

Pertanika Journal of

SOCIAL SCIENCES & HUMANITIES

JSSH

VOL. 28 (2) JUN. 2020

PERTANIKA JOURNALS

A scientific journal published by Universiti Putra Malaysia Press

Journal of Social Sciences & Humanities
Journal of Social Sciences & Humanities

Journal of Social Sciences & Humanities

About the Journal

Overview

Pertanika Journal of Social Sciences & Humanities (JSSH) is the official journal of Universiti Putra Malaysia published by UPM Press. It is an open-access online scientific journal which is free of charge. It publishes the scientific outputs. It neither accepts nor commissions third party content.

Recognized internationally as the leading peer-reviewed interdisciplinary journal devoted to the publication of original papers, it serves as a forum for practical approaches to improving quality in issues pertaining to social and behavioural sciences as well as the humanities.

JSSH is a **quarterly** (*March, June, September* and *December*) periodical that considers for publication original articles as per its scope. The journal publishes in **English** and it is open to authors around the world regardless of the nationality.

The Journal is available world-wide.

Aims and scope

Pertanika Journal of Social Sciences & Humanities aims to develop as a pioneer journal for the social sciences with a focus on emerging issues pertaining to the social and behavioural sciences as well as the humanities. Areas relevant to the scope of the journal include Social Sciences—Accounting, anthropology, Archaeology and history, Architecture and habitat, Consumer and family economics, Economics, Education, Finance, Geography, Law, Management studies, Media and communication studies, Political sciences and public policy, Population studies, Psychology, Sociology, Technology management, Tourism; Humanities—Arts and culture, Dance, Historical and civilisation studies, Language and Linguistics, Literature, Music, Philosophy, Religious studies, Sports.

History

Pertanika was founded in 1978. A decision was made in 1992 to streamline Pertanika into three journals as Journal of Tropical Agricultural Science, Journal of Science & Technology, and **Journal of Social Sciences & Humanities** to meet the need for specialised journals in areas of study aligned with the interdisciplinary strengths of the university.

After almost 28 years, as an interdisciplinary Journal of Social Sciences & Humanities, the revamped journal focuses on research in social and behavioural sciences as well as the humanities, particularly in the Asia Pacific region.

Goal of *Pertanika*

Our goal is to bring the highest quality research to the widest possible audience.

Quality

We aim for excellence, sustained by a responsible and professional approach to journal publishing. Submissions are guaranteed to receive a decision within 14 weeks. The elapsed time from submission to publication for the articles averages 5-6 months.

Abstracting and indexing of *Pertanika*

The journal is indexed in SCOPUS (Elsevier), Clarivate-Emerging Sources Citation Index [ESCI (Web of Science)], BIOSIS, National Agricultural Science (NAL), Google Scholar, MyCite and ISC.

Future vision

We are continuously improving access to our journal archives, content, and research services. We have the drive to realise exciting new horizons that will benefit not only the academic community, but society itself.

Citing journal articles

The abbreviation for *Pertanika* Journal of Social Sciences & Humanities is *Pertanika J. Soc. Sci. Hum.*

Publication policy

Pertanika policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications. It prohibits as well publication of any manuscript that has already been published either in whole or substantial part elsewhere. It also does not permit publication of manuscript that has been published in full in Proceedings.

Code of Ethics

The Pertanika Journals and Universiti Putra Malaysia takes seriously the responsibility of all of its journal publications to reflect the highest in publication ethics. Thus all journals and journal editors are expected to abide by the Journal's codes of ethics. Refer to Pertanika's **Code of Ethics** for full details, or visit the Journal's web link at http://www.pertanika.upm.edu.my/code_of_ethics.php

International Standard Serial Number (ISSN)

An ISSN is an 8-digit code used to identify periodicals such as journals of all kinds and on all media–print and electronic. All Pertanika journals have ISSN as well as an e-ISSN.

Journal of Social Sciences & Humanities: ISSN 0128-7702 *(Print)*; ISSN 2231-8534 *(Online)*.

Lag time

A decision on acceptance or rejection of a manuscript is reached in 3 to 4 months (average 14 weeks). The elapsed time from submission to publication for the articles averages 5-6 months.

Authorship

Authors are not permitted to add or remove any names from the authorship provided at the time of initial submission without the consent of the Journal's Chief Executive Editor.

Manuscript preparation

Refer to Pertanika's **Instructions to Authors** at the back of this journal.

Editorial process

Authors are notified with an acknowledgement containing a *Manuscript ID* on receipt of a manuscript, and upon the editorial decision regarding publication.

Pertanika follows a **double-blind peer-review** process. Manuscripts deemed suitable for publication are usually sent to reviewers. Authors are encouraged to suggest names of at least three potential reviewers at the time of submission of their manuscript to Pertanika, but the editors will make the final choice. The editors are not, however, bound by these suggestions.

Notification of the editorial decision is usually provided within ten to fourteen weeks from the receipt of manuscript. Publication of solicited manuscripts is not guaranteed. In most cases, manuscripts are accepted conditionally, pending an author's revision of the material.

The Journal's peer-review

In the peer-review process, three referees independently evaluate the scientific quality of the submitted manuscripts.

Peer reviewers are experts chosen by journal editors to provide written assessment of the **strengths** and **weaknesses** of written research, with the aim of improving the reporting of research and identifying the most appropriate and highest quality material for the journal.

Journal of Social Sciences & Humanities
Journal of Social Sciences & Humanities

Operating and review process

What happens to a manuscript once it is submitted to *Pertanika*? Typically, there are seven steps to the editorial review process:

1. The Journal's Chief Executive Editor (CEE) and the Editorial Board Members examine the paper to determine whether it is appropriate for the journal and should be reviewed. If not appropriate, the manuscript is rejected outright and the author is informed.

2. The CEE sends the article-identifying information having been removed, to three reviewers who are specialists in the subject matter represented by the article. The CEE requests them to complete the review in three weeks.

   Comments to authors are about the appropriateness and adequacy of the theoretical or conceptual framework, literature review, method, results and discussion, and conclusions. Reviewers often include suggestions for strengthening of the manuscript. Comments to the editor are in the nature of the significance of the work and its potential contribution to the field.

3. The CEE, in consultation with the Editor-in-Chief (EiC), examines the reviews and decides whether to reject the manuscript, invites the author(s) to revise and resubmit the manuscript. The CEE may seek additional reviews. Final acceptance or rejection rests with the CEE and EiC, who reserve the right to refuse any material for publication. In rare instances, the manuscript is accepted with almost no revision. Almost without exception, reviewers' comments (to the author) are forwarded to the author. If a revision is indicated, the editor provides guidelines for attending to the reviewers' suggestions and perhaps additional advice about revising the manuscript.

4. The authors decide whether and how to address the reviewers' comments and criticisms and the editor's concerns. The authors return a revised version of the paper to the CEE editor along with specific information describing how they have answered' the concerns of the reviewers and the editor, usually in a tabular form. The author(s) may also submit a rebuttal if there is a need especially when the author disagrees with certain comments provided by reviewer(s).

5. The CEE sends the revised paper out for re-review. Typically, at least one of the original reviewers will be asked to examine the article.

6. When the reviewers have completed their work, the CEE in consultation with the EiC and Editorial Board Members examine their comments and decide whether the paper is ready to be published, needs another round of revisions, or should be rejected.

7. If the decision is to accept, an acceptance letter is sent to all the author(s), the paper is sent to the Press. The article should appear in print in approximately three months.

   The Publisher ensures that the paper adheres to the correct style (in-text citations, the reference list, and tables are typical areas of concern, clarity, and grammar). The authors are asked to respond to any minor queries by the Publisher. Following these corrections, page proofs are mailed to the corresponding authors for their final approval. At this point, **only essential changes are accepted**. Finally, the article appears in the pages of the Journal and is posted on-line.

Pertanika Journal of

SOCIAL SCIENCES & HUMANITIES

Vol. 28 (2) Jun. 2020



A scientific journal published by Universiti Putra Malaysia Press

JSSH

Journal of Social Sciences & Humanities

AN INTERNATIONAL PEER-REVIEWED JOURNAL

EDITOR-IN-CHIEF

Wong Su Luan, *Malaysia*
Information and Communication Technology in Education

CHIEF EXECUTIVE EDITOR

Abu Bakar Salleh
Biotechnology and Biomolecular Science

UNIVERSITY PUBLICATIONS COMMITTEE

Zulkifli Idrus, *Chair*

EDITORIAL STAFF

Journal Officers:
Kanagamalar Silvarajoo, *ScholarOne*
Siti Zuhaila Abd Wahid, *ScholarOne*
Tee Syin-Ying, *ScholarOne*
Ummi Fairuz Hanapi, *ScholarOne*

Editorial Assistants:
Siti Juridah Mat Arip
Zulinaardawati Kamarudin

PRODUCTION STAFF

Pre-press Officers:
Nur Farrah Dila Ismail
Wong Lih Jiun

WEBMASTER

IT Officer:
To be appointed

PUBLICITY & PRESS RELEASE

Magdalene Pokar *(ResearchSEA)*

EDITORIAL OFFICE

JOURNAL DIVISION
Office of the Deputy Vice Chancellor (R&I)
1st Floor, IDEA Tower II
UPM-MTDC Technology Centre
Universiti Putra Malaysia
43400 Serdang, Selangor Malaysia.
Gen Enq.: +603 9769 1622 | 1616
E-mail:
executive_editor.pertanika@upm.edu.my
URL: www.journals-jd.upm.edu.my

PUBLISHER

UPM Press
Universiti Putra Malaysia
43400 UPM, Serdang, Selangor, Malaysia.
Tel: +603 9769 8855 | 8854
Fax: +603 9679 6172
E-mail: penerbit@upm.edu.my
URL: http://penerbit.upm.edu.my

EDITORIAL BOARD
2018-2020

Abdul Mansur M. Masih
Economics, Econometrics, Finance
King Fahd University of Petroleum and Minerals, Saudi Arabia.

Ain Nadzimah
Modern Languages and Communication,
Universiti Putra Malaysia, Malaysia.

Alan Maley
English Language Studies, Teaching of English Language and Literature
Leeds Metropolitan University, UK.

Ali Reza Kaldi
Medical Sociology, Sociology of Development Ageing, Gerontology
University of Social Welfare and Rehabilitation, Tehran, Iran.

Brian Tomlinson
English Language Studies, The Evaluation, Adaptation and Development
Leeds Metropolitan University, UK.

Deanna L. Sharpe
Economics, Consumer and Family Economics, Personal Finance
University of Missouri, Columbia, USA.

Dessy Irawati
Economist and Business Development Strategist
BNI Bank Representative in the Netherlands, EduPRIME Consulting, the Netherlands.

Dileep K. Mohanachandran
Psychology, Sociology, Technology
Berjaya University College, Malaysia.

Jacqueline Pugh-Kitingan
Music, Ethnomusicology, Borneo and Papua New Guinea Studies
Universiti Malaysia Sabah, Malaysia.

James R. Stock
Management Studies, Marketing, Logistics and Supply Chain Management, Quantitative Method
University of South Florida, USA.

Jayum A. Jawan
Sociology, Politics and Government, Civilization Studies
Tun Abd Razak Chair & Visiting Professor of Political Science
Ohio University, Athens Ohio, USA (2015-2017).
Universiti Putra Malaysia, Malaysia.

Jonathan Newton
Classroom-based Second Language Acquisition, Language Teaching Methodology, the Interface of Culture and Language in Language Teaching and Learning, and Language/ Communication Training and Material Design for the Multicultural Workplace
Victoria University of Wellington, New Zealand.

Marcus Bion GRIFFIN
Human Ecology, Anthropology, Tropical Agriculture, Fisheries
Cultural Learning Solutions, USA.

Mary Susan Philip
English Language Theatre in Malaysia and Singapore; Postcolonial Theatre
University of Malaya, Malaysia.

Muzafar Shah Habibullah
Economics, Monetary Economics, Banking, Macroeconomics
Universiti Putra Malaysia, Malaysia.

Patricia Matusky
Music, Ethnomusicology, Malay and Indonesian language, Literature and Culture
Grand Valley State University, USA.

Rama Mathew
Teacher Education, English Language Education including Young Learners and Language Assessment
Delhi University, India.

Rohany Nasir
Psychology-Career counseling, Counseling for Adolescents and Adults, Marriage and Family counseling, Counseling industry and Organization
Universiti Kebangsaan Malaysia, Malaysia.

Shameem Rafik-Galea
English Language Studies, Linguistics, Applied Linguistics, Language and Communication
University College Sedaya International, Malaysia.

Stephen J. HALL
English Language Studies, Linguist, Teacher Educator, TESOL
Sunway University, Malaysia.

Stephen J. THOMA
Phsycology, Educational Psychology,
The University of Alabama, USA.

Vahid Nimehchisalem
Modern Languages and Communication,
Universiti Putra Malaysia, Malaysia.

Victor T. King
Anthropology / Southeast Asian Studies
White Rose East Asia Centre, University of Leeds, UK.

INTERNATIONAL ADVISORY BOARD
2018-2021

Barbara Wejnert
Political Sociologist: Gender Studies, Macro Political and Social Changes
University at Buffalo, SUNY, USA.

Carolyn Graham
Music, Jazz Chants
Harvard University, USA.

Faith Trent AM FACE
Education: Curriculum development
Flinders University, Adelaide, Australia.

Gary N. Mclean
Community and Social Development, International Human Resource Development, Organizational Development
Executive Director, International Human Resource Development Programs, EAHR, Teas A&M University, USA.

Graham Thurgood
English Language Studies, General Linguistics, Discourse and Syntax
California State University, Chico., USA.

Handoyo Puji Widodo
English Language Teaching, ESP, Language Curriculum-Materials Design and Development, and Language Methodology
English Language Center
Shantou University, China.

John R. Schermerhorn Jr.
Management Studies, Management and Organizational Behaviour, International Business
Ohio University, USA.

Kent Matthews
Economics, Banking and Finance, Modelling and Forecasting the Macro Economy
Cardiff Business School, UK.

Lehman B. Fletcher
Economics, Agricultural Development, Policy Analysis and Planning
Iowa State University, USA.

Mohamed Ariff
Economics, Finance, Capital Market, Islamic Finance, FIscal Policy
Sunway University, Malaysia.

Pal Ahluwalia
African Studies, Social and Cultural Theory, Post-colonial Theory
Pro Vice-Chancellor (Research and Innovation),
University of Portsmouth, UK.

Phillip Jones
Architectural Science, Sustainability in the Built Environment
Welsh School of Architecture,
Cardiff University, UK.

Rance P. L. Lee
Sociology
The Chinese University of Hong Kong, China.

Royal D. Colle
Communication
Cornell University, USA.

Shonda Buchanan
American Literature Interim Chair
Hampton University, USA.

Vijay K. Bhatia
Education: Genre Analysis and Professional Communication
City University of Hong Kong, China.

ABSTRACTING AND INDEXING OF PERTANIKA JOURNALS

The journal is indexed in SCOPUS (Elsevier), Clarivate-Emerging Sources Citation Index (ESCI), BIOSIS, National Agricultural Science (NAL), Google Scholar, MyCite, ISC. In addition, Pertanika JSSH is recipient of "CREAM" Award conferred by Ministry of Higher Education (MoHE), Malaysia.

The publisher of Pertanika will not be responsible for the statements made by the authors in any articles published in the journal. Under no circumstances will the publisher of this publication be liable for any loss or damage caused by your reliance on the advice, opinion or information obtained either explicitly or implied through the contents of this publication.

All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in Pertanika. Pertanika provides free access to the full text of research articles for anyone, web-wide. It does not charge either its authors or author-institution for refereeing/publishing outgoing articles or user-institution for accessing incoming articles.

No material published in Pertanika may be reproduced or stored on microfilm or in electronic, optical or magnetic form without the written authorization of the Publisher.

Copyright © 2018-19 Universiti Putra Malaysia Press. All Rights Reserved.

Pertanika Journal of Social Sciences & Humanities
Vol. 28 (2) Jun. 2020

Contents

Foreword i
Abu Bakar Salleh

Management Studies

Firm Characteristics, Corporate Governance and Management Compensation Disclosure: Evidence from Indonesia 745
Ersa Tri Wahyuni, Asangki Nindya, Gatot Soepriyanto, Ilya Avianti and Zubir Azhar

Examining the Effect of Persuasive Message of Beauty Vloggers on Information Acceptance of eWOM and Purchase Intention: The Study of Consumers of Beauty Products in Jabodetabek, Indonesia 763
Sari Ramadanty, Alex Maulana Muqarrabin, Wulandari Ayu Nit and Imam Syafganti

Effect of Functional Convenience and Representational Delight on Positive Emotional Affect and Impulse Buying of Discount Group Site Users in Indonesia 777
Aryo Bismo, Sukma Putra, Haryadi Sarjono and Lessya Nasrul

Participative Decision-Making, Psychological Empowerment and Job Performance: Evidence from the Malaysian Electrical and Electronic Manufacturing Firms 791
Jeniboy Kimpah and Hazril Izwar Ibrahim

Project Managers' Leadership Styles and Their Effects on Project Management Performance 803
Nurianna Thoha and I Made Ngurah Wahyu Avandana

Mainstreaming Disability in the Workplace in Myanmar: Preliminary Study Findings 817
Sanjukta Choudhury-Kaul

Fostering Project Delivery Capabilities in Indonesian Commercial Banks 827
Mohammad Ichsan and Jimmy Sadeli

Disruptive Business Model Innovation in Indonesia Digital Startups 847
Kurnadi Gularso, Tirta Nugraha Mursitama, Pantri Heriyati and Boto Simatupang

Present Working Conditions in Slaughterhouses and Meat Selling Centres and Food Safety of Workers in Two Districts of Bangladesh 867
Mohammad Khurshed Alam, Yoshino Keiko and Mohammad Mujaffar Hossain

Does the Social Exchange Theory (SET) Work Effectively for New Employees? An Empirical Study of Contingent Worker in Indonesia 883
Jati Waskito, Asri Laksmi Riani, Joko Suyono and Ahmad Ikhwan Setiawan

Exploring Hipness and its Influence on Women Entrepreneurship 901
Norela Ahmad, Khairul Akmaliah Adham and Nur Sa'adah Muhamad

Implementation of NAMS Cycle Model – A Continuous Improvement Model from an Islamic Perspective 921
Afroza Bulbul Afrin, Rafikul Islam and Md. Yousuf Ali

Language and Linguistics

Translation Strategies of Humor in Subtitling 939
Mozhgan Ghassemiazghandi and Tengku Mahadi Tengku-Sepora

The Importance of Japanese Language Skills Proficiency among Malaysian Graduates in Japanese-based Companies 957
Yeoh Lee Su, Kaur Manjet and Tengku Mahadi Tengku-Sepora

Language and Social Identity: Language Choice and Language Attitude of Diaspora Communities in Bali 979
Ni Made Dhanawaty, Ni Luh Nyoman Seri Malini, Ni Made Wiasti and Ida Bagus Putra Yadnya

Iran's Nuclear Programme: An Analysis of Face in Political Interviews 995
Zuraidah Mohd Don and Masoumeh Bahman

The Realization of Experiential Meaning in Indonesian Subtitles of *The Kingdom* (2007): Cases of Transitivity System Clausal Constituents Reduction 1015
Romel Noverino, Mangatur Rudolf Nababan, Riyadi Santosa and Djatmika

The Fall of Egyptian President Morsi and the Media Representation: A Critical Discourse Analysis of *Kompas* Daily Newspaper 1035
Nuruddin, Yayan Nurbayan, Hanik Mahliatussikah, Sri Harini Ekowati, Hanip Pujiati and Syarfuni

Education

Review Article
Academic Stress among Faculty and Students in Higher Institutions 1055
Dickson Adom, Joshua Chukwuere and Mavis Osei

Lecturers' Perceptions of English Medium Instruction (EMI) Practice at a University in Indonesia 1065
Nurmala Elmin Simbolon, Rhonda Oliver and Paul Mercieca

Educational Researchers in Malaysia – Who They Conduct Their Research for? 1083
Amrita Kaur, Abdul Hamid Busthami Nur, Yoppy Wahyu Purnomo, Mohd Zailani Mohd Yusof and Suswandari

Mathematics Pre-service Teachers' Learning Experiences of International Teaching Practicum in Indonesia 1105
Chew Cheng Meng, Wun Thiam Yew, Nahlia Rakhmawati and Puput Suriyah

Developing Intercultural Communicative Competence through Telecollaborative Modules Integrated in Foreign Language and Intercultural Communication University Courses 1125
Agnes Loch and Agnes Pal

Economics

Foreign Trade and Economic Growth in sub-Saharan African Countries: Dynamic Common Correlated Effects Estimator (CS-ARDL) 1143
Shuaibu Sidi Safiyanu and Soo Yean Chua

Household Indebtedness: Economic Determinants of the Malaysian Residential Properties Nonperforming Loans 1163
May Jin Theong, Ahmad Farid Osman and Su Fei Yap

Determinants of Natural Rubber Price Instability for Four Major Producing Countries 1179
Yi Chiun Fong, Aye Aye Khin and Chee Seong Lim

Law

Harmonization of Law in the Application of Legal Metrology 1199
Muldri Pudamo James Pasaribu and Ningrum Natasya Sirait

Legal Protection of the Constitutional Rights of the Indigenous Faith Believers in Indonesia 1215
Muhammad Yusrizal Adi Syaputra and Mirza Nasution

Plea Bargaining in Corruption Cases: A Solution for the Recovery of Financial Losses by Indonesia? 1233
Febby Mutiara Nelson and Topo Santoso

Literature

Deconstruction of Lord Shiva in the Era of Post-Truth: A Study of Amish Tripathi's *The Immortals of Meluha* 1249
S. Karthik and Sangeeta Mukherjee

'Inscription' as Speaking for Women: African Women Writers and their Writing Form 1263
Shalini Nadaswaran

Master-Slave Dialectics and the Evolution of the Self in Bulosan's *America is in the Heart* 1277
Met'eb Ali Alnwairan

Media and Communication Studies

Keyboard Warrior, Online Predator or Cyber Bully? The Growing Menace of Child Exposure to Internet Harm based on Research Evidence 1291
Sarina Yusuf, Khairuddin Idris, Asnarulkhadi Abu Samah, Adamkolo Ibrahim, Nor Sabila Ramli, Muhamad Shamsul Ibrahim and Nur Atikah A Rahman

Framing Analyses of Malaysia's Media Outlets and Editorial Decisions Concerning Frame Preferences after the 2008 General Election 1311
Muhammad Izawan Baharin, Moniza Waheed, Akmar Hayati Ahmad Ghazali, and Abdul Mua'ti @ Zamri Ahmad

Chinese Cultural Preservation, Identity and Community: Examining the roles of *Sin Chew Daily* in Bridging Chinese Education, Cultural and Religious Rights of the Chinese Community in Malaysia 1335
Miew Luan Ng and Yuen Beng Lee

Psychology

Psychometric Study of Bar-On Emotional Quotient Inventory: Youth Version in Malaysian Sample 1357
Chua Bee Seok, Shazia Iqbal Hashmi, Lailawati Madlan and Jasmine Adela Mutang

Multicultural Competency, Spirituality and Self-Efficacy in Dealing with Legal and Ethical Issues 1371
Neerushah Subarimaniam, Noor Syamilah Zakaria and Wan Marzuki Wan Jaafar

Sociology

The Effect of Sociocultural Identities on Study Destination Choice 1387
Evelyn Hendriana, Khairil Wahidin Awang, Raja Nerina Raja Yusof and Jamil Bojei

Exploring the Gerontological Skills Competencies of Social Workers through Vocational Education and Training in Caring for the Elderly 1401
Khadijah Alavi, Nur Hanis Hazlan and Sarin Johani

Consumer and Family Economics

Health Vulnerability Versus Multiple Vulnerability Factors Among Low-Income Group in Malaysia 1415
Nora Muda, Anisa Mohammad Azahari, Faridatulazna Ahmad Shahabuddin, Zamira Hasanah Zamzuri, Noratiqah Mohd Arif, Mohd Aftar Abu Bakar and Nur Riza Mohd Suradi

An Exploratory Study on Factors Influencing University Students' Intention to Patronize Food Trucks 1429
Tan Poh Leong, Audrey Malenee Mariadass and Lee Boon Kai

Religious Studies

Review Article
A Survey on Relevant Malaysian *Fatwā* about Cadaver Concerning Tissue Engineering Research 1451
Muhammad Aa'zamuddin Ahmad Radzi, Munirah Sha'ban, Nur Syamimi Mohd. Azharuddin, Azran Azhim and Abdurezak Abdulahi Hashi

The Practice of *al-Ta'awun* in the Wedding Expenditure of Malay-Muslims in Malaysia 1467
Syh Noorul Madihah Syed Husin, Raihanah Azahari and Asmak Ab Rahman

Accounting

Independent Corporate Governance Organs' Activities, Tax Avoidance, and Country Tax Environment: Evidence from ASEAN Countries 1485
Oktavia

Anthropology

Anticipations for and Perceived Barriers of Development among the Sarawak's Highlanders 1507
Kuok Ho Daniel Tang

Arts and Culture

Pangandaran Batik as a Distinctive Batik Style from the East Priangan Region of West Java 1525
Agus Nero Sofyan, Ekaning Krisnawati and Tajudin Nur

Finance/Investment

Determinants of Stock Splits' Ex-Date Returns: Empirical Evidence from Indonesian Stock Market 1539
*Edwin Hendra, Bambang Leo Handoko**2** and Stefanus Ariyanto*

Geography

Adapting to Saline Intrusion: Empirical Insights from Two Coastal Areas in the Vietnamese Mekong Delta 1553
Van Huynh Thanh Pham, Rudi Febriamansyah, Afrizal and Thong Anh Tran

Technology Management

Introducing Automatic Control Method of Safety Standards in Horizontal Curves by Processing Images Taken by Mobile Mapping System 1567
Mohammadreza Koloushani, Ali Fatemi, Masoud Tabibi and Eren Erman Ozguven

Tourism

Comparing Official Tourism Twitter Accounts: The Case of Four Major Tourist Destinations in Southeast Asia 1581
Imam Syafganti and Michel Walrave

Foreword

Welcome to the Second Issue of 2020 for the Journal of Social Sciences and Humanities (JSSH)!

JSSH is an open-access journal for studies in Social Sciences and Humanities published by Universiti Putra Malaysia Press. It is independently owned and managed by the university for the benefit of the world-wide science community.

This issue contains 50 articles; two review articles and the rest are regular articles. The authors of these articles come from different countries namely Malaysia, Japan, Indonesia, Singapore, Ghana, USA, Thailand, Balgium, Hungary, India and Oman.

Met'eb Ali Alnwairan dissected the master-slave dialectics in Carlos Bulosan's *America is in the Heart* (1947), in his article, entitled "Master-Slave Dialectics and the Evolution of the Self in Bulosan's *America is in the Heart*". He perceived that the study shed light on the evolution of the self-conscious, human individuality as a foundation of the individual's moral agency, based on the principles of Hegel's and Marx's dialectics. Further details of the study can be found on page 1277.

A selected review paper from the scope of religious studies, entitled "A Survey on Relevant Malaysian *Fatwā* about Cadaver Concerning Tissue Engineering Research" discussed about the *fatwā* in Malaysia regarding to the issue of tissue engineering research. Local *fatwā* related to the sampling of tissue from the dead human body was retrieved from various resources. It is shown that the importance of Muslim researchers to ensure their conduct and practices in developing new treatment should be in line with the *shariʿāh*. Details of this study are available on page 1451.

A regular article entitled "Anticipations for and Perceived Barriers of Development among the Sarawak's Highlanders" discussed on the perception of the highlanders towards development. This study shows that the highlanders generally welcome development but were unsure of the modes of development to adopt. The detailed information of this article is presented on page 1507.

We anticipate that you will find the evidence presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of JSSH, who have made this issue possible. JSSH is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

Chief Executive Editor
Prof. Dato' Dr. Abu Bakar Salleh
executive_editor.pertanika@upm.edu.my

Pertanika J. Soc. Sci. & Hum. 28 (2): 745 - 762 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Firm Characteristics, Corporate Governance and Management Compensation Disclosure: Evidence from Indonesia

Ersa Tri Wahyuni[1]*, Asangki Nindya[1], Gatot Soepriyanto[2], Ilya Avianti[1] and Zubir Azhar[3]

[1]Department of Accounting, Faculty of Economics and Business, Universitas Padjadjaran, Bandung 40132, Indonesia
[2]Department of Accounting, Faculty of Economics and Communication, Bina Nusantara University, Jakarta 11480, Indonesia
[3]School of Management, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia

ABSTRACT

This study aimed to examine the effect of firm characteristics and corporate governance on the quality of management compensation disclosure in Indonesia. The adoption of International Accounting Standards (IAS) 24 "Related Party Disclosures" in Indonesia in 2011 had required disclosures about key management compensation, which was not required by the previous standard. The research was conducted by examining the top 100 listed companies' data that ranged between 2011 and 2014. Our findings suggest that institutional ownership and firm size are positively associated with the disclosure level of management compensation. We also found that the proportion of independent audit committee was negatively associated with the level of management compensation disclosure. Finally, we found no evidence that the audit quality had affected the level of management compensation disclosure. Our research has shed light on the determinants of management compensation disclosure in an emerging country with a two-tier board system where arguably the financial reporting environment is opaquer than the more developed countries.

Keywords: Audit Committee, IAS 24, institutional ownership, management compensation

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
ersa@unpad.ac.id (Ersa Tri Wahyuni)
asangkinindya@gmail.com (Asangki Nindya)
gsoepriyanto@binus.edu (Gatot Soepriyanto)
ilya_avianti@yahoo.com (Ilya Avianti)
zubirazhar@usm.my (Zubir Azhar)
* Corresponding author

INTRODUCTION

Management compensation is an interesting subject and has attracted many researchers especially those in the developed countries to explore this topic (Al-Shaer & Zaman, 2019; Andjelkovic et al., 2002; Basu, 2007; Brunello et al., 2001; Grosse et al., 2017; Kaplan, 1998; Laing & Weir, 1999; Ma et

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

al., 2019; Unite et al., 2008). Mandatory disclosure on management compensation has been regulated in many developed countries such as the US (Conyon, 2011), and the UK (Al-Shaer & Zaman, 2019). Research on management compensation in emerging countries, however, remains limited due to data availability issues (Darmadi, 2011; Utami & Kusuma, 2020). Indeed, firms are reluctant to disclose company information related to key management compensation as it could lead to confidential proprietary information leakage (Aobdia, 2018; Donahue, 2008).

Upon the decision to converge national accounting standard with International Financial Reporting Standards (IFRS) in 2008, Indonesia had adopted International Accounting Standards (IAS) 24 "Related Party Disclosures" in 2011 into its local standard of Pernyataan Standar Akuntansi Keuangan (PSAK) 7. The standard requires the disclosure of key management compensation and also the disclosure of related parties' relationships, transactions and balances, including commitments, in the financial statements. The level of detail for management compensation disclosure is increased among Indonesian listed companies after the adoption of IAS 24 (Utama & Utama, 2014). This study aims to examine the effect of institutional ownership, audit committee, audit quality and size to the disclosure of management compensation among top Indonesian listed companies.

Top management compensation is a very attractive subject both for legislators and academic studies in Indonesia (Chou & Buchdadi, 2018; Darmadi, 2011; Kartadjumena & Rodgers, 2019). Indonesia provides an attractive research ground for this subject as it is among the emerging countries where financial reporting environment is relatively more opaque than developed economies with low market incentives for the preparers to produce a good quality financial report (Ball et al., 2003; Lourenco, 2018). Thus, the new accounting standard's requirement to disclose management compensation may be seen as an effort to improve the quality of accounting information and transparency.

However, the presence of the mandatory requirement to disclose management compensation does not necessarily guarantee full compliance. Robinson et al. (2011) reported the disclosure deficiency amongst 336 US firms as identified by the Securities and Exchange Commission (SEC) after mandatory disclosure of management compensation in 2006. Another study by Alfijri et.al (2014) reported that the mandatory disclosure rate of companies in the UAE was only 57%. As such, it is reasonable to expect that the new accounting standard in Indonesia does not necessarily lead to full compliance amongst companies, especially in the early years of adoption. Indeed, Indonesia's level of disclosure on a firm's governance is among the lowest in ASEAN countries (Laksono, 2016). More specifically, Laksono (2016) had reported that Indonesia ranked lowest among other countries in ASEAN with the average index of Executive Director Remuneration and

Compensation Disclosure of 0.1900. The highest score is Thailand with a value of 0.2728. While Malaysia is in the middle with a value of 0.2206. These findings implied that the corporate governance practice in Indonesia is still low compare to other countries in ASEAN, especially in terms of management compensation disclosure.

On the other hand, management compensation needs to be disclosed for several reasons. First, disclosure of information on compensation for key management is part of the principle of good corporate governance and may assist the company to improve the governance. Second, disclosure of the information is required by shareholders as a tool for the decision making process. Disclosure of incomplete key management compensation information will result in the commissioner's decision in granting compensation to key management uncontrolled (Donahue, 2008). As claimed by Donahue (2008), the absence of key management compensation information disclosure would result in the risk of an outrage cost (key management compensation exceeding the prescribed limit).

The remaining of our paper is structured as follows. The ensuing section reviews the literature which has guided for us to develop research hypotheses. We then describe the research methodology adopted for this study before presenting the results derived from the statistical tests performed. Such results are related to the extant literature in which further elaboration is presented in the discussion section. Finally, we conclude the paper and provide future recommendations for future research.

Literature Review

Agency Theory. The agency theory is one of the theories underlying the study of the extent of disclosure which explains the relationship between agent and principal. The agency relationship presented by Jensen and Meckling (1976) describes the contractual relationship that arises between one or more shareholders (principal) to another party which is manager (agent), where the agent is required to perform services on behalf of the principal and involves delegation of authority to the agent in making business decisions. The principal acts as a provider of facilities and funds to run the company, while the agent is obliged to manage and execute the corporate management function. In the supervisory function, the agent is obliged to report periodically to the principal for the business he or she has undertaken. While the principal has to assess the performance of agents through financial statements submitted.

Principle-agent model explains the reason for complex management compensation such as share options and performance bonus, instead of just a flat salary (Gayle et al., 2018). Management compensation mix is designed to motivate the agent in increasing the principle's value. The literature on agency theory and executive compensation over the last two decade has argued that CEO compensation

should be aligned to firm performance (Grossman & Hart, 1992; Holmstrom, 2000; Jensen & Murphy, 1990). It is by disclosing management compensation that the information asymmetry may be reduced due to the agency problem, especially for minority investors.

Corporate Governance. Corporate governance has attracted the attention of academic researchers and business world in recent years after the financial crisis of 2008 (Grosse et al., 2017; Ma et al., 2019; Ng et al., 2016). According to the International Auditing and Assurance Standards Board (2013), governance describes the role of the person(s) or organization(s) with responsibility for overseeing the strategic direction of the entity and obligations related to the accountability of the entity. A good corporate governance system should provide effective protection of security in getting a higher return on investments for all shareholders, be it creditors or minority shareholders (Bhaumik et al., 2019; Ng et al., 2016). Furthermore, Ng et al. (2016) stated that with the structured mechanisms in place, it would directly or indirectly shape the corporate governance system to enforce these rules more effectively in any country.

Institutional Ownership. Institutional ownership is defined as shares ownership by parties in the form of institutions such as insurance companies, banks, investment companies, and other parties related to institutional ownership. Institutional ownership is a tool that can be used to reduce agency conflict by controlling the management through an effective monitoring process. The percentage of certain shares owned by an institution can affect the process of preparing the financial statements, which does not rule out the existence of accruals in the interests of the management (Birt et al., 2019; Kusumaningtyas et al., 2019). The institutional investors' impact on corporate management can be significant and used to align management interests with shareholders or reduce agency conflicts. The relatively large percentage of institutional share ownership may affect the disclosure of company reporting through the General Meeting of Shareholders (GMS). Rachmawati and Triatmoko (2015) stated that corresponding to the monitoring function, institutional investors were believed to have more capability to monitor management actions better than individual investors. Institutional investors have better resources than individual investors, such as experts to analyze investments, greater capital, and more sophisticated equipment. This is why institutional ownership is used in this research as a proxy for corporate governance, it can reduce agency conflict by improving the quality of corporate governance.

Independent Audit Committee. Corporate governance has an important role to mitigate the negative effect of related party transaction to the accounting quality (Hasnan et al., 2016). Audit committees are formed to assist the commissioners in carrying out their duties related to internal

control, financial reporting, and corporate behaviour standards. The audit committees are expected to improve the quality of financial reporting, ensuring that directors make decisions based on accounting policies, practices and disclosures, reviewing the scope and results of internal and external audits, and overseeing the financial reporting process. By having an effective audit committee, commissioners can escalate the quality of financial reporting. Also, the audit committee assists the commissioners to carry out their duties and responsibilities to oversee the company's internal controls, resolve the audit issues, and allow the commissioner time to focus more on other issues. This is why an independent audit committee is used in this research as a proxy for corporate governance, it can reduce agency conflict by improving the quality of corporate governance.

Based on the Decision of the Chairman of Bapepam and LK Number: Kep-643/ BL/2012 on the Establishment and Guidance of the Implementation of the Work of the Audit Committee is arranged the subjects about audit committee. Audit Committee membership consists of at least three members, and one of them is an independent commissioner who also doubles as chairman of the committee. Other members are independent external parties of which at least one of them has accounting and/or finance capabilities. Furthermore, a prior study suggested that independent audit committee members would ensure higher quality financial reporting (Lary & Taylor, 2012).

Firm Characteristics. In this study, the firm characteristic is represented with audit quality and firm size. Based on research conducted by Aljifri et al (2014), these characteristics were selected on the basis that they met the following three preconditions: (1) the variable encompasses sound theoretical reasons for explaining the association between the variable and corporate disclosure, (2) the variable is relevant to the socio-economic environment of Indonesia; and (3) sufficient data about the variable was available. An auditor can be the mechanism for controlling the behaviour of management, thus it's characteristics. The auditing process has an important role in reducing agency costs by limiting the opportunistic behaviour of management. This is why audit quality is used as a proxy for firm characteristics. Disclosing detailed information is costly, and thus may not be affordable for small firms, large firms are usually diverse in the scope of their business, the types of products and geographical coverage (Aljifri et al., 2014). Furthermore, a considerable amount of information is required for management purposes and can be generated internally. This is why firm size is also used as a proxy for firm characteristics.

Audit Quality. An auditor can be the mechanism for controlling the behaviour of management. The auditing process has an important role in reducing agency costs by limiting the opportunistic behaviour of management. Auditing process by external auditors verify the claim made by the agent

and ensure the shareholders that the numbers presented in the financial statements are fair. Public accountants as external auditors who are relatively more independent of management than internal auditors have so far been expected to minimize profit engineering cases and improve the credibility of accounting information in financial statements (D'Angelo, 1981; Jordan et al., 2017). Big accounting firms have attracted a much larger fee than the small firms as the big accounting firms signalled a better audit quality (Fung et al., 2019). The auditor's quality dimension most frequently used in research is the size of the public accounting firm because the firm's reputation is considered as the most relevant to proxy audit quality (Challen & Siregar, 2017; Jiang et al., 2018; Jordan et al., 2017).

Firm Size. Firm size is a description of the size of a company. Sudarmadji and Sularto (2007), argued that the size of the company reflected in total assets, total sales or market capitalization. The greater the total assets, sales and market capitalization owned by the company, the greater the size of the company. Of the three measurements, the relative asset value is considered to have a higher level of stability than the total sales and market capitalization value in determining the size of a company. The large company arguably will provide more disclosures than a smaller company. Wider disclosure indicates that companies have applied the principles of good corporate governance which also may reduce the asymmetry information. The previous study argued that the size of the company had a significant association with the company's disclosure (Probohudono et al., 2013).

Management Compensation. Motivating the agent to act in the principal's interest is the key challenge arising from the separation of ownership and control. The main instrument to encourage management to act for the wealth of shareholders is through compensation contract. The disclosure of management compensation increases the trust of the investors (Seow et al., 2019). Management compensation disclosure has been required and used by the regulators as the mean to improve corporate governance. Market regulators have demanded more disclosure requirements for top management as part of the corporate governance reform. For example, is the requirement by the US SEC in 2017 for public companies to disclose the ratio of CEO's compensation to the median compensation of its employees (Securities and Exchange Commission, 2015). US SEC has required disclosure for management compensation since the 1970s and evolves (Espahbodi et al., 2016). However, in Indonesia, mandatory disclosure for top management compensation is required since 2011 with the adoption of IAS 24.

Hypotheses Development

Management compensation disclosure as an instrument to reduce the agency problems has also been used by the regulator to improve the corporate governance of the companies. The company's with better

corporate governance attract more trust from the shareholders by disclosing their top management compensation (Seow et al., 2019). Thus we are interested to investigate if the corporate governance of the companies is associated with the level of management compensation disclosure. The firm's characteristics as proxied by the firm's size and audit's quality may also be associated with the level of management compensation disclosure. Considering the preceding discussion, we formulate our hypothesis as follow:

H_1: Institutional ownership is associated with the level of management compensation disclosure.

H_2: The independent Audit Committee is associated with the level of management compensation disclosure.

H_3: Audit quality is associated with the level of management compensation disclosure.

H_4: The firm size is associated with the level of management disclosure compensation.

MATERIALS AND METHODS

Research Design and Sources of Data

This research used Logit Regression to test the previously formulated hypotheses about the effect of ownership structure, independent audit committee, audit quality and company's size on the extent of key management compensation disclosures in companies registered in Kompas 100. The Kompas100 Index is a stock index of 100 shares of public companies traded on the Indonesia Stock Exchange (IDX). This study chose Kompas 100 because the selected company had large market capitalization values, also had good fundamentals and performance. Thus companies in Kompas 100 index supposedly have better financial reporting quality, bigger remuneration, and better corporate governance. Secondary data is employed in this research to be analyzed. This study used the data presented in the published corporate financial statements obtained from the IDX website (www.idx.co.id) or the official website of each company. These archival data were collected from 2011 to 2014 (time series) as well as cross-section as it includes several companies with diverse industries. With time-series data and cross-section in this research then used pooling data or panel data.

Population and Sample

The populations in this research were all companies listed on the Indonesia Stock Exchange and included in Kompas 100 in 2011-2014. The sample used in this research was chosen by the purposive sampling meet the following criteria:

(i) All companies listed in Indonesia Stock Exchange (BEI) in 2011-2014 and included in Kompas 100.

(ii) Companies are included in Kompas 100 in 2011-2014 consistently

(iii) The company has submitted/published annual financial reports and annual reports that have been audited regularly and have complete financial data as required

by this research and can be accessed through the internet

(iv) The company has an independent institutional shareholder and independent audit committee from outside the company.

Based on these criteria, 212 observations in 5 years (2011-2014) were used as research samples.

Research Model

To test the hypothesis, this study employed a logit regression technique with the following empirical model:

$$COMPDISC_{i,t} = \alpha + \gamma_1 INSTOWN_{j,i,t} + \gamma_2 AUCOM_{j,i,t} + \gamma_3 AUQUAL_{j,i,t} + \gamma_4 SIZE_{j,i,t} + \varepsilon$$

Note:

$COMPDISC_i$ = a broad level of disclosure of key management compensation in the company's financial statements *i*. The disclosure level than divided into high and low disclosure to differentiate the level. The firm will be given 1 if the disclosure score is equal 4, and 0 if the disclosure score is 0, 1, 2 or 3.

$INSTOWN_i$ = proportion of the company's institutional ownership *i*

$AUCOM_i$ = the proportion of independent audit committee members from outside the company

$AUQUAL_{it}$ = quality audit company i in year t.

$SIZE_i$ = firm size *i*

The extent of disclosure of key management compensation in the company's financial statements is measured using scores as in previous studies conducted by Akmyga and Mita (2015), and Astasari and Nugrahanti (2015). The disclosure score is divided into five namely:

(i) A score of 0 is given if the firm does not disclose key management compensation in the financial statements

(ii) Score 1 is given if the company only presents total compensation without a description of reward categories

(iii) Score 2 is given when the company discloses the total compensation of each commissioner and director

(iv) Score 3 is given when the company discloses the total compensation by providing a description/reward category

(v) Score 4 is given when the company discloses the total compensation and provides details of sub amounts per category of employee benefits.

The operational definition of each independent variable used in this study is described as follows:

(a) Institutional Ownership (*INSTOWN*). This variable is measured by using the percentage of the number of shares owned by the institution from all share capital of the company in circulation (Bangun et al. as cited in Astasari & Nugrahanti, 2015).

(b) Independent Audit Committee (*AUCOM*). This variable is

measured using the ratio of the number of independent audit committee members to the total number of audit committee members present in the company (Mujiyono & Nany, 2010).

(c) Audit Quality (*AUQUAL*). Audit Quality$_{it}$ is the quality of corporate audit *i* in year *t*. Following DeAngelo (1981), audit quality can be measured by a public accounting firm's size. Audit Quality is coded 1 if the company is audited by Big 4 and is 0 if it is not audited by Big 4.

(d) Firm Size (*SIZE*). Firm size is a scale that determines the size of the company that can be reviewed from the value of equity, sales value, the number of employees and the total value of assets which is a context variable that measures the demands of service or product organization (Kusnia, 2013). Following Minnick and Noga (2010) in measuring the size of the company is by the natural logarithm of the company's total assets at the end of the year.

RESULTS AND DISCUSSION

Descriptive Statistics

Figure 1 shows that in general the disclosure of management compensation in Indonesia was improving over the years from 2011 to 2014. Companies with a score of 1 resulted a significant decreasing in number from 2011 to subsequent years. The number of companies with score 2 and score 3 did not seem to decrease and increase significantly. There was a significant increase in the number of companies with a score of 4 from 2011 to the next year. This indicates that the extent of disclosure of key management compensation in the financial statements of the company is increasing.

Table 1 presents the descriptive statistics for the dependent variable (*COMPDISC*) and the independent variables (*INSTOWN, AUCOM, AUQUAL* and *SIZE*). From the table, it can be seen that on average, firms in

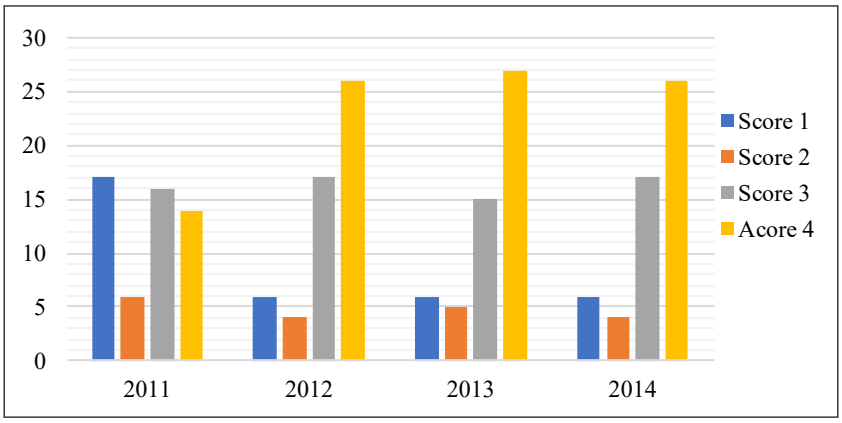


Figure 1. The quality of management compensation disclosure

Table 1
Descriptive statistics

	N	Mean	SD	Q1	Median	Q3
COMPDISC	212	0.44	0.5	0	0	1
INSTOWN	212	70.53	21.29	55.88	71.46	90.24
AUCOM	212	0.60	0.12	0.50	0.67	0.67
AUQUAL	212	0.76	0.43	1	1	1
SIZE	212	13.46	0.56	13.07	13.34	13.77

Notes: COMPDISC= management compensation disclosure level. A firm with high disclosure (i.e., disclosure score = 4) is coded 1 and 0 otherwise; INSTOWNn= the percentage of institutional ownership; AUCOM = the percentage of the independent audit committee in the board; AUQUAL= audit quality, represents 1 if a firm is audited by Big 4 audit firm, and 0 otherwise; SIZE= natural log of total assets.

our sample had 44% of high-level disclosure in key management compensation. The average (median) institutional ownership (*INSTOWN*) in our sample was 70.53% (71.46%), suggesting that the majority of firms in our sample were owned by institutional shareholders. Next, the average (median) of audit committee proportion from an independent party *(AUCOM)* in our sample was 60% (67%). Further, firms in our sample, on average, 76% were audited by Big Four audited firms *(AUQUAL)*. Finally, the mean of *SIZE* as a proxy of firm size was 13.46 (median=13.34).

Correlation Statistics

Pearson and Spearman correlations between the dependent and independent variables are presented in the upper and lower diagonal of Table 2 respectively. *COMPDISC* is positively correlated with *INSTOWN, AUQUAL AND SIZE* ($p<0.05$, Pearson and Spearman Correlations) suggesting that as institutional ownership, audit quality and size increase, compensation disclosure also increased. *COMPDISC,* however, is negatively correlated with *AUCOM* ($p<0.05$, Pearson and Spearman Correlations) suggesting that as the number of independent audits committee member increased, the extent of compensation disclosure decreased. the correlation statistics generally indicate that compensation disclosure increased with *INSTOWN, AUQUAL, SIZE* and decrease with *AUCOM*. Finally, the highest correlation observed in Table 2 was between

Table 2
Correlation matrix

	COMPDISC	*INSTOWN*	*AUCOM*	*AUQUAL*	*SIZE*	*VIF*
COMPDISC		0.39*	-0.29*	0.17*	0.31*	1.28
INSTOWN	0.40*		-0.12	0.27*	0.37*	2.10
AUCOM	-0.28*	-0.11		-0.27*	-0.26*	1.72
AUQUAL	0.20*	0.23*	-0.26*		0.37**	2.34
SIZE	0.31**	0.34*	-0.23*	0.37*		3.82

Correlations: Pearson (Spearman) Correlations are Presented in the Upper (Lower) Diagonal.
*Notes: * significant at 1 percent level ** significant at 5 percent level*

COMPDISC and *INSTOWN* (0.40, Pearson Correlation, significant at the 1% level). In testing for potential multicollinearity, the highest variance inflation factor (VIF) scores relate to SIZE (3.82), which was lower than the conservative threshold of 10 beyond which multicollinearity concerns could arise among independent variables (Kennedy, 1992).

Logit Regression Results

Table 3 reports the results from the estimation of empirical model, which regresses the level of key management compensation disclosure on independent variables (*INSTOWN, AUCOMM, AUQUAL,* and *SIZE)*. The result based on *INSTOWN* as independent variable revealed that the coefficient was positive (0.046) and significant at 1% level (z-statistic=-4.98). This result suggests that as institutional ownership increases the level of key management compensation disclosure will also increase. The result for *AUCOM* shows that the coefficient was negative (-3.369) and significant at the 5% level (z-statistic=-2.38). It suggests that the increase in the audit committee proportion will lead to a decrease in the level of key management disclosure. Next, the result for *AUQUAL* revealed that the coefficient was negative (-0.119) but not significant at any conventional level (z-statistic=-0.280). It suggests that the audit quality does not affect the level of disclosure on key management compensation. The result for *SIZE* as independent variable showed that the coefficient was negative (-0.949) and significant at 5% level (z-statistic=-2.830). It suggests a larger firm will be more likely to disclose more on key management compensation. Finally, the pseudo-R-squared values from the regression specifications reported in Table 3 indicated that the explanatory variables collectively explained around 22.48% of the total variation in the decision of firms to disclose more or less of key management compensation. This table presents results from the estimation of empirical model, which regressed the high level of disclosure *(COMPDISC)* on independent variables (*INSTOWN, AUCOM, AUQUAL* and *SIZE*).

Table 3
Logit regression results

Variable	Coefficient	Robust Std. Error	z-Statistic	Prob.
INSTOWN	0.046	0.009	4.980*	0.000
AUCOM	-3.369	1.414	-2.380**	0.017
AUQUAL	-0.119	0.422	-0.280	0.778
SIZE	0.949	0.335	2.830**	0.005
C	-14.231	4.528	-3.140	0.002
Pseudo R^2	0.2248			
N	212			

*Notes: * significant at 1% level ** significant at 5% level*

DISCUSSION

This study tested four hypotheses if institutional ownership (INSTOWN), audit committee (AUCOM), audit quality (AUQUAL) and firm size (SIZE), had a significant effect on the management compensation disclosure. The study found that institutional ownership, audit committee and firm size had a significant effect on the management compensation disclosure.

Institutional ownership arguably can be used in reducing agency conflict by controlling the management through an effective monitoring process. Percentage of certain shares owned by the institution may affect the process of preparing financial statements that do not rule out any actualization according to the interests of the management (Birt et al., 2019; Hanafi & Setiawan; 2018; Kusumaningtyas et al., 2019). By the intervention of institutional stakeholders, it is expected that greater disclosure of the extent in key management compensation will be better.

The institutional ownership variable has a significant positive effect on the extent of disclosure of key management compensation on the results of this study. This is in contrast to Astasari and Nugrahanti (2015) research findings that institutional ownership had a significant negative impact on the extent of disclosure of key management compensation in the financial statements. Institutional share ownership has proven to improve the quality of corporate information disclosure. Institutional ownership defined as share ownership by parties in the form of institutions such as insurance companies, banks, investment companies, and other parties related to institutional ownership. Institutional shareholders gain more benefit than individual investors, especially major institutional shareholders or above 5%. Institutional investors arguably have better resources than individual investors, such as experts to analyze investments, greater capital, and more sophisticated equipment. Large institutional shareholders are assumed to have long-term investment orientation which immediately affects their higher concern toward the development of the company by monitoring the company. The relatively large percentage of institutional share ownership may affect the disclosure of company reporting through the General Meeting of Shareholders (GMS). Effective monitoring processes by institutional shareholders can influence the process of preparing financial statements, including key management compensation disclosures.

The general purpose of establishing audit committees, among others, is to improve the quality of financial reporting, ensuring that directors make decisions based on accounting policies, practices and disclosures, reviewing the scope and results of internal and external audits, and overseeing the financial reporting process. With an effective audit committee, commissioners can improve the quality of financial reporting. The results of this study indicate that the audit committee has a negative and significant association with the key disclosure of key management compensation. This result is differing from the previous research conducted by

Astasari and Nugrahanti (2015) which found that the audit committee had no effect on the extent of disclosure of key management compensation in the financial statements. Mujiyono and Nany (2010) also found that the audit committee did not affect the area of voluntary disclosure. Similarly, the results of Wulandari and Budiartha (2014) showed that the audit committee did not affect the integrity of the financial statements. This signifies the role of independent audit committee members has not been effective in improving the quality of corporate financial statement disclosure. The more independent members of the audit committee disclose financial statements declining in quality. The many parties who give opinions/suggestions to improve the quality of financial statement disclosure, even make the inputs, are not executed maximally, because it is not focused on one/two input only.

Further, the results of this study indicate that audit quality measured by a public accounting firm's size does not affect the extent of disclosure of key management compensation in the financial statements. That is, firms audited by Big 4 and Non-Big 4 firms provided the same extent on key management compensation disclosure. The results of this study are not in line with previous research conducted by Basset et al. (2007), DeAngelo (1981), Nelson and Percy (2005), Wang and Chen (2004) that companies audited by large public accounting firms (Big 4) might disclose mandatory information in financial statements more widely. Akmyga and Mita (2015) stated that the public accounting firm measures had a significant effect on the extent of disclosure of key management compensation in the financial statements. It is important to note that the Non-Big 4 Public Accounting Firms in this research were PKF International, Moore Stephens, Mazars, HLB International, BDO International, RSM International, DFK International, and others. The Public accounting firm is an internationally affiliated Public accounting firm, which has good credibility. This shows that the Non-Big 4 also has the same good audit quality as big 4, so there might be no significant difference in audit quality between Big 4 and Non-Big 4 Public Accounting Firm.

The results of this study indicate that firm size variable provides a positive and significant effect on the extent of disclosure of key management compensation. This may occur due to the increasingly stringent regulations and public scrutiny make the company try to keep its reputation more transparent, especially for large companies, as they are more visible and under greater scrutiny from the stakeholders. The result of this study is aligned with previous studies such as Omar and Simon (2011), Agca and Onder (2007), and Alsaeed (2006), which indicated that firm size had a significant effect on the disclosure of the company's financial statements. However, this study is in contrast with the finding of Jaafar et al. (2014) who found firm size harmed the director's remuneration disclosure.

CONCLUSIONS

This study aimed to examine the effect of firm characteristics and corporate governance on the quality of management compensation disclosure in Indonesia. Using 212 firm-year observations in four years after mandatory disclosure of management compensation in 2011, we documented some evidence that institutional ownership and firm size were positively associated with the disclosure level of key management compensation. We also found that the proportion of independent audit committee was negatively associated with the level of management compensation disclosure. Our research, however, did not find evidence that the audit quality affected the level of management compensation disclosure. This study is significant for regulator and investor who seek for determinants of management compensation disclosure in an emerging country with two-tier board system. The implication of our study is highlighting the importance of corporate governance in solving agency problems. We recommend the market regulator to impose a stricter rule to improve the corporate governance of the listed companies especially for the quality and the quantity of independent audit committee member. The paper contributes to the literature of management compensation disclosure as the size of the audit firm does not affect the level of disclosure. This is not necessarily a bad signal of lower quality of Big Firms, instead, this may indicate that the international non-Big Firms in Indonesia have also similar audit quality with their Big Firms competitors.

ACKNOWLEDGEMENT

We appreciate the funding support from Academic Leadership Grant of Universitas Padjadjaran for this research and comments from the reviewer and audience in the 5th International Conference on Management, Hospitality, Tourism and Accounting (IMHA) Conference 2018. We would like also to thank our research assistant Pera Yulianingsih for her assistance.

REFERENCES

Agca, A., & Onder, S. (2007). Voluntary disclosure in Turkey: A study on firms listed in Istanbul stock exchnge (ISE). *Problems and Perspective in Management*, *5*(3), 241-286.

Akmyga, S. F., & Mita, A. F. (2015). Pengaruh struktur corporate governance dan kualitas audit terhadap luas pengungkapan kompensasi [Effect of corporate governance structure and audit quality on the extent of compensation disclosure]. *Jurnal Akuntansi dan Keuangan Indonesia, 12*(1), 19-36.

Aljifri, K., Alzarouni, A., Ng, C., & Tahir, M. I. (2014). The association between firm characteristics and corporate financial disclosures: Evidence from UAE companies. *The International Journal of Business and Finance Research*, *8*(2), 101-123.

Al-Shaer, H., & Zaman, M. (2019). CEO compensation and sustainability reporting assurance: Evidence from the UK. *Journal of Business Ethics*, *158*(1), 233-252.

Alsaeed, K. (2006). The association between firm-spesific characteristics and disclosure: The case of Saudi Arabia. *Managerial Auditing Journal, 21*(5), 476-496.

Andjelkovic, A., Boyle, G., & McNoe, W. (2002). Public disclosure of executive compensation: Do shareholders need to know? *Pacific-Basin Finance Journal, 10*(1), 97-117.

Aobdia, D. (2018). Employee mobility, non-compete agreements, product-market competition, and company disclosure. *Review of Accounting Studies*, *23*(1), 296-346.

Astasari, K. G. A., & Nugrahanti, Y. W. (2015). Pengaruh struktur kepemilikan, ukuran komite audit, dan kualitas audit terhadap luas pengungkapan kompensasi manajemen kunci di laporan keuangan [Effect of ownership structure, audit committee size, and audit quality on the extent of disclosure of key management compensation in financial statements]. *DeReMa Jurnal Manajemen, 10*(2), 162-182.

Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: Properties of accounting income in four East Asian Countries. *Journal of Accounting and Economics, 36*(1), 235-270.

Basset, A., Vadrucci M. R., & Cabrini M. (2007). Biovolume determination of phytoplankton guilds in transitional water ecosystem of Mediterranean Ecoregion. *Transitional Waters Bulletin, 2*, 83-102.

Basu, S., Hwang, L. S., Mitsudome, T., & Weintrop, J. (2007). Corporate governance, top executive compensation and firm performance in Japan. *Pacific-Basin Finance Journal, 15*(1), 56-79.

Bhaumik, S., Driffield, N., Gaur, A., Mickiewicz, T., & Vaaler, P. (2019). Corporate governance and MNE strategies in emerging economies. *Journal of World Business*, *54*(4), 234-243.

Birt, J., Chalmers, K., Maloney, S., Brooks, A., Oliver, J., & Bond, D. (2019). *Accounting: Business reporting for decision making*. Milton, Australia: John Wiley & Sons Australia.

Brunello, G., Graziano, C., & Parigi, B. (2001). Executive compensation and firm performance in Italy. *International Journal of Industrial Organization, 19*(1-2), 133-161.

Challen, A. E., & Siregar, S. V. (2017). Audit quality on earnings management and firm value. *Jurnal Keuangan dan Perbankan*, *14*(1), 30 – 43.

Chou, T. K., & Buchdadi, A. D. (2018). Executive's compensation, good corporate governance, ownership structure, and firm performance: A study of listed banks in Indonesia. *Journal of Business and Retail Management Research*, *12*(3), 79 – 91.

Conyon, M., & He, L. (2011). *Executive compensation and corporate governance in China (ICS 2011-003)*. Retrieved July 19, 2016, from http://digitalcommons.ilr.cornell.edu/ics/6

Darmadi, S. (2011). Board diversity and firm performance: The Indonesian evidence. *Corporate Ownership and Control Journal*, *8*(2), 450 – 466.

DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting an Economics*, *3*(3), 183-199.

Donahue, S. M. (2008). Executive compensation: The new executive compensation disclosure. *Fordham Journal of Corporate & Financial Law, 13*(1), 59 – 87.

Espahbodi, R., Liu, N., & Westbrook, A. (2016). The effects of the 2006 SEC executive compensation disclosure rules on managerial incentives. *Journal of Contemporary Accounting & Economics*, *12*(3), 241-256.

Fung, M. K., Cheng, L. T., & Leung, T. Y. (2019). The signalling cost of hiring a large auditor: Evidence from the fee differential between large and small auditors. *International Journal of Monetary Economics and Finance*, *12*(3), 196-211.

Gayle, G. L., Li, C., & Miller, R. A. (2018). How well does agency theory explain executive compensation? *Review*, *100*(3), 201 – 236.

Grosse, M., Kean, S., & Scott, T. (2017). Shareholder say on pay and CEO compensation: Three strikes and the board is out. *Accounting & Finance*, *57*(3), 701-725.

Grossman, S. J., & Hart, O. D. (1992). An analysis of the principal-agent problem. In *Foundations of*

Insurance Economics (pp. 302-340). Dordrecht, Netherlands: Springer International Publishing.

Hanafi, M. M., & Setiawan, A. (2018). Ownership concentration, institutional ownership, and IPO underpricing: Evidence from Indonesia Stock Exchange. *International Journal of Governance and Financial Intermediation*, *1*(1), 3-17.

Hasnan, S., Daie, M. S., & Hussain, A. R. M. (2016). Related party transactions and earnings quality: Does corporate governance matter? *International Journal of Economics & Management*, *10*(2), 189 – 219.

Holmstrom, B. (2000). Moral hazard and observability. The theory of the firm: Critical perspectives on business and management. *The Bell Journal of Economics*, *10*(1), 74 – 91.

International Auditing and Assurance Standards Board, 2013. ISA 260: Communication with Those Charged with Governance.

Jaafar, S. B., Wahab, E. A. A., & James, K. (2012). Director remuneration and performance in Malaysia family firms: An expropriation matter? *World Review of Business Research*, *2*(4), 204-222.

Jensen, C., & Meckling, H., (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, *98*(2), 225-264.

Jiang, J. X., Wang, I. Y., & Wang, K. P. (2018). Big N auditors and audit quality: New evidence from quasi-experiments. *The Accounting Review, 94*(1), 205 – 227.

Jordan, C. E., Clark, C. S. J., & Thomas, P. B. (2017). Audit quality differentials for constraining cosmetic earnings management in the pre-sox era: An analysis of audit firm size and brand. *Global Journal of Accounting and Finance*, *1*(1), 13.

Kaplan, S. N. (1998). *Top executive incentives in Germany, Japan, and the US: A comparison*. Working paper (no. 465). Chicago, USA: University of Chicago.

Kartadjumena, E., & Rodgers, W. (2019). Executive compensation, sustainability, climate, environmental concerns, and company financial performance: Evidence from Indonesian commercial banks. *Sustainability*, *11*(6), 1673.

Kennedy, P. (1992). *A guide to econometrics*. Cambridge, USA: MIT Press.

Kusnia, G. (2013). *Pengaruh umur perusahaan, ukuran perusahaan, dan leverage terhadap intellectual capital disclosure* [The effect of company age, company size, and leverage on intellectual capital disclosure] (Master thesis), Universitas Pasundan, Indonesia.

Kusumaningtyas, M., Chariri, A., & Yuyetta, E. N. A. (2019). Board of commissioners, audit committee gender, institutional ownership and earnings management. In *5th International Conference on Accounting and Finance 2019* (pp. 103 – 108). Yogyakarta, Indonesia: Atlantis Press.

Laing, D., & Weir, C. M. (1999). Governance structures, size and corporate performance in UK firms. *Management Decision, 37*(5)*,* 457-464.

Laksono, R. H. C. (2016). *Ownership structure, diversitas pendidikan direksi, karakteristik perusahaan dan pengaruhnya terhadap executive director remuneration and compensation disclosure: Sebuah studi komparatif sektor perbankan di indonesia, Malaysia dan Thailand* [Ownership structure, diversity of directors' education, company characteristics and their influence on executive director remuneration and compensation disclosure: A comparative study of the banking sector in Indonesia, Malaysia and

Thailand]. (Doctoral dissertation). Universitas Sebelas Maret, Indonesia.

Lary, A. M., & Taylor, D. W. (2012). Governance characteristics and role effectiveness of audit committees. *Managerial Auditing Journal, 27*(4), 336-354.

Lourenço, I. C., Rathke, A., Santana, V., & Branco, M. C. (2018). Corruption and earnings management in developed and emerging countries. *Corporate Governance: The International Journal of Business in Society*, *18*(1),35-51.

Ma, L., Tang, Y., & Gómez, J. P. (2019). Portfolio manager compensation in the US mutual fund industry. *The Journal of Finance*, *74*(2), 587-638.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance, 16*(5), 703-718.

Mujiyono, & Nany, M. (2010). Pengaruh leverage, saham publik, size dan komite audit terhadap luas pengungkapan sukarela [Effect of leverage, public shares, size and audit committee on the extent of voluntary disclosure]. *Jurnal Dinamika Akuntansi, 2*(2), 129-134.

Nelson, J., & Percy, M. (2005). The transparency of executive stock option disclosures in Australian annual reports, *Financial Reporting, Regulation, and Governance, 4*(2), 1- 35.

Ng, S. H., Teh, B. H., Ong, T. S., & Soh, W. N. (2016). The relationship between board characteristics and firm financial performance in Malaysia. *Corporate Ownership and Control, 14*(1), 259 – 268.

Omar, B., & J. Simon. (2011). Corporate aggregate disclosure practices in Jordan. *Advances in Accounting, Incorporating Advances in International Accounting, 27*(1), 166-186.

Probohudono, A. N., Tower, G., & Rusmin. (2013). Diversity in risk communication. *Australasian Accounting, Business and Finance Journal*, *7*(1), 43-58.

Rachmawati, A., & Triatmoko, H. (2015). Pengaruh pengadopsian IFRS dan good corporate governance terhadap kualitas laba [The effect of IFRS adoption and good corporate governance on earnings quality]. *Diponegoro Journal of Accounting, 4*(3), 1-12.

Robinson, J. R., Xue, Y., & Yu, Y. (2011). Determinants of disclosure noncompliance and the effect of the SEC review: Evidence from the 2006 mandated compensation disclosure regulations. *The Accounting Review, 86*(4), 1415-1444.

Securities and Exchange Commission. (2015). *Pay ratio disclosure*. Retrieved August 19, 2017, from https://www.sec.gov/rules/final/2015/33-9877.pdf

Seow, P. S., Goh, C., & Pan, G. (2019). The Effects of Corporate Reputation and Compensation Disclosure on Investor Judgments. *2019 Canadian Academic Accounting Association (CAAA) Annual Conference*: Singapore Management University School of Accountancy. Research Paper No. 2019-2103. Available at SSRN: https://ssrn.com/abstract=3311443or http://dx.doi.org/10.2139/ssrn.3311443

Sudarmadji, A. M., & Sularto, L. (2007). Pengaruh Ukuran Perusahaan, Profitabilitas, Leverage, dan Tipe Kepemilikan Perusahaan terhadap Luas *Voluntary Disclosure* Laporan Keuangan Tahunan [Effect of Company Size, Profitability, Leverage, and Type of Company Ownership on the Area of Voluntary Disclosure of Annual Financial Statements]. *Proceedings PESAT (Psikologi, Ekonomi, Sastra, Arsitek dan Sipil)*, 2, 53 – 61. Depok: Universitas Gunadarma.

Unite, A. A., Sullivan, M. J., Brookman, J., Majadillas, M. A., & Taningco, A. (2008). Executive pay and firm performance in the Philippines. *Pacific-Basin Finance Journal, 16*(5), 606-623.

Utama, C., & Utama, S. (2014). Determinants of disclosure level of related party transactions in Indonesia. *International Journal of Disclosure and Governance*, *11*(1), 74-98.

Utami, E. R., & Kusuma, I. W. (2020). Firm performance, top management compensation, and risk preference: A story of Indonesian firms. *The Indonesian Journal of Accounting Research*, *22*(2), 261-286.

Wang, Y. Y., & Chen, H. W. (2004). Auditing quality and accounting information transparency evidence from Chinese listed corporations. *Accounting Research*, *4*(1), 9-15.

Wulandari, N. P., & Budiartha, I. K. (2014). Pengaruh struktur kepemilikan, komite audit, komisaris independen dan dewan direksi terhadap integritas laporan keuangan [Effect of ownership structure, audit committee, independent commissioners and board of directors on the integrity of financial statements]. *E-Jurnal Akuntansi*, *7*(3), 574-586.

Pertanika J. Soc. Sci. & Hum. 28 (2): 763 - 775 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Examining the Effect of Persuasive Message of Beauty Vloggers on Information Acceptance of eWOM and Purchase Intention: The Study of Consumers of Beauty Products in Jabodetabek, Indonesia

Sari Ramadanty[1]*, Alex Maulana Muqarrabin[2], Wulandari Ayu Nita[2] and Imam Syafganti[3]

[1]*Department of Communication, Faculty of Economics and Communication, Bina Nusantara University, Jakarta 11480, Indonesia*
[2]*Department of International Marketing, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta 11480, Indonesia*
[3]*Department of Communication Studies, University of Antwerp, Prinsstraat 13, 2000 Antwerpen, Belgium*

ABSTRACT

Beauty vlogger, as an influencer on YouTube, provides a change in consumer purchase behaviour. Beauty vlogger is a new platform of eWOM providing honest feedback towards skincare and cosmetics products. This study aimed to examine the effect of beauty vlogger through the persuasive eWOM Message, based on the construct of argument quality, source credibility, source attractiveness, and sources perception on information acceptance of eWOM. This study also evaluated the impact of information acceptance of eWOM on purchase intention through Vlogger in the Beauty Industry. This research used an online questionnaire from 400 female respondents who were the subscribers or the viewers of beauty vlogger with the age ranging from 15 to 25 years old. Data were analyzed using Structural Equation Modeling. The results showed that based on the construct of the Persuasive eWOM message, source credibility was the only variable which had no effect on Information Acceptance of eWOM. However, information acceptance of eWOM and source credibility had a direct effect on purchase intention.

Keywords: Beauty vlogger, information acceptance of eWOM, persuasive eWOM message, purchase intention

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
sari.ramadanty@binus.ac.id (Sari Ramadanty)
alex.maulana@binus.ac.id (Alex Maulana Muqarrabin)
wulanayunita@gmail.com (Wulandari Ayu Nita)
Imam.Syafganti@student.uantwerp.be (Imam Syafganti)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

Social Networking Sites (SNS) have been used by the users to share and create relationships with other users (Karpinska-Krakowiak, 2016). In addition, the second most popular SNS among users around the world (including in Indonesia) is YouTube while Facebook is still in the first rank (Wang & Li, 2015). The popularity of YouTube relates to site accessibility (Simonsen, 2011), allowing everyone to upload and share video content that has been created (Amy et al., 2013).

YouTube users can upload and share instrumental videos for their video blog (Vlogs) to their followers. These YouTube users are known as vloggers (Hill et al., 2017). Vloggers may upload videos about their personal lives (Lee & Watkins, 2016), the products they use, the places they visit and others. A vlogger can convey a message of thoughts, opinions, and reviews to the audiences who cannot provide immediate feedback at the same time (Haider et al., 2016). Furthermore, a vlogger provides a reference for her followers regarded as an opinion leader (Zanette et al., 2013).

Vlogger is an embodiment of Electronic Word of Mouth (eWOM), in which a person or a group of people may recommend or provide opinions about a product or service (Bayazit et al., 2017). Currently, vlog content is a highly credible source for online users as it is considered more trustworthy through testimonials of product experience (Hsu et al., 2014). A vlog about beauty is one of the most popular and widely subscribed contents (Ananda & Wandebori, 2016). The viewers of the beauty vlogger content reach more than 125 million and most of them are young women (Berryman & Kavka, 2017).

In Indonesia, beauty vloggers such as Sarah Ayu, Titan Tyra, Suhay Salim are the most recommended vloggers for the best beauty advice (Rahmiasri, 2016). The beauty vloggers such as Nanda Arsyinta and Molita Lin are even on the list of 66 Top Asian Beauty Bloggers on YouTube in the world (nylonpink.tv, 2017). Beauty vloggers are believed to be able to stamp their approval on a particular product where the viewers can trust their opinion very much because it is considered a recommendation (Sokol, 2017).

Consequently, beauty vloggers become influencers to their viewers with a persuasive message through interaction and interpersonal influence (Have, 2017). The beauty vloggers creating video content about beauty tutorial and product review can be a manifestation of the persuasive eWOM message. Persuasive eWOM message is formed by argument quality, source credibility, source attractiveness, and source perception (Teng et al., 2016). Persuasive eWOM message from beauty vloggers is perceived as a credible source, indicating the explanatory power in online information acceptance (Teng et al., 2014). Persuasive eWOM message and information acceptance of eWOM effectively influence the purchase behaviour of online consumer (Erkan & Evans, 2016).

Therefore, this research investigated the power of beauty vloggers as the influencers to their viewers through the eWOM message

which finally would influence the intention of those viewers to buy the beauty product. The objective of this research was to examine the influence of the persuasive eWOM message, based on the constructs of argument quality, source credibility, source attractiveness, and source perception on the purchase intention through the Information Acceptance of eWOM in Jabodetabek, Indonesia.

Literature Review

Argument Quality. Argument quality refers to the strength of the persuasion power of arguments embedded in informational messages which will develop the positive attitude of consumers (Djafarova & Rushworth, 2017). High argument quality can be interpreted by both high informativeness of sufficient data and high persuasive level of strong support claims (Zhang et al., 2014). Messages are considered to have strong or weak qualities based on their relevance, timeliness, accuracy, and comprehensiveness (Cheung & Thadani, 2012). The high-quality review message reflects the clear reviewer's attitude and contains how and why the reviewer has shaped a certain attitude towards the target (Teng et al., 2014). Therefore, it can be concluded that Argument Quality is the information conveyed by the communicator referring to the extent to which the recipient of the message can understand and take an attitude in response to the information.

H1: Argument quality has positive effects on Information Acceptance of eWOM

Source Credibility. Source credibility is the ability and motivation of the source of the message to generate accurate and correct information to the audience (Li & Zhan, 2011). Source credibility can generate an effective persuasive message and encourage a good attitude towards the product/service associated with its review. Source credibility is a multi-dimensional concept that serves as a tool for the recipient of information to assess the source or transmitter of communication with respect to the information. Source credibility is formed by the dimensions of expertness, trustworthiness, and source experience (Khong & Wu, 2013). Source credibility is driven by the perception of expertise and trust of communicator to influence the consumer attitudes towards the evaluation of information received (De Veirman et al., 2017). Expertness refers to the knowledge that communicators have about the product/service. Trustworthiness is a level of trust and acceptance that the recipient of the message develops toward the source. Source experience deals with the extent to which the communicator is familiar with the product/service based on his or her actual experience, as perceived by the eWOM recipients (Teng et al., 2014). Additionally, the credibility of the information relates to the source's influence on his or her followers for changing and driving the opinion of their purchase intention (Martawilaga & Purwanegara, 2016).

H2: Source credibility has positive effects on Information Acceptance of eWOM

H3: Source credibility has positive effects on Purchase Intention

Source Attractiveness. Source attractiveness is persuasion through the identification process in which the recipient is motivated to accumulate relation with the source and by adopting the beliefs, attitudes, preferences, or similar behaviour (Belch & Belch, 2015). Source attractiveness has a positive impact on consumer perceptions and has the ability to influence opinion change (Hill et al., 2017). In addition, the source attractiveness perceived to be attractive is more likely to lead to purchase intention (Ananda & Wandebori, 2016). Source attractiveness is formed by the dimensions of familiarity, likability, similarity (Muda et al., 2014). Thus, source attractiveness concluded as the ability of a person referring to the attraction who causes persuasion and will result in trust in the recipient of the message (Kittikowit et al., 2018).

H4: Source attractiveness has positive effects on information acceptance of eWOM

H5: Source attractiveness has positive effects on purchase intention

Source Perception. Source perception is a process of selecting, arranging and interpreting the stimulation. Perception is formed to give a sensation of its own in giving meaning to the audiences (Solomon, 2015). Source perception is a form of online review created by users aimed at influencing other users' intentions to receive and use online information (Teng et al., 2016). Source perceptions take possession of opinion leader role by an online review which is helpful, reliable and valuable to other users (De Veirman et al., 2017). The dimensions of source perception are usefulness, helpfulness, social tie, and homophily (Teng et al., 2014).

H6: Source perception has positive effects on information acceptance of eWOM

Information Acceptance of eWOM. Information acceptance of eWOM is based on social norms or opinions in virtual communities through the process of message evaluation. If the reader determines that the review is credible, he is more likely to receive the eWOM message and this influences the purchasing decision process (Fan et al., 2013). Information acceptance of eWOM is a persuasive message received by the recipient from the trusted source and it convinces the recipient that the message is valid, growing his or her desire in making a purchase. Persuasive messages from social media opinion leader can lead the acceptance of information that will be affected the consumer behaviour regarding recommending the product or services and their intention to buy (Huhn et al., 2018). The dimensions of information acceptance of eWOM are acceptance and influence (Teng et al., 2014).

H7: Information Acceptance of eWOM has positive effects on Purchase Intention

Purchase Intention. Purchase intention relates to consumer behaviour based on personal characteristics of everyone in determining a factor that can be categorized as a brand, product, retailer, purchase time and purchase quantity (Kotler & Armstrong, 2014). Purchase intention describes and determines consumer responses to buy a product based on his or her intention. Consumer purchase intention can be determined through their feedback and engagement (Schiffman et al., 2013). Purchase Intention is formed by the dimensions of likely, probably, and definitely (Sari & Kusuma, 2014). Figure 1 depicts the conceptual model of this research.

Based on the research framework, the variables of source perception and argument credibility are not directly tested for purchase intent, this is because, according to Teng et al. (2014), Source Perception is an assessment made by the user to influence the intentions of other users to receive and use the information. Ideally, based on the literature, source perception should be mediated by the acceptance of the information provided, so that it can only influence consumer behaviour. Similarly, the quality argument in the study by Teng et a.l (2014) states that the quality of the argumentation refers to "the persuasiveness of the argument embedded in the information message" because it is still in the form of information that is substantiated or assessed In order to be able to influence consumer behaviour, the acceptance level of the information itself must then be mediated. Therefore, based on the proposed research framework, source perception and argument quality variables are not immediately recognized but must be mediated by eWOM information acceptance.

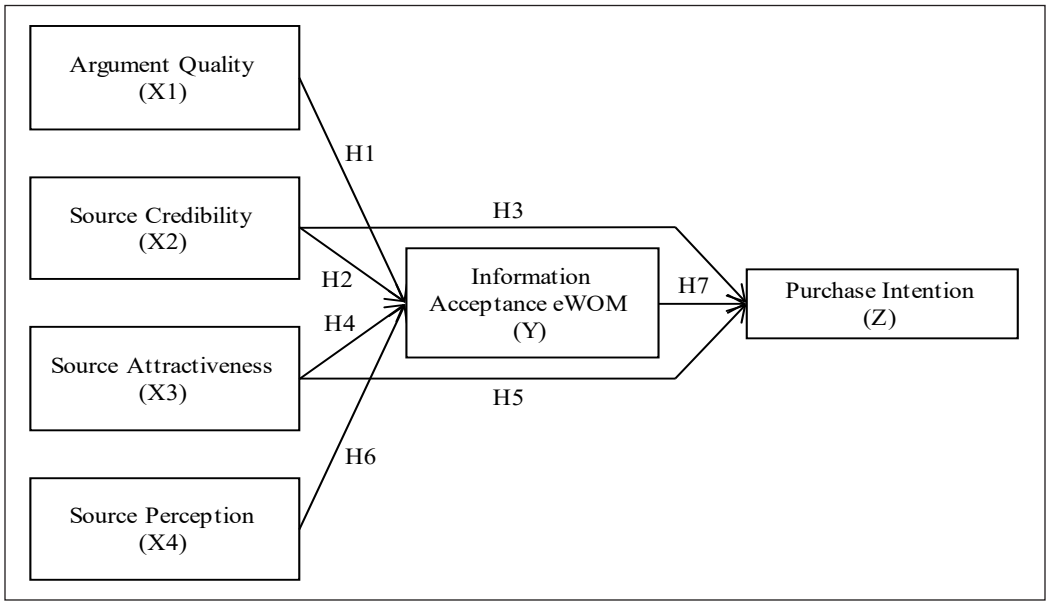


Figure 1. Research framework and hypotheses

MATERIALS AND METHODS

Measurement Items

The empirical hypothesis testing in this research used multi-item scales based on the previous studies which were identified and modified to suit with the study setting. A questionnaire with six constructs was designed to capture the respondents' evaluation of the persuasive eWOM message based on the constructs of argument quality, source credibility, source attractiveness, and source perception, on the information acceptance of eWOM. In addition, this study also measured the effect of information acceptance of eWOM on purchase intention through vlogger in the beauty industry.

The argument quality consists of four dimensions, namely relevance, timeliness, accuracy, and comprehensiveness (Cheung & Thadani, 2012). The source credibility consists of three dimensions, namely expertness, trustworthiness and source experience (Khong & Wu, 2013). The source attractiveness consists of three dimensions, namely familiarity, likability, and similarity (Muda et al., 2014). The source perception consists of four dimensions, namely usefulness, helpfulness, social tie, and homophily (Teng et al., 2014). The Acceptance of eWOM consists of two dimensions, namely acceptance and influence (Teng et al., 2014). Finally, purchase intention consists of two dimensions, namely likely, probably, and definitely (Sari & Kusuma, 2014). The questionnaires were distributed online using Likert scales covering points 1 through 5. The assessment used was 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree.

Data Collection

This research used explanatory research with a quantitative approach. Data collection method used surveys to 400 subscribers or beauty vlogger viewers in Jabodetabek area, Indonesia. The sampling technique used was probability sampling with a simple random sampling, where we assigned a number to each population element and then used a random number table to select the specific element to be inserted into the sample. The respondents' answers in the questionnaires were processed using Structural Equation Modeling (SEM). In this study, we used SmartPLS 3.0 to process the data. In performing the analysis, several stages were conducted, namely, designing path analysis, testing the outer model, and testing the inner model.

RESULTS AND DISCUSSIONS

Descriptive Information

Based on research results, it is known that among 400 respondents, there were 395 respondents (98.7%) aged 15-25 years old. Thus, it can be concluded that most of the followers of the beauty vlogger are aged 15-25 years old. This result relates to the age of internet user in Indonesia, which is around 15-25 years old. Based on the respondents' domicile, 203 respondents (50.8%) lived in Tangerang, 126 respondents (31.5%) lived in Jakarta, 30 respondents (7.5%) lived in

Bekasi, 24 respondents (6%) lived in Depok, and 17 respondents (4.2%) lived in Bogor.

To assess the internal consistency of each construction, the composite reliability (CR) and Cronbach Alpha were calculated. The acceptable threshold level for the test is 0.7. As shown in Table 1, according to Fornell and Larcker (1981), all CR and Cronbach's values exceed the value of 0.7, thus indicating adequate internal consistency (Hsu et al., 2014).

In addition, for testing convergent validity, Fornell and Larcker (1981) suggested that the loading factor of each dimension must exceed 0.7 and AVE must exceed 0.5. In Table 1, all loading factors range from 0.74 to 0.96 and AVE ranged from 0.62 to 0.91, all of which meet the recommended criteria. Regarding the discriminant validity, the tests were performed based on the criteria suggested by Fornell and Larcker (1981). In Table 1, all diagonal values exceed the inter-construct correlation, thus meeting the criteria for establishing discriminant validity.

Correlation and Structural Model

Based on the test results, it is found that the r-square value of argument quality, source credibility, source attractiveness and source perception on information acceptance of eWOM was 0.506. This can be interpreted that information acceptance of eWOM can be explained by the independent variables (X1-X4) of 50.6%. the purchase intention variable in the model shows the r-square value of 0.557. This can be interpreted that 55.7% of purchase intention constructs can be explained by the variables in this study (argument quality, source perception, and the information acceptance of eWOM).

Based on Table 2, it is shown that Argument Quality, Source Attractiveness, and Source Perception variables have a significant and positive influence on

Table 1
The properties of reliability and confirmatory factor analysis

Construct	Cronbach's Alpha	Composite Reliability	Standardized Factor Loadings	AVE
Argument Quality: Q1/ Q2/ Q3/ Q4/ Q5/ Q6/ Q7/ Q8	0.896	0.917	0.698/ 0.725/ 0.670/ 0.813/ 0.846/ 0.790/ 0.770/ 0.777	0.582
Source Credibility: Q9/ Q10/ Q11	0.821	0.902	0.837/ 0.848/ 0.889	0.647
Source Attractiveness: Q12/ Q14/ Q15/ Q16/ Q17/ Q18	0.811	0.883	0.575/ 0.717/ 0.779/ 0.756/ 0.744/ 0.727	0.654
Source Perception: Q19/ Q20/ Q21/ Q23	0.670	0.864	0.868/ 0.852/ 0.602/ 0.500	0.517
Information Acceptance eWOM: Q24/ Q25/ Q26/ Q27/ Q28	0.863	0.893	0.800/ 0.752/ 0.823/ 0.846/ 0.799	0.736
Purchase Intention: Q29/ Q30/ Q31/ Q32	0.825	0.796	0.831/ 0.851/ 0.753/ 0.798	0.509

information acceptance of eWOM. This can be seen from the T-statistics> 1.96 and P-Value <0.05. source credibility is the only factor which has no effect on the information acceptance of eWOM, but source credibility has a significant effect on purchase intention. This is not in line with Source Attractiveness that does not affect purchase intention. Meanwhile, information acceptance of eWOM significantly and positively affects purchase intention.

This research was trying to predict the power of beauty vloggers as influencers to their viewers through an eWOM message which would finally influence the intention of those viewers to buy the beauty product. Based on the research results, it is indicated that argument quality had a significant and positive influence on information acceptance of eWOM. This result is consistent with previous research conducted by Cheung and Thadani (2012) explaining that people would be more receptive to the information when argument quality is comprehensive, accurate, relevant and up-to-date. Argument quality acts as the most important determinant that can be implemented in several ways, such as submitting online reviews that can convince and encourage stronger relationships with online customers (Teng et al., 2014). A good argument of the beauty vloggers in sharing their choices and tips toward beauty products may influence viewers' decision making (Martawilaga & Purwanegara, 2016) and develop the viewer's positive attitude to product and brand (Djafarova & Rushworth, 2017). Argument quality of beauty vloggers, through their vlogs about beauty products, will exert a high influence of persuasion when the reviews are positive and informative (Zhang et al., 2014).

Conversely, source credibility has a negative and insignificant influence on information acceptance of eWOM. This result is contrary to the previous research of Martawilaga and Purwanegara (2016) stating that Source Credibility

Table 2
Hypothesis of the structural model

	T-statistic	P-Value	Original Sample	Hypothesis
Argument Quality - Information Acceptance of eWOM	2.633 > 1.96	0.009>0.05	0.176	Significant impact
Source Credibility - Information Acceptance of eWOM	0.175 < 1.96	0.861<0,05	-0.011	Not significant impact
Source Credibility - Purchase Intention	2.167 > 1.96	0.031<0.05	0.107	Significant impact
Source Attractiveness - Information Acceptance of eWOM	3.906 > 1.96	0.000>0.05	0.187	Significant impact
Source Attractiveness - Purchase Intention	1.598 > 1.96	0.128<0.05	0.079	Not significant impact
Source Perception - Information Acceptance of eWOM	8.253> 1.96	0.000<0.05	0.455	Significant impact
Information Acceptance of eWOM - Purchase Intention	1.443 > 1.96	0.000<0.05	0.638	Significant impact

had a positive and significant influence because the experience of a professional and reliable person could make the message delivery better. This different result might be caused by the difference in the industry. Martawilaga and Purwanegara examined the fashion industry while we in this study examine the Beauty Industry. In addition, this research result is also different from the research conducted by Teng et al. (2014) explaining that Source Credibility positively and significantly influences information acceptance of eWOM in a direct way. This might be caused by the object in this study being different from their study. In this study, we used beauty industry in YouTube video content (Vlog) as the research object and these results may differ between the fashion industry and beauty industry where source credibility is not a factor that makes viewers to information acceptance of eWOM.

However, based on the result of this research, source credibility positively and significantly influences purchase intention. This result is consistent with the previous research of Ananda and Wandebori (2016) stating that source credibility could affect consumer buying interest through video by vlogger on YouTube. Meanwhile, according to Engel's (Widodo & Mawardi, 2017), the level of knowledge or expertise and reliability are the main determinants of Source Credibility in affecting the process of persuasion. Further, Teng et al. (2014) pointed out that source credibility was very important in influencing a person's perception of online reviews before making a final decision. This means as an influencer, beauty vlogger is one of the most important factors which affects Purchase Intention of his or her viewers.

Based on the results of this research, source attractiveness has a positive and significant influence on information acceptance of eWOM. This is in line with the research conducted by Martawilaga and Purwanegara (2016) who pointed out that source attractiveness, consisting of similarity, familiarity, and likeability could make the consumers receive the information directly and they would be affected. In addition, beauty vloggers can drive the viewer's opinion to the same opinion of the beauty product based on their testimony. Likewise, beauty vloggers' attractiveness has a positive impact on the perception which the source is associated, the perception of the source, and the opinion change caused by the eWOM message (Hill et al., 2017). With regard to source attractiveness, the research results indicated that the viewers found online reviews to be attractive when they had similar opinions on the content of beauty vloggers. Besides, the persuasive eWOM message is deemed attractive when the viewers are familiar with the beauty products being reviewed or recommended (Teng et al., 2016)

Nevertheless, based on the research result, source attractiveness has a negative and insignificant influence on purchase intention. This result is contrary to the previous research conducted by Sertoglu et al. (2014) stating that source attractiveness had a positive and significant influence on purchase intention. Beauty vlogger,

as a source attractiveness, creates video content based on opinion similarity as his or her audiences on a chosen product. Familiarity or intimacy in a video can also affect consumers in their purchase intention. However, the result is not in line with the research of Martawilaga and Purwanegara (2016) examining the fashion industry, while this study examines the Beauty Industry.

Based on the research result, Source Perception positively and significantly influences information acceptance of eWOM. The result of this study is reinforced by the previous research of Teng et al. (2014) who stated that online reviews offered useful information in influencing a person's perception. Someone tends to see the social tie or social similarity to other people based on the background they have in receiving the messages. In this study, it was also emphasized that reviews were very useful and could help someone in receiving information that would have an impact on the decision making. This research result is also in line with Teng et al. (2016) stating that source perception affected information acceptance of eWOM. Vlogger viewers believe that online reviews generated by friends and people with similar educational and social backgrounds are a very important resource when they make a decision.

Based on the results of the research, information acceptance of eWOM has a positive and significant impact on purchase intention. This result is in line with the research conducted by Fan and Miao (2012) explaining that to make consumers have a high buying interest, the acceptance of their messages must be higher or clearer. This result is also reinforced by the previous research of Teng et al. (2014) explaining that purchase intention would increase along with the increasing acceptance of information. These results reinforce that if a person can well receive the message, the level of interest in the purchase arising in that person will also increase. The persuasive message from beauty vloggers persuade the viewers to lead the behaviour to recommended and intention to buy the product or the specific beauty brand (Huhn et al., 2018).

CONCLUSIONS

This research adopted the conceptual framework of the persuasive eWOM message and its impact on consumer purchase intention. The results show some theoretical implications. This paper adds to the literature by enhancing the understanding of eWOM in the context of social media through video blogging (vlog). We believe that this study contributes to the existing concepts and empirical eWOM literature. As a result, an integrated conceptual framework was developed to describe the comprehensive antecedent of persuasive eWOM messages, the relationship between these messages, the acceptance of information and its impact on purchase intention. This research framework is expected to expand and enrich previous studies or literature in the relevant field. This research provides a comprehensive overview of the antecedents of persuasive eWOM messages.

Previous research has highlighted the importance of argument quality, source credibility, source attractiveness, and source perception in influencing the information acceptance of eWOM and its impact on purchase intention (Teng et al., 2014). The findings are inconsistent with some of the previous studies where source credibility has a negative and insignificant influence on information acceptance of eWOM. Nonetheless, source perception can affect the user's perception of online reviews before making a final decision. However, the results show that source perception is the most influential determinant of persuasive eWOM Messages. It is important to expand the focus of the research. This is presumably because the media used in this research is different from other research where we used a video blogger (vlogger) and in the beauty industry. So, the dimensions such as skin similarity or main physical characteristics of vloggers are considered to be the most important reference. In other hands, this study indicates a significant relationship between information acceptance and purchase intention of the product. This strongly reaffirms the findings of previous studies on effective persuasive eWOM message and also explain a new area of eWOM studies in the context of social media, especially with the medium of a Vlog.

This study has some practical implications as well. It is recognized that vloggers have become a new phenomenon in exchanging personal information, experiences and ideas among young people. They actively share opinions or information with other members or online users. In addition, it is suggested that marketers maximizing their presence as an intermediary of communication about a product or brand and also influencing consumer behaviour. Marketers can choose a beauty vlogger who has knowledge and experience in the field of beauty. In addition, the vloggers must be able to maximize a beauty contest. Recently, marketers should be selective in choosing a beauty vlogger who has physical characteristics like the characteristics of the product itself.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Amy, M., Ian, R., & David, M. (2013). A classification scheme for content analyses of YouTube video comments. *Journal of Documentation, 69*(5), 693-714.

Ananda, A. F., & Wandebori, H. (2016). The impact of drugstore makeup product reviews by beauty vlogger on YouTube towards purchase intention by undergraduate students in Indonesia. *International Conference on Ethics of Business, Economics, and Social Science*, (pp. 255 – 263). Yogyakarta, Indonesia: Faculty of Economics, Yogyakarta State University.

Bayazit, D. Z., Durmus, B., & Yildrim, F. (2017). Can vloggers characteristics change online-shopping intentions? The role of word of mouth effect as a communication tool. *Online Academic Journal of Information Technology, 8*(26), 23 - 40.

Belch, G. E. & Belch, M. A. (2015). *Advertising and promotion: An integrated marketing communications perspective* (10th edition). Boston, USA: McGraw-Hill Irwin.

Berryman, R., & Kavka, M. (2017). 'I guess a lot of people see me as a big sister or a friend': The role of intimacy in the celebrification of beauty vloggers. *Journal of Gender Studies*, *26*(3), 307-320.

Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems, 54*(1), 461-470.

De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828.

Djafarova, E. & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, *68*(C), 1-7.

Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior, 61*(1), 47-55.

Fan, Y. -W. & Miao, Y. -F. (2012). Effect of electronic word-of-mouth on customer purchase intention: The perspective of gender differences. *International Journal of Electronic Business Management*, *10*(3), 175 – 181.

Fan, Y. -W., Miao, Y. -F., Fang, Y. -H., & Lin, R. -Y. (2013). Establishing the adoption of electronic word-of-mouth through consumers' perceived credibility. *International Business Research, 6*(3), 58-65.

Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50.

Haider, F., Cerrato, S. L., Luz, S., & Campbell, N. (2016.). Attitude recognition of video bloggers using audio-visual descriptors. *Proceedings of the Workshop on Multimodal Analyses enabling Artificial Agents in Human-Machine Interaction* (pp. 38-42). Tokyo, Japan: MA3HMI '16.

Have, C. T. (2017). *Beauty vloggers and their influence on consumer-buying intentions The case of the Netherlands.* Rotterdam, Netherlands: Erasmus University Rotterdam.

Hill, S. R., Troshani, I., & Chandrasekar. (2017). Signalling effects of vlogger popularity on online consumers. *Journal of Computer Information Systems*, 60(1), 76 – 84.

Hsu, M.-H., Chuang, L.-W., & Hsu, C.-S. (2014). Understanding online shopping intention: The roles of four types of trust and their antecedents. *Internet Research, 24*(3), 332-352.

Huhn, R., Brantes Ferreira, J., Sabino de Freitas, A., & Leão, F. (2018). The effects of social media opinion leaders' recommendations on followers' intention to buy. *Review of Business Management*, 20(1), 57-73.

Karpinska-Krakowiak, M. (2016). The effects of social networking sites on consumer-brand relationships. *Journal of Computer Information Systems, 56*(3), 204 – 210.

Khong, K., & Wu, Y. (2013). Measuring the impact of celebrity endorsement on consumer behavioural intentions: A study of Malaysian consumers. *International Journal of Sports Marketing & Sponsorship, 14*(3), 157-177.

Kittikowit, S., Suwanabubpa, K., & Sithisomwong, S. (2018). Factors influencing purchase intention on cosmetic products of female consumers in Yangon, Myanmar. *International Journal of Organizational Business Excellence*, *1*(2), 77-90.

Kotler, P., & Armstrong, G. (2014). *Principle of marketing* (15th ed.). New Jersey, USA: Pearson Prentice Hall.

Lee, J. E., & Watkins, B. (2016). YouTube vloggers' influence on consumer luxury brand perceptions and intentions. *Journal of Business Research, 69*(12), 5753-5760.

Li, J., & Zhan, L. (2011). Online persuasion: How the written word drives WoM evidence from consumer-generated product reviews. *Journal of Advertising Research, 51*(1), 239- 257.

Martawilaga, A. I., & Purwanegara, M. S. (2016). Information acceptance of Electronic Word of Mouth (E-WoM) and purchase intention through haul videos YouTube. *Journal of Business and Management, 5*(5), 651-660.

Muda, M., Musa, R., Mohamed, R. N. & Borhan, H. (2014). Celebrity Entrepreneur Endorsement and Advertising Effectiveness. *Procedia – Social and Behavioural Sciences*, 130, 11 – 20.

nylonpink.tv. (2017). "The Ultimate List of the 66 Top Asian Beauty Bloggers on Youtube in the World!" Retrieved July 23, 2017, from www.nylonpink.tv/ultimate-list-66-top-asian-beauty-bloggers-youtube/#nandaarsyinta

Rahmiasri, M. (2016). "Beauty vloggers from Indonesia you should follow right now." Retrieved October 14, 2017, from www.asiaone.com/women/beauty-vloggers-indonesia-you-should-follow-right-now

Sari, D., & Kusuma, B. (2014). Does luxury brand perception matter in purchase intention ? A comparison between a Japanese brand and a German brand. *Asian Marketing Journal, 6*(1), 50-63.

Schiffman, L., Kanuk, L. L., & Wisenblit, J. (2013). *Consumer behavior* (10th ed.). Singapore: Prentice Hall.

Sertoglu, A. E., Catlı, O., & Korkmaz, S. (2014). Examining the effect of endorser credibility on the consumers' buying intentions: An empirical study in Turkey. *International Review of Management and Marketing, 4*(1), 66-77.

Simonsen, T. M. (2011). Categorising YouTube. *Journal of Media and Communication Research, 27*(51), 72-93.

Sokol, E. (2017). *The world of beauty vloggers on YouTube.* Rotterdam, Netherlands: Erasmus University Rotterdam.

Solomon, M. R. (2015). *Consumer behaviour: buying, having and being.* New Jersey, USA: Pearson Education, Inc.

Teng, S., Khong, K. W., Chong, A. Y.-L., & Lin, B. (2016). Persuasive electronic word-of-mouth messages in social media. *Journal of Computer Information Systems*, *57*(1), 76-88.

Teng, S., Khong, K. W., Goh, W. W., & Chong, A. Y. (2014). Examining the antecedents of persuasive eWOM messages in social media. *Online Information Review, 38*(6), 746-768.

Wang, X., & Li, Y. (2015). Users' satisfaction with social networking sites: A self-determination perspective. *Journal of Computer Information Systems, 56*(1)*,* 48-54.

Widodo, W. D. P. S., & Mawardi, M. K. (2017). Pengaruh beauty vlogger terhadap source characteristics serta dampaknya terhadap purchase intention [The influence of beauty vlogger on source characteristics and their impact on purchase intention]. *Jurnal Administrasi Bisnis*, *47*(1), 63 – 69.

Zanette, M. C., Brito, E. P. Z., & Coutinho, M. (2013). New influential: An exploratory study on blogs. *Journal of Direct, Data and Digital Marketing Practice, 15*(1), 36-46.

Zhang, K. Z., Zhao, S. J., Cheung, C. M., & Lee, M. K. (2014). Examining the influence of online reviews on consumers' decision-making: A heuristic-systematic model. *Decision Support Systems, 67*, 78-89.

Pertanika J. Soc. Sci. & Hum. 28 (2): 777 - 790 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Effect of Functional Convenience and Representational Delight on Positive Emotional Effect and Impulse Buying of Discount Group Site Users in Indonesia

Aryo Bismo*, Sukma Putra, Haryadi Sarjono and Lessya Nasrul

Department of Management, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta 11480, Indonesia

ABSTRACT

This research investigated the relationship between website quality (functional convenience and representational delight) to consumer online impulse buying with positive emotion as mediating variable, in brief, how functional convenience and representational delight on the website could affect visitors' emotion positively, that led into impulse buying. This research was tested on 388 respondents through an online questionnaire. The research scope was several discount group sites in Indonesia. Respondents were Indonesians that once shopped at that discount group. This research used SEM-PLS method with the assistance of SmartPLS v3.2.6 software as a calculation tool. The result of this research showed there was a positive and significant effect from Functional Convenience and Representational Delight on Impulse Buying, either simultaneously or partially through Positive Emotional Affect as a mediating variable.

Keywords: Functional convenience, online impulse buying, positive emotion, representational delight

INTRODUCTION

The results of MasterCard's research during the period of May to June 2015 that involved Indonesian millennial respondents (18-29 years), showed the tendency that Indonesian millennial shopped impulsively, the research stated that as many as 50% of the Indonesian Millennial was the second most impulsive customers in the Asia Pacific, below Thailand with the impulse buyers as many as 60% (Primadhyta, 2015).

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
aryobismo19212@gmail.com; aryo.bismo001@binus.ac.id (Aryo Bismo)
sputra@binus.edu (Sukma Putra)
haryadi_s@binus.edu (Haryadi Sarjono)
lessyanasrul12@gmail.com (Lessya Nasrul)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

It was supported with data from Nielsen (2016), which says that Indonesia scored 119 points in the Consumer Confidence Index, where a value exceeding 100 indicated a high level of customer confidence in shopping. This showed that Indonesian people, in general, were not afraid to spend their money on shopping transactions. Massive advertising also takes a major part, to make consumers become impulsive buyers and form the characteristics called *shopaholics* (Alfi, 2017).

The story continues with investigations made by Shoppercentric 'Pull the trigger…' (2011) which indicated that customers who made online transactions were more impulsive and making a lot of purchases that were not planned. It is seen by the data that said customers who made impulse buying through online transactions grew by 28% in 2011. While in the same year, the number of food and beverage categories purchased impulsively increased three times from the purchases in 2008 (Liao et al., 2016). If it is continued until 2018, with support in the technology evolution and the spread of internet network in Indonesia, we can imagine how fast this behaviour will grow.

Impulsive shopping activities occurred around 40% on online transactions, according to this data there was still more opportunity to investigate regarding this matter, therefore requiring more detailed research on this field especially investigating the impulsive attitude of customers (Turkyilmaz et al., 2015). Another data provided, in a survey by *shop percent* to 1047 British consumers in 2012, 76% reported that they purchased food impulsively; 57% said they were shopping for products such as fashion impulsively, and 28% said they were buying expensive products such as electronics impulsively (Floh & Madlberger, 2013).

Following this phenomenon, the development of the e-commerce industry in Indonesia has encouraged people to freely choose products through their gadget that leads to impulsive behaviour (Olavia, 2015). To fulfil customer expectations when they shop online, one of the factors to fulfil this expectation is website quality; for example, the website is expected to run smoothly because every consumer has a different purpose when visiting the website (McGovern, 2016).

When shopping or doing online transactions, a website is a bridging tool between customers and sellers. Therefore, the website should be the main focus for e-commerce retailers. Nowadays, customers will be able to evaluate the product through online features on the website.

Based on previous research from Shirmohammadi et al. (2015) there are two elements of a website that can create impulsive behaviours, such as *functional convenience* (*merchandise attractiveness*; *site ease of use*) and *representational delight* (*enjoyment; website communication style website*). This research said that the most important element that affected impulsive behaviour in the sequence was *merchandise attractiveness, enjoyment, website communication style, and ease of use.*

According to preliminary research conducted to 30 respondents regarding the impulsive buying behaviour, 56% of them were interested in buying impulsively just because of the merchandise attractiveness displayed on the website, following 43% respondent that said they impulsively bought a product on the website because of ease of use of the website.

Although not all customers decide to make an impulsive buying because of these factors, the more experience that they feel, the higher the likelihood that an impulsive buying will occur. Customers with high impulsive desires will be able to influence positively and negatively based on varying levels of website quality. Therefore, e-commerce must pay attention to customer experience, especially when interacting or transacting through their website, in advance, positive experiences need to maintain and improved (Shirmohammadi et al., 2015)

Moreover, with the development of current online features, e-commerce can stimulate customer emotions, that effect on their self-control, and encourage impulsive buying (Pappas et al., 2014).

Based on the phenomena above regarding online impulse buying behaviour, further research conduct regarding impulsive buying behaviour from website quality perspective, and discuss whether functional convenience and representational delight really have a positive emotional effect on website visitors and whether it will lead to impulsive buying behaviour on coupon website customers in Indonesia or not.

Literature Review

Consumer behaviour is a study of the processes involved when individuals or groups choose, buy, use, or determine products, services, ideas, or experiences to meet their needs and wants (Solomon, 2007). According to Simamora (2008), consumer behaviour is emphasized more as a decision-making process; a decision-making process that requires individual activities to evaluate, obtain, use, or organize goods and services.

Based on consumer behaviour theory, further elaboration regarding impulsive buying behaviour revealed about characteristics of impulsive buying behaviour, the first characteristic of impulse buying is an unplanned purchase. When a customer decides to buy a product directly at that time, and it is not a response to a previously identified problem or desire while in a shopping environment, this is considered a characteristic of impulse buying. The second characteristic is the openness of stimuli. A stimulus is something that evokes or raises an action. The third characteristic is speed; the customer makes a decision on the spot without any evaluation of the consequences that will be incurred when deciding to buy a product (Shirmohammadi et al., 2015).

The impulsive buying behaviour is always affected by the customer's emotion. Emotion is something strong, tending to be an uncontrollable feeling that affects behaviour. Emotions lead to recognizable, specific feelings, and the influence of the likes or dislikes of such specific feelings

(Hawkins et al., 2007). Emotions are divided into two, namely: positive emotions and negative emotions. Emotions are the deciding factor and the intermediary that will cause the customer's desire to shop impulsively. Positive emotional affect is the level from which one feels enthusiastic and inspired.

This research tries to explain how customers' positive emotional factors will affect impulsive buying behaviour. One of the factors that can affect the emotion of customers is through website quality. According to Shirmohammadi et al. (2015), attractive merchandise and special offers can generate an emotional response which is positive feelings such as joy.

The experience of ease felt by online visitors in using the site also very important, Shirmohammadi et al. (2015) found a positive outcome of usability, including ease of use, had a positive impact on positive emotions and negative impacts on negative emotions. While Shiau and Chau (2015) said that online store enjoyment could also be stimulated by using music as a background and displaying interesting visual effects; it also could add a significant effect to positive emotions.

Positive emotions tend to be more liable to make customers more impulsive (Shirmohammadi et al., 2015). Liao et al. (2016) stated that the emotional and cognitive results of online stores could influence unplanned purchasing decisions.

Based on previous research from Shirmohammadi et al. (2015), there are two elements of the website that are more easily seen to create impulsive buying behaviour namely functional convenience (merchandise attractiveness, site ease of use) and representational delight (enjoyment, style).

Sinuraya and Dewi (2015) revealed that the appearance of a website was important because it could lead to impulse-buying decisions. This is seen from the results of their research that showed that the representational delight variable was more influential than the functional convenience variable and had no effect on impulsive buying.

There is a total of four variables in this research which are functional convenience, representational delight, positive emotional affect, and impulse buying. According to Valacich et al. (2007), functional convenience refers to the availability of convenient characteristics that help the interaction with the consumer interface. This includes such characteristics as the site's ease of use and ease of navigation. Functional convenience becomes the main focus for consumers when the basic needs of structural firmness have been met. Consumer users of previously reviewed sites show that the characteristics associated with functional convenience are secondary requirements compared to structural firmness.

Representational delight is about the characteristics that are not directly related to completing an online shopping activity but can enhance the shopping experience by stimulating the human senses and making the shopping activities enjoyable (Verhagen & Dolen, 2011).

Positive emotional affect is the level from which one feels enthusiastic, enthusiastic, and inspired. According to Turkyilmaz et al. (2015), impulsive buying is classified as those bought with sudden payment without any need or desire to buy the products for a specific category or to fulfil a specific task.

According to Mavlanova (2014), there are three basic needs that are required to create a website that can be accepted by the buyers, namely structural firmness (SF), functional convenience (FC), and representational delight (RD). The three architectural sizes of this website, are sorted according to the level of importance, can be seen in Figure 1.

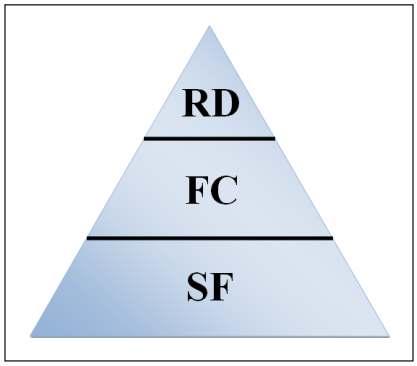


Figure 1. Pyramid of website architecture quality level

The lower in the pyramid, the more important the factor is, and vice versa much as in Maslow's hierarchy of needs (Mavlanova, 2014). This level dictates the functionality and usefulness of each factor; structural firmness is at the base level because it represents the most fundamental needs of a site which are privacy and security. After structural firmness is met, then the next focus is the fulfilment of functional convenience and then representational delight at the top (Valacich et al., 2007), this is the reason why this research is using representational delight as one of the variables.

The Relationship between Functional Convenience, Representational Delight and Emotions

Emotion consists of two basic outcomes whether it is positive or negatives, both emotions outcomes are common between genders, age groups, and also can be found in all cultures. In a study conducted by Madhavaram and Laverie (2004), it was found that website elements such as functional convenience (merchandise attractiveness; site ease of use) and representational delight (enjoyment; website communication style) were more likely to cause impulsive buying attitudes.

Becherer and Halstead (2004) found that special offered and positive emotions such as fun having an influence on emotional response. In addition, a study conducted by Shirmohammadi et al. (2015) found that merchandise attractiveness (functional convenience) and enjoyment (representational delight) were the most influential dimensions for customers' positive emotion. Therefore, based on the description of the results of the research, the hypotheses proposed in this study are:

H1: There is a positive influence of functional convenience on positive emotional affect

H2: There is a positive influence of representational delight on positive emotional affect

Relationship between Functional Convenience, Representational Delight and Emotions with Impulse Buying

According to Floh and Madlberger (2013), the three types of atmospheric cues in the e-store are content, navigation (ease of use) and design. Research conducted by Koufaris and Hampton-Sosa (2002) found that enjoyment also had a positive impact on impulse buying.

Liu and Sutanto (2012) found that the visual appearance of a site, site ease-of-use and product availability could lead to online impulse-buying. Ltifi (2013) also found that the attributes of a site such as navigation, visual displays and customized reviews were three causes that could improve impulse-buying. High-quality sites will increase the desire to make impulsive purchases on the site.

In addition, research conducted by Sinuraya and Dewi (2015) found that functional convenience and representational delight simultaneously had an impact on unplanned purchases. This study yielded the conclusion that representational delight was very important to the decision of impulsive buying. Based on the description of the results of the research, the hypotheses proposed in this study are:

H3: There is a positive influence of functional convenience on impulse buying

H4: There is a positive influence of representational delight on impulse buying

Research conducted by Verhagen and Dolen (2011) found that there was a significant influence of functional convenience and representational delight on impulse buying mediated by positive emotions from consumers. According to this study, emotions play a very important role as an intermediary between functional convenience, representational delight and impulse buying. Adelaar et al. (2003) found that positive emotions could positively influence impulse buying.

Functional convenience and representational delight have a significant effect on impulse buying based on research conducted by Shirmohammadi et al. (2015). This influence is mediated by the emotions of the consumer. Based on the description of the results of the research, the hypotheses proposed in this study are:

H5: There is a positive influence of positive emotional effect on impulse buying

H6: There is an indirect influence of functional convenience on impulse buying through positive emotional effect as an intermediary

H7: There is an indirect influence of representational delight on impulse buying through positive emotion affect as an intermediary

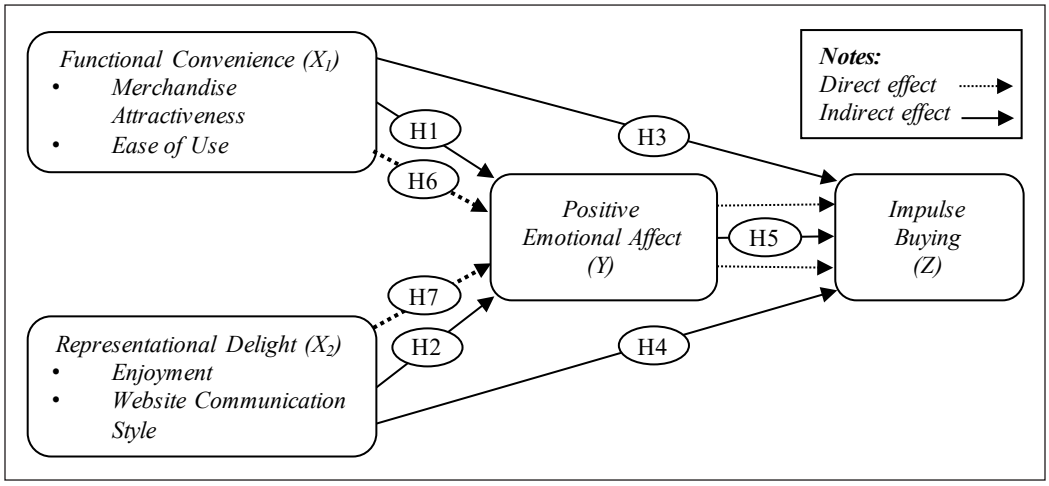


Figure 2. Research framework

MATERIALS AND METHODS

The research framework is shown in Figure 2. This research focused on investigating the behaviour of Indonesian customers whoever bought a product through discount group websites. The choice of this discount group websites is because this website is the most attractive among other e-commerce websites, especially on showing the merchandise attractiveness and representational delight.

A quantitative type of data was collected by collecting both primary and secondary data sources. Primary data of this research were collection of samples through a survey by the distribution of an online questionnaire to 388 respondents already calculated with a formula. Probability sampling method with simple random sampling was used in this research in choosing the samples. Respondents of this research were any customers that already purchased product on one of the discount group website. Secondary data were collected through articles on a journal, article website, books.

A Likert scale was used in this research scale with 1 (strongly disagree) to 5 (strongly agree) scale based on (Malhotra, 2009). The value of probability or acceptable level of significance used in this research was 0.05 ($\alpha = 5\%$).

This study used partial least square method (PLS) as an alternative method of structural equation modelling (SEM) method with the help of SmartPLS v 3.2.6 program as a tool to help the researchers assessed the influence of each relationship.

RESULTS AND DISCUSSIONS

The validity and reliability test was conducted on the questionnaires distributed in this research. There were 23 questions in total in this research, all of the questions were already tested with convergent validity, the convergent validity tested by the outer loading factors with 0.70 as a benchmark. It was said that if the outer loading was 0.70 the questions were valid.

The result was there was one indicator that was not valid because it had an Outer Loading correlation value smaller than 0.70. For this reason, a single indicator item Q14 (RD6 in Figure 3) must be removed so that the outer loading results are as follows:

Reliability test, tested by using Cronbach's alpha, all of the variables were already tested and the results of all variables indicated reliable which all of the variables were above 0.80 that considered high. The data were as follow: Functional convenience

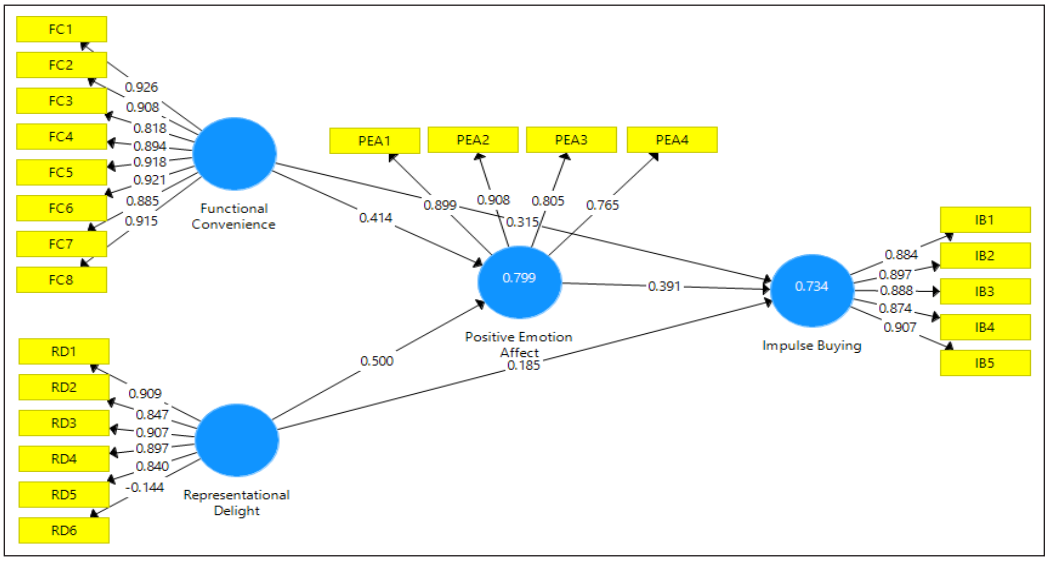


Figure 3. Outer loading result

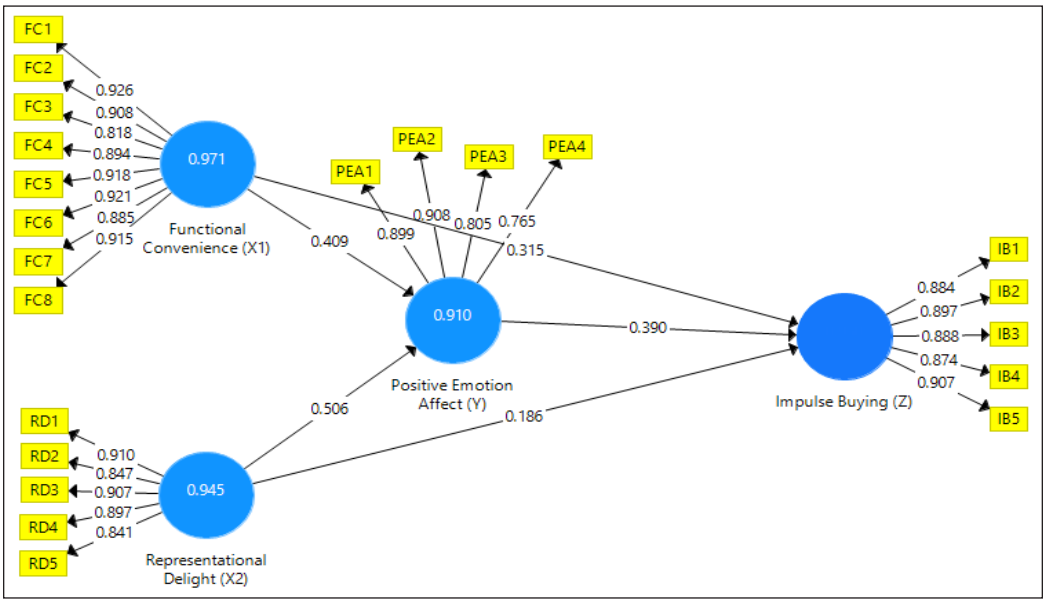


Figure 4. Outer loading results after RD6 indicator removed

0.971, Representational delight 0.945, Positive emotion affect 0.910 and Impulse buying 0.950 (Figure 4).

To determine the model fitness, the structural model test already conducted with measuring the R^2, both Positive emotions Affect and Impulse buying behaviour as dependent variables had 0.734 and 0.800 respectively. It is shown in Table 1 that the independent variables can explain enough of the dependent variable.

Based on the calculation of indirect effect of SmartPLS software v 3.2.6, the results obtained are shown in Table 2.

After obtaining the results of the indirect influence of each research variable, the total value of the influence of each research variable must be assessed. Calculations can be done through manual calculations or by using SmartPLS software support. The result of the indirect effect of total value according to SmartPLS software v 3.2.6 is as follows:

Based on Table 3, it can be seen that the functional convenience variable has a greater direct effect on the impulse buying variable with a value of 0.315 when compared with the direct influence of the

Table 1
Path coefficients

	Functional Convenience	Impulse Buying	Positive Emotion Affect	Representational Delight
Functional Convenience		0.315	0.409	
Impulse Buying				
Positive Emotion Affect		0.390		
Representational Delight		0.186	0.506	

Table 2
Indirect effects

	Functional Convenience	Impulse Buying	Positive Emotion Affect	Representational Delight
Functional Convenience			0.159	
Impulse Buying				
Positive Emotion Affect				
Representational Delight			0.197	

Table 3
Total effects

	Functional Convenience	Impulse Buying	Positive Emotion Affect	Representational Delight
Functional Convenience		0.474	0.409	
Impulse Buying				
Positive Emotion Affect		0.390		
Representational Delight		0.384	0.506	

representational delight variable on the impulse buying variable with a value of only 0.186.

Compared with the indirect effect through the positive emotional effect variable, the functional convenience variable had a greater influence when compared with the representational delight variable with the total value of the total effects (Table 5) at 0.474 and 0.384 respectively. Based on the final results of this research all hypotheses in this research are accepted, with the final result as in Table 4.

Based on the results of this study it can be concluded that Functional convenience had a significant effect on impulse buying, either directly or indirectly through positive emotional effect as an intermediary. The relationship between the variables generated was positive and very strong. This shows that the relationship between these variables was directly proportional which was the higher the increase in functional convenience, the higher the impulse buying by consumers of discount group sites in Indonesia.

Representational delight had a significant effect on impulse buying, either directly or indirectly through positive emotional effect as an intermediary. The relationship between the variables generated was positive and very strong. This shows that the relationship between these variables was directly proportional, the higher the representational delight increase, the higher the impulse buying by consumers of discount group sites in Indonesia.

Positive emotional effect had a significant effect on impulse buying. The relationship between the variables generated was positive and very strong. This shows that the relationship between these variables was directly proportional, the higher the increase in positive emotional affect, the higher the impulse buying by consumers of discount group sites in Indonesia.

When combined, functional convenience and representational delight also had a significant effect on impulse buying. The relationship between these variables was positive and very strong. This suggests

Table 4
Research summary

Hypothesis	Original Sample (O)	Nature of Relationship	T-Statistic	T-*Value*	Effect	Result
Hypothesis 1	0.409	Positive	6.082	>1,96	Direct	Accepted
Hypothesis 2	0.506	Positive	7.731		Direct	Accepted
Hypothesis 3	0.315	Positive	3.512		Direct	Accepted
Hypothesis 4	0.186	Positive	2.240		Direct	Accepted
Hypothesis 5	0.390	Positive	5.058		Direct	Accepted
Hypothesis 6	0.409 and 0.315	Positive	6.082 and 3.512		Indirect	Accepted
Hypothesis 7	0.506 and 0.186	Positive	7.731 and 2.240		Indirect	Accepted

that the higher the increase in functional convenience and representational delight, the higher the impulse buying by consumers of discount group sites in Indonesia.

The effect of functional convenience variables is greater when compared with the influence of representational delight variables according to the results of this study, both directly and overall in total influence. The total value of the influence of functional convenience relation to impulse buying was 0.474. The influence of representational delight variable to impulse buying in total was only 0.384. This shows that the variable functional convenience was more influential on the tendency of customer discount group sites in Indonesia to perform impulse buying actions.

CONCLUSIONS

Based on the results and conclusions obtained, the suggestions that can be used as input and consideration for the discount group sites industry in Indonesia are elaborated in the following paragraphs.

To be able to cause impulse buying behaviour, web designers should strive to always improve and ensure that the functional convenience and representational delight of discount group sites can be met properly. Functional convenience is the second basic requirement after the structural firmness of a site. The functional convenience variable has a greater influence on the attitude of impulse buying customers of discount group sites, so if you want to create an attitude of impulse buying customers, discount group sites industry players must pay more attention to this variable.

Dimensions that need to be considered for web designers of functional convenience variables are attractiveness and ease of use merchandise. The more attractive the product offered, the greater the tendency for a consumer to make impulsive purchases at discount group sites. In addition to interesting products, products should also be in accordance with the interests of Indonesian consumers.

Based on the results of the study, it was found that Indonesians were very interested in spending their money on coupons or discounts on food and beverage products. The ease when using the website as a medium for making transactions also needs to be considered because almost all consumers expect convenience when making transactions at discount group sites, such as ease of access, ease of navigation and layout of the site.

Dimensions that need to be considered for web designers of representational delight variables are enjoyment and website communication style. Feelings of pleasure from a consumer when making transactions at discount group sites will be able to influence emotions and their desire to make impulsive buying transactions. The feeling of pleasure can be generated through the design of an attractive site using images that can move, there are videos of the product and the presence of background music. So that the tendency of consumers to make purchases that are not planned will be greater.

Another dimension of representational delight is the website communication style. Based on the results of research, consumers do not like the way to communicate that is pushy or pushy. They prefer a friendly way of communication. In addition, consumers want customer service to have knowledge or master information about existing products on the coupon site.

The development of the digital era and the internet in Indonesia is very rapid. This should be put to good use by the discount group sites industry in Indonesia to be able to expand the market. Based on research, researchers found that there are still quite a lot of people, especially millennial who do not know about coupon sites and cannot distinguish coupon sites from other e-commerce sites. Companies that are engaged in the coupon site industry can collaborate with the product owner company to be able to help socialize about how to use coupons that have been purchased from coupon sites or can provide information that the company has collaborated with coupon sites so that the introduction of coupon sites at Indonesia will be even better. Through discount group sites in Indonesia, product-owned companies can increase their brand awareness so that they can expand the market.

Further Research

In this research, it was found that functional convenience variables had more influence on the attitude of impulse buying customers in account group sites in Indonesia. This shows that the Indonesian people pay more attention to the technical and process of a site, especially coupon sites. In addition, positive emotions also have a large role in generating impulse buying attitudes, especially on the representational delight variable; positive emotions produce a greater effect if given a stimulus from the representational delight variable. In this research also found that the influence of functional convenience and representational delight is positive and significant for customers of discount group sites in Indonesia. Unlike the case with the results of research conducted by Sinuraya et al. (2015) conducted to customers from Elevania.co.id website which resulted that the functional convenience variable had no effect on impulsive buying behaviour on customers. This shows that, if the research object is different the results of research with the same variable can be different it may be one of the reasons to conduct this research with different objectives.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Adelaar, T., Chang, S., Lancendorfer, K., Lee, B., & Morimoto, M. (2003). Effects of media formats on emotions and impulse buying intent. *Journal of Information Technology, 18*(4), 247 – 266.

Alfi, A. N. (2017). *Ini kaitan prilaku belanja dan kondisi emosional* seseorang [This is related to shopping behavior and emotional condition of a person]. Retrieved September 25, 2017, from http://lifestyle.bisnis.com/

read/20170312/220/636181/ini-kaitan-prilaku-belanja-dan-kondisi-emosional-seseorang

Becherer, R. C. & Halstead, D. (2004). Characteristics and internet marketing strategies of online auction sellers. *International Journal of Internet Marketing and Advertising*, *1*(1), 24-37.

Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, *12*(6), 425 – 439.

Hawkins, D. I., Mothersbaugh, D. L., & Best, R. J. (2007). *Consumer behavior: Building marketing strategy* (10th ed.). New York, USA: McGraw-Hill Companies.

Koufaris, M., & Hampton-Sosa, W. (2002). Customer trust online: Examining the role of the experience with the web site. *CIS Working Paper Series*. New York, USA: City University of New York.

Liao, C., To, P.-L., Wong, Y.-C., Palvia, P., & Kakhki, M. D. (2016). The impact of presentation mode and product type on online impulse buying decisions. *Journal of Electronic Commerce Research*, *17*(2), 153 – 168.

Liu, Y., & Sutanto, J. (2012). Buyers' purchasing time and herd behavior on deal-of-the-day group-buying websites. *Electron Markets*, *22*(2), 83 – 93.

Ltifi, M. (2013). Antecedents and effect of commitment on the impulse buying by internet. *Journal of Internet Banking and Commerce*, *18*(1), 1 – 22.

Madhavaram, S. R., & Laverie, D. A. (2004). Exploring impulse purchasing on the internet. *Advances in Consumer Research*, *31,* 59 - 66.

Malhotra, N. K. (2009). *Basic marketing research* (3rd ed.). New Jersey, USA: Pearson Education.

Mavlanova, T. (2014). The effect of cultural values on the perceptions of architectural quality of websites in E-Commerce. *AIS Electronic Library (AISeL)*, 1.

McGovern, M. (July 30th 2016). *Customers want more: 5 new expectattions you must meet now*. Retrieved September 10, 2017, from http://www.customerexperienceinsight.com/customer-expectations-you-must-meet-now/

Nielsen. (2010). *Global consumer confidence, concerns and spending. A global Nielsen consumer report.* Retrieved September 22, 2017, from https://www.nielsen.com/content/dam/nielsen/en_us/documents/pdf/White%20Papers%20and%20Reports%20II/Q2-2010-Global-Consumer-Confidence.pdf

Olavia, L. (2015). *Ada lima faktor pendorong "E-commerce" di Indonesia* [There are five factors driving "E-commerce" in Indonesia]. Retrieved August 11, 2017, from http://www.beritasatu.com/ekonomi/310208-ada-lima-faktor-pendorong-ecommerce-di-indonesia.html

Pappas, I., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. (2014). Shiny happy people buying: The role of emotions on personalized e-shopping. *Electron Markets*, *24*(3), 193-206.

Primadhyta, S. (2015, November 2). *Generasi millenial RI paling impulsif belanja barang mewah* [RI Millenials are the most impulsive buyers of luxurious goods]. Retrieved October 12, 2017, from https://www.cnnindonesia.com/ekonomi/20151102182452-92-88999/generasi-millenial-ri-paling-impulsif-belanja-barang-mewah

Pull the trigger for impulse. (2011). Retrieved August 14, 2017, from https://issuu.com/shoppercentric/docs/windows01_on_impulse?e=23309330/67431534

Shiau, W.-L., & Chau, P. Y. (2015). Does Altruism matter on online group buying? Perspectives from egoistic and altruistic motivation online. *Information Technology and People*, *28*(1), 677-678.

Shirmohammadi, D., Ghane, N., & Ebrahimi, D. R. (2015). Investigating and prioritizing the effective factors on internet impulse buying behavior of customers (case study: discount group sites). *International Journal of Information, Business and Management*, *7*(3), 275.

Simamora, B. (2008). *Panduan riset perilaku konsumen* [Guide to consumer behavior research] (3rd ed.). Jakarta, Indonesia: Gramedia Pustaka Utama.

Sinuraya, D. L., & Dewi, C. K. (2015). The influence of online store beliefs towards impulse buying (Study on ELEVENIA.CO.ID). *Journal The Winners*, *4*(3), 64 – 70.

Solomon, M. R. (2007). *Consumer behavior: Buying, having, and being* (7th ed.). New Jersey, USA: Pearson Education.

Turkyilmaz, C., Erdem, S., & Uslu, A. (2015). The effects of personality traits and website quality on online impulse buying. *Procedia - Social and Behavioral Sciences,175*, 98-105.

Valacich, J. S., Parboteeah, D. V., & Wells, J. D. (2007). The online consumer's hierarchy of needs. *Communication of the ACM*, *50*(9), 84 – 90.

Verhagen, T., & Dolen, W. V. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information and Management*, *48*, 320 – 327.

Pertanika J. Soc. Sci. & Hum. 28 (2): 791 - 802 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Participative Decision-Making, Psychological Empowerment and Job Performance: Evidence from the Malaysian Electrical and Electronic Manufacturing Firms

Jeniboy Kimpah[1,2]* and Hazril Izwar Ibrahim[2]

[1]Optentia Research Focus Area, North-West University, 1900 Vanderbijlpark, South Africa
[2]School of Management, Universiti Sains Malaysia, 11800 Penang, Malaysia

ABSTRACT

The aim of the study was to investigate the relationship between participative decision-making, psychological empowerment and job performance among engineers in the Electrical and Electronic (E&E) manufacturing firms in Malaysia. The study used a structured survey questionnaire to collect data from both managers and engineers as the study utilized matched-pair analysis. Human Resource (HR) managers from 73 manufacturing firms agreed to cooperate in the data collection process. The researchers were able to collect 173 matched responses from both managers and engineers. For the purpose of data analysis, the study used SEM-PLS method to analyse the direct and indirect effect between the variables. The results indicated that all the direct effects were significant and only the perceived meaning dimension of psychological empowerment was not significant as a mediator. The practical implication of participative decision-making and psychological empowerment on job performance leads employees to learn new skills, obtain information, help one another, enhance social contact, and fulfill the obligation.

Keywords: Job performance, participative decision-making, psychological empowerment

INTRODUCTION

According to Ghani et al. (2016) employees' job performance affects the organizational outcomes. In other words, employees' job performance ensures the realization of the firm's business and operational objectives. In the current competitive scenario, employees' job performance is a key factor for the manufacturing firms to

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
drjeniboy@icloud.com (Jeniboy Kimpah)
hazrilizwar@usm.my (Hazril Izwar Ibrahim)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

gain competitive advantage and improve productivity. Thus, the high standard of employees' job performance obtained from proficient human resources is one of the competitive advantage available to improve performance in the Malaysian Electrical and Electronic (E&E) manufacturing sector. Furthermore, Huang (2012) and Kimpah and Raudeliuniene (2014) found that participative decision-making and empowerment were factors that influenced employee job performance, particularly within the context of two-way interactions between superiors and subordinates.

Employees in the manufacturing firms have variety of issues related to job performance, particularly in-role performance between superiors and subordinates. The first issue; is the lack of communication between managers and their subordinates regarding the company's objectives and performance expectations (Chelniciuc, 2010). Second issue; managers often do not take enough time to determine the source of the problem, when engineers do not have the ability or the motivation to do work. The third issue; is the lack of participative decision-making and improper empowerment practices in organizations. The reason is the budget for human resource development is at the bottom of the list of priorities (Chan et al., 2016). Fourth issue; its engineers are among the unhappiest employees in Malaysia based on a Work Happiness Survey in 2013 (Boo, 2014). All issues mentioned above can be factors that influence the engineers' job performance.

There have been limited empirical studies conducted to assess factors influencing employees' job performance associated with superiors and subordinates, specifically between managers and engineers in the Malaysia E&E manufacturing firms. There is a line of logic which supports the view that an organization obtains benefits from the interaction of managers and employees in the workplace (Dodi, 2015). It is expected that being involved in the decision-making process as well as being empowered will be challenging for many employees and might influence his or her performance. Furthermore, sharing information can lead to enhanced job performance (Abdul-Rasit & Isa, 2015) Thus, this shows a strong need for the research to be conducted, to investigate employee job performance-related issues in the workplace and how such performance is influenced by the interaction between the managers and their engineers.

Therefore, the objectives of this study were 1) to examine the relationship between participative decision-making and psychological empowerment on in-role performance; 2) to investigate the mediating role of psychological empowerment between participative decision-making and in-role performance.

Job Performance

Job performance is defined as the effectiveness, productivity and efficiency when employees maximize their work behaviour and resources. Normally, performance comprises two dimensions: those related to the task/in-role performance

and the contextual/extra-role performance (Motowidlo et al., 1997). In-role performance is an action that contributes to performing a task to generate the expected and precise outcome. In other words, the in-role performance consists of job-specific behaviours including core job responsibilities. Meanwhile, contextual/extra-role performance is the effectiveness of the workers in performing his or her job which is supported by his or her personal behaviour, social and physiological ambience of the workplace (Mohd-Rashid et al., 2016). The focus of the current study is on in-role performance orientation of job performance.

A classic view of in-role performance refers to an objective indicator to measure employees' job performance. Furthermore, in-role performance is related to the employees' workplace behaviour based on his or her prescribed job descriptions (Shen et al., 2014). Similarly, in-role performance is based on the activities related to formal tasks, duties, and responsibilities outlined in the employees' job description. It is reasonable to conclude that in-role performance refers to employees' behaviours specified by the job description and contributes to the organization's technical core.

Participative Decision-Making

Participative decision-making calls for a participative style of management, which will increase the productivity of employees and increase their satisfaction (Ghattas et al., 2014). According to Parnell et al. (2012), participative style of management calls for employees from multiple hierarchies and tiers uniting and combining their resources. Such practices correspondingly contribute to improved work practices, greater productivity, and improved efficiency in organizational performance. From the management perspective, this gives the perception of shifting responsibility to the employees making them having better perception about themselves and thus improving both supervisors and their subordinates' job performance. Indeed, participative decision-making in an organization indicates that the organization is more responsive towards empowering the employees. Employees pursue meaningful, competent, and impactful objectives on their work outcomes. In conclusion, the employees' participative decision-making role is significant for its links with psychological empowerment and in-role performance. The hypotheses formulated are:

Hypothesis 1: Participative decision-making has a positive and significant effect on perceived meaning;

Hypothesis 2: Participative decision-making has a positive and significant effect on perceived competence; and

Hypothesis 3: Participative decision-making has a positive and significant effect on perceived impact.

Psychological Empowerment

Appraisal of empowerment and factors influencing its characteristic by an aspect of job performance are extensively deliberated

in the scientific literature with sufficient controversial viewpoints (Raudeliuniene et al., 2014). The most recent and well-known psychological empowerment concept is derived from the works of Spreitzer (1995), Spreitzer et al. (1997), and Spreitzer et al. (1999). The concept of psychological empowerment namely perceived meaning, perceived competence, perceived impact and perceived self-determination has been widely investigated since 1995. However, none of the psychological empowerment constructs has an ideal definition, researchers have aligned the definition within the context of productivity, profitability, and the effectiveness of the workplace. All in all, this study will employ three out of four dimensions adopted by Meyerson and Kline (2008) and Kimpah (2018). Self-determination is excluded because of its essential link with job autonomy. Thus, this study will investigate psychological empowerment without the influential of self-determination or job autonomy.

Psychological empowerment namely perceived meaning, perceived competence, and the perceived impact can improve employees' perceptions about themselves and improve their self-esteem in the workplace (Meyerson & Kline, 2008). Meyerson and Kline (2008) and Kimpah (2018) suggested that through perceived meaning, perceived competence, and perceived impact would result in an improved concentration of the employees and this in return would improve the employees' job performance. Therefore, researchers expected that these three dimensions of psychological empowerment to be positively related to engineers' in-role performance and researchers formulated the hypotheses as follows:

Hypothesis 4: Perceived meaning has a positive and significant on in-role performance;

Hypothesis 5: Perceived competence has a positive and significant effect on in-role performance; and

Hypothesis 6: Perceived impact has a positive and significant effect on in-role performance.

The participative style of management is considered to enhance the work outcomes of subordinates through induced psychological empowerment. Several studies revealed that psychological empowerment significantly mediated the relationship between participative leadership and job performance (Huang, 2012). Researchers formulated the following hypothesis:

Hypothesis 7: Perceived meaning mediates the relationship between participative decision-making and in-role performance;

Hypothesis 8: Perceived competence mediates the relationship between participative decision-making and in-role performance; and

Hypothesis 9: Perceived impact mediates the relationship between participative decision-making and in-role performance.

MATERIALS AND METHODS

Data Collection

The unit of analysis of this study is the individual, specifically individuals working in the Malaysian E&E manufacturing firms. Individuals working in the E&E manufacturing firms must be the managers and engineers. The engineers must have worked for their present company for at least a year and each engineer must be directly supervised by a specific manager who has been identified by the HR manager as the direct coordinator or superior of the engineer based on his or her work outcomes relationships. As such, judgemental sampling was utilized for sampling technique.

For data collection purposes, structured survey questionnaires were used to obtain responses. The process of data collection involved; firstly, the HR managers of the E& E manufacturing firms were contacted to inform them of the research and the "walk-in, drop-off, and collect" method. This facilitated an explanation of the purpose of the study and to secure their cooperation in identifying the relevant managers and engineers. The HR managers were requested to identify managers and engineers under the managers' direct supervision. This meant that the HR manager provided the matched-pairs; one manager and one engineer under the manager's supervision. The manager will respond to the survey on the engineer's in-role performance and the engineer will self-rate their perception of participative decision-making and psychological empowerment. Secondly, as a follow-up, the researcher also posted a cover letter to the Human Resource Department to explain the purpose of this research and to obtain permission to conduct research in their organizations. The researcher contacted and sought permission from 274 firms of whom 73 firms agreed to allow data collection to take place in their firms after discussing the research with the HR managers. An important technique to increase the return rate of questionnaires is through a gentle reminder by letter and phone calls after two weeks of dropping off the questionnaire.

Measurement

The participative decision-making instrument was developed by Siegel and Ruh (1973) and adopted by Lam et al. (2002). This instrument is used due to its appropriateness for the matched-pairs method in this study (Lam et al., 2002). This instrument consists of 5 items and is scored using a 7-point Likert scale ranging from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither, 5=slightly agree, 6=agree, and 7=strongly agree.

The psychological empowerment instrument originated from the work of Spreitzer (1995) and adopted by Meyerson and Kline (2008) and Kimpah (2018). This instrument investigates the psychological empowerment dimensions of perceived meaning, perceived competence, and perceived impact. The scale measures the engineers' psychological empowerment. This instrument consists of 9 items and is scored using a 7-point Likert scale ranging

from 1=strongly disagree, 2=disagree, 3= slightly disagree, 4=neither, 5=slightly agree, 6=agree, and 7=strongly agree.

In-role performance instrument originated from Williams and Anderson (1991) and adapted by Frieder et al. (2018). As mentioned earlier, this variable is for the manager to assess his or her engineers' in-role performance in accordance with a matched-pairs analysis method. There are 7 items and respondents were asked to respond using a 5-point Likert scale ranging from 1=never, 2=rarely, 3=sometime, 4=often, and 5=very often.

For the purpose of data analysis, the study employed the latest version of the Statistical Package for the Social Sciences (SPSS) version 25 and Partial Least Square (PLS) with SmartPLS version 3.

RESULTS AND DISCUSSIONS

The respondents of this survey comprised 173 managers and 173 engineers; they are full-time workers presently working in E&E manufacturing firms located in states of Johore, Selangor, Perak, Penang, and Sabah. The manager's profile based on gender shows that 86.7% were male and 13.3% were female. Majority of respondents' age was in the range of 41 to 50 years old with a percentage of 62.4%, and the age in the range of above 51 years old had a percentage of 37%. The percentage of married managers was 94.2% and non-married managers was 5.8%. Concerning the manager's educational level, the percentage of bachelor's degree holders was 87.9% compared to the master's degree holders at 12.1%. Most of the managers were Chinese with a percentage of 78.6%, followed by Indian with a percentage of 11%, Malay with a percentage of 7.5%, Bumiputra from Sabah and Sarawak with the same percentage of 1.2%. In addition, the length of the manager's working service at the current company was in the range of five to 10 years at 50.3% and more than 10 years at 49.7%. Moreover, the length of the manager's relationship with his or her current engineer showed 85.5% with more than one to less than five years, followed by the range of 5 to 10 years at 13.9%, and more than 10 years at 0.6%.

As for the engineers, 80.9% of the engineers are males with the remaining 19.1% being females. The majority of engineers are between the age of 31 to 40 years old with a percentage of 55.5% and in the age range of below 30 years old with a percentage of 27.7%. It demonstrates that the majority of engineers are relatively young and middle age. In terms of marital status, 87.3% are married and the remaining of 12.7% are unmarried. Most engineers have a bachelor's degree with 88.4%. Chinese engineers dominated the sample with 59.5% in this study, Malays and Indian engineers showed a percentage of 24.3% and 16.2%, respectively. Year of service at the current company showed that engineers with more than one to five years at 48% and the range of five to 10 years showed 37%. It can be seen that 87.9% of the engineers have been working with their current managers for more than one to less than five years with the remaining 12.1% at five to 10 years.

Convergent validity is the degree to which a measure or indicator correlates positively with other alternative measures or indicators of the same constructs (Hair et al., 2017). The purpose of convergent validity is to evaluate a reflective form of relationship with the construct. The indicators must be in a high proportion of variance or among each other (Hair et al., 2017). Assessment of convergent validity is based on the average variance extracted (AVE) and factors loading. The AVE with a value of 0.5 or higher indicates that on average, a construct explains half or more than half of the variance of its indicators. Table 1 presents the AVE value of all the constructs are greater than 0.5.

Discriminant validity or divergent validity test is to ensure the measurements are not supposed to be related. Fornell and Lacker's criterion are assessed based on the square root of AVE of each variable (diagonal values). The result of the Fornell and Lacker criterion showed that each variable (diagonal values) was higher than the correlation between the variable (diagonal values) and other variables (off-diagonal values) as shown in Table 2.

Table 1
Result of the measurement model

Construct	Items	Loadings	AVE	CR
Participative decision-making	PDM1	0.856	0.736	0.933
	PDM2	0.874		
	PDM3	0.866		
	PDM4	0.884		
	PDM5	0.808		
Perceived meaning	PE_M1	0.933	0.874	0.954
	PE_M2	0.940		
	PE_M3	0.932		
Perceived competence	PE_C1	0.910	0.856	0.947
	PE_C2	0.945		
	PE_C3	0.919		
Perceived impact	PE_I1	0.920	0.876	0.955
	PE_I2	0.961		
	PE_I3	0.927		
In-role performance	IRP1	0.851	0.684	0.938
	IRP2	0.781		
	IRP3	0.873		
	IRP4	0.807		
	IRP5	0.830		
	IRP6	0.807		
	IRP7	0.836		

Note. Loadings>0.708; AVE>0.500; CR>0.700

Table 2
Fornell and Lacker criterion

Variables	1	2	3	4	5
1. In-Role Performance	**0.827**				
2. Participative decision-making	0.825	**0.858**			
3. Perceived competence	0.759	0.775	**0.925**		
4. Perceived impact	0.754	0.786	0.757	**0.936**	
5. Perceived meaning	0.746	0.770	0.778	0.787	**0.935**

Note. Diagonal represents the square root of the AVE while the off-diagonals represent the correlations

The result of bootstrapping analysis shown in Table 3, participative decision-making has a direct effect of on perceived meaning (β=0.770, p<0.01), perceived competence (β =0.774, p<0.001) and perceived impact (β=0.786, p<0.001). The results indicated as positive and significant. Hence, hypotheses H1, H2, and H3 are supported.

The direct effect (Table 3) of perceived meaning (β=0.133, p>0.10), perceived competence (β=0.258, p<0.01) and perceived impact (β=0.220, p<0.001)) are found to have a positive and significant effect on in-role performance. Therefore, there is support for hypotheses H4, H5 and H6.

Table 3
Result of direct effect

H	Relationship	β	Std Error	*t*-values	R^2	Decision
H1	PDM →PEM	0.770	0.057	13.419***	0.593	Supported
H2	PDM →PEC	0.774	0.058	13.242***	0.599	Supported
H3	PDM→PEI	0.786	0.051	15.274***	0.618	Supported
H4	PEM→IRP	0.133	0.094	1.406*	0.708	Supported
H5	PEC→IRP	0.258	0.081	3.172***	0.708	Supported
H6	PEI→IRP	0.220	0.074	2.986***	0.708	Supported

Note. n=173; ***p<0.01; **p<0.05; *p<0.10; 5,000 re-sampling bootstrapping; one-tiles

Table 4
Result of the indirect effect

H	Relationship	β	Std Error	*t*-values	Decision
H7	PDM→PEM→IRP	0.102	0.074	1.372	Not Supported
H8	PDM→PEC→IRP	0.200	0.065	3.060***	Supported
H9	PDM→PEI→IRP	0.173	0.061	2.817***	Supported

Note. n=173; ***p<0.01; **p<0.05; *p<0.10; 5,000 re-sampling bootstrapping; two-tiles

As indicated by Table 4, the relationship between participative decision-making and in-role performance via perceived meaning (β=0.102, p>0.10) is not significant and therefore H7 is not supported. The result revealed the positive and significant relationship between participative decision-making and in-role performance via perceived competence (β=0.200, p<0.001), perceived impact (β=0.173, p<0.001). Thus, only H8 and H9 are supported.

CONCLUSIONS

Engineers' perception of participative decision-making was found to be significantly related to the three dimensions of psychological empowerment; namely, perceived meaning, perceived competence, and perceived impact. Therefore, the conclusion based on the results indicated that all three dimensions of psychological empowerment are influenced by participative decision-making among engineers in the E&E manufacturing firms. H1 was supported in this study. The mean score of the participative decision-making was 5.506 and perceived meaning was 5.657; both of these variables are well above average. Furthermore, the t-values were 13.419***, β was 0.770, and R^2 was 0.593. In short, the analysis showed that the engineers did experience participative decision-making and were aware of their personal desire or perceived meaning at the workplace. The result is consistent with the findings by Emamgholizadeh et al. (2011) and Fock et al. (2011) where perceived meaning provided employees with greater decision-making ability and they might feel psychologically empowered if they interpreted their job task as meaningful and they were free to determine his or her work.

The relationship between participative decision-making and perceived competence (H2) was supported. The result indicated that the mean score was 5.543, t-values were 13.242***, β was 0.774, and R^2 was 0.599. It is relevant to add that promoting participative decision-making may enable engineers to experience perceived competence in the workplace. This is supported by Amundsen and Martinsen (2015) who explained that the employees' perceived participative decision-making might lead to perceived competence and skills optimization. The results of this study demonstrated that the engineers' perceived participative decision-making was positively and significantly related to their perceived impact at the workplace, indicating that H3 is supported. The mean score was 5.347, t-values were 15.274***, β was 0.786, and R^2 was 0.618. This result is consistent with where employees perceive their involvement in the decision-making process allows them to create more meaningful and impactful results in the workplace.

Studies by Moake and Oh (2015), Chiang and Hsieh (2012), and Huang et al., (2012) had acknowledged that psychological empowerment significantly influenced employees' in-role performance at the workplace. Results of this study revealed three dimensions of psychological empowerment, such as perceived meaning (β=0.133), perceived competence (β=0.258),

and perceived impact (β=0.220) having a positive and significant impact on in-role performance. Based on the results of this analysis, there is support for hypotheses H4, H5, and H6 meaning when engineers experience perceived meaning, perceived impact and perceived competence at the workplace, they are willing to put extra effort and diligently seek for better ways to do his or her work, resulting in improved productivity.

Previous studies by Park et al. (2015) had proven that psychological empowerment was significant as a mediator. Thus, it is expected that each dimension of psychological empowerment would act as a significant mediating variable particularly between participative decision-making and in-role performance in the E&E manufacturing context. The result revealed that perceived competence (H8) and perceived impact (H9) were significant as mediators; however, perceived meaning (H7) was not significant as a mediator. The non-significance of H9 could be attributed to the engineers' lack of emotional engagement with their work roles, beliefs, values, and behaviours at the workplace (Brief & Nord, 1990; Hackman & Oldham, 1980).

The results of the current study confirm that there is evidence of engineers' involvement in the decision-making process at the workplace in Malaysian E&E manufacturing firms. Consequently, their participation in the decision-making process leads to a sense of empowerment; evidently, this indicates social exchange between the engineers and their managers. Previous studies established that a sense of fairness and social exchange between the managers and employees was mutually beneficial to the organization. Since the results were based on a matched-pair analysis, the non-significance of perceived meaning as a mediator could be the result of the managers' perception that engineers were not emotionally invested in their job performance but rather regard their task as being routine.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Abdul-Rasit, Z., & Isa, C. R. (2015). Decision facilitating role of comprehensive performance measurement system (CPMS) and job performance: Influence of role ambiguity and locus of control. *Pertanika Journal of Social Sciences & Humanities*, *23*(S), 145 – 160.

Amundsen, S., & Martinsen, O. L. (2015). Linking empowering leadership to job satisfaction, work effort, and creativity: The role of self-leadership and psychological empowerment. *Journal of Leadership & Organizational Studies, 22*(3), 304-323.

Boo Su-Lyn. (2014). *Survey: Doctors, lawyers, engineers are Malaysia's unhappiest workers.* Retrieved October 16, 2017, from http://www.themalaymailonline.com/malaysia/article/surveydoctorslawyersengineersaremalaysiasunhappiestworkers#sthash.u7AYw838.dpuf

Brief, A. P., & Nord, W. R. (1990). *Meanings of occupational work: A collection of essays*. Lexington, USA: Lexington Books.

Chan, S. W., Omar, A. R., Ramlan, R., Zaman, I., Omar, S. S., & Lim, K. H. (2016). Assessing participation in decision-making among employees in the manufacturing industry. In *2016 International Conference on Industrial Engineering, Management Science and Application (ICIMSA)* (pp. 1-5). Jejudo, South Korea: IEEE Xplore.

Chelniciuc, A. (2010). *Assessing organizational performance management capability*. Retrieved July 24, 2017, from http://www.performancemagazine.org/assessing-organizational-performancemanagement/capability-the-performance-management-maturity-model/

Chiang, C. F., & Hsieh, T. S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behaviour. *International Journal of Hospitality Management*, *31*(1), 180-190.

Dodi, W. I. (2015). Employee participation in decision-making: Evidence from a state-owned enterprise in Indonesia. *Journal of Contemporary Management, 20*(1), 159-172.

Emamgholizadeh, S., Matin, H. Z., & Razavi, H. R. (2011). Is participation in decision making related to employee's empowerment? *African Journal of Business Management, 5*(9), 3504-3510.

Fock, H., Chiang, F., Au, K. Y., & Hui, M. K. (2011). The moderating effect of collectivistic orientation in psychological empowerment and job satisfaction relationship. *International Journal of Hospitality Management, 30*(2), 319-328.

Frieder, R. E., Wang, G., & Oh, I. S. (2018). Linking job-relevant personality traits, transformational leadership, and job performance via perceived meaningfulness at work: A moderated mediation model. *Journal of Applied Psychology, 103*(3), 324-333.

Ghani, N. M. A., Yunus, N. S. N. M., & Bahry, N. S. (2016). Leader's personality traits and employees job performance in public sector. *In Fifth International Conference on Marketing and Retailing* (pp. 46-51). Penang, Malaysia: Elsevier.

Ghattas, J., Soffer, P., & Peleg, M. (2014). Improving business process decision making based on past experience. *Decision Support Systems, 59*(1), 93 – 107.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Oldham Reading, USA: Addison-Wesley.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)* (2nd ed.). Thousand Oaks, USA: Sage Publications.

Huang, X. (2012). Helplessness of empowerment: The joint effect of participative leadership and controllability attributional style on empowerment and performance. *Human Relations, 65*(3), 313-334.

Kimpah, J., & Raudeliuniene, J. (2014). Impact of women empowerment on work performance: Malaysian Banks. In *17th Conference for Junior Researchers, Science - Future of Lithuania* (pp. 62-70). Vilnius Gediminas Technical University, Vilnius, Lithuania: Public Knowledge Project.

Kimpah, J. (2018). *The effect of participative decision-making and empowerment on job performance of engineers in Electrical and Electronic Sectors* (Doctoral dissertation), Universiti Sains Malaysia, Malaysia.

Lam, S. S. K., Chen, X.-P., & Schaubroeck, J. (2002). Participative decision making and employee performance in different cultures: The moderating effects of allocentrism/idiocentrism and efficacy. *Academy of Management Journal, 45*(5), 905-914.

Meyerson, S. L., & Kline, T. J. (2008). Psychological and environmental empowerment: Antecedents

and consequences. *Leadership & Organization Development Journal, 29*(5), 444-460.

Moake, T. R., & Oh, N. (2015). Empowerment and innovative performance: The moderating effects of in-role performance and sex. *Academy of Management, 1*(1), 125-157.

Mohd-Rashid, N., Mohd-Sah, N. F., Mohd-Ariffin, N., Wan-Abdul-Ghani, W. S., & Muhamad-Yunus, N. S. N. (2016). The influence of bank's frontlines personality traits on job performance. In *Fifth International Conference on Marketing and Retailing* (pp. 65–72). Batu Feringgi, Penang: Elsevier.

Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance, 10*(2), 71–83.

Park, C. H., Kim, W., & Song, J. H. (2015). The impact of ethical leadership on employees' in-role performance: The mediating effect of employees' psychological ownership. *Human Resource Development Quarterly, 26*(4), 385-408.

Parnell, J. A., Koseoglu, M. A., & Dent, E. B. (2012). Propensity for participative decision making (PPDM) in Turkey and the USA. *International Journal of Business Excellence, 5*(3), 278-304.

Raudeliuniene, J., Dzemyda, I., & Kimpah, J. (2014). Factors for assessment of women empowerment: Theoretical approach. In *8th International Scientific Conference: Business and Management 2014* (pp. 353-362). Vilnius, Lithuania: Vilnius Gediminas Technical University.

Shen, J., Benson, J., & Huang, B. (2014). High-performance work systems and teachers' work performance: The mediating role of quality of working life. *Human Resource Management, 53*(5), 817-833.

Siegel, A. L., & Ruh, R. A. (1973). Job involvement, participation in decision making, personal background and job behavior. *Organizational Behavior and Human Performance, 9*(2), 318-327.

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal*, *38*(5), 1442-1465.

Spreitzer, G. M., Dejanasz, S. C., & Quinn, R. E. (1999). Empowered to lead: The role of psychological empowerment in leadership. *Journal of Organizational Behaviour*, *20*(4), 511-526.

Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness satisfaction, and strain. *Journal of Management*, *23*(5), 679-704.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviours. *Journal of Management, 17*(3), 601-617.

Pertanika J. Soc. Sci. & Hum. 28 (2): 803 - 816 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Project Managers' Leadership Styles and Their Effects on Project Management Performance

Nurianna Thoha* and I Made Ngurah Wahyu Avandana

International Business Program, Management Department, BINUS Business School International Undergraduate Program, Bina Nusantara University, Jakarta 11480, Indonesia

ABSTRACT

PLTU-XYZ construction project is a part of the accelerated development of a 10,000-MW power-generation program first-phase which is being launched by the Indonesian government. To handle large projects that have a high level of complexity requires a leader or a project manager who has expertise in the field of power plant construction, has good leadership skills, and who is expected to be able to overcome the difficulties faced during the process of the project. This research was conducted using a qualitative method to analyze the leadership style of the project managers who had led the PLTU-XYZ project and also to investigate their leadership influence on the project management's team performance. Data were collected by using in-depth interviews, which were then analyzed by using thematic-data analysis. The study discovered that the first project manager had an 'affiliative' leadership style, the second had a 'pacesetting' leadership style while the third had a 'democratic' leadership style. The affiliative leadership style and democratic leadership style brought positive effects to the project management team's performance while the pacesetting leadership style brought negative effects to the project management team's performance. This research also found that the leadership style of the project manager was not a factor that could cause delays in the project.

Keywords: Leadership style, PLTU XYZ 2x30MW project, project management

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
nurianna@binus.edu (Nurianna Thoha)
wahyu_av@yahoo.com (I Made Ngurah Wahyu Avandana)
* Corresponding author

INTRODUCTION

To meet the needs of electrical energy in a particular city in the island of Sumatra, PT Perusahaan Listrik Negara (PLN-Persero) planned to build, own and operate a steam power plant with a maximum capacity of 2x30MW, which was then

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

known as a PLTU-XYZ 2x30MW project. The project was one of the accelerated developments of phase one of a 10,000-MW power-generation program. It was launched by the Indonesian-government in 2007. Many foreign and Indonesian contractors competed to participate in the program.

To work on the PLTU-XYZ 2x30MW project, PT.PLN (Persero) appointed a partnership between PT. ABC from Indonesia with PT.DEF from China as the prime-contractor or 'Engineering Procurement Construction (EPC) Contractor'. Similar to other power plant construction programs that were included in the accelerated development of phase one of the 10,000-MW power generation program, the construction of PLTU-XYZ project was also delayed. At the time of writing in 2016, the process of the PLTU-XYZ project had reached 98.25% and was delayed for four years.

As with any other project, the PLTU-XYZ construction project was led by a project manager who was appointed as the head of the project management team. The project manager had a duty to oversee the project implementation so that it would be in line with the project plan. The project manager also had a duty to direct his team members and to communicate with all parties involved in the project implementation. This is in line with Barata's (2016) statement that the followers need examples and guidance from the leader as inspirational and behavioural standards so they could identify the aspect of their tasks that need improvement.

According to Melton and Smith (2009), the main target to be achieved by a project manager is to deliver the project as planned, taking into account the current environment - both internally within the project and externally within the business.

Every project manager has his/her own leadership style that they apply to their team members when running a project. Besides that, the project manager should develop relationships with various stakeholders, including clients, suppliers, team members, corporate management, and others. Therefore, a suitable leadership style that fits into a particular situation is absolutely important. The suitable leadership style is also crucial when the project manager faces the myriad uncertainties that usually happen when leading a project.

The PLTU-XYZ construction project faced many non-technical obstacles that caused project delays, that included the intervention of the Board of Directors to the project management team, the application of wrong policies from EPC contractor, high rainfalls, and other factors.

To make up for the project delays, PT. ABC intended to improve the performance of project management by appointing a new project manager in order to finish the project sooner. Until this study was conducted, PT. ABC had changed the project manager three times, even though there was no valid evidence that the performance of the project management team was one of the causes of project delays since there were too many factors affecting the delay of the project.

Any project should be run by the project manager in accordance with the target time, cost and quality that had been planned previously. Failure to achieve these targets will affect all team members involved in project management. Based on the discussion above, it can be concluded that the problems that were faced by PT. ABC included:

(i) Dissatisfaction from the management and other departments of PT. ABC towards the performance of the project management team who were in charge of PLTU-XYZ Project.

(ii) The changing of the project manager three times may indicate that the leadership style of the project manager influenced the project management team's performance, considering that each project manager had a different leadership style.

(iii) There might be a relationship between the project management team's performances and the delay of PLTU-XYZ Project.

Therefore, the research question of this study was "What is the effect of the leadership style of the first, second, and third project manager on the project management team's performance in PLTU-XYZ?" This study aimed to identify and analyse the leadership style of the first, second, and third project manager, to analyse the effect of each project manager's leadership style on the project management team's performance, and to find out whether the project management team's performance was one of the causes of the project delay. The main contributions of this study are:

(i) To provide recommendations for PLTU-XYZ on the most appropriate leadership style/s to accomplish the project.

(ii) To provide a reference for companies to choose project managers when they have a project which has a high degree of complexity.

(iii) To provide a reference for companies to reduce the risk of losses when they are working on a project.

Literature Review

Project Management. Project management is an activity which combines the technical and human aspects of a project systematically. It is used to perform control functions and supervision of all activities within a project so that it can be run successfully and be completed on time. A project is successful if it can be completed on time, meeting the expected quality standards and in accordance with the planned budget. According to 'A Guide to the Project Management Body of Knowledge' (PMBOK-Guide) (2004), project management is an application of knowledge, skills, tools, and techniques in an overall project with the aim to meet the requirements of the project. Wysocki (2007), described project management as a method or a set of techniques which was applied based on management principles that were used to perform the functions of planning, forecasting, and controlling all

work activities to achieve the desired results in a timely manner.

Project Manager. Every project must have a project manager. A project manager is a person who is in charge to lead the project and the project management team and is responsible for ensuring that the project is completed on time within the budget. This statement is in line with Wysocki's (2007) definition above. Meanwhile, according to Walsh (2008) "the wise project manager knows that the specification contains errors, ambiguities, and misdirection. Depending on the complexity of the project, the specifications will change many times before the project is completed, and probably will increasing frequency as the deadline draws closer". Therefore, it is crucial for a project manager to have leadership skills as good as their management skills (Lewis, 2007). In general, a project manager is selected when a company obtains a project and the project will be implemented soon. Since the roles and responsibilities of the project manager are so important, his or her selection should be general management's responsibility (Kerzner as cited in Wysocky, 2007).

Leadership. One of the definitions of leadership is expressed by Armstrong (2009), "leadership is the process of getting people to do their best to achieve the desired result". Armstrong also conveys the opinions of some experts on leadership, such as Goleman (2000) who mentioned that a leader's singular job was to get results. Moreover, Robbins and Judge (2015) defined leadership as the ability to influence a group toward the achievement of a vision or set of goals. Besides that, McShane and Von Glinov (2015) stated that leadership included motivating and enabling others to contribute toward the effectiveness and success of the organization of which they were members. From the definitions above, it can be concluded that leadership involves interaction in a group, involves more than one person, and has a target to be achieved.

Leadership Style. In doing his/her job, a leader will apply a variety of leadership styles to achieve the desired targets, so it is difficult to determine which leadership style is the best to apply in a particular situation. Based on the research conducted by Hay-McBer Consulting in Goleman (2000), there are six leadership styles which consist of:

(i) *Coercive*: A leadership style that centralizes all decisions, regulations, measures, and policies on the leader.

(ii) *Authoritative*: A leadership style where the leader makes his/her subordinates achieve the vision of the company.

(iii) *Affiliative*: the leader tries to create a harmonious atmosphere and build an emotional bond with his/her subordinates.

(iv) *Democratic*: A leadership style where the leader gives a high degree of authority to his/her subordinates in doing their jobs. The leader likes to involve others in making decisions, listen to their opinions,

and provide directions to solve problems.

(v) *Pace-setting*: A leadership style where the leader demands perfection from his/her subordinates, sets high standards and provides examples to subordinates.

(vi) *Coaching*: A leadership style where the leader develops his/her subordinates because, with the advancement of their abilities, they will greatly assist him/her in developing the organization.

The leadership styles proposed by Hay-McBer Consulting above was chosen to be applied in this research since it provides more comprehensive leadership styles (six leadership styles) compared to other leadership styles that proposed by other authors/theories such as by Armstrong (2009), and Path-Goal Leadership Theory by House (1971) that proposed only four leadership styles as can be seen in Figure 1.

MATERIALS AND METHODS

The qualitative/inductive approach was used in this research since this research intends to confirm knowledge and to gain cognition on the project managers' leadership styles and their effects on project management performance. The inductive approach begins with a special observation for generalization and a comprehensive theory (Trochim, 2006).

Research Design

The research design of this study is shown in Figure 2.

Research Method

Data Sampling Technique. This study applied the purposive-sampling method, which is a method of data sampling which selects participants who meet the criteria so that they can provide information that is required and the results can be used to answer the research questions.

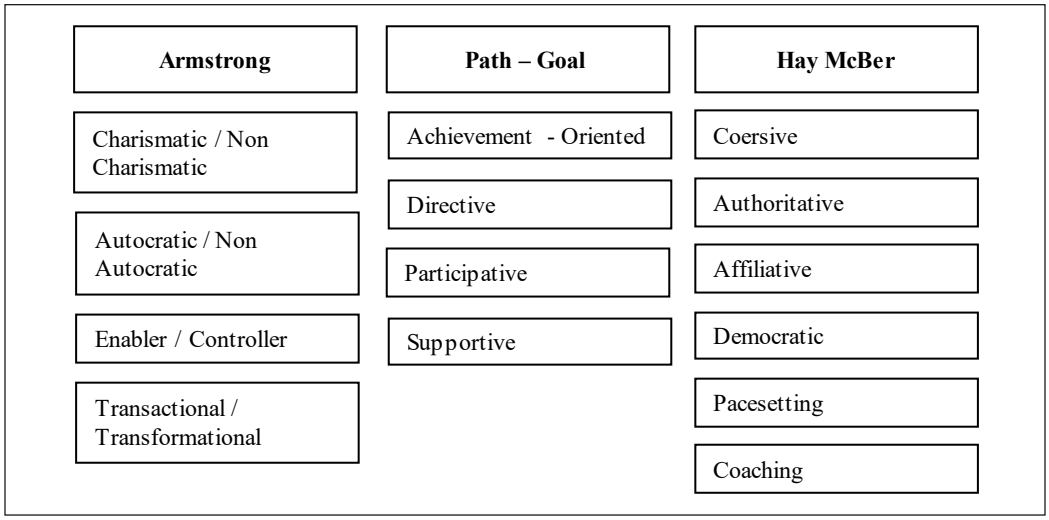


Figure 1. A comparison of leadership styles (Armstrong, 2009; House, 1971; Goleman, 2000)

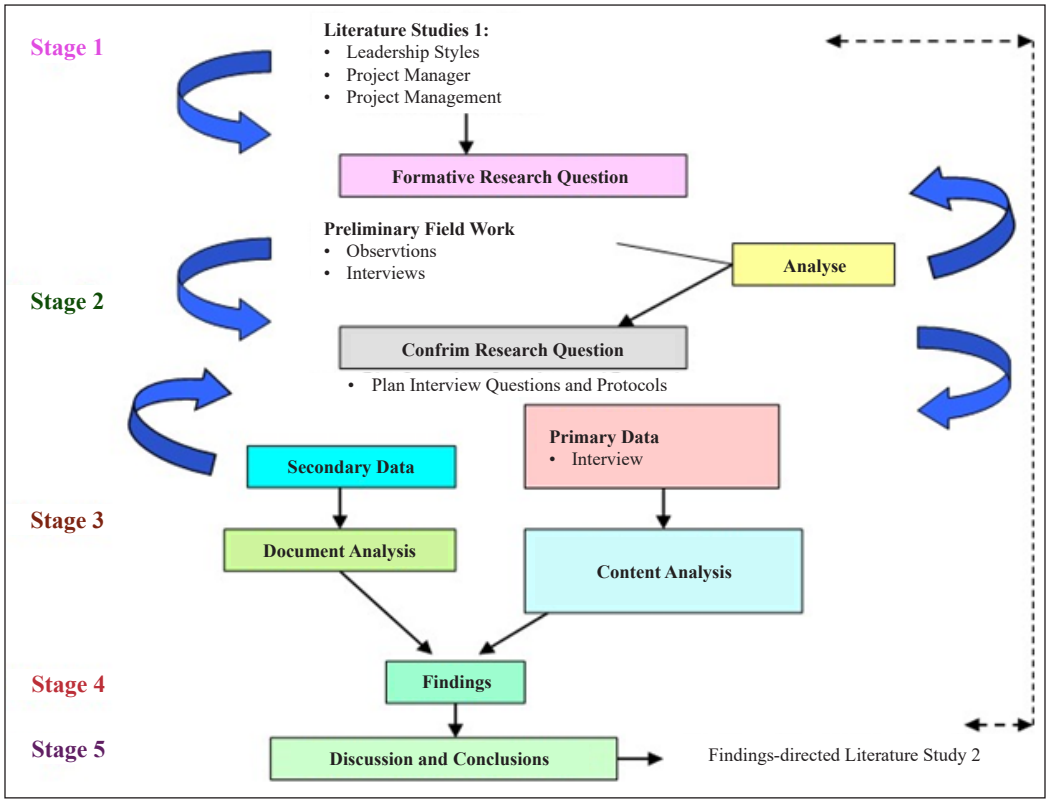


Figure 2. Research design process (Modified from Thoha (2006))

Data Collection and Analysis Techniques. The preliminary data collection was conducted by interviewing three respondents that include one respondent each from the managerial, supervisor, and staff levels to assess their understanding of the interview questions list. The results were used to adjust the questions list that finally was used for the actual data collection.

In the actual data collection process, observation and in-depth interviews were conducted to investigate employees' perception of the leadership style of the first, second, and third project manager on the project management team's performance in PLTU-XYZ. The purpose of doing the interviews was to obtain relevant information with a fairly high degree of accuracy. While the secondary data was obtained through the literature and the company's documents.

The interviews in this study were conducted with three levels of respondents that included all managers (3-people), all supervisors (7-people), and all officers (3-people) in PLTU-XYZ. The aim was to investigate the opinions from different levels of respondents in order to know the opinion of the respondents from different levels. This method was conducted for 'triangulation purposes'. According to Mathison in Wahyuni (2012), triangulation in qualitative approaches is conducted to control bias and establish valid propositions.

The interviews were conducted three times with each respondent in order to get in-depth information on the first, second, and third project managers' leadership style. Therefore, in this study 39 interviews were conducted and all of them were recorded, which were then transcribed into 198 pages.

Data Analysis. The transcript data of the actual interviews were sorted, coded, and analyzed utilizing thematic analysis. Various nodes that were developed were based on the respondents' words or terms. These nodes were then grouped to determine sub-categories. Several sub-categories were grouped to develop categories and later on to develop super-categories. The categories that were developed were compared and contrasted to confirm the leadership theories/ concepts. The coding results are shown in Figure 3**.**

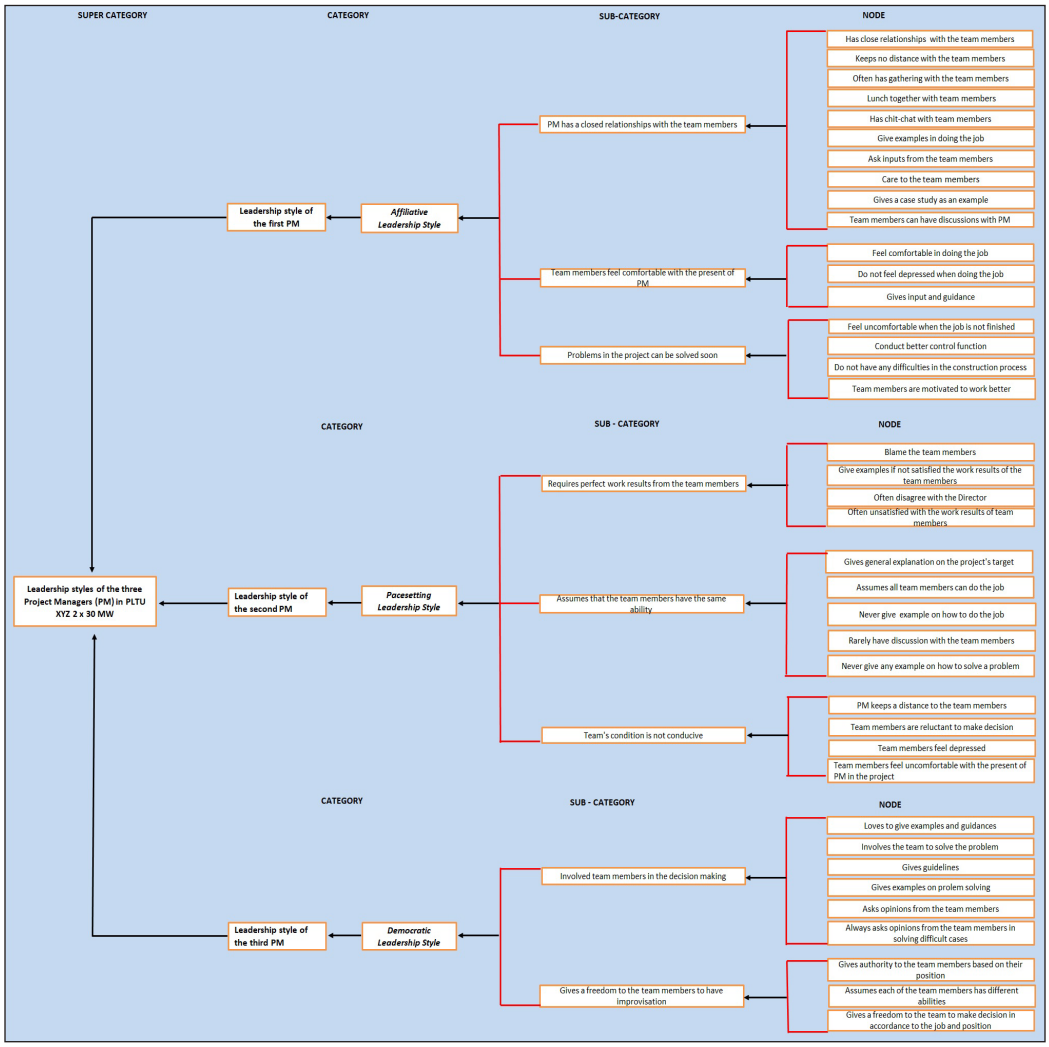


Figure 3. Coding and categorizing of project managers' leadership styles in PLTU XYZ

RESULTS AND DISCUSSIONS

The primary data that were obtained through observations at PLTU-XYZ 2x30MW project site, and the interviews in the form of direct interviews either by phone or face to face were able to be used to confirm the leadership style of each project manager while they were leading at PLTU-XYZ 2x30MW project and to identify their influence on the project management team's performance.

Project Manager's Leadership Style

Figure 3 presents the coding mapping results from the interview transcript data on the leadership style of the first, second, and third project managers. It consists of category, sub-category, and node from each category. Figure 3 shows that each project manager who led PLTU-XYZ 2x30MW project had their own leadership style (affiliative, pace-setting, and democratic leadership styles) when dealing with the project, team members, and other stakeholders.

Leadership Style of the First Project Manager: **Affiliative.** The first project manager who led PLTU-XYZ project had an affiliative leadership style. The characteristics of this leadership style are such that the leader tried to create a harmonious atmosphere and build an emotional bond with his subordinates as stated by Garrick (2006*)*: "Affiliative Style - Primary Objective: Creating harmony among employees and between the manager and employees".

These characteristics are consistent with the three sub-categories of the first project manager's leadership style as the project manager had close relationships with the team members; team members felt comfortable with the presence of the project manager, and problems in the project could be solved quickly. Meanwhile, these three sub-categories were developed from the 17 nodes that were taken from the respondents' words/terms. For example:

(i) Managers' statements: "This project manager always paid attention to the team members and often invited his team members for gatherings outside of working hours"

(ii) Supervisor's statements: "I felt quite comfortable when the project manager was at the construction site."

(iii) Officer's statements: "Yes, I felt very comfortable when the project manager was at the construction site."

Leadership Style of the Second Project Manager: **Pacesetting.** The second project manager who handled PLTU-XYZ project had a pacesetting leadership style. The characteristic of this leadership style is the leader demands perfection from his/her subordinates, sets high standards, and provides examples to subordinates as confirmed by Garrick (2006*)*: "Pacesetting Style - Primary Objective: Accomplishing tasks to high standards of excellence".

These characteristics are in-line with the three sub-categories of the second

project manager's leadership style that included: requiring perfect work results from the team members, assuming that the team members have the same ability, and the team's condition was not conducive. These three sub-categories were developed from the 13-nodes that were taken from the respondents' words/terms. For example:

(i) Managers' statements: "This project manager always assumed that his team members could do the job so he did not give a detailed explanation regarding the job."
(ii) Supervisors' statements: "He always considered that the team members had the same ability/ skills as he does; he didn't give any explanations."
(iii) Officers' statements: "The project manager would be upset and give instructions on how to complete a job."

Leadership Style of the Third Project Manager: **Democratic.** The third project manager who managed the PLTU-XYZ project when this research was conducted had a democratic leadership style. This style of leadership gives high authority to his/her subordinates. This type of leader is very pleased to involve others in decision-making, listen to their opinions, and provide solutions to problems. Garrick (2006*)* referred to this leadership style as a style that had the primary objective of building commitment among employees and generating new ideas.

These characteristics are consistent with the two sub-categories of the third project manager's leadership style that included: involving the team members in decision making and giving freedom to the team members to make improvisations in doing their job. These two sub-categories were developed from the nine nodes that were taken from the respondents' words/terms. For example:

(i) Managers' statements: "Usually for complicated things, the project manager would ask the team's opinion."
(ii) Supervisors' statements: "I think yes, the project manager gave high authority to team members according to their position."
(iii) Officers' statements: "Yes, always being involved in problem-solving and also its solutions."

Project Management Team's Performance

Figure 4 shows that the project manager's leadership style has an influence on the project management's team performance. The influences of the leadership style can be positive or negative that ultimately might simplify or complicate the construction process at PLTU-XYZ 2x30MW project site.

Project Management Team's Performance Under the First Project Manager. The affiliative leadership style that was applied by the first project manager brought a positive impact on the project management

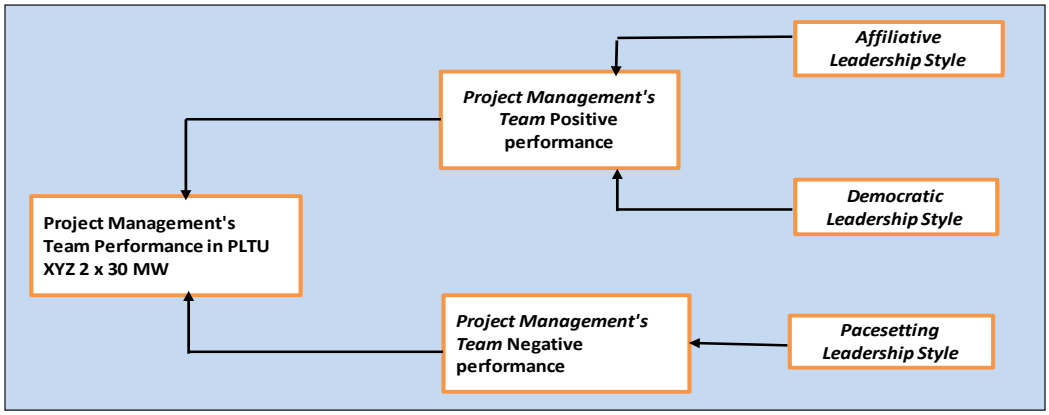


Figure 4. The effects of project managers' leadership style on the project management team's performance

team's performance. This is supported by the evidence that the team members were motivated to work better, compelled to perform better functions on planning and control of the project, and felt a comfortable working environment. This was supported by the interview results below:

(i) Managers' statements: "For me, I think with this leadership style, we felt safe and comfortable, thus we completed our jobs better."

(ii) Supervisors' statements: "The Board of Directors always intervened in the work arrangement at the construction project site, but however, the project manager always strived to reject any forms of intervention."

(iii) Officers' statements: "I did not feel any pressure but instead felt comfortable."

Project Management's Team Performance Under the Second Project Manager. The second project manager applied a pacesetting leadership style that brought negative effects on the project management team's performance, for example working conditions became unconducive, and the team members were scared to make decisions because they were afraid to be blamed by the project manager. Therefore, the team members were not motivated to work better. This can be inferred from the interview results as follows:

(i) Managers' statements: "... I felt upset and wanted to just quickly go back home."

(ii) Supervisors' statements: "Yes, because a lot of our colleagues felt horrified to make decisions due to the fear to be blamed or scolded by the boss."

(iii) Officers' statements: "Not at all, because for being creative, we were scared to be blamed by the project manager if it was not what he wanted."

Project Management Team's Performance under the Third Project Manager. The third project manager's leadership style,

which was democratic, brought positive effects to the project management team's performance; for example, supporting the construction process, creating a comfortable working environment for the team, encouraging the team to work harder or better, and the team members were not hesitant to make decisions because they were being given high authority.

(i) Managers' statements: "We did not feel any pressure but instead felt comfortable."
(ii) Supervisors' statements: "Yes sir, because the project manager was very detailed about the construction progress."
(iii) Officers' statements: "Never felt any difficulties but instead felt peaceful in doing the work."

Delay on PLTU-XYZ Project

The project manager's leadership style was not one of the factors that caused the delay of the project; this can be inferred from the interview results as follows:

(i) "In my opinion, the delay of the project was not because of the leadership style; there are a lot of other things to be considered such as land tillage, engineering, and the procurement side."
(ii) "No, delay on the Babel project happened because there are few factors for example weather factors, the involvement of the Board of Director, lack of preparedness of operators, and other factors."
(iii) "Babel project experience delay because of weather factors, infrastructure, less reliable electricity network system, Board of Directors' wrong policy and other factors. There is no relationship between the delayed project with Project Manager's leadership styles."

CONCLUSIONS

The purposes of this research were to identify and analyse the leadership style of the first, second, and third project managers, to analyse the effect of each project manager's leadership style on the project management's team performance, and to find out whether the project management team's performance is one of the causes of the project delay.

The first project manager applied an affiliative leadership style that had positive impacts on the project management team's performance. Meanwhile, the second project manager had a pacesetting leadership style that brought a negative impact on the project management team's performance, and the third project manager had a democratic leadership style that had a positive impact on the project management team's performance.

Based on these findings, it can be seen that the leadership style can bring negative effects as well as positive effects on the project management team's performance. However, the delay of the PLTU-XYZ project was not caused by the leadership style of project managers.

The best project manager is a project manager who possesses a minimum of four or more leadership styles as suggested by Hay-McBer. However, if a company is having trouble finding project manager candidates who possess several leadership styles, then a leader who has a democratic leadership style is relevant to be considered as the project manager to handle projects that have high levels of complexity. Since in the democratic leadership style the leader involves the team members in the decision-making process and gives freedom to the team members to make improvisations in doing their job which is very needed to run the project that has a high level of complexity. This is also in line with these research findings.

Each leadership style has its own strengths and weaknesses, in the sense that there is no best leadership style that can be applied in all situations. It depends on the situation faced by the project and the strength of the project manager's team members. A good project manager must be able to choose the best leadership style according to the problems faced in a particular situation.

Intervention from the company's Board of Directors regarding the project's decision-making sometimes unconsciously played a role in the delay of the project. The project manager must have the courage to reject the decisions made by the Board of Directors if such decisions would cause problems so that the project can be run in accordance with the objectives and within the period set.

Implications and Recommendations

Based on the findings explained above, this section discusses the implications of the findings and provide several suggestions or recommendations.

Selection of Project Manager. The project manager's leadership style has an influence on the project management team's performance, however, each of these leadership styles has advantages and disadvantages depending on the situation encountered.

In selecting a project manager to handle a project that has a high level of complexity, companies might consider choosing a project manager who has an affiliative or democratic leadership style because these leaders are capable of achieving positive performance in project management. Even though for this particular project the affiliative and democratic leadership styles can bring positive results for the project management team, it does not mean that leaders who apply other leadership styles are not suitable to lead a project.

The best project manager is the project manager who possesses four or more leadership styles as proposed by Hay-McBer theory because each of these leadership styles has its own unique style in facing a particular situation or problem. This is in line with the statement of Goleman (2000), "Leaders who have mastered four or more - especially the authoritative, democratic, affiliative, and coaching styles have the very best climate and performance. The

most effective leaders are also able to switch flexibly among the leadership styles as needed."

Cause of Delays on PLTU XYZ Project

The PLTU-XYZ project was delayed for four years. The delay was caused by several factors that were consistent with the categories of delays that were proposed by Kraiem and Diekmann (1987):

- Delays that are eligible for compensation (compensatory delays).
  At PLTU-XYZ's project, this delay was caused by the project's owner lateness to acquire the land, access road problems, lack of preparation on the operator side, and by unreliable electricity networks.
- Delays that are not eligible for compensation (non-excusable delays).
  At the PLTU-XYZ project, this delay was caused by the intervention of the Board of Directors to the project management team and the application of wrong policies from EPC contractor that were determined by the Board of Directors and influenced the construction process.
- Delays that were not caused by the project's owner or contractor (excusable delays). At PLTU-XYZ project this delay happened due to high rainfall and a lack of appropriate local infrastructure to support a large capacity project.

To sum up, the delay of PLTU-XYZ project was not caused by the leadership

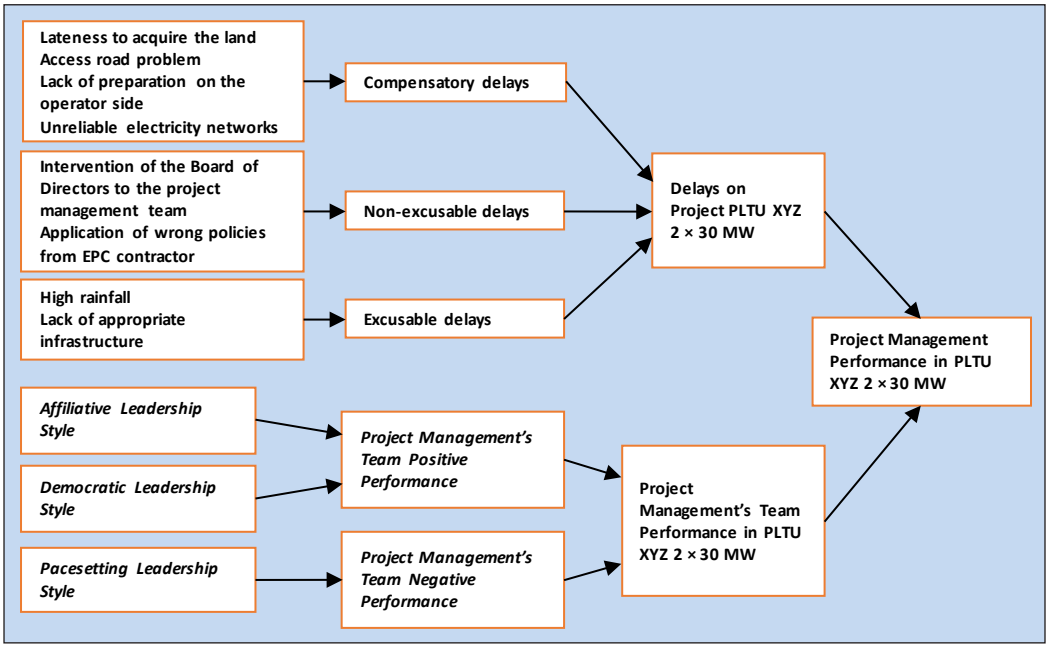


Figure 5. Factors that Influence Project Management Performance on PLTU XYZ 2x30 MW

style of the project managers, but by the owner of the project, the force majeure circumstances, and by other causes as can be seen from Figure 5 that include the factors in compensatory, non-excusable, and excusable delays. Therefore, PT. PLN (Persero) provided an extended time of contract - called the Extension of Time - to the consortium of PT. ABC and PT-DEF as the main contractor for the construction of the PLTU-XYZ project.

This research has a contribution to the body of knowledge in terms of providing the evidence on the applicability of the six leadership styles that were proposed by Hay-McBer in analyzing the leadership styles of the project managers' leadership styles in a power generation project in Indonesia that has never been conducted before.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Armstrong, M. (2009). *Armstrong's handbook of management and leadership: A guide to managing for results*. (2nd ed.). London, England: Kogan Page Limited.

Barata, D. D. (2016). The impact of leader engagement on the creation of innovation culture. *International Journal of Economics and Management, 10*(S1), 135-149.

Garrick, L. (2006). *Senior careers development service: Supporting guide - Hay group inventory of leadership styles diagnostic.* Retrieved July 26, 2017, from www.haygroup.com

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*, March-April, 78 – 90.

House, R. J. (1971). A Path-Goal Theory of leader effectiveness. *Administrative Science Quarterly*, *16*, 321-328.

Kraiem, Z. M., & Diekmann, J. E. (1987). Concurrent delays in construction projects. *Journal of Construction Engineering and Management, 113*(4),591-602

Lewis, J. P. (2007). *Fundamentals of project management.* (3rd ed.). New York, USA: Amacom.

McShane, S. L., & Von Glinov, M. A. (2015). *Organizational behavior* (7th ed.). Singapore: McGraw Hill.

Melton, T., & Smith, P. I. (2009). *Managing project delivery: Maintaining control and achieving success* (1st ed.). Oxford, UK: Elsevier Ltd.

PMBOK Guide. (2004). *A guide to the project management body of knowledge* (3rd ed.). Newtown Square, USA: Project Management Institute.

Robbins, S. P., & Judge, T. A. (2015). *Organizational behavior: Emerging knowledge, global reality* (16th ed.). Edinburgh Gate, England: Pearson Education Limited.

Trochim, W. M. K. (2006). *Deduction & induction*. Retrieved October 17, 2017, from https://www.socialresearchmethods.net/kb/dedind.php

Wahyuni, S. (2012). *Qualitative research method-theory and practise*. Jakarta, Indonesia: Salemba Empat.

Walsh, R. (2008). *Time management.* (2nd ed.). Avon, USA: Adams Media.

Wysocki, R. K. (2007). *Effective project management: Traditional, adaptive, extreme.* (4th ed.). Indianapolis, USA: Wiley Publishing.

Pertanika J. Soc. Sci. & Hum. 28 (2): 817 - 826 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Mainstreaming Disability in the Workplace in Myanmar: Preliminary Study Findings

Sanjukta Choudhury-Kaul

International Business Management Program, Department of Management, BINUS Business School Undergraduate Program, Bina Nusantara University, 11480 Jakarta, Indonesia

ABSTRACT

International businesses have been under pressure to consider inclusive workplace practices and mainstream the disability agenda. After decades of isolation as Myanmar slowly opens itself to the world, global businesses making their inroads into the country are poised with several challenges in addressing the agenda of people with disabilities (PWD) in the workplace in Myanmar. This article reports the preliminary study findings of a qualitative study of business professionals, as well as civil society members including PWD, based in the business capital city of Yangon, to examine the various business impediments in their engagement with disabled people in the workplace. The preliminary findings indicate three barriers for businesses in engaging with the issue of disabilities. These are restricted business understandings, a weak social model of disability, nascent management approaches, and an absence of skills and resources for PWD. The study indicates that in the absence of strong public policies and a regulatory environment, voluntary business participation through stakeholder engagement with the government and PWD is an essential way forward for businesses to facilitate disability mainstreaming in the workplace in Myanmar.

Keywords: Business, disability, Myanmar, people with disabilities, workplace

INTRODUCTION

People with disabilities (PWD), along with other groups such as the elderly, share the social perception and position of being marginalized people (Yoon et al., 2017). The consideration of disabilities and PWD, in particular, is an emergent issue in most developing Asian economies, yet the integration of people with disabilities

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail address:
skaul@binus.edu (Sanjukta Choudhury-Kaul)

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

(PWD) in the workplace has increasingly garnered interest in Asia. Myanmar, a country with one of the fastest-growing economies in the world, which continues to remain in a state of political and economic transition, reported 4.6% of its population (2.3 million people) as PWD (Department of Population, Ministry of Labor, Immigration, and Population, 2015). As Myanmar opens itself to domestic and international business, its participation in creating an inclusive workplace to facilitate disability mainstreaming and the various business impediments faced by businesses form an important area of study. This study offers useful implications for businesses, society, and the government in their attempts to mainstream disabilities in the workplace.

Literature Review

Businesses in Myanmar: Joining the Global Platform. After decades of military rule, in recent times the Republic of the Union Myanmar has opened itself to the outside world, ending its several decades of isolation with the global community. Myanmar's new government has encouraged a suitable business climate and welcomed international businesses over the last five years. In recent times, the changes in the new company laws (Myanmar Company Law, 2017) are expected to increase international investment interest (Oxford Business Group, 2020). Furthermore, with factors like the lifting of sanctions by the USA, Myanmar's active participation in the ASEAN economic community, as well as a steady rise in local consumption and increased public spending, Myanmar is attempting to position itself as a business preferred ASEAN destination for the global investment community.

However, amidst the ongoing international concerns of Myanmar's domestic stability, the optimistic global investment community has continued to seek a guarded advantage of the economic situation. At present, the development of domestic and international businesses as an outcome of Myanmar's political and economic transitions remains deeply dependent on the future development of the four essential stocks of the country's physical, human, institutional, and social capital (Organisation for Economic Co-operation and Development [OECD], 2013).

In the context of an emergent changing business scenario, the notion of conducting a responsible business is also a developing concept in Myanmar. While the traditional philanthropy, charity, and foundation-based approach continue to be popular, the strategic understanding of CSR and the facilitator role of bodies like the Union of Myanmar Federation of the Chamber of Commerce and Industry (UMFCCI) is still not widely known. The governance and environmental dimensions of businesses have been concerned with issues of transparency, combating corruption, and efforts to prevent environmental exploitation. The social dimension shows a preference for human rights issues and those related to workplace engagement. However, there is evidence of very little research in this area.

Disabilities in Myanmar

Disabilities in the workplace and its conceptualization within the framework of labour is a new concept in Myanmar. The first formal documentation of PWD in the country was carried out only as late as 2008/2009. For a much longer time, PWD has been the 'hidden society' in Myanmar. In recent times, Myanmar has undertaken several regulatory initiatives to promote disability-inclusive developments. These include the ratification of the 2006 United Nations Convention on the Rights of Persons with Disabilities (CRPD) (2011) and the Law of the Rights of Persons with Disabilities, the Government of Myanmar (2015), and the formation of the National Committee on Rights of Persons with Disabilities (NCPRD). The country is also committed to the Bali Declaration on the Enhancement of the Role and Participation of Persons with Disabilities in the ASEAN Community and Mobilization Framework of the ASEAN Decade of Persons with Disabilities (2011-2020), a signatory for the Asian and Pacific Decade of Persons with Disabilities (2013-2022) with a commitment to the 2012 Incheon Strategy, a disability-inclusive post-2015 development agenda (Department of Population, Ministry of Labor, Immigration, and Population, 2017).

The civil society committed to issues of PWD in Myanmar is an active group of stakeholders pursuing the issue through cross-functional efforts of disability service providers (DSPs), disabled people's organizations (DPOs), and non-governmental organizations (NGOs). These organizations attempt to address an array of issues such as advocacy, education, vocational training, skill-building, employment, mobility, and independent living concerns.

Stakeholder Theory. The stakeholder theory, with an expansive view, positions itself in contrast to the shareholder theory, with the fundamental assumption that corporations are socially responsible entities which have obligations towards the society. The theory beyond the philosophical assumptions of CSR is within the realm of management. Freeman (1984), the principal architect of this approach, defined stakeholders 'as any group or individual who can affect, or is affected by, the achievement of the organization's objectives'. The shareholder is repositioned as one of the stakeholders within a larger set of stakeholders, and the bidirectional relationship which the company previously shared with the shareholder alone is also extended to other members of the stakeholder group. In the context of this study, this is a useful lens as businesses in Myanmar are trying to conceptualize the position of people with disabilities as employee stakeholders who have tried to gain a voice and increasingly demanded to the mainstream through economic and social participation. Additionally, the stakeholder approach also positions the government and the disability-focused civil society, as stakeholders for business, in mainstreaming the disability agenda in Myanmar.

MATERIALS AND METHODS

The key research question of this paper was to examine and identify the key barriers to business participation in mainstreaming the disability agenda in the workplace in Myanmar. Given the exploratory nature of the research, the study engaged in purposive sampling, with the intent to understand the various issues underpinning the research objective. The sampling objective was guided by the need to learn 'a great deal about the issues' (Coyne, 1997). The methods employed for the data collection were semi-structured, in-depth interviews and document analysis. For the aforesaid purpose, businesses and civil society were both parts of the direct sample while government documents were referred to for document analyses.

A total of 12 interviews were conducted. The study entailed engagement with a total of 4 businesses and 3 disability NGOs/ DPOs. The data was exclusively collected from businesses and civil society located near or with the head office in Yangon. The interviews with businesses included professionals who are responsible for the diversity initiative in the company and are presently driving the same or shortly expected to lead the initiative. For the NGOs and DPOs, all the interviews were conducted with the key members such as the founders or leadership team.

Semi-structured, In-depth Interviews

All the interviews were on-site, and audio recorded. The interviewer was accompanied by a language translator, given that Burmese is the preferred language of discussion. All the interviewees were coded, and interviews were translated and transcribed. All interviews were conducted as face-to-face interviews. Codes and themes from the research findings were developed from the line-by-line reading of the transcripts. The thematic analysis was aided by the engagement with the computer-assisted qualitative data analysis software program, NVivo (Version 10).

RESULTS AND DISCUSSIONS

The early study findings indicate three impediments for mainstreaming disabilities in the workplace and its conceptualization of PWD as employee stakeholders in Myanmar.

Restricted Business Understanding of Disabilities and Weak Social Model of Disability

The findings of this study indicate that the business interpretation of disabilities and challenges of PWD in Myanmar are limited, and the sub-classifications are restricted to those with physical or visual or auditory impairments. The expansion of the term 'disability' now includes intellectual, sensory, and long-term illnesses which have a disabling impact, and account for PWD with a wide range of disabilities. However, the study findings show that Myanmar businesses prefer the narrow definition of a disability. Businesses cite several reasons for their preferred engagement with physical, visual, or auditory impairments. For example, businesses are at the very

early stages of engagement with disabilities in the workplace and therefore remain more comfortable with traditional types of disabilities, such as hearing impairments, speech impairments, mobility issues, and visual impairments.

> *We have worked with people who have leg problems, amputees or those from childhood who cannot walk, or in wheelchairs. We have not faced any problem with them. But I am not sure if we are equipped to understand the challenges of those who have other challenges which are internal and impact their disabilities.* (Respondent 1.1)

Furthermore, businesses have a weak understanding of intellectual or other forms of disabilities. They are also unprepared to address the challenges or offer suitable accommodations which include people with intellectual disabilities or those who have functional limitations because of the disabling impact of a long-term illness like chronic diabetes, leprosy, HIV, a psychological issue, or those related with the ageing process. Going ahead, this can be a challenge for businesses. For example, the 2010 report of the Myanmar National Disability Survey showed that in the working-age group of 16-65 years old, and the school-age group of 6-15 years old, "the proportion of persons with a disability due to an intellectual disorder is the highest" (Department of Social Welfare and the Leprosy Mission International, 2010). It is useful to note here that Myanmar for a long time has recognized the significance of mental healthcare, with services and support available as early as 1928 (James, 2005).

> *We need to think as to what roles and functions we can create for a suitable job for others [those with an intellectual disability].* (Respondent 3.1)

Businesses in Myanmar need to adopt an expanded understanding of disabilities and PWD. In addition to physical and sensory disabilities, or those acquired at birth, businesses in Myanmar also need to account for intellectual disabilities and the disabling impact of long-term illnesses. In doing so, they will be able to reach out to a larger pool of potential employee stakeholders with disabilities and build upon the existing resources available within the country, which supports disability.

Emergent HR Practices and Nascent Modern Management Approaches

Most of the private businesses in Myanmar are now experiencing a new business climate, given the business needs to boost their productivity and enhance their people, processes, and product efficiency. To assert their positions in an increasingly competitive market, businesses are considering several measures such as transparency issues, labour laws, the impact of an influx of international partners, foreign employees, the challenges of skilled labour, the lack of capital, and access to finance amongst others (PWC, 2017).

In line with global trends, the shifting business culture in Myanmar is also coming to terms with designing a work environment and processes to adjust to new workplace demographics, issues of people efficiency, and the development of global competencies to operate within larger frames of futuristic and dynamic organizational strategies. Many of the sophisticated processes of modern HR practices for businesses in Myanmar are at very early stages of development.

> *Our people processes are very nascent, for example, the payroll. Until recently, people were paid their full salaries in cash. There were no bank accounts. And there continues to be little trust, so many people withdraw their full salaries on the first day itself. Things still work in the old way, since relationships, contacts, and personal networks are very important. We are moving but the speed is slow.* (Respondent 2.1)

With businesses which are subsidiaries of international corporations, there remains both gaps and challenges in the transfer of global best practices, given the institutional and local constraints. For example, organization-wide job descriptions and the mapping of all organizational roles are an emergent initiative.

> *Traditionally, there were no job descriptions. Once you entered a company, you did whatever you were asked to do. There was no clear difference between my responsibility and your responsibility.* (Respondent 1.8)

The employee stakeholder relationship is at a nascent stage in Myanmar, and businesses largely remain comfortable dealing with homogenous employee groups. It is in this background that mainstreaming the disability agenda, in the absence of developed organizational systems and culture emerges as a challenge for businesses in Myanmar. At present, there is little consensus in terms of the organizational design and other support for the successful integration and implementation of the disability initiative by businesses. Within organizations, businesses will need to cross embed the issue through resource allocation, do internal organizational climate building, as well as design suitable policies and processes with the long-term intent of mainstreaming disabilities through workplace initiatives. This means developing partnerships with internal stakeholders such as employees and suppliers. There is also scope for businesses engaging in a sectoral approach, for example, the banking industry and PWD, which will allow for building industry-specific skills or developing industry-wide governing codes for better participation for PWD in the workplace.

'Elusive' Skills, Talents, and PWD Resources

In Myanmar, despite the high engagement of the population in the workforce, there is a serious problem related to skill mismatches, the brain drain of the skilled workforce, and the existing gap between the current education system and skill demands as the country undertakes its modernization

journey. The subject of skill-building challenges for PWD are further complex given that only 15% of PWD are engaged with the workforce with nearly 50% of them never having had a livelihood (OECD, 2015).

Choudhury-Kaul's (2015) study of PWD employees in Indian companies showed that the issue of missing employees with disabilities and their relevant skills in the workplace was intrinsically linked to the issue of the missing or absent population of children with disabilities in school. The situation is quite similar in Myanmar. The scope of primary and secondary education for children with disabilities in Myanmar remains very low. A United Nation Children's Health [UNICEF] (2016) study highlights the role of the family and those of mothers as the central caregivers, restricted options of education and proper health care, and the lack of a suitable environment and mainstream sensitization for children with disabilities. These factors prevent the social inclusion of children with disabilities and deeply affect their prospects of skill-building and mainstreaming labour market participation as adults in formal sectors leading to setbacks of their earning capacity.

> *Many of our children who have some have disabilities ... There is very little accommodation when the child is a slow learner ... The classroom will be on the first floor, while the toilet and water drinking taps are on the ground floor.* (Respondent 6.1)

The business preparedness for mainstreaming disabilities at the workplace remains low in Myanmar. Businesses remain besieged with the concerns of locating suitable candidates who can transition as employees and be offered gainful employment. One of the questions the businesses are asking is where they can locate a pool of skilled and talented employees with disabilities in the first place. The present situation is an outcome of years of neglect of education and skill-building for children and youths with disabilities in Myanmar. Furthermore, businesses at present remain sceptical of the expected costs of disability accommodation and the retaining of PWDs as long-term organizational employees given the weak social model of disability in Myanmar.

> *To work in the banking sector, our employees need to be at least a university graduate ... but we have only one person who is an accountant who has formal qualifications ... we have struggled to find suitably qualified PWD.* (Respondent 3.1)

The civil society and the DPOs having realized the aforesaid challenges, in recent times have launched programs and projects which are intended towards enhancing the skills of the PWD and working towards engaging with the business sector. The Shwee Mintha Foundation, for example, as one of the DPOs at the forefront of Myanmar's Disability Rights movement, actively engages in the advocacy of the right to employment and access to work

opportunities for PWD at local and national levels mainly in central and western Myanmar.

The vocational skills offered to PWD through vocational centres fall short of the market demand and skill expectations. A challenge that these skill centres face is that many of the students have never been to school previously or are school dropouts. The centres in their interactions with private businesses note that many of them do not have any previous experiences in dealing with PWD employees or have very little interest in engaging with PWD as employees. Another challenge is that the deskilling of skilled PWD resources, who despite having a higher level of training and certification, may end up making them do very basic roles.

> *For private companies which do not have much experience with employing PWD, they do not know about the disabilities and they do not know about the rights of the persons with disabilities. Then we try to explain [to them] about persons with disabilities. Some employers refuse to hear more explanations, but some are interested. But it is like sympathy, like a charity.* (Respondent 5.1)

The business outlook towards the subject of disability must remain futuristic. This means that business participation is not only limited to being concerned about the present-day employment of PWD but also understanding the current skill gaps and playing a role in designing suitable solutions. For example, businesses through their CSR approach may effectively engage with educating and training PWD through state partnership programs or independent initiatives at primary, secondary, and tertiary education levels. Several businesses are already engaged in skill-building initiatives through establishing short-term programs and setting up training institutions to address the current skill shortages in the country. These programs can be adapted to enhance the work readiness of PWD. Businesses may also seek to participate in the better implementation of a social model of disabilities by steering accessibility initiatives at regional and national levels.

CONCLUSIONS

Businesses in Myanmar are going through a transition period. As businesses adapt to new world expectations of their roles in society, they are under increasing pressure to reexamine their positions as economic institutions in the context of social, governance, and environmental expectations from multiple domestic and international stakeholders. In such a situation, a proactive business approach to mainstream disabilities and PWD in the workplace will offer a pole position advantage to early adopters. This study recommends three key drivers of voluntary business participation in mainstreaming the disability agenda in the workplace in Myanmar, which seeks to explain the reasons for business engagement with disabilities and what businesses can do to voluntarily mainstream disabilities in the workplace in Myanmar.

Adopt an Expanded Definition of Disabilities and Embed Disability Initiatives in the Workplace for Business Readiness

Businesses in Myanmar would greatly benefit by adopting an expanded definition of disabilities inclusive of intellectual disabilities and those that are acquired later in life or because of the long-term impact of diseases (as per the UNCRPD and government). This will allow for businesses to harness a larger and better work-ready pool of talented PWD.

Establish Long-Term Meaningful Partnerships for the Effective Realization of Corporate Objectives

At present, the business and its stakeholder engagement for successful implementation of disability initiatives in the workplace is weak. Voluntary participation in mainstreaming disabilities in the workplace will entail businesses building long-term partnerships with multi-stakeholders to address the different dimensions of the subject. These partnerships will require businesses to create both internal and external stakeholder engagements. For example, the social model of disabilities remains weakly interpreted and implemented in Myanmar. This has a deliberating impact on business efforts to integrate disabilities in the workplace. The challenges of collaborative efforts of the government, civil society, and businesses to construct a stronger social model will help businesses in their workplace engagement with PWD.

Align with Global Trends and a Futuristic Approach

In Myanmar, while the governance mechanism to facilitate the integration of PWD in the workplace and business participation to address the same is in place, it is the enforcement which remains amiss. There remains an absence of a strong regulatory environment for the disability initiative. With changes in a global working climate and demand from foreign investors and partners to consider issues that go beyond the law (as already underway for issues such as transparency, workplace rights, human rights issues, gender, amongst others), along with the corporate ambitions of international expansion by Myanmar businesses, the economic institutions will benefit from the voluntary adoption of disabilities as a corporate initiative.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Choudhury-Kaul, S. (2015). *Business, disability and corporate social responsibility: The India experience* (Doctoral dissertation), Monash University, Australia.

Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling: Merging or clear boundaries. *Journal of Advanced Nursing, 6*(3), 623-630.

Department of Population, Ministry of Labour, Immigration and Population. (2017). *Thematic Report on Disability: The 2014 Myanmar*

Population and Housing Census (No. Census Report Volume 4-K), 1 – 104.

Department of Social Welfare and the Leprosy Mission International. (2010). *First Myanmar national disability survey 2010,* Myanmar: Republic of the Union of Myanmar.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach* (Vol. 1). Boston, USA: Pitman.

James, H. (2005). *Governance and civil society in Myanmar: Education, health and environment*. London, England: Routledge.

Myanmar Companies Law 2017 – The changes and how these help your company. (2017, October 3). Retrieved November 9, 2017, from http://myanmarcs.focuscoregroup.com/myanmar-companies-law-2017-the-changes-and-how-these-help-your-company/

Organisation for Economic Co-operation and Development. (2013). *OECD development pathways multidimensional review of Myanmar* (Vol. 1). Paris, France: OECD Publishing.

Organisation for Economic Co-operation and Development. (2015). *OECD development pathways multidimensional review of Myanmar: In-depth analysis and recommendations.* Paris, France: OECD Publishing.

Oxford Business Group. (2020). *Myanmar Companies Law opens economy to foreign trade and investment.* London, England: Oxford Business Group.

PWC. (2017). *Myanmar business guide* (5th ed.). Yangon, Myanmar: PWC.

UNFPA 2014 Population and housing census of Myanmar - data sheet. (2015). *Department of Population, Ministry of Labour, Immigration and Population.* Retrieved June 28, 2020, from http://myanmar.unfpa.org/publications/2014-population-and- housing-census-Myanmar-datasheet

United Nation Children's Fund. (2016). *Situation analysis of children with disabilities in Myanmar***.** Retrieved July 16, 2017, from https://www.unicef.org/myanmar/Full_report_in_English.pdf

Yoon, Y., Witvorapong, N., & Pothisiri, W. (2017). Perceptions towards the elderly among the Thai working-age population: A structural equation modelling analysis. *International Journal of Economics and Management*, *11*(S1), 271-286.

Pertanika J. Soc. Sci. & Hum. 28 (2): 827 - 846 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Fostering Project Delivery Capabilities in Indonesian Commercial Banks

Mohammad Ichsan[1]* and Jimmy Sadeli[2]

[1]Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jl. Kyai H. Syahdan No.9, Jakarta 11480, Indonesia
[2]Management Department, BINUS Business School Master Program, Bina Nusantara University, Jl. Kyai H. Syahdan No.9, Jakarta 11480, Indonesia

ABSTRACT

To be competitive in their business, many of Indonesian Commercial Banks create strategic initiatives that are managed in form of projects and expect that the impact of this projects will bring quantified value to the organization in form of firm performance. Nevertheless, it is important to know organizations capability and project prioritization in delivering those projects so that the quantified value can be optimized. This paper aims to explore how the project portfolio management supports the project delivery capabilities through PMO to respond the environmental uncertainties and how it affects the bank performance that is measured using Return on Asset (ROA). Data were obtained from 74 respondents representing each of 74 commercial banks and analysed using the partial least squares structural equation modelling software SmartPLS 3.0. Study was concluded that project delivery capabilities had a significant impact on ROA in banks with larger equity category. This empirical research reveals that the environmental uncertainties are responded by the banks with bigger equity category (3 and 4) through implementing the right strategic initiatives in form of project that is managed with sufficient project delivery capabilities through PMO and significantly affecting the ROA. This phenomenon, however, is not reflected in Commercial Banks with smaller equity category (1 and 2). The result of this study shall provide insights to Indonesian Bank Regulatory to provide governance in managing strategic initiatives in the form of projects to the Indonesian Commercial Banks.

Keywords: Equity category, project management office, project portfolio management, return on assets

ARTICLE INFO

Article history:
Received: 18 December 2019
Accepted: 05 January 2020
Published: 26 June 2020

E-mail addresses:
d3919@binus.ac.id (Mohammad Ichsan)
jjsadeli@gmail.com (Jimmy Sadeli)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

In the business world, economic turbulence is marked by intermittent changes that can be sudden and at times uncontrolled. Such conditions pose a threat to firms' performance, especially their financial performance. To respond to such dynamic changes, firms must be able to respond with quick actions and by being innovative (Hamel, 1996). This can be done through the type of strategic initiatives that firms formulate and implement. Most of these activities or endeavours are considered to be temporary (Boppel, 2013) and are therefore managed as projects (Project Management Institute, 2017).

Financial services sectors also have to deal with the uncertainties that arise from such conditions (Oliver Wyman, 2015). The financial services sector in Indonesia is dominated by banks, with the banking industry accounting for 74% of the sector's assets (Indonesia Financial Services Authority, 2016). However, despite the tendency for the business characteristics of banks to be short-term and very sensitive to global financial reforms, they remain attractive prospects for further exploration and exploitation (Indonesia Financial Services Authority, 2016).

Regulatory bodies such as the Indonesia Financial Services Authority (Otoritas Jasa Keuangan - OJK) and the Central Bank of Indonesia (Bank Indonesia) exert strict control over banking operations; hence, banking is a highly regulated industry in Indonesia. Ernst and Young (2017) outlined the role of Central Bank of Indonesia in lowering down the SBI (Bank Indonesia Certificate) rate from 7.5% to 6.5% per annum in 2016 in fact gave benefits to banks with larger equity such as banks in Category (BUKU – Bank Umum Kelompok Usaha) 3 and 4. However, the consequences of lower SBI rate were the other way around, banks in Category or BUKU 1 and 2 were disbenefit. Furthermore, the performance of banks can be affected by macroeconomic factors such as the Industrial Production Index (*Indeks Produksi Industri*), inflation rate, central bank rate (BI rate), exchange rate, and Composite Stock Price Index (IHSG), as well as the global price of crude oil (Aviliani et al., 2015).

Pricewaterhouse Coopers (2018) published its Indonesia Banking Survey Report, the findings of which indicated that banking strategies were changing. A total of 45% of the survey respondents reported a significant change in strategy over the previous 18 months. The technology transformation strategies of banks have driven them to focus more on their front-end customer platforms (Pricewaterhouse Coopers, 2018). As stated in the survey report by Pricewaterhouse Coopers (2018), the volume of transactions undertaken via digital channels has overtaken those using traditional branches. Such technological advancement leads to banks re-shaping their strategy to become more technology-oriented. However, the advancing technology in financial services has also engendered disruption to the business. The birth of financial technology, or fintech, companies (Indonesia Financial Services

Authority, 2017) has acted as a disruptor, with the banks regarding such firms as a unique form of competition since they are actually considered as non-financial services companies. The report concludes that fintech companies will continue to cause significant disruption to businesses for the next 5 years, especially for BUKU 3 and 4 banks.

In order to be more effective in implementing technology-related strategy, banks may formulate, select, and implement initiatives in the form of projects; however, there are often a large number of initiatives to consider during any given time span, which must always be aligned with the objective of improving the performance of the banks (ROA). Managing such relatively parallel projects, however, may lead to problems if they are not managed effectively. Some business organizations have faced challenges in simultaneously managing their strategic initiatives in the form of projects; hence, they need a structured management approach using project portfolio management (PPM), in which the organization can select, prioritize, balance, and even reconfigure its projects to ensure they are continually aligned with the objectives of the initiatives (Dietrich & Lehtonen, 2005; Killen et al., 2008a, Killen et al., 2008b; Martinsuo & Lehtonen, 2007; Project Management Institute, 2017). Some businesses will also need to establish a function, possibly as a formal entity or group, to support them in managing their parallel strategic initiatives in the form of projects. This type of practice is commonly called a project management office, or PMO (Aubry et al., 2009) and underlines the importance and challenges of managing multiple projects using a PMO (Aubry et al., 2007; Hobbs & Aubry, 2007; Singh et al., 2009; Too & Weaver, 2014).

Despite various studies on the importance of the application of PMOs and PPM capabilities, there appears to be a lack of evidence in the form of empirical studies on whether Indonesian commercial banks apply PMOs and PPM capabilities in managing their strategic initiatives in the form of multiple and parallel projects. Furthermore, it is also important to know the implication of such applications with regard to the firm performance of banks as measured by their Return on Assets (ROA). The purpose of this study is to explore whether PMOs and PPM capabilities are applied in responding to such a technology-driven dynamic environment and how this contributes to the ROA of Indonesian commercial banks.

The remainder of this paper is structured as follows. Section 2 contains a review and discussion of the significant literature related to the research topic. Section 3 outlines the method used for this research, while the data analysis and research results are discussed in Sections 4 and 5, respectively. Lastly, Section 6 contains the conclusion of the research.

Literature Review

A firm's strategy orientation considers the way in which its strategy, structure, and processes must fit with the environmental circumstances it faces, in addition to taking

into account that these elements may change over time (Tan et al., 1994). It may cover measures such as stability environment, regulation, competition, global trends, technology, the effect from suppliers and customers, and economic as well as sociocultural conditions (Sung et al., 2010; Tan & Litschert, 1994; Wong et al., 2011). In the past, it was relatively easy to achieve alignment between a firm's strategy and external environment owing to the relative stability of market conditions; hence, it was possible for the strategy to follow a relatively clear path through the stages of planning, execution, and control. In a more dynamic environment, however, the external factors may not simply change, but they are also interconnected and have variables. As a result, changes in strategic orientation are required in order to continually adapt to the changing external environment (Priem, 2007). with some of the external environmental variables including regulation, competitor activity, international circumstances, technology, suppliers, customers, and economic and sociocultural. Strategy formulation is commonly referred to in the field of strategic management using the term strategic orientation. Porter (1980, 1985) argued that by having well-conducted strategic orientations (cost leadership, marketing differentiation, and innovative differentiation), a business organization could earn above-average returns or achieve superior performance and that these orientations could serve as a determinant of competitive sustainability (Gatignon & Xuereb, 1997; Kerin et al., 1992). Maintaining this line of argument, this research will test how environmental uncertainty leads to strategy formulation or strategic orientation, presenting the following hypothesis.

H1: Environmental uncertainty (EU) positively influences strategic orientation (SO).

Smith (2011) argued that there was a range of measures that could be taken in terms of successful strategy implementation. These included building a capable organization, marshalling resources, instituting policies and procedures, adopting best practices and continuous improvement, imparting information and operating systems, providing rewards and incentives, instilling a corporate culture, and effective leadership. Furthermore, Milosevic and Srivannaboon (2006) formulated a framework for the nature of alignment that was developed by integrating Porter's generic strategy, namely differentiation strategy, cost leadership strategy, and best-cost strategy, for instance, quality or cost, along with the project management elements of Shenhar et al.'s strategic project leadership framework, to formulate a new framework for project and strategic management (Shenhar et al., 2007). Meanwhile, Saunders et al. (2008), in their research, outlined seven constructs of strategy deployment such as communicating the initiative, achieving buy-in, aligning implementation, learning, creating an infrastructure for deployment, understanding the business drivers and identifying deployment options.

An examination of the previous studies leads to the establishment of the following hypothesis.

H2: Strategic orientation (SO) positively influences strategic initiatives implementation (SII).

In some organizations, however, the implementation of strategic initiatives may present a challenge, as a lack of execution know-how and ability to tackle constraints such as politics and bureaucracy in the organizations acts as a limitation (Hrebiniak, 2006; Smith, 2011; Saunders et al., 2008). As a result, organizations may expect to be able to measure the impact of strategic initiatives on their organizations from the perspective of firm performance. Firm performance is a continuous and important theme across most branches of management, including strategic management, and it is of interest to both academic scholars and practitioners. Hult et al. (2004) defined firm performance as the achievement of organizational goals related to profitability and growth in sales and market share, as well as the accomplishment of general firm strategic objectives. Meanwhile, Tseng (2010) in her research based on a consolidation of previous studies, concluded that firm performance could be defined as an integral improvement in financial and performance aspects (e.g., as measured by sales, profits, or return on investment). In the context of banks, performance can be measured using the components of the CAMEL (stands for capital adequacy, assets quality, management, earnings and liquidity) model (Boubakri et al., 2017; Nurazi & Evans, 2005). This study looks at the firm performance of banks with reference to these CAMEL components in areas such as capital growth, credit growth, net interest margin growth, third-party fund growth, and total assets growth. Boppel (2013) used ROA to measure firm performance as it provided the best measure for indicating earnings efficiency (McNamara et al., 2003). ROA is also used due to the fact that it provides a direct reflection of the strategic decisions taken on the asset mix of financial services firms (Reger et al., 1992) and is the least sensitive performance measure (Barkema & Schijven, 2008). For this study, ROA is used to measure the firm performance of banks. Boppel (2013) argued that implementation of the right strategy might lead to a better ROA performance for financial institutions; as such, it could be stated that the right SII might positively influence the ROA of banks. In relation to this notion, the following hypothesis is proposed:

H3: Strategic initiatives implementation (SII) positively influences the firm performance (FP) of banks.

The field of strategic management has undergone rapid development, from Porter's (1980, 1985) competitive advantage to the resource-based views of Wernerfelt (1984) and Barney (1991), up to the dynamic capabilities of Teece et al. (1997). This paper has a core theoretical framework of dynamic capabilities, as it aims to demonstrate how an organization can implement, build, or integrate its competences to respond to the

rapidly changing environment, where the responses could be strategic initiatives that are mostly managed in the form of projects. This concept shall be considered suitable for selecting, prioritizing, and reconfiguring the strategic initiatives in responding to such an environment.

The implementation of strategic initiatives is thus imperative as a response to the types of external factors that organizations face. The effectiveness of such implementation is also becoming critical for firms, commencing with the selection of the right strategic initiatives prior to their implementation. There is also the possibility that banks may have to deal with multiple strategic initiatives. This could raise the challenges when it comes to managing multiple strategic initiatives or projects with the goal of achieving strategic objectives since each may have different priorities and the banks always have to align with the strategic objectives. In extending the capabilities of the organization to manage the implementation of strategic initiatives, the application of dynamic capabilities in the form of PPM can be translated into several factors such as business objectives, selection, prioritization, dynamic balancing, and the reconfiguration of projects (Daniel et al., 2014; Kock & Gemünden, 2019; Martinsuo & Lehtonen, 2007; Project Management Institute, 2017), thereby implying an enhancement of the theory of dynamic capabilities (Clegg et al., 2018; Killen et al., 2008a; Killen et al., 2008b; Killen, 2008c; Killen & Hunt, 2013; Killen & Hunt, 2010). Therefore, the approach to applying the capabilities of PPM should be considered in effectively managing the implementation of multiple strategic initiatives. Such consideration leads to the following proposed hypothesis:

H4: Project portfolio management (PPM) capabilities positively influence strategic initiatives implementation (SII).

Such capabilities are hard to manage, especially where the organization has to deal with multiple projects. In order to address this issue, an organization may choose to apply project management practices (Aubry et al., 2009; Dai & Wells, 2004; Hobbs & Aubry, 2007; Project Management Institute, 2017). Such capabilities shall provide the organization with project management standards and methods, the development of lessons learned, administrative support, staffing assistance, support in developing project management resources, and strategic management.

According to the Project Management Institute (2017), the organization may have different types of PMO depending on their needs. The PMO practices may also be extended to the supporting of banks' PPM capabilities in order to align the implementation of strategic initiatives with the formulated strategic objectives. There is a lack of evidence in previous studies as to whether PMO practices can influence the performance of banks, so it is interesting to observe their direct influence on ROA. The following hypotheses are therefore proposed:

H5: Project management office practices (PMOP) positively influence project portfolio management (PPM) capabilities

H6: Project management office practices (PMOP) positively influence firm performance (FP)

The research model in Figure 1 illustrates the structural model/inner model and its related hypotheses as a result of a review of the relevant theoretical aspects from the prior related studies.

In the research model the Firm Performance (FP), Strategic Initiatives Implementation (SII), Project Portfolio Management Capabilities (PPM) and Strategic Orientation (SO) are the proposed Endogenous Variables (η), meanwhile Environmental Uncertainties (EU) and Project Management Office Practices (PMOP) are the proposed Exogenous Variables (ξ). The mathematical model that represents the structural model can be proposed as follows:

$$\eta_{SO} = \gamma_1 \cdot \xi_{EU} \quad (1)$$

$$\eta_{SII} = \beta_1 \cdot \eta_{SO} + \beta_3 \cdot \eta_{PPM} \quad (2)$$

$$\eta_{PPM} = \gamma_2 \cdot \xi_{PMOP} \quad (3)$$

$$\eta_{FP} = \beta_2 \cdot \eta_{SII} + \gamma_2 \cdot \xi_{PMOP} \quad (4)$$

MATERIALS AND METHODS

Using a positivist paradigm perspective, the study was designed to be empirical and quantitative in nature. The data used in the study were obtained from the population of commercial banks in Indonesia, using Infobank (2017) as the sampling frame reference and giving a total population size of 115. A simple random sampling approach was considered since the population of commercial banks was known and the number of banks was relatively small. The primary data were collected via a survey using a structured questionnaire addressed to the senior management personnel (Director, General Manager, Head of Department/Unit, or their equivalent) representing each of the

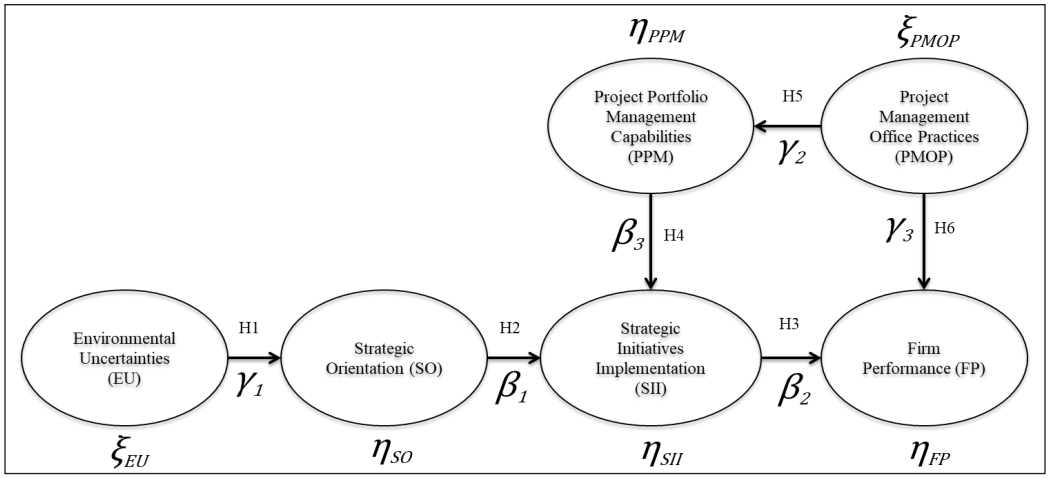


Figure 1. Research model

banks as a respondent. The respondents were probed regarding the strategic initiatives that they managed during the period 2013-2015. The questionnaires were established using statements that had been used and tested in previous research and were sent to the respondent through various channels such e-mails in electronic format, electronic questionnaires using Google Form and hardcopy questionnaires through mails or courier services. Each statement was measured using a 6-(six-) point Likert Scale (ranging from 1 = "strongly disagree" to 6 = "strongly agree"). The purpose of this is to force the respondents to commit to a certain position. A pilot test was conducted prior to the survey to check item validity and reliability. Furthermore, the secondary data were taken from a special edition of the magazine Infobank (2015, 2016, 2017), with the aim of establishing the growth in the firm performance of the banks from 2014 to 2016.

The unit of analysis is a bank as a company, and the objects of analysis are the banks' executives (C-Suites) or top management (Vice Presidents, General Managers, Heads, or equivalent). The sampling frame is the list of banks in Indonesia based on Infobank (2017). There was a total of 115 banks at the time the study was conducted. Considering that the population was known, and the number of banks was relatively small, a census approach was considered advisable Finally, the questionnaires were distributed using several channels such as email and online survey tools.

As the number of the banks was relatively small, the decision was taken to use a partial least squares structural equation model (PLS-SEM) to analyse the data. Firstly, the analysis is done of a total of 74 banks and followed by an analysis of each Equity Category to see whether there is a difference of each influence in each bank category. The geometric mean was proposed to measure the growth during the period in question. As the primary data for variables Environmental Uncertainties (EO), Strategic Orientation (SO), Strategic Initiatives (SII), Project Portfolio Management Capabilities (PPM), Project Management Office Practices (PMOP) were ordinal and the secondary data for variable Firm Performance were ROA (interval data) that are taken from Infobank (2015; 2016; 2017). A conversion from ordinal to interval data was undertaken using the Method of Successive Intervals (Edwards, 1952). Analysis of the PLS-SEM was carried out using SmartPLS3.0 software.

RESULTS

The survey was conducted during the period of October 2016 to January 2017. From the total of 115 banks, 74 respondents, representing 74 banks, returned their questionnaires, all of which were complete. The Cochran formula was used to determine α=0.06. Additionally, due to the small number of samples, as well as considering the effect of the sample β size and statistical power, $p<0.1$ was considered in order to test the hypotheses (Hair et al., 2017). From the total of 74 respondents, the majority,

40, were Category[1] 2 banks (54%). There were also 11 Category 1 banks (15%); 16 Category 3 banks (22%), and 7 Category 4 banks (9%). The respondents held the following positions: Vice President or similar (28; 38%); General Manager or similar (25; 34%); and C-Suite (18; 24%), with the remainder holding other positions (similar to the three designated positions in the questionnaire). A total of 41 respondents held a bachelor's degree or similar (56%), 32 had a master's degree or similar (43%), and the remaining one respondent had a diploma (1%). Of the total respondents of banks, 44 (59%) had a formal PMO entity, while the other 30 (41%) did not. From Table 1, there is a positive correlation between banks with higher equity levels (Category of the Banks based on equity) and the greater presence of a formal PMO within the banks.

The proposed research model was analyzed using SmartPLS3.0 software. The PLS algorithm and bootstrapping with 2,000 subsamples (Hair et al., 2017) was used to perform an assessment of the model with the aim of achieving several criteria. All of the loading factors (λ) had values greater than 0.70, thus the indicator reliability is greater than 0.5. This means that it passed the criteria for model assessment. Furthermore, the SRMR value is 0.175, as indicated in Table 2, which is greater than the threshold of 0.08, thereby indicating that the model is not fit. Figure 2 provides the hypothesis results of the analysis of all banks (n=74).

The analysis result shows that environmental uncertainty (EU) has no significant influence on strategic orientation (SO). It is thus understood that the banks' strategic initiatives are formulated and implemented with no significant effect from the EU. It can also be understood that such initiatives are perceived as regular activities as part of the banks' yearly strategic plans (*Rencana Bisnis Bank*). Furthermore, the influence of project management office practices (PMOP) has no significant direct influence on ROA. It can thus be understood that the application of PMO practices does not have much effect on ROA if there is no proper selection,

[1] According to Regulation of the Central Bank of Indonesia (Regulation No. 14/26/PBI/2012), commercial banks can be categorized as four types, based on their equity. Category 1 banks have equity < IDR 1 trillion; Category 2 banks have equity in the range IDR 1 trillion – IDR 5 trillion, Category 3 banks have equity in the range IDR 5 trillion – IDR 30 trillion; and Category 4 banks have equity > IDR 30 trillion.

Table 1
PMO presence in the banks

No	Equity Category Type	Number of banks without a formal PMO	% of total respondents	Number of banks with a formal PMO	% of total respondents	Total respondents
1	Category 1	7	63.64%	4	36.36%	11
2	Category 2	21	52.50%	19	47.50%	40
3	Category 3	2	12.50%	14	87.50%	16
4	Category 4	0	0.00%	7	100.00%	7
		30		44		74

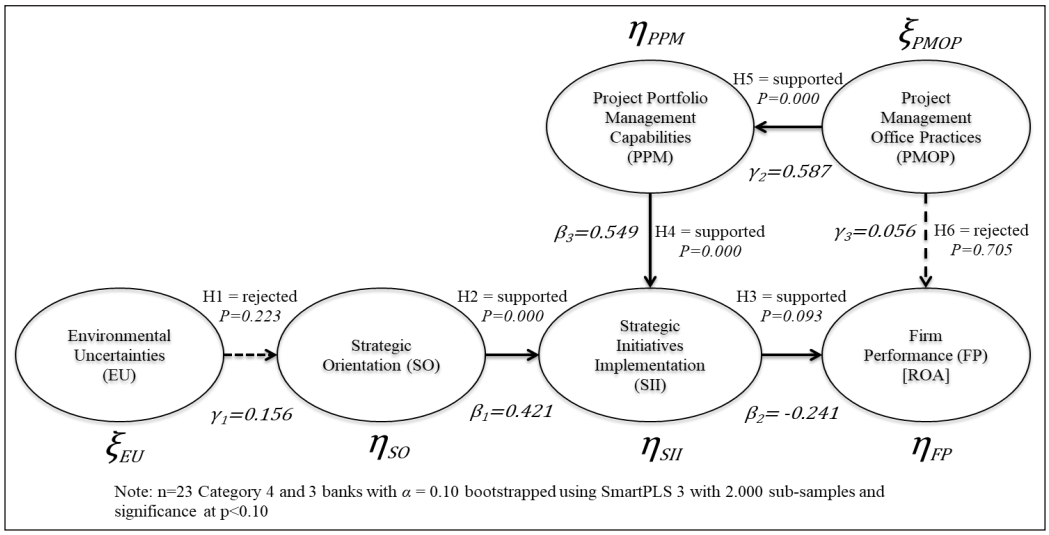


Figure 2. Hypothesis test results using bootstrapping for all banks (n=74)

reprioritization, and reconfiguration of the strategic initiatives (in the form of projects) to align the business objectives of the banks. The relationship between SO and strategic initiatives implementation (SII) has a significant relationship at p<0.1, with a loading factor of 0.421 for n=74 and 0.312 for n=37. Meanwhile, the relationship between PPM capabilities and SII is also significant at p<0.1, with a loading factor of 0.549 for n=74. The influence of project management office practices (PMOP) and project portfolio management (PPM) capabilities is also positively significant at p<0.1, with a loading factor of 0.587 for n=74. Firm performance (FP) is also significantly influenced by SII at p<0.1, but the loading factor is negative (-0.240 for n=74). This negative loading factor indicates that the weakening influence of strategic initiatives may be decreasing ROA, but it can also be understood that ROA is pushed back due to external factors such as the Industry Production Index and IHSG. The impact of this influence on ROA will be explored for each bank asset category in the ensuing analysis. Figure 3 depicts the hypothesis results of the analysis of Category 3 and 4 banks (n=23).

After the analysis using all samples (n=74), further analysis is required to determine how PPM capabilities are influenced by PMOP, how SII is influenced by PPM capabilities and the impact of SII on the FP of the banks (as measured in ROA) in each bank category. It is impossible to conduct analysis for the Category 4 banks with PLS-SEM using the SmartPLS 3.0 software due to the limited size of the Category 4 sample (that is 7 banks). It was therefore decided to combine the Category 4 and Category 3 banks to give a total of 23 banks. There is then a total of 40 Category 2 banks. Figure 4 provides the hypothesis results of the analysis of Category 2 banks (n=40).

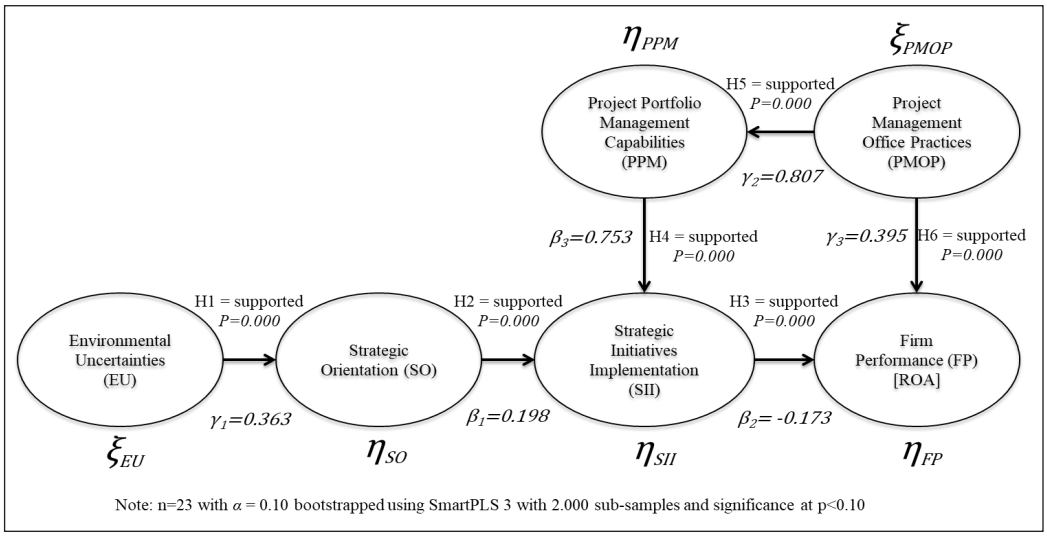


Figure 3. Hypothesis test results using bootstrapping for Category 3 and 4 banks (n=23)

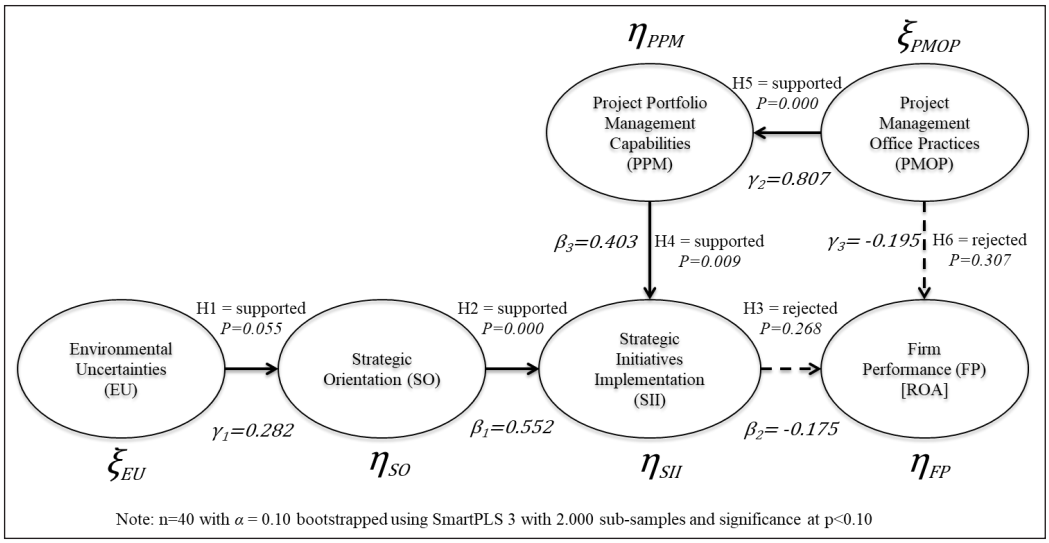


Figure 4. Hypothesis test results using bootstrapping for Category 2 (n = 40)

Finally, the Category 1 Commercial Banks as depicted in Figure 5, with 11 data were analysed.

The results of the whole analysis can be seen in Table 2.

The results show that the strategic initiatives in Category 4 and Category 3 banks tend to have a greater influence in comparison with those in the Category 2 and Category 1 banks, although the loading factor is still negative. It is interesting to observe that the influence of the strategic initiatives in Category 2 banks is not significant and that Category 1 banks have

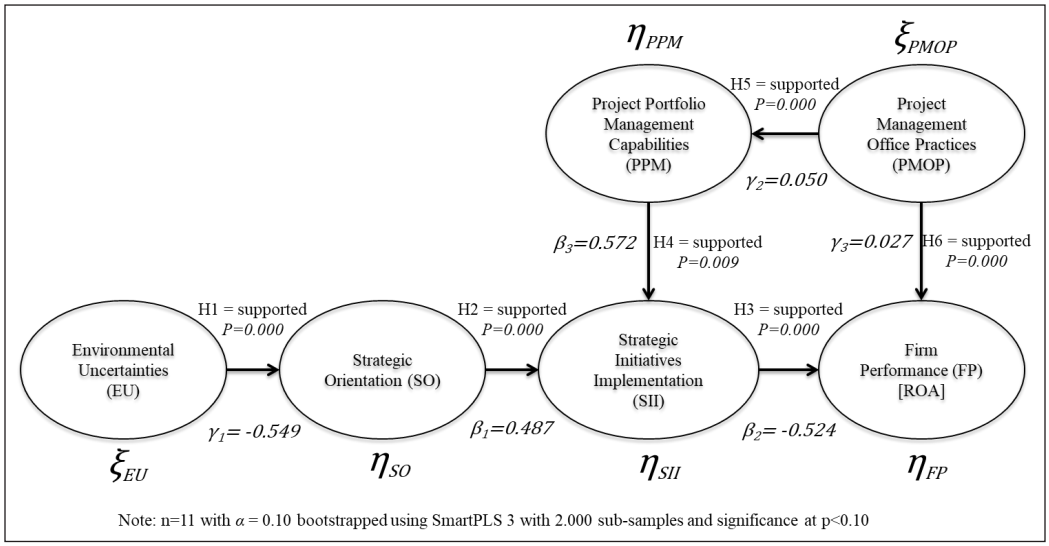


Figure 5. Hypothesis test results using bootstrapping for Category 1 (n = 11)

the lowest loading factor. For each category, the influence of the EU on SO is significant at the p<0.1 level. It can also be seen that the higher the category, the higher the loading factors for EU-SO. With regard to SO-SII, the relationships are all significant at p<0.1; however, the Category 4 and Category 3 banks have the lowest loading factors in comparison to the Category 2 and Category 1 banks. This shows that the Category 4 and Category 3 banks may not implement their strategy based on a strategy formulation, which contrasts with the banks in Category 2 and Category 1 that are relatively stricter in terms of implementing strategic initiatives based on the strategy formulation. This is in line with the PPM–SII relationship that is significant in all banks and where the banks in Categories 4 and 3 have the highest loading factors. So, there is the high likelihood that the Category 4 and Category 3 banks are engaging in prioritization and reconfiguration during their SII, while the Category 2 and Category 1 banks have lower loading factors compared to the Category 4 and Category 3 banks. The PMOP–PPM relationship is again significant at p<0.1 for all of the bank asset categories; however, the Category 4 and Category 3 banks have the highest loading factors, followed by those in Category 2 and Category 1. This shows that the PMO practices are applied relatively better in Category 4 and Category 3 compared to Category 2 and Category 1. Finally, the relationship between SII and FP is significant at p<0.1 for the Category 4, Category 3, and Category 1 banks, but not for the Category 2 banks. The Category 4 and 3 banks have higher loading factors compared to those in Category 1; however, the negative indicator shows that the Category 4 and Category 3 banks are undertaking a stronger push to improve their ROA compared to those in Category 1. Therefore, the impact of SII on ROA is greatest for those banks in Categories

Table 2
PLS-SEM analysis and hypothesis testing results

No	Equity category	Sample size (n)	Loading factor EU-SO	Loading factor SO-SII	Loading factor PPM-SII	Loading factor PMO-PPM	Loading factor SII-FP	Loading factor PMOP-FP	Remarks
1	All categories	74	Not significant	0.421***	0.549***	0.587***	-0.240***	Not significant	As has been analysed and shown in the research model
2	Category 4 and 3	23	0.363***	0.198***	0.753***	0.807***	-0.173***	0.395***	Sample size of category 4 (7 banks) is too small to be analysed, hence it is combined with category 3
3	Category 2	40	0.282*	0.552***	0.403***	0.576***	Not significant	Not significant	
4	Category 1	11	-0.549***	0.487***	0.572***	-0.050***	-0.524***	0.027***	

Notes: * Means significant at p<0.1, ** significant at p<0.05 and *** significant at p<0.01

3 and 4. All data analysis results have been communicated and validated by some subject matter experts from both academicians and commercial bankers. Both groups of experts confirmed and supported the results and hence herewith the results are validated.

DISCUSSIONS

The analysis result has led to 2 (two) general cases. First, exploring how the research model is applied and analysed using 74 samples and its validation using multistage sampling (stratified and simple random sampling). Second, the analysis explores the impact of SII, PPM capabilities, and PMO practices and their associated impact on ROA. Based on the analysis result using a sample size of n=74, it can be concluded that EU and SO have no significant influence. This could be understood as indicating that the formulation of any strategy is mainly predictive. There is thus no such uncertainty that leads the banks to formulate and initiate their strategy to be more competitive in their business. However, the analysis of each asset category reveals the influence of the EU on SO to be significant for each bank category at $p<0.1$. From the loading factor, meanwhile, it can be seen that the influence of EU on SO is greatest for the Category 4 and 3 banks. This leads to the conclusion that the research model can be applied only to Category 4 and Category 3 banks, which are the banks that may see an impact of the uncertainties in terms of an effect on their business. Furthermore, there will be a systematic impact on government agencies like the OJK and Central Bank of Indonesia (Bank Indonesia) the systemic impact if the Category 4 and Category 3 banks are unable to respond to the uncertainties that affect their performance. The Category 2 and Category 1 banks may not see uncertainties, aside from regulation by the government, as the key drivers in the implementation of strategic initiatives. The banks may thus tend to follow government regulation as a basis for the formulation and implementation of their strategic initiatives. Furthermore, the risks posed to the FP of the banks by failing to respond to such uncertainty may be considered to be relatively manageable and easier to mitigate by the government as there is no associated systemic impact on the broader macroeconomic condition in Indonesia.

The next discussion looks at the influence of SO on SII, which is also significant across all of the bank asset categories, as well as within each individual category. The loading factor for those banks in Category 4 and Category 3 tends to be smaller in comparison to the Category 2 and Category 1 banks. This indicates that the Category 4 and Category 3 banks tend to implement dynamic strategic initiatives so that the PPM capabilities provide continuous support to the strategic initiatives implemented to align the project objectives, which may differ from the original formulation. This can be seen from the significance of PPM–SII and the loading factor in Category 4 and Category 3. Category 2 and Category 1 tend to have smaller changes or reconfiguration

of their strategic initiatives and to continue following the original formulation. The PMOP-PPM relationship also reveals the significant influence of PMOP in all categories; however, Category 4 and Category 3 have the biggest loading factors, hence there is a strong influence of PMOP on PPM. ROA for Category 4 is relatively higher in comparison to the other categories. The Category 3 banks with a PMO tended to have a higher ROA in 2015 and 2016, but not in 2017. The Category 2 banks with a PMO tended to have a lower ROA in 2015 and 2016, although there was an increasing trend in 2017. This could be because the Category 2 banks tend to have some PMO functions despite them lacking any formal PMO organization. Such a condition is seen in around 40% of the Category 2 banks. The Category 1 banks with a PMO tended to have a higher ROA in comparison with those that do not have any PMO presence in the organization. The influence of SII–FP in all categories is significant at $p<0.1$; however, the Category 4 and Category 3 banks show a very strong significance and have a bigger loading factor in comparison to the banks in Category 2 and Category 1. The negative indicator can be seen as a weakening effect, but in this case, it could indicate a retaining effect of the strategic initiatives toward the external factors that decrease ROA. The final part of the discussion concerns the presence of a PMO as a control variable in the FP of the banks (ROA). The presence of a PMO has a significant effect at $p<0.1$. The hypothesis is rejected for the Category 2 banks as some of the banks in Category 2 have a PMO function in place, despite there being no formal presence of a PMO organization.

In summary, the FP of the banks can be measured using ROA. During the period 2014-2017, ROA is significantly affected by external factors such as the Industry Production Index and IHSG and therefore exhibits a continuous decreasing trend. Strategic initiatives are formulated with the aim of pushing back this declining ROA and are implemented in accordance with the right project selection, prioritization, and reconfiguration, with projects even being terminated if required, to ensure that they remain aligned with the current needs of the business. This capability can be supported using PPM where a PMO plays a very important role in providing the required support to the organization to not only implement but also to continue aligning the strategic initiatives (projects) with the organization's strategic objectives. The impact of the strategic initiatives and the ways in which the banks apply the PPM and PMOP vary between each bank asset category. The higher the category, the greater the impact of the strategic initiatives as these banks are relatively good at applying PPM capabilities and PMOP. Not having a formal PMO in place does not necessarily mean there is a lack of application of PMO practices. This is the case with the Category 2 banks, which do have some PMO functions in place.

CONCLUSION

This study has led to the general conclusion that Indonesian banks, depending on the category type, have been implementing strategic initiatives that are driven by environmental uncertainties. Furthermore, the strategic initiatives are significantly influenced by the banks' PPM capabilities, where initiatives in the form of projects are selected, prioritized, balanced, and aligned to the latest business needs. Furthermore, projects that have already been selected and are progressing can be re-prioritized, reconfigured, balanced, or even cancelled in order to align with the organization's strategic objectives, with the aim of optimizing the result of such projects and minimizing their negative impact. This result is aligned with the previous study of Boppel (2013).

In the area of project management practices, the result leads to the conclusion that PMO practices have a direct effect on PPM. The presence of a formal PMO does not necessarily indicate that PMOP is being applied more effectively within the organization. Apart the previous of studies revealed of existence of PMO predicts the increasing degree of effectiveness in managing projects (Otra-Aho, et al, 2018), nevertheless, the direct contribution to the organization performance is not seen yet unless it is seen as multiple coexisting values within the organization (Aubry et alAubry et al., 2009). The result reveals that regardless of the bank equity category, the PMO practices tend to manage the organization's capabilities in delivering the projects. The result of the impact of SII needs to have been tracked from the very beginning and subsequently monitored and measured in the form of the realization of benefits to the organization, and only then can the isolated impact of the strategic initiatives can be measured.

This is supporting the previous study from Killen (2008), Killen et al. (2008a), Killen et al. (2008b), Killen and Hunt (2010), Killen et al. (2012) and fully aligned with the middle theory Dynamic Capabilities (Teece et al, 1997). In accordance with PMO practices in influencing the FP of the banks (measured in ROA), this study has proven that PMO practices have a significant indirect influence in the firm performance of the bank through PPM capabilities and hence enriching the previous study from Aubry et al. (2007) and Aubry et al. (2009).

This research has also proven that the impact of implementing strategic initiatives in the banks (in the form of projects) can be more effective if project portfolio management capabilities in selecting the right project in the very beginning. If there is any dynamic environment that might change the strategic objective of the banks, this can be managed by re-prioritizing and reconfigure the projects to ensure that the outputs are still aligned with the objectives, especially if the banks managing multiple projects or/and program. Without such capabilities, a waste of efforts is expected. In the aspect of policy implication, this study provides insight into Indonesian Banks Regulatory to equip the commercial banks with governance in managing strategic initiatives from perspectives of PPM.

ACKNOWLEDGEMENT

This study is made possible through the the help on support from everyone including the respondents and the distinguished organizations such The Indonesian Banks Association, The Financial Services Authority of Republic of Indonesia and Binus Business School. The authors thank them for their generous and incredible support during the study.

REFERENCES

Aubry, M., Hobbs, B., & Thuillier, D. (2007). A new framework for understanding organizational project management through the PMO. *International Journal of Project Management, 25*(4), 328-336.

Aubry, M., Hobbs, B., & Thuillier, D. (2009). The contribution of the project management office to organizational performance. *International Journal of Managing Projects in Business, 2*(1), 141-148.

Aviliani, A., Siregar, H., Maulana, T., & Hasanah, H. (2015). The impact of macroeconomic condition on the bank's performance in Indonesia. *Buletin Ekonomi Moneter dan Perbankan, 17*(4), 379-402.

Barkema, H., & Schijven, M. (2008). Toward unlocking the full potential of acquisition: The role of organizational restructuring. *Academy of Management Journal, 51*(4), 696-722.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120.

Boppel, M. (2013). *Strategic Initiative Portfolios: Theory and Empirical Evidence* (Doctoral dissertation), University of St. Gallen, Switzerland.

Boubakri, N., Mirzaei, A., & Samet, A. (2017). National culture and firm performance of the banks: Evidence from the recent financial crisis. *Journal of Financial Stability*, *29*(4), 35-56.

Clegg, S., Killen, C. P., Biesenthal, C., & Sankaran, S. (2018) Practices, projects and portfolios: Current research trends and new directions. *International Journal of Project Management*, *35*(2018), 762-777.

Dai, C. X., & Wells, W. G. (2004). An exploration of project management office features and their relationship to project performance. *International Journal of Project Management, 22*(7), 523–532.

Daniel, E. M., Ward, J. M. & Franken, A. (2014) A dynamic capabilities perspective of IS project portfolio management. *Journal of Strategic Information Systems*. 23(2), 95–111.

Dietrich, P., & Lehtonen, P. (2005). Successful management of strategic intentions through multiple projects-Reflections from empirical study. *International Journal of Project Management, 23*(5), 386-391.

Edwards., A. L. (1952). The scaling of stimuli by the method of successive intervals. *Journal of Applied Psychology, 36*(2), 118-122.

Ernst & Young. (2017). *The Indonesian banking industry: Unfolding the opportunity*. Retrieved August 19, 2018, from https://www.ey.com/Publication/vwLUAssets/EY-the-Indonesian-banking-industry-unfolding-the-opportunity/$FILE/EY-the-indonesian-banking-industry-unfolding-the-opportunity.pdf

Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *American Marketing Association, 34*(1), 77-90.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M. (2017) *A primer on partial least squares*

structural equation modelling (PLS-SEM) (2nd ed.). Thousand Oaks, California: SAGE Publication, Inc.

Hamel, G. (1996). Strategy as revolution. *Harvard Business Review, 74*(4), 69-71.

Hobbs, B., & Aubry, M. (2007). A multi-phase research program investigating project management offices (PMOs): The results of phase 1. *Project Management Journal, 38*(1), 74-86.

Hrebiniak, L. G. (2006) Obstacles to effective strategy implementation. *Organizational Dynamics*, *35*(1), 12-31.

Hult, G. T. M., Hurley, R. F., & Knight, G. A. (2004). Innovativeness: Its antecedents and impact on firm performance. *Industrial Marketing Management, 33*(5), 429-438.

Indonesia Financial Services Authority. (2016). *Indonesian Financial Services Sector Master Plan 2015-2019: Fostering growth and addressing challenges in the financial services sector, today and tomorrow*. Jakarta: Author.

Indonesia Financial Services Authority. (2017b). *Daftar Perusahaan Fintech yang terdaftar di OJK [List of Fintech Companies registered with OJK]*. Retrieved December 12, 2017, from https://sikapiuangmu.ojk.go.id/FrontEnd/CMS/Article/10398

Infobank. (2015). 118 rating bank 2014. *Infobank, 37*(437), 22-39.

Infobank. (2016). 118 rating bank 2015. *Infobank, 38*(451), 20-37.

Infobank. (2017). 115 rating bank 2016. *Infobank, 39*(466), 16-31.

Kerin. R. A., Varadarajan, P. R., & Peterson, R. A. (1992). First-mover advantage: A synthesis, conceptual framework, and research propositions. *Journal of Marketing*, *56*(4), 33-52.

Killen, C. P. (2008). *Project portfolio management for product innovation in services and manufacturing industries* (Doctoral dissertation), Macquarie University, Sydney, Australia.

Killen, C. P., & Hunt, R. A. (2010). Dynamic capabilities through project management in service and manufacturing industries. *International Journal of Managing Projects in Business, 3*(1), 157-169.

Killen, C. P., Hunt, R. A., & Kleinschmidt, E. J. (2008a). Project portfolio management for product innovation. *International Journal of Quality & Reliability Management, 25*(1), 24-38.

Killen, C. P., Hunt, R. A., & Kleinschmidt, E. J. (2008b). Learning investments and organizational capabilities: Case studies on the development of project portfolio management capabilities. *International Journal of Managing Projects in Business, 1*(3), 334-351.

Killen, C. P., Hunt, R. A. (2013) Robust project portfolio management: capability evolution and maturity. *International Journal of Managing Projects in Business*, *6*(1), 131-151.

Kock, A. & Gemünden, H., G. (2019) Project Lineage Management and Project Portfolio Success. *Project Management Journal*, *50*(5), 1-15.

Martinsuo, M., & Lehtonen, P. (2007). Role of single-project management in achieving portfolio management efficiency. *International Journal of Project Management, 25*(1), 56-65.

McNamara, G., Deephouse., D., & Luce, R. (2003). Competitive positioning within and across a strategic group structure: The performance of core, secondary and solitary firms. *Strategic Management Journal, 24*(2), 161-181.

Milosevic, D. Z., & Srivannaboon, S. (2006). A theoretical framework for aligning project management with business strategy. *Project Management Journal, 37*(3), 98-110.

Nurazi, R., & Evans, M. (2005). An Indonesian study of the use of CAMEL(S) ratios as predictors of bank failure. *Journal of Economic and Social Policy*, *10*(1), 1-23.

Oliver Wyman (2015). *Managing complexity: The state of the financial services industry 2015*. Oliver Wyman. Retrieved on July 8, 2017 from: https://www.oliverwyman.com/our-expertise/insights/2015/jan/state-of-the-financial-services-2015-managing-complexity.html

Otra-Aho, V. J., Arndt, C., Bergman, J. P., Hallikas, J., & Kaaja, J. (2018). Impact of the PMOs' Roles on Project Performance. *International Journal of Information Technology Project Management, 9*(4), 41-53.

Porter, M. (1980). *Competitive strategy*: *Techniques for analyzing industries and companies.* New York: Free Press.

Porter, M. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.

Pricewaterhouse Coopers (2018). *2018 Indonesia Banking Survey: Technology shift in Indonesia is underway,* February 2018. Retrieved on August 19, 2018 from: https://www.pwc.com/id/en/publications/assets/financialservices/2018-indonesia-banking-survey.pdf

Priem, R. L. (2007). A consumer perspective on value creation. *Academy of Management Review,* 32(1), 219-235.

Project Management Institute (2017). *A guide to the project management body of knowledge (PMBoK® Guide).* 6th Ed. Pennsylvania, PA: Project Management Institute Inc.

Reger, R., Duhaime, I., & Stimpert, J. (1992). Deregulation, strategic choice, risk and financial performance. *Strategic Management Journal, 13*(3), 189-204.

Saunders, M., Mann, R., & Smith, R. (2008). Implementing strategic initiatives: a framework of leading practices. *International Journal of Operations & Production Management, 28*(11), 1095-1123.

Shenhar, A., Milosevic, D., Dvir, D., & Thamhain, H. (2007). *Linking project management to business strategy.* Newtown Square, PA: Project Management Institute.

Singh, R., Keil, M., & Kasi, V. (2009). Identifying and overcoming the challenges of implementing a project management office. *European Journal of Information Systems, 18*(5), 409-427.

Smith, E. E. (2011). Perceptions regarding strategy implementation tasks in selected industries: A South African perspective. *International Journal of Business and Commerce, 1*(4), 22-45.

Sung, T. -J., Lu, Y. -T., & Ho, S. -S. (2010). Time-based strategy and firm performance under environmental uncertainty: An empirical study of design firms in Taiwan. *International Journal of Design, 4*(3), 29-42.

Tan, J. J., & Litschert, R. J. (1994). Environment-strategy relationship and its performance implications: An empirical study of the Chinese electronics industry. *Strategic Management Journal, 15*(5), 1-20.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, *18*(7), 509-533.

Too, E. G., & Weaver, P. (2014). The management of project management: A conceptual framework for project governance. *International Journal of Project Management, 32*(8), 1382-1394.

Tseng, S. -M. (2010) The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management*. *14*(2), 269-284.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, *5*(2), 171-180.

Wong, C. Y., Boon-Itt, S., & Wong, C. W. Y. (2011). The contingency effects of environmental uncertainty on the relationship between supply chain integration and operational performance. *Journal of Operations Management, 29*(6), 604-615.

Pertanika J. Soc. Sci. & Hum. 28 (2): 847 - 865 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Disruptive Business Model Innovation in Indonesia Digital Startups

Kurnadi Gularso[1]*, Tirta Nugraha Mursitama[2], Pantri Heriyati[3] and Boto Simatupang[4]

Management Department, BINUS Business School Doctor of Research in Management, Bina Nusantara University, Jakarta 11480, Indonesia

ABSTRACT

Many studies have investigated how incumbents react to disruptive business model innovation. However, how digital (tech) startups as the initiator performs business model innovation that consciously or not disrupts incumbents from various industries, has not yet been widely analyzed empirically. This study employed a quantitative method with Partial Least Squares-Structural Equation Modeling (PLS-SEM) using SmartPLS 3 software to present and analyze the data. The sample of Indonesia digital startups was taken from the list managed by DailySocial, an Indonesia digital media startup. A self-administered questionnaire was distributed among the Founders and or C-Level of Indonesia startups adopting a random sampling technique. The findings of this study showed that startups apply disruptive business model innovation to survive and scale-up. This study also suggested some predictors of disruptive business model innovation. As an alternative to implementing dynamic capabilities, startups need to have transformation capability in the form of continuous reconfiguration capability; leadership aspects, especially entrepreneurship mentality, which are embodied in strategic orientation; and stakeholder management support.

Keywords: Continuous reconfiguration capability, disruptive business model innovation, startups, strategic orientation, stakeholder management

ARTICLE INFO

Article history:
Received: 18 December 2019
Accepted: 06 January 2020
Published: 26 June 2020

E-mail addresses:
kurnadi.gularso@binus.ac.id (Kurnadi Gularso)
tmursitama@binus.edu (Tirta Nugraha Mursitama)
pheriyati@binus.edu (Pantri Heriyati)
bsimatupang@binus.edu (Boto Simatupang)
* Corresponding author

INTRODUCTION

Digital (tech) startups (referred to "startups" in this study) have industrialized rapidly around the world, including in Indonesia, especially in the 4.0 Industrial Era, as many traditional industries are facing disruption. Many startups perform new business

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

models to survive and scaling-up (Balboni et al., 2014; PricewaterhouseCoopers, 2013). As opposed to startups, incumbents prefer implementing sustaining innovation to disruptive business model innovation (shortened as "DBMI") because the latter is not financially interesting (Christensen, 2006).

Two kinds of generic strategies are used for responding to DBMI namely explorative adoption of a disruptive business model and exploitative strengthening of an existing business model (Osiyevskyy & Dewald, 2015). These two kinds of responses do not include the innovation of a business model but instead involve adaption and evolution (Foss & Saebi, 2016). Today, there are many studies on how incumbents respond to DBMI. However, there is little research on disruptive business model innovation conducted by a disruptor, especially by digital (tech) startups.

Previous research focused on how a firm responds to disruptive innovation, specifically DBMI (Habtay & Holmén, 2014; Karimi & Walter, 2016; Osiyevskyy & Dewald, 2015) and others. Several studies focus on a firm as an initiator of DBMI as well. However, most of these studies are simply literature/on desk studies as well as case studies, for instance, Attias (2017), Chu (2017), and Aminoff et al. (2017).

Dynamic capabilities are pivotal to respond to the rapid change of the business environment to enable the successful transformation that is called reconfiguration (Teece, 1997, 2007). Dynamic capabilities affect the company in creating disruptive innovation (Čiutienė & Thattakath, 2014). This study will investigate this reconfiguration capability as one of the antecedents of DBMI, which acts as a transformation capability.

This study focuses on how startups, which are from multiple industries, manage their businesses to sustain and achieve scale up by executing DBMI as disruptors. This study sets Indonesian startups as a specific object with empirical field research.

A research question of this study is, "What are the predictors of DBMI, and how do these enable Indonesia startups to attain DBMI, which makes their businesses sustainable and scale up?" The purpose of this study is to present guidance to entrepreneurs on either startups or incumbents on how to understand the way startups disrupt routine business, including how to implement DBMI.

The same as startups around the world who are facing a high failure rate as much as 90% (Patel, 2015), Indonesia startups have been facing such a problem as well, perhaps even worse. Some researchers conclude that the primary cause of startup failure, according to the founders, is because the business model is not viable (Truong, 2016). Aside from that, especially for Indonesia startups, they do not have an adequate ecosystem to nurture them. However, it is not a sustainable business issue that engenders the growth of the startups' number as the only challenging problem; thus, scaling up Indonesia startups is also another issue (Widjaja, 2017).

Literature Review

This literature review discusses disruptive business model innovation, predictors of DBMI, including continuous reconfiguration capability, stakeholder management, and strategic orientations focused on entrepreneurship orientation and strategic innovation orientation, including marketing orientation and technology orientation. A discussion of startups as a research context will precede this section.

Startups

There is no widely agreed definition of startups. According to Ries (2011), a startup is an organization dedicated to creating something new under conditions of extreme uncertainty. The definition of startups in this study refers to Ries (2011). This study defines a startup as "an organization with efficient resources and entrepreneurship mentality to persistently create something new in the VUCA (volatility, uncertainty, complexity, ambiguity) business environment, through good product/services innovation, process/technology innovation, and business model innovation to achieve a scalable, repeatable, profitable business model, which involve internal and external resources supported by relevant technology, which can give value to users of its products/services" (Blank & Dorf, 2012; Hall, 2011; Ireland, 2017; Robehmed, 2013; Ries, 2011; Sawers, 2011). Therefore, the purpose of startups is always to offer a better solution for targeted customers through the provision of products/services or another cutting-edge means through which business is delivered.

Startups are encouraged to consciously create existing business opportunities especially given broader funding (Kanze & Iyengar, 2017) by always meeting customers' needs, which have not been appropriately satisfied or have not yet been served at all. As a disruptor, it does not mean a negative connotation but rather to encourage and stimulate to find an alternative to the existing business model.

Triggered by inferior internal resources, startups can conduct DBMI to challenge incumbents by creating new opportunities (Christensen et al., 2015). Moreover, this situation can also support these startups to have an alliance with partners in targeting an ignored market such as the low-end market.

Disruptive Business Model Innovation

The definition of business model innovation remains unclear (Foss & Saebi, 2017). According to some literature, business model innovation appertains disruptive innovation (Markides, 2006; Voelpel & Leibold, 2004). According to Markides (2008), DBMI is fundamentally different from disruptive technology/product innovation. However, many scholars have argued that business model innovation is a new thing not only for firms but also for industries (Foss & Saebi, 2016).

This study defines disruptive business model innovation as "changes in the architectural design to include fundamentally different content, structure, and governance through resource reconfiguration of both tangible and intangible assets so that they can excel in the arena of competition

or competitive advantage and finally achieve value creation for a company and its stakeholders, namely customers, suppliers, and partners" (Amit & Zott, 2012; Casadesus-Masanell et al., 2013; Markides, 2006; Santos et al., 2009). Disruption related to the market includes two new dimensions: low-end foothold disruption and new-market foothold disruption (Christensen et al., 2015).

Many studies related to DBMI indicate that they are different from business model innovation in general. Those studies aimed to illustrate the incumbent adoption of this disruption. There has been little research on how startups from the perspective of startup entrepreneurs as new entrants act as initiators in conducting DBMI. Most DBMI implementation searches for opportunities from unserved customers through low-cost offerings, and eventually, they take over the incumbents' market share (Charitou & Markides, 2003; Markides, 1997, 1998, 2006).

Of the many studies about responding to DBMI, Zhang et al. (2017) studied DBMI as an initiator strategy. The authors used multiple comparative case studies on a single industry which are internet financial service firms in China. The study resulted in suggestions on how to drive the process to perform DBMI. Table 1 shows several recent studies on DBMI. It is different from those previous studies since this study focuses on DBMI as a first-mover strategy and its predictors via empirical research on Indonesia startups.

Predictors of Disruptive Business Model Innovation

The predictors of DBMI in this study include three aspects: 1) dynamic capabilities of an organization's predominant transformation capability; 2) leadership expressed in entrepreneurship mentality and embodied in strategic orientation; and 3) as a support, management of stakeholders that stress four primary stakeholders, including customers, partner, employees/talent, and government.

Startups should have dynamic capabilities to respond VUCA. Dynamic capabilities are "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments." And one of its dimensions that is reconfiguration capabilities is crucial because they encourage transformation (Teece, 2007). Reconfiguration should be done continuously because the continuous flow of dynamic capabilities enables organizations to take new strategic opportunities in the face of volatility in the environment (Vivas López, 2005), which include the capabilities to become active enablers of the creation of disruptive innovation (Čiutienė & Thattakath, 2014; Teece, 2018; Teece et al., 2009).

Continuous reconfiguration capability has relations with a strategic orientation, especially marketing orientation and entrepreneurial orientation (Kiiru, 2015; Kiiru et al., 2013). Various studies also show that strategic orientation comprises 1) entrepreneurial orientation, which is involved in dynamic capabilities, and 2) strategic innovation orientation, including marketing

Table 1
Studies on DBMI, previous and this research

Authors	Year	Title	Country & Industry	Research type	Description
Sabatier et al.	2012	When technological discontinuities and disruptive business models challenge dominant industry logics: Insights from the drugs industry	Europa: Drug industry with four types: software as a service, platform technologies, bundling, collaborative discovery	Qualitative & Case studies	The study found three triggers of change in high technology fields, technological discontinuities to disrupt an industry's dominant logic. It suggests initially entrants' business model that fits into the dominant logic and value chains remain unchanged, after technologies evolve and uncertainty decreases, disruptive business models may emerge.
Habtay & Holmén	2014	Incumbents' responses to disruptive business model innovation: The moderating role of technology vs. market-driven innovation	South Africa: Mobile communications, insurance, banking, and airline industries.	Comparative multiple case studies to build conceptual model	It is different from incumbents' response to disruptive technology innovations, incumbents response to market-driven innovations can succeed in managing both disruptive and sustaining innovations without setting up structurally separated business units.
Amshoff et al.	2015	Business model patterns for disruptive technologies	Germany: Engineering Companies	Conceptual paper	The study presents a methodology for pattern-based business model design simplifying the development and analysis of business models for disruptive technologies.
Osiyevskyy & Dewald	2015	Explorative versus exploitative business model change: The cognitive antecedents of firm-level responses to disruptive innovation	Canada: Real estate brokerage industry	Quantitative	Firms respond to DBMI by two generic strategies: (1) explorative adoption; and (2) exploitative strengthening of the existing business model. The study tested the cognitive antecedents of managerial intentions for both strategies. Some cognitive antecedents are found either positive or negative associations to the two kinds of adaptation.
Karimi & Walter	2016	Corporate Entrepreneurship, disruptive business model innovation adoption, and its performance: The case of the newspaper industry	USA: Traditional newspaper	Quantitative	Companies as incumbents respond to disruptive business model innovation by corporate entrepreneurship attributes. All attributes have positive associations with the extent of adoption of DBMI except innovativeness. Adoption shows a nonlinear association with business model performance.
Rusitschka et al.	2016	Disruptive potential and business model innovation through elastic Microgrid-As-A-Service (MAAS) platforms	Germany: MAAS	On desk/ literature study	The emerging "dynamic microgrids" becomes disruptive potential and business model innovation through microgrid-as-a-service (MAAS) providers.

Table 1 *(continue)*

Authors	Year	Title	Country & Industry	Research type	Description
Attias	2017	The autonomous car, a disruptive business model?	France: Automobile	On desk/ literature study	The development of self-driving car innovations and potentially disruptive business models by digital companies.
Chu	2017	Business model revolution: Four cases of the fastest-growing, disruptive companies of the twenty-first century	Worldwide: Four large digital (tech) startups	On desk/ literature study	The capability of business model innovation becomes key for long-term survival in a turbulent and fast-changing environment. Without BMI, competitive advantage is likely to become less and less sustainable in the future.
Aminoff et al.	2017	Exploring disruptive business model innovation for the circular economy	Finland: Industrial companies	On desk/ literature & conceptual study	The study develops a conceptual framework for shaping the industrial systems towards circular economy (CE) ecosystems through disruptive business model innovations and proposes value circles and co-creation of value are crucial aspects in enabling CE.
Zhang et al.	2017	Exploring the multi-phase driven process for disruptive business model innovation of e-business microcredit: A multiple case study from China	China: e-Business microcredit firms	Multiple comparative case study	There are three phases that drive the DBMI of e-business microcredit firms. Several integrated forces drive the process, i.e., market, technology, policy, competition, and entrepreneurs' groups.
Vorbach et al.	2017	Business model innovation vs. business model inertia: The role of disruptive technologies	Europa: N.A.	On desk/ literature study	It discusses the impact of disruptive technologies on BMI and the factors that hinder the adoption of new technological developments.
Watanabe et al.	2018	Digital solutions transform the forest-based bio-economy into a digital platform industry - A suggestion for a disruptive business model in the digital economy	USA and Finland: Online retail (Amazon) and forest-based bio-economy, pulp and paper and other bio-products (two Finland firms).	On desk case study	Study on effects of creative disruption in downstream on the market value increase in upstream firms. The impact of this digital-solution-driven transformation stream is dynamism transforming the forest-based bio-economy into a digital-solution-driven creative disruption platform. It also gives a significant impact on the whole value chain ecosystem of the forest-based bio-economy.
Gularso et al.	2018	Disruptive business model innovation in Indonesia digital startups	Indonesia: Digital startups	Quantitative empirical study	Study on how digital startups are initiating disruptive business model innovations. It shows three predictors: transforming capability as the enabler to innovation implementation, leadership embodied in entrepreneurship mentality, and stakeholder support.

orientation and technology orientation, with mixed dimensions, which has a positive relation with innovation, including business model innovation (Bouncken & Lehmann, 2016; Chomvilailuk, 2016; Mütterlein & Kunz, 2017; Teece, 2018; Tacheva, 2007; Vázquez et al., 2001).

The following two hypotheses express two relationships, i.e., between continuous reconfiguration capability and strategic orientation as well as DBMI:

H1: Continuous reconfiguration capability is positively related to disruptive business model innovation.

H2: Continuous reconfiguration capability is positively related to strategic orientation.

According to Geissdoerfer et al. (2017), the first stage of the business model innovation process is ideation, which includes the purpose of innovation and the definition of critical stakeholders. Stakeholder management is a dynamic and essential aspect of creating a value proposition. Porter argued that, if stakeholder management is aligned with the strategic positioning of firms, these firms will create a competitive advantage. However, to some extent, stakeholder cohesion may reduce the propensity for innovation and change (Minoja et al., 2010).

Startups who are conducting disruptive innovations will attract affected stakeholders' attention related to the concerned disruption either directly or indirectly. Instead of considering stakeholders who are affected due to the innovation, startups must focus on customers and products/services development to grow their business (Giardino et al., 2014; Rais & Goedegebuure, 2009). However, specific stakeholders cannot be avoided and will take up their focus when startups reach a particular stage in doing their business (Ter Halle & Ruel, 2016). A study conducted on Taiwanese service and manufacturing companies shows that pressure from competitors, governments, and employee conduct has a significant and positive effect on green innovation practices (Weng et al., 2015).

Following the "startups" definition of this study, we argued that startups are required to have a disruptive innovation mentality to be successful. It means that the implementation of a company strategy should base on stakeholders primarily: 1) targeted customers, 2) talents/employees who become enablers of innovation, 3) partners in operational as well as financial aspects, and 4) government generally ignored by startups in the early stages not to be inhibitors of innovation created. Thus, this study focused on those four stakeholders.

The relationship between stakeholder management and strategic orientation, as well as DBMI, are set out in the following two hypotheses:

H3: Stakeholder management is positively related to disruptive business model innovation.

H4: Stakeholder management is positively related to strategic orientation.

Some implications of strategic orientation are innovation capability/ innovation success and competitive advantage towards market performance. Further, various innovation capabilities are marketing innovation, product innovation, and process innovation (Tutar et al., 2015). While, two important types of innovation is radical and disruptive innovation those are aimed at dealing with an uncertain environment through product innovation, processes, and business models. The new business models eventually cannibalize a firm's prior business model (Obeidat, 2016). These studies have explained that the consequences of strategic orientation are business models innovation, which might have a disruptive impact.

Furthermore, the relationship between strategic orientation and DBMI is set out in the following hypothesis:

H5: The positive relationship exists between strategic orientation and disruptive business model innovation.

MATERIALS AND METHODS

The objective of this study was to examine how DBMI was organized and implemented in its antecedent of the VUCA business environment in the context of Indonesia startups. Based on the hypotheses, the relationship among potential variables was analyzed using partial least squares-structural equation modelling (PLS-SEM).

Research Design

This study employed a quantitative method with a cross-sectional survey using a questionnaire with a Likert four scale was used to avoid tendencies to centre answers. The questionnaire was formed using Google Forms and majority distributed online (more than 98%), either through email or WhatsApp, Line, and Telegram or for a relatively small portion (less than 2%) through offline by directly distributing the hardcopy questionnaire to Founders and or C-Level of Indonesia startups from January to May 2018. To ensure that the questionnaires were filled out by the intended respondents, the forms were distributed through related personal accounts.

The sample of 327 startups was taken randomly from the population of Indonesia startups, amounting to 772 within the list owned by DailySocial, an Indonesia digital media startup, as per 31 December 2017. A total of 62 startups from the sample could not be reached. Thus, the remaining 265 questionnaires were distributed. The total number of the returned questionnaires was 107 equals to 32.7% of the total sample or 40.4% of the distributed questionnaires.

Nulty (2008) suggested guidance to prevent the potential for systematic sample bias that under 'Stringent conditions' (3% sampling error and 95% confidence) for an online survey with data size between 750 and 1000, the required response rate was about 41% and 48%. Nulty (2008) also presented data based on several researchers; the average response rate for online surveys

was 33%. This study data collection rate above is moderately close to the required response rate and could be deemed as adequate.

The theoretical objective of this study was primarily to predict and identify the relationships between continuous reconfiguration capability and stakeholder management in achieving DBMI through strategic orientation, as depicted in Figure 1.

Partial least-squares structural equation modelling (PLS-SEM) was used to develop theories and to asses measurement (individual constructs) and structural (the relationships between constructs) models, especially when the sample size was small (Reinartz et al., 2009). The results of the multivariate analysis using this PLS-SEM were then confirmed by several small group discussions with some business communities of business people/managers and investors/venture capitalists.

RESULTS AND DISCUSSIONS

The data from 107 respondents were processed using SmartPLS 3 software and then analyzed using a two-step approach to assess the partial model structures using the measurement model (outer model) and the structural model (inner model). After that, an analysis using the importance-performance matrix analysis (IPMA) approach (Hair et al., 2014) was conducted to provide the findings for managerial actions and suggestions. Descriptive analysis, including discussions, results with Founders and or C-Level, and investors were added as an interpretative explanation of the result. Two highlights of respondents' profiles are types of startups and compound annual growth rates (CAGR). There are nine types of startups and other types (Figure 2). The most are startups are marketplace and e-commerce. Almost half of the total respondents admitted more than 50% of CAGR (Figure 3).

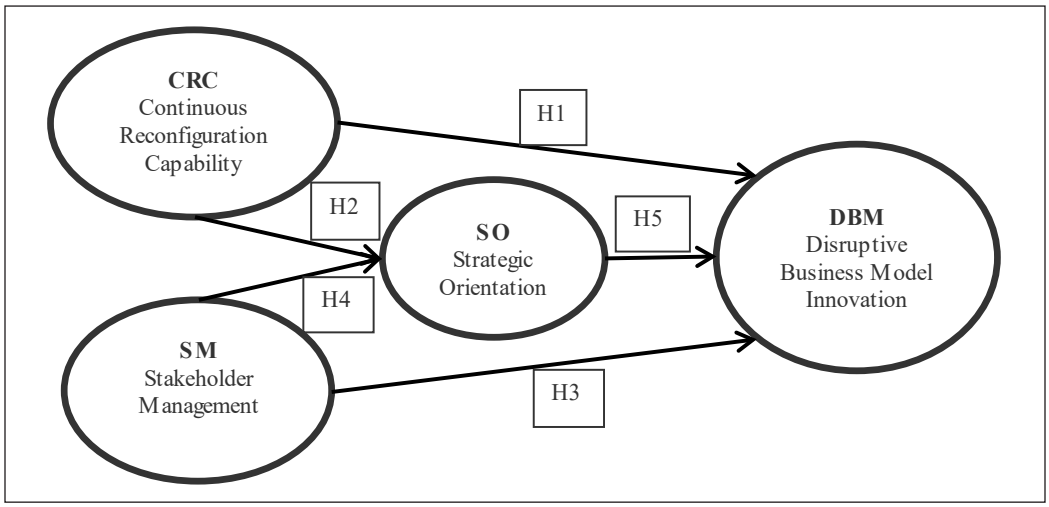


Figure 1. Conceptual model

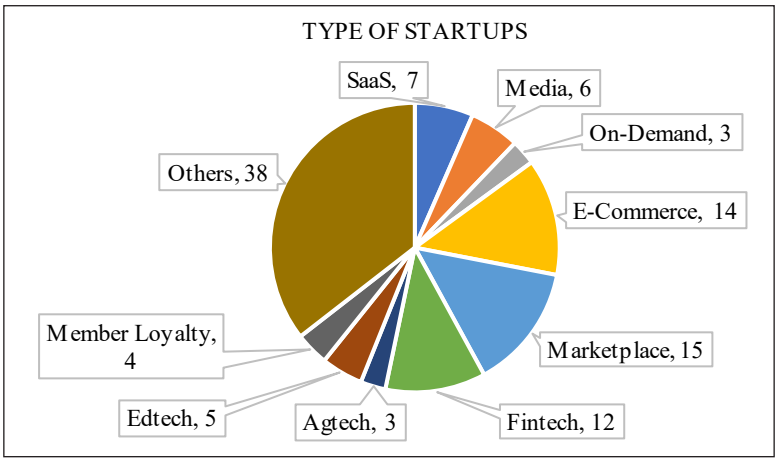


Figure 2. Type of startups

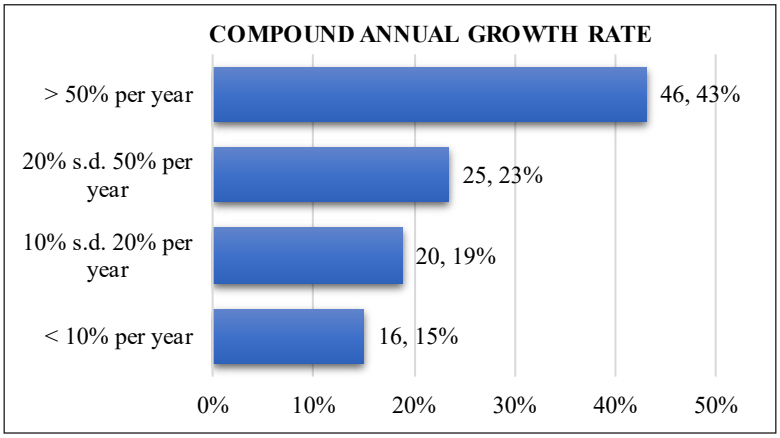


Figure 3. Compound Annual Growth Rate (CAGR)

This study applied structural equation modelling (SEM) for multivariate data analysis. All indicators in this study were reflective measures. Thus, they were analyzed based on internal consistency reliability and validity, including composite reliability, individual indicator reliability, average variance extracted (AVE) to evaluate the convergent validity, and cross-loadings as well as the Fornell-Larcker criteria to assess discriminant validity.

Instead of applying the Cronbach's alpha, Hair et al. (2014) recommended applying composite reliability to measure internal consistency, in which all result values were within and above a satisfactory range of 0.70 to 0.90 (Nunnally & Bernstein, 1994). The AVE values are all above the 0.50 threshold. Thus, the constructs explain more than half of the variance of its indicators. The reflective measurement models are presented in Table 2.

Table 2
Results summary for reflective measurement models

Latent variable	Indicators	Loadings	Indicator reliability	Cronbach Alpha	Composite reliability	AVE	Discriminant validity
CRC	*crc_1*	0.754	0.569	0.836	0.883	0.601	*Yes*
	crc_2	0.770	0.592				
	crc_3	0.793	0.629				
	crc_4	0.811	0.658				
	crc_5	0.747	0.558				
DBMI	*dbmi_1*	0.699	0.489	0.740	0.835	0.560	*Yes*
	dbmi_2	0.799	0.639				
	dbmi_3	0.744	0.553				
	dbmi_4	0.747	0.558				
SM	*sm_1*	0.765	0.585	0.858	0.898	0.639	*Yes*
	sm_2	0.721	0.519				
	sm_3	0.836	0.699				
	sm_4	0.825	0.680				
	sm_5	0.843	0.710				
SO	*so_1*	0.617	0.381	0.798	0.858	0.508	*Yes*
	so_2	0.522	0.272				
	so_3	0.691	0.477				
	so_4	0.830	0.689				
	so_5	0.816	0.666				
	so_6	0.750	0.562				

Subsequently, for the evaluation of structural models, Hair et al. (2014) suggested using the following key criteria: collinearity issues (VIF), the level of R^2 values, the f^2 effect size, the predictive relevance (Q^2), and the significance of the path coefficients. However, the goodness-of-fit (GoF) measurement is not applicable to this PLS-SEM. VIF results are within a tolerance value of 0.2 or lower and a value of 5 or higher, as shown in Table 3, which means all are free from collinearity problems.

Table 3
Evaluation of structural models

	DBMI				SO			
	Inner VIF	Path Coefficients	t-Value	f^2 Effect Size	Inner VIF	Path Coefficients	t-Value	f^2 Effect Size
CRC	1.188	0.120	1.429	0.020	1.104	0.233	2.087	0.077
SM	1.476	0.244	1.726	0.067	1.104	0.487	5.244	0.337
SO	1.565	0.399	3.145	0.169	-	-	-	-

R^2 values show that exogenous latent variables CRC and SM explain 36.1% of the variance in the endogenous latent variable SO. Likewise, latent variables CRC, SM, and SO explain 39.7% of the variance in the endogenous latent variable DBMI. Further, because the R^2 values are above 0.25, the number of sample size in this research (107) is adequate (Cohen, 1992). Meanwhile, all Q^2 values are higher than 0, which means that the exogenous construct has predictive relevance for the two endogenous constructs under consideration. The results of R^2 and Q^2 values are shown in Table 4.

Table 4
Results of R^2 and Q^2 values

Endogenous Latent Variable	R^2 Value	Q^2 Value
DBMI	0.397	0.183
SO	0.361	0.166

The effect size f^2 values are compared with thresholds of 0.02, 0.15, and 0.35, which indicate that the effects of an exogenous construct on an endogenous construct are small, medium, and large, respectively. From the f^2 values, it can be seen that CRC has a small effect on DBMI and relatively small to medium effect on SO. SM has also small to medium effect on DBMI. SO has a relatively medium effect on DBMI, while the SM variable has also a medium to large effect on the SO construct. The effect size of f^2 values is shown in Table 3.

The path coefficient values results (Table 3) are aligned with the *t*-value, which determines that the significance of the relationship between two variables with a threshold of ≥ 1.96 is significant using a two-tailed test with significance level = 5%. We find that all relationships in the structural model are significant, except CRC → DBMI and SM → DBMI.

The results confirm the significant roles of the two exogenous variables, the endogenous variable, as well as the final dependent variable that is a disruptive business model innovation that is shown in the research model. The implementation of disruptive business model innovation to the context of the research "startups" confirms the vital role of the business model in startup success, survive, and scale up as a former study by Balboni et al. (2014). Table 5 shows the summary results of hypothesis significance testing.

The study also proves that there are predictors as an alternative implementation of dynamic capability. The dynamic capability is made from the superposition of 1) continuous reconfiguration capability; 2) stakeholder management that focuses on customers, talents, partners (operational and financial aspects), and government to achieve 3) strategic orientation that focuses on entrepreneurial, marketing, and technology orientation. This alternative embodiment of dynamic capability had supported the previous studies namely Kiiru et al. (2013), Szymaniec-Mlicka (2016), Tutar et al. (2015), and Obeidat (2016).

From the results of the discussions, many startups recommend to not merely focus on profit-oriented but more oriented to customer need that is explicitly not been

Table 5
Results of hypothesis significance testing

Effect of Latent Variable	Hypothesis	Path Coefficient	t-Value	Conclusion
Continuous Reconfiguration Capability (CRC) has a positive relation with Disruptive Business Model Innovation (DBMI).	*H1: Continuous Reconfiguration Capability (CRC) is positively related to Disruptive Business Model Innovation (DBMI)*	*0.120*	*1.429*	*H1 is rejected, t-value is < 1.96, and there is no significant effect. Data do not support the hypothesis.*
Continuous Reconfiguration Capability (CRC) has a positive relation with Strategic Orientation (SO).	H1: Continuous Reconfiguration Capability (CRC) is positively related to Strategic Orientation (SO)	0.233	2.087	H1 is accepted, t-value is ≥ 1.96, and there is a significant positive effect. Data support both hypothesis and research model.
Stakeholder Management (SM) has a positive relation with Disruptive Business Model Innovation (DBMI).	*H1: Stakeholder Management (SM) is positively related to Disruptive Business Model Innovation (DBMI)*	*0.244*	*1.726*	*H1 is rejected, t-value is < 1.96, and there is no significant effect. Data do not support the hypothesis.*
Stakeholder Management (SM) has a positive relation with Strategic Orientation (SO).	H1: Stakeholder Management (SM) is positively related to Strategic Orientation (SO)	0.487	5.244	H1 is accepted, t-value is ≥ 1.96, and there is a significant positive effect. Data support both hypothesis and research model.
Strategic Orientation (SO) has a positive relation with Disruptive Business Model Innovation (DBMI).	H1: The positive relationship exists between Strategic Orientation (SO) and Disruptive Business Model Innovation (DBMI)	0.399	3.145	H1 is accepted, t-value is ≥ 1.96, and there is a significant positive effect. Data support both hypothesis and research model.

served by existing players/incumbents. One of Indonesia Unicorn startup founders argues: "In building startups, instead of focusing on the profit that we will get later, we focus on products/services those are needed by targeted customers." This assertion supports the role of strategic orientation as a guideline for all member of the organization as described above.

CONCLUSION

Organizations need DBMI to survive and grow. Its implementation requires its predictor, which is dynamic capabilities, in the form of entrepreneurial activities (Foss & Saebi, 2016). In this study, these activities appear in some predictor variables. This study is about predictors of DBMI, which tested the relationship between variables using a structural equation model in the context of Indonesia startups.

The strategic-orientation construct in startups focuses on entrepreneurship and strategic innovation orientation, including marketing and technology orientation. This focus is consistent with that of previous studies stating that startups focus on customers and products/services development to grow a business (Giardino et al., 2014). Entrepreneurship orientation is needed because scale-up is essential for startups. This orientation is following the startups' definition of this study, in which entrepreneurship mentality is essential to make a business grow by conducting DBMI which is something new that gives more value to customers. This characteristic also distinguishes startups with a small business owner (Carland et al., 2013) or large-scale incumbent, which tends to sustain innovation (Boons & Lüdeke-Freund, 2013; Christensen, 2006).

Besides evolution through sustainable innovation and adaptation by conducting adoption DBMI, an organization needs to set aside the allocation of its resources to respond to the VUCA environment by working to build a dynamic culture that is as the initiator of DBMI by looking for new opportunities for customers, especially neglected low-end customers.

It is interesting to note that the DBMI, which has predictor dynamic capabilities, in this research is not only in the form of continuous reconfiguration capability and strategic orientation variables but is also a stakeholder management variable. This study also offers insight for startups in underscoring the focus target of customers as well as talent/employees and partners at an early stage. Startups also need to harvest concern for stakeholder regulations/ government in the right momentum.

Limitations and Recommendations for Further Research

Due to the consideration of the number of startups, some of the possible influencing aspects are not measured as the limitations of this study. However, the results of this study are satisfactory as preliminary research to be followed up by further researches on strategy and growth management of digital startups. Future researches should consider aspects such as the age and scale of organization,

the existence of investors/venture capitals, and the maturity of Founders and or C-Level that can be used as control variables.

ACKNOWLEDGEMENT

We would like to express our gratitude to all parties who helped this study. They are the Ministry of Communication and Information Technology Indonesia (Kementerian Kominfo), Indonesian Agency for Creative Economy (Badan Ekonomi Kreatif Republik Indonesia), DailySocial, startups in Indonesia (Founders and or C-Level), incubators, investors, and/or venture capitals. Those parties have helped us by offering insights, answering questionnaires, and remaining active in discussions. We also sincerely thank Bina Nusantara University, especially the Doctor of Research in the Management Program Department and also the alumni who provided the necessary facilities.

REFERENCES

Aminoff, A., Valkokari, K., Antikainen, M., & Kettunen, O. (2017). Exploring disruptive business model innovation for the circular economy. In G. Campana, R. J. Howlett, R. Setchi, & B. Cimatti (Eds.), *Sustainable design and manufacturing 2017* (pp. 525-536). Cham, Switzerland: Springer.

Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review, 53*(53310), 41-49. doi:10.2139/ssrn.1701660

Amshoff, B., Dülme, C., Echterfeld, J., & Gausemeier, J. (2015). Business model patterns for disruptive technologies. *International Journal of Innovation Management 19*(3), 1-22. doi:10.1142/S1363919615400022

Attias D. (2017) The autonomous car, a disruptive business model? In D. Attias D. (Ed.) *The automobile revolution* (pp. 99-113). Cham, Switzerland: Springer.

Balboni, B., Bortoluzzi, G., Tivan, M., Tracogna, A., & Venier, F. (2014). The growth drivers of start-up firms and business modelling: A first step toward a desirable convergence. *Management, 9*(2), 131-154.

Blank, S., & Dorf, B. (2012). *The startup owner's manual: The step-by-step guide for building a great company*. Pescadero, California: K&S Ranch, Inc.

Boons, F., & Lüdeke-Freund, F. (2013). Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *Journal of Cleaner Production, 45*(1), 9-19. doi:10.1016/j.jclepro.2012.07.007

Bouncken, R. B., & Lehmann, C. (2016). The role of entrepreneurial orientation and modularity for business model innovation in service companies. *Katharina Fellnhofer, 8*(3), 237-260.

Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. A. C. (2013). Differentiating entrepreneurs from small business owners: A conceptualization. *Academy of Management Journal 9*(2), 354-359.

Casadesus-Masanell, R., & Feng, Z. (2013). Business model innovation and competitive imitation: The case of sponsor-based business models. *Strategic Management Journal, 34*(4), 464-482.

Charitou, C., & Markides, C. (2003). Responses to disruptive strategic innovation. *Sloan Management Review 44*(2), 55-63.

Chomvilailuk, R. (2016). Disruptive innovation, entrepreneurial marketing, and competitive advantages. *The International Journal of Business and Economics, 8*(1), 1-33.

Christensen, C. M. (2006). The ongoing process of building a theory of disruption. *The Journal of Product Innovation Management*, *23*(1), 39-55.

Christensen, C. M., Raynor, M. E., & McDonald, R. (2015). *What is disruptive innovation?* Retrieved January 1, 2018, from https://hbr.org/2015/12/what-is-disruptive-innovation

Chu, R. (2017). Business model revolution: Four cases of the fastest-growing, disruptive companies of the twenty-first century. In A. Brem, & E. Viardot (Eds.), *Revolution of Innovation Management* (pp. 145-189). London: Palgrave Macmillan, London.

Čiutienė, R., & Thattakath, E. W. (2014). Influence of dynamic capabilities in creating disruptive innovation. *Economics & Business, 26*(1), 15-21. doi:10.7250/eb.2014.015

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin 112*(1), 155-159.

Foss, N. J., & Saebi, T. (2016). *Business model innovation: The organizational dimension*. Oxford, UK: Oxford University Press.

Foss, N. J., & Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management, 43*(1), 200-227. doi:10.1177/0149206316675927

Geissdoerfer, M., Savaget, P., & Evans, S. (2017). The Cambridge business model innovation process. *Procedia Manufacturing, 8*(1), 262-269. doi:10.1016/j.promfg.2017.02.033

Giardino, C., Wang, X., & Abrahamsson, P. (2014). Why early-stage software startups fail: A behavioural framework. In *Software business. Towards continuous value delivery* (pp. 27-41). Cham, Switzerland: Springer.

Habtay, S. R., & Holmén, M. (2014). Incumbents' responses to disruptive business model innovation: the moderating role of technology vs. market-driven innovation. *International Journal of Entrepreneurship and Innovation Management, 18*(4), 289-309. doi:10.1504/IJEIM.2014.064211

Hair, J. F. J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modelling (PLS-SEM). *Long Range Planning, 46*(1-2), 1-12. doi:10.1016/j.lrp.2013.01.002

Hall, M. (2011). When is a startup no longer a startup? *Business Insider*. Retrieved from https://www.businessinsider.com/when-is-a-startup-no-longer-a-startup-2011-2/?IR=T

Ireland, T. (2017). *Welcome to the big leagues: At what point are you no longer a startup?* Retrieved March 2, 2019, from https://www.business.com/articles/at-what-point-are-you-no-longer-a-startup/

Kanze, D., & Iyengar, S. S. (2017). *Startups that seek to "Disrupt" get more funding than those that seek to "Build."* Retrieved March 2, 2019, from https://hbr.org/2017/11/startups-that-seek-to-disrupt-get-more-funding-than-those-that-seek-to-build

Karimi, J., & Walter, Z. (2016). Corporate entrepreneurship, disruptive business model innovation adoption, and its performance: The case of the newspaper industry. *Long Range Planning, 49*(3), 342-360. doi:10.1016/j.lrp.2015.09.004

Khanagha, S., Volberda, H., & Oshri, I. (2014). Business model renewal and ambidexterity: Structural alteration and strategy formation process during transition to a cloud business model. *R&D Management, 44*(3), 322-340.

Kiiru, G. (2015). Reconfiguration capabilities, entrepreneurial intentions and competitive advantage of small and medium youth retail enterprises in Kenya. *European Journal of Business and Management, 7*(25), 254-260.

Kiiru, G., Iravo, M., & Oloko, M. (2013). Mediating effect of strategic orientation on the relationship between dynamic capabilities and competitive advantage of small and medium retail enterprises in Kenya. *IOSR Journal of Business and Management*, *14*(2), 64-69.

Markides, C. (1997). Strategic innovation. *Sloan Management Review 38*(3),9-23.

Markides, C. (1998). Strategic innovation in established companies. *Sloan Management Review, 39*(3), 31-42.

Markides, C. (2006). Disruptive innovation: In need of better theory. *The Journal of Product Innovation Management*, *23*(1), 19-25.

Markides, C. C. (2008). *Game-changing strategies: How to create new market space in established industries by breaking the rules*. San Francisco, California: Jossey-Bass.

Minoja, M., Zollo, M., & Coda, V. (2010). Stakeholder cohesion, innovation, and competitive advantage. *Corporate Governance: The International Journal of Business in Society*, *10*(4), 395-405. doi:10.1108/14720701011069632

Mütterlein M. A. J., & Kunz, R. (2017). Influence of entrepreneurial and alliance orientation on business model innovation. *EMMA Conference, 49*(1), 1-13.

Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, *33*(3), 301-314.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York: McGraw-Hill.

Obeidat, B. Y. (2016). The effect of strategic orientation on organizational performance: The mediating role of innovation. *International Journal of Communications, Network and System Sciences, 9*(11), 478-505.

Osiyevskyy, O., & Dewald, J. (2015). Explorative versus exploitative business model change: The cognitive antecedents of firm-level responses to disruptive innovation. *Strategic Entrepreneurship Journal, 9*(1), 58-78. doi:10.1002/sej

Patel, N. (2015). *90% of startups fail: Here's what you need to know about the 10%.* Retrieved January 1, 2019, from https://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/#4e1479056679

PricewaterhouseCoopers. (2013). *The startup economy: How to support tech startups and accelerate Australian innovation*. Sydney, Australia: PricewaterhouseCoopers.

Rais, S., & Goedegebuure, R. V. (2009). Stakeholder orientation and financial performance: Evidence from Indonesia. *Problems and Perspectives in Management, 7*(3), 62-75.

Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing, 26*(4), 332-344. doi:10.1016/j.ijresmar.2009.08.001

Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses.* Retrieved January 1, 2018, from https://doi.org/23

Robehmed, N. (2013). *What is a startup?* Retrieved January 1, 2018, from https://www.forbes.com/sites/natalierobehmed/2013/12/16/what-is-a-startup/#3ecedd604044

Rusitschka, S., Sturm, M., & Lehofer, M. (2016). Disruptive potential and business model innovation through elastic Microgrid-As-A-Service (MAAS) platforms. In *Proceedings of the CIRED Workshop* (0254). Helsinki, Finland: CIRED.

Sabatier, V., Craig-kennard, A., & Mangematin, V. (2012). Technological forecasting & social change when technological discontinuities and disruptive business models challenge dominant industry logics : Insights from the drugs industry. *Technological Forecasting & Social Change, 79*(5), 949-962. doi:10.1016/j.techfore.2011.12.007

Santos, J., Spector, B., & van der Heyden, L. (2009). *Toward a theory of business model innovation within incumbent firms.* Retrieved December 20, 2017, from http://org.business.utah.edu/opsconf/pages/vanderHeyden_Paper.pdf

Sawers, P. (2011). *Why Facebook is still a startup?* Retrieved December 20, 2017, from https://thenextweb.com/socialmedia/2011/04/22/why-facebook-is-still-a-startup/?amp=1

Szymaniec-Mlicka, K. (2016). Impact of strategic orientation adopted by an organization on its performance, as shown on the example of public healthcare entities. *Management*, *20*(2), 278-290.

Tacheva, S. (2007). *Top management team diversity: A multilevel exploration of antecedents and consequences* (Doctoral dissertation), University of St. Gallen, Switzerland.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319-1350.

Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40-49. doi:10.1016/j.lrp.2017.06.007

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Teece, D., Pisano, G., & Shuen, A. (2009). *Dynamic capabilities and strategic management.* New York: Oxford University Press Inc.

Ter Halle, I., & Ruel, H. (2016). *How do start-ups engage with stakeholders?* Retrieved August 7, 2018, from https://www.researchgate.net/publication/ 309770780_How_do_startups_engage_with_ stakeholders

Truong, A. (2016). *After analyzing 200 founders' postmortems, researchers say these are the reasons startups fail*. Retrieved May 12, 2016, from https://qz.com/682517/after-analyzing-200-founders-postmortems-researchers-say-these-are-the-reasons-startups-fail/

Tutar, H., Nart, S., & Bingöl, D. (2015). The effects of strategic orientations on innovation capabilities and market performance: The case of ASEM. *Procedia-Social and Behavioral Sciences, 207*(1), 709-719.

Vázquez, R., Santos, M. L., & Alvarez, L. I. (2001). Market orientation, innovation and competitive strategies in industrial firms. *Journal of Strategic Marketing, 9*(1), 69-90.

Vivas López, S. (2005). Competitive advantage and strategy formulation: The key role of dynamic capabilities. *Management Decision*, *43*(5), 661-669.

Voelpel, S. C., & Leibold, M. (2004). The wheel of business model reinvention: How to reshape your business model to leapfrog competitors. *Journal of Change Management, 4*(3), 259-276. doi:10.1080/1469701042000212669

Vorbach, S., Wipfler, H., & Schimpf, S. (2017). Business model innovation vs. business model inertia: The role of disruptive technologies. *BHM Berg-und Hüttenmännische Monatshefte*, *162*(9), 382-385. doi:10.1007/s00501-017-0671-y

Watanabe, C., Naveed, N., & Neittaanmäki, P. (2018). Digital solutions transform the forest-based bio-economy into a digital platform industry - A suggestion for a disruptive business model in the digital economy. *Technology in Society*, *54*(1), 168-188. doi:10.1016/j.techsoc.2018.05.002

Weng, H.-H., Chen, J.-S., & Chen, P.-C. (2015). Effects of green innovation on environmental

and corporate performance: A stakeholder perspective. *Sustainability, 7*(5), 4997-5026. doi:10.3390/su7054997

Widjaja, N. (2017). *Opinion: Indonesia needs more scale-ups, not more startups.* Retrieved December 11, 2017, from https://www.forbes.com/sites/outofasia/2017/12/11/opinion-indonesia-needs-more-scale-ups-not-more-startups/#6d9fb4f2ee28

Zhang, W., Daim, T., & Zhang, Q. (2017). Exploring the multi-phase driven process for disruptive business model innovation of e-business microcredit: A multiple case study from China. *Journal of The Knowledge Economy, 10*(2), 590-617. doi:10.1007/s13132-017-0483-z

Pertanika J. Soc. Sci. & Hum. 28 (2): 867 - 881 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Present Working Conditions in Slaughterhouses and Meat Selling Centres and Food Safety of Workers in Two Districts of Bangladesh

Mohammad Khurshed Alam[1]*, Yoshino Keiko[1] and Mohammad Mujaffar Hossain[2]

[1]Department of Agricultural Economics, Tokyo University of Agriculture, Tokyo 156-8502, Japan
[2]Department of Animal Science, Bangladesh Agricultural University, Mymensingh 2202, Bangladesh

ABSTRACT

The present study is aimed at (a) assessing the current overall conditions in slaughterhouses and meat selling centres and (b) evaluating food safety knowledge of workers of slaughterhouses and meat selling centres in two districts of Bangladesh. A questionnaire relating to facilities and hygienic conditions in the slaughterhouses and meat selling centres was administered to the foreperson at each site. A total of 116 workers from 20 selected slaughterhouses were interviewed through another structural questionnaire to evaluate their food safety conditions and hygiene practices. Among the twenty slaughterhouses and meat selling centres surveyed, 55% had roofs, 40% had toilets and 35% had handwashing facilities. Ten (10%) of slaughterhouses slaughtered sick animals. About 20% of the workers had health certificates, 15% of workers wore protective coats and only 10% of workers wore rubber boots. Only 70% of workers were knowledgeable about zoonotic diseases. Knowledge about food safety was poor among workers. The present working conditions in the study areas are not sufficient in the context of food safety. Improvement of facilities and hygiene practices is needed for worker safety and to reduce the possibility of meat contamination. Training should be given to workers of slaughterhouses and meat selling centres to improve food safety knowledge and increase awareness of risks.

Keywords: Food safety and hygiene practice, slaughterhouses

ARTICLE INFO

Article history:
Received: 18 April 2019
Accepted: 07 January 2020
Published: 26 June 2020

E-mail addresses:
mka.sagor@gmail.com (Mohammad Khurshed Alam)
yosh@mbc.ocn.ne.jp (Yoshino Keiko)
mmh_bau2009@yahoo.com (Mohammad Mujaffar Hossain)
* Corresponding author

INTRODUCTION

Livestock is an important component of the food supply of rural and urban areas and contributes to family nutrition, supplying animal protein. Meat is an important source of animal protein and a valuable product in resource-poor communities in many

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

developing countries like Bangladesh. A slaughterhouse is a facility where animals are slaughtered for consumption as human food. The noticeable reform of slaughterhouses was visible in the nineteenth century. This reform was a part of the rapid transition of industrial society from an agricultural society based on urbanization, technological development, and growing concern about public hygiene (Brantz, 2005). An anthropologist Noelle Vialles pointed out, "animal slaughtering tends to be a somewhat unpopular subject: no one wants to know about it" (Vialles, 1994). Philosopher Nancy Williams argued, there was an unwillingness among the public to think about how their meat was produced, and that this had important ethical implications(Williams, 2008). The slaughterhouse is a location from which one can view economic and geographic changes in the production of food, cultural attitudes towards killing, social changes in small communities, and the changing sensibilities and relations between humans and non-human animals (Fitzgerald, 2010).

In developing countries, facilities of large scale slaughterhouse or meat processing plant situated in the city area differ from that of rural areas with small scale slaughterhouses (Clottey, 1985). This difference between meat processing plants with modern facilities and small slaughterhouses in the meat industry is due to insufficient investment from the private sector and limited regulation of the trade (Mann et al.,1983). A lack of appropriate slaughtering facilities and unsatisfactory slaughtering techniques often contaminates meat and is hazardous to human health. Food safety is the foundation for the future success of this industry. Currently there are growing concerns in critical areas such as biosecurity, good animal husbandry, feeding practices, quality assurance programs and HACCP at the farm level as well as in processing plants (Raghvan, 2007). Good hygiene practices in food establishments like slaughterhouses and meat selling centres are essential for consumer protection and the control of public health risks. This is because the hygiene of food workers can contribute significantly to the outbreak and transmission of foodborne illness (Assefa et al., 2015). All workers in a food handling area are therefore expected to maintain a high degree of cleanliness of their body and clothing, wear suitable and protective clothing to ensure food safety and public health (Nee & Sani, 2011).

There is limited literature about the working facilities and hygiene conditions of the meat sector in Bangladesh. According to Rahman (2001), the livestock in Bangladesh is handled, slaughtered and dressed haphazardly. There are few slaughterhouses with modern facilities and those that exist, are located only in big cities such as Dhaka and Chittagong. Secondly, since there is no lairage, animals generally do not receive antemortem care.

The traditional management system of slaughterhouses and meat selling centres were not sufficient to supply quality meat

for human consumption. Slaughterhouses facilities such as the water supply, concrete floor, drainage system and ventilation system were not sufficient. Workers' hands and clothes were found to be dirty. The crows were found in the slaughter place waiting for thrown by-products and no restriction of dog and cat entering the slaughterhouses. No rules of the Government related to slaughterhouses were executed in the slaughterhouses (Alam et al., 2009).

These two studies were conducted a decade ago and meanwhile a new law about slaughtering animal and meat quality control named "Slaughterhouses Act-2011" was implemented by Bangladesh Government to improve meat safety by the modernisation of facilities. However, food safety cannot be attained solely through the modernisation of facilities. It is also necessary to address the behaviour of people working at slaughterhouses and meat selling centres. The behaviour of workers is connected to various socio-economic factors such as educational background, social status and workers' enthusiasm (connected to their income and social status). On-the-job training of workers is also important for the improvement of food safety.

Therefore, the present study was designed (a) to assess current overall hygienic conditions in slaughterhouses and meat selling centres and (b) to evaluate food safety knowledge of workers of slaughterhouses and meat selling centres considering socio-economic background.

MATERIALS AND METHODS

Study Site

The survey was carried out in twenty slaughterhouses and meat selling centers of two districts, Mymensingh and Gazipur, located in the central north part of Bangladesh (Figure1). The data was collected from July to August 2017.

Questionnaire Design. A questionnaire relating to facilities and hygienic conditions in slaughterhouses and meat selling centres was prepared by modifying from previous studies conducted by Alam et al. (2009) and Cook et al. (2017). Another structural questionnaire was designed to assess food safety knowledge and hygiene practice of workers at slaughterhouses and meat selling centres based on the validated questionnaire of previous research work by Smigic et al. (2016). The questionnaires were translated from English to Bangla to get optimum response from the respondents. The translated questionnaire was pre-tested in two slaughterhouses and meat selling centres of the urban area of each district. The necessary modification was made to make it simple for the respondents to answer with the help of a professional expert. After questionnaire validation, it was used to conduct our main study. The first questionnaire composed of infrastructure and working facilities of slaughterhouses and meat selling centre (roof, cement floor, drainage facilities, handwashing facilities, source of water, and bleeding facilities). The second questionnaire composed of

demographic characteristic of workers (gender, age, education, and experience), hygiene practices (wear a protective coat, and rubber boots) and food safety knowledge of workers (proper handwashing knowledge, handling of meat, storage time of meat, cleaning of equipment, and training). In some questions, the choice of "I don't know" was provided to avoid respondents selecting correct answers by chance.

Data Collection and Analysis

Data were collected from ten slaughterhouses and meat selling centres of each district. The main slaughterhouses of two districts (Mechua Bazar of Mymensingh and Joydebpur of Gazipur) were visited before data collection. The purpose of the visit was to get information on the overall situation of the slaughterhouses of the districts. After getting the necessary information, twenty slaughterhouses were randomly selected from two districts, having a capacity of at least six animals slaughtered per day. A total number of 217 workers was working in the sampled twenty slaughterhouses and meat selling centres. Out of 217 workers, only 116 workers' demographic information

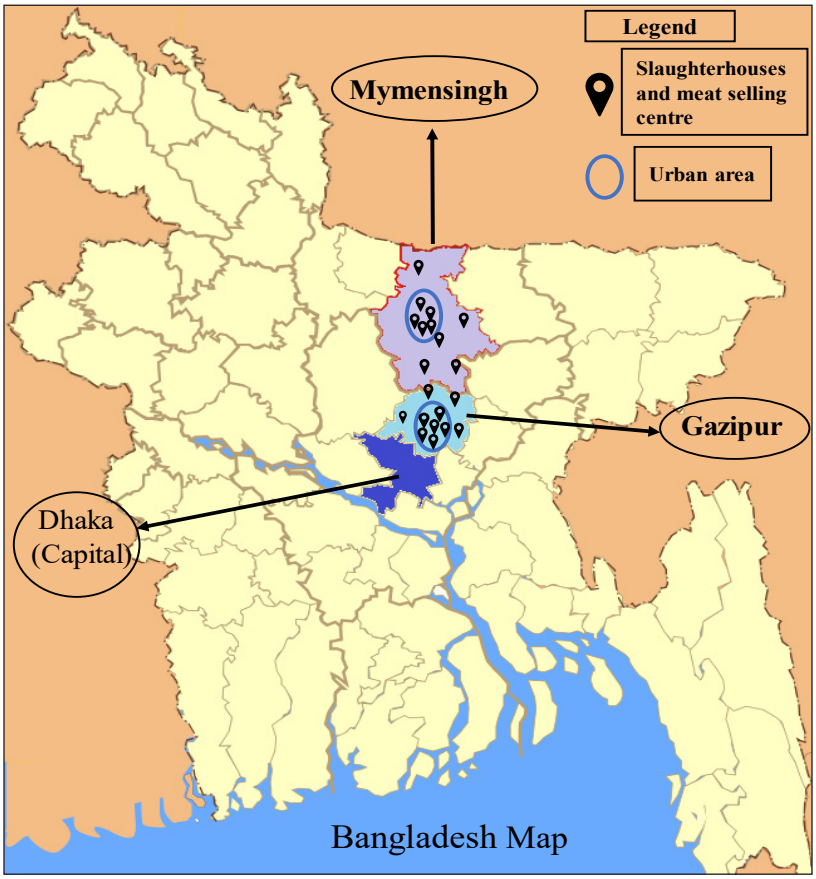


Figure 1. Research sites of Mymensingh and Gazipur Districtsin Bangladesh.

(age, education, experiences) were collected individually and recorded who responded willingly to the questionnaire. Regarding questions about food safety and hygiene practice, workers of 20 sampled slaughterhouses were answered as a group rather than an individual. The facilities and hygienic conditions were assessed through personal interviews and direct observations. In addition, open discussion with workers of the sampled slaughterhouses and meat selling centres was conducted to gain insight into the socio-economic conditions and general concerns.

Data were analysed using IBM SPSS (version 22.0). Demographics and descriptive data were presented in tabular form. The relationship between training and food safety knowledge score were analysed by T-Test Group using SPSS. Knowledge scoring is the sum of correct answers of sixteen food safety-related questions such as washing hand is mandatory after handling raw meat, using the toilet, touching money, handling garbage, blowing the nose, eating or drinking; handling meat when having diarrhoea, vomiting, having wounds on hand; minimum storage time of raw meat at room temperature, the optimum time required for handwashing, knowledge of the zoonotic disease, food poisoning bacteria may enter the food via raw meat, food poisoning bacteria may enter in the food via meat handlers, using gloves can reduce the risk of meat contamination, raw and ready to cook meat can weighed on the same scales.

RESULT AND DISCUSSION

General Description of Sample Slaughterhouses and Meat Selling Centres

Table 1 presents the general description of the sample slaughterhouses and meat selling centres. Out of the total twenty slaughterhouses and meat selling centres surveyed, a majority were managed privately with only two slaughterhouses and meat selling centres being operated by the local government authority. In the study area, the average number of workers per slaughterhouse and meat selling centre was 10.9. There were comparatively more workers in slaughterhouses and meat selling centres in urban than those in semi-urban areas. The average number of animals slaughtered per day was 20.9, where cattle were 4.3 and goat was 16.6. Hasan et al. (2004) conducted a field survey to investigate the management system of slaughterhouses and meat selling centres in Mymensingh district and found that an average number of 13.1 animals (cattle-4.0 and goat-11.0) were slaughtered per day. Alam et al. (2009) conducted a study on the management system of slaughterhouses and meat selling centres to supply quality goat meat for human consumption in Gazipur and found an average number of 22.5 goats slaughtered per day in Gazipur area. The average number of cattle slaughtered per day was like previous studies. But the average number of goats slaughtered per day was different within the study area (Mymensingh-12.0 and Gazipur -21.0).

Table 1
General description of slaughterhouses and meat selling centres (N = 20)

Name of slaughterhouses and meat selling centres	Management (private or public)	Location of slaughterhouses and meat selling centres	District	Total man-power	No. of respondent	No. of animal slaughtered per day		
						Cattle	Goat	Total
Natun Bazar	private	Urban area	M	12	6	4	18	22
Mechua Bazar	public	Urban area	M	22	11	7	60	67
Charpara Bazar	private	Urban area	M	12	6	4	5	9
Kachijuli Bazar	private	Urban area	M	6	5	2	5	7
Sankipara Bazar	private	Urban area	M	10	6	3	6	9
Churkhai Bazar	private	Semi-Urban area	M	6	4	2	4	6
Gouripur Bazar	private	Semi-Urban area	M	7	4	3	3	6
Phulpur Bazar	private	Semi-Urban area	M	8	6	2	6	8
Bhaluka Bazar	private	Semi-Urban area	M	10	5	3	8	11
Gafargaon Bazar	private	Semi-Urban area	M	10	6	2	6	8
Tongi Bazar	private	Urban area	G	23	11	12	46	58
Cherag Ali Bazar	private	Urban area	G	10	6	5	21	26
Tongi College-gate Bazar	private	Urban area	G	8	4	3	5	8
Board Bazar	private	Urban area	G	11	6	4	26	30
ChandonaChowrasta Bazar	private	Urban area	G	13	6	6	21	27
Joydebpur Bazar	public	Urban area	G	17	7	9	51	60
Konabari Bazar	private	Semi-Urban area	G	9	5	6	13	19
Kaliganj Bazar	private	Semi-Urban area	G	7	4	3	11	14
MawnaChowrasta Bazar	private	Semi-Urban area	G	8	4	2	9	11
Sreepur Bazar	private	Semi-Urban area	G	8	4	3	8	11
Total				217	116	85	332	417
Average				10.9	5.8	4.3	16.6	20.9

Source: Field survey (2017)
*Note:*M = Mymensingh, G = Gazipur

Common Facilities and Techniques

The infrastructure and working facilities of the sampled slaughterhouses and meat selling centres were in very poor condition. Table 2 presents common facilities and working conditions of slaughterhouses and meat selling centres in the study areas**.** Out of the twenty slaughterhouses and meatselling centres surveyed, only 20% of the slaughterhouses and meat selling centres had sufficient lairage facilities.

Out of twenty slaughterhouses and meat selling centres, 55% ofslaughterhouses and meat selling centres had roofs, 70% had cement floors and 50% had solid walls. A roof is necessary for the slaughterhouse, even in the slaughterhouse having only a small slaughter slab. It protects the slaughtering process in both hot and cold weather conditions. It also allows for artificial lighting facilities and reduces the inside temperature in the slaughterhouses (Mann et al., 1983). The impermeable, easily cleanable, and rodent-proof floors and walls are necessary for maintaining the proper sanitary level in the slaughterhouses. The floors should be concrete made, smooth but not slippery, and sloped unto the drains adjacent to the wall for easy cleaning (Bengtssom & Whittaker, 1986). Cook et al. (2017) reported that 65% of slaughterhouses had roofs, 89% had a cement floor and 72% slaughterhouses had solid walls in western Kenya.

Only 45% of slaughterhouses and meat selling centres had proper light facilities, 35% had proper ventilation and 50% had drainage facilities. Alam et al. (2009) conducted research in 2007 on slaughterhouses in Gazipur and found that 40% had inadequate light, 40% had improper ventilation and 50% of the slaughterhouses lacked drainage facilities in the Gazipur area. After 10 years, the situation did not improve. The noticeable finding was the lack of infrastructure facilities to ensure food safety, which indicates that there is no improvement from ten years ago. Out of twenty slaughterhouses and meat selling centres, only 40% of slaughterhouses and meat selling centres had access to a toilet but they were not properly cleaned. This situation is not satisfactory and may cause the persistence of zoonotic diseases such as cysticercosis (Mann et al.,1983).

Only 35% of slaughterhouses and meat selling centres had handwashing facilities, and tube wells were the main source of water. The availability of hot and cold water should be equipped for cleaning and workers' hand should be washed with soap and hot water (Food and Agriculture Organization of the United Nations [FAO], 2005). The lack of sufficient water source and washing facilities was observed, and similar conditions were found by Cook et al. (2017) in slaughterhouses of western Kenya.

In all slaughterhouses, animals were slaughtered using the Mohammedan or Halal method. According to the halal guidelines the animal should be killed in a comfortable way. Most of the sample slaughterhouses were found to focus on voicing the name of Allah while cutting the throat. We observed that butchers slaughtered animals by using blunt knives

Table 2
Common facilities and working conditions of slaughterhouses and meat selling centres (N=20)

Characteristics		Percent (%)	Yes (%)	NO (%)
Lairage facilities	Sufficient	**20**		
	Insufficient	30		
	Not Available	50		
Roof present			**55**	45
Cement Floor			**70**	30
Solid walls			**50**	50
Proper light facility			45	**55**
Proper Ventilation			35	**65**
Drainage facility			50	50
Toilet facility			40	**60**
Hand wash facility			35	**65**
Meat Inspector visit daily			**70**	30
Anti-mortem examination			10	**90**
Slaughter a sick animal			10	**90**
Source of water	Municipal	15		
	Tube well	45		
	Motor pump	40		
	Borehole	0		
	River	0		
Bleeding	Ground	45		
	Drainage	50		
	Pit	5		

Source: Field survey (2017)

and animals slaughtered in front of other animals which are not good practices according to halal guidelines. Ahsan et al. (2014) also found the halal guidelines were not followed properly except for voicing the name of God in slaughterhouses in Bangladesh. The name of Allah must be invoked (mentioned) at the time of slaughtering by saying: "BismillahAllahu Akbar (In the name of Allah; Allah is the Greatest)". The animal must be slaughtered using a sharp knife. The knife must not kill due to its weight. If it kills due to impact the meat may not be permissible. Animals should not be slaughtered in front of other animals (Department of Halal Certification, Europe, 2018).

Out of twenty slaughterhouses and meat selling centres, 30% of them slaughtered animals without inspection of a veterinary surgeon or meat inspector. According to s.5.2 of "The Slaughterhouse Act-2011", this violates the law which stipulates that regular inspections are compulsory. Meat inspectors regularly visited 70% of slaughterhouses and meat selling centres in the study area, whereas, veterinary surgeons visited slaughterhouses located

in the district's main point to check animal and meat quality once or twice a week and often perform antemortem examination. Slaughtering infected animals is a risk factor for infection by certain directly transmitted zoonotic diseases like anthrax (Ray et al., 2009).

Ten percent slaughterhouses and meat selling centres reported that they slaughtered sick animals. Cook et al. (2017) found about 9% of the slaughterhouses slaughtered sick animals in western Kenya. This is a common phenomenon in third world countries. Regular inspections may help to improve the situation.

Out of twenty slaughterhouses and meat selling centres, 50% of slaughterhouses and meat selling centres had drainage facilities for bleeding, 45% bleeding on the ground and 5% used a simple pit. In most of the sample slaughterhouses and meat selling centres goats were flayed either on the ground or by hanging method but cattle were always flayed on the ground. Alam et al. (2009) found the same condition in Gazipur in 2007 meaning treatment methods have not changed in ten years.

Workers Background, Experiences, and Attitude

All workers in the sample slaughterhouses and meat selling centres were male (Table 3). Out of the 116 workers who responded, a majority were middle-aged (31-40 years) representing 37% of workers, followed by younger aged (20-30 years) group 28%. A majority of workers surveyed had a basic level education (84%), with most of them graduating from primary school (64%), 15% with secondary education and 5% with tertiary level education. The workers who had tertiary level education were owners and don't regularly participate in the slaughtering process. Sixteen percent of workers had no education. In Bangladesh, the current educational situation is improving. In 2017, 98% of children attended primary school and about 80% completed their primary level education. The national enrolment rate of secondary education and tertiary education is 63% and 17.33% respectively (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017). Comparing to the national average of education, the educational level of workers in slaughterhouses and meat selling centres are low. Wambui et al.(2017) also reported most of the meat handlers in slaughterhouses in Kenya were middle-aged (31-40 years) and had primary level education only and 8% of workers lacked formal education. Slaughterhouses need workers with technical knowledge, but educated and young people are not interested in working there.

Concerning work experience of the surveyed workers, 40% had 8-16 years of work experience, 35% had 2-8 years of work experience, 19% had more than 16 years of experience and 6% had less than 2 years of experience. In a study examining Serbian meat establishment, Smigic et al. (2016) found most of the workers possessed 2-8 years of work experience. Compared to Serbia, older and more experienced persons are working in the meat sector of Bangladesh. The workers of sample

slaughterhouses and meat selling centres earned an average of 3.5 USD to 4.7 USD/ day (Monthly income 105 USD -141 USD). The average monthly wage of private-sector workers are 156 USD/month in 2017 (Trading Economics, 2018) and the minimum wage of Government employees in Bangladesh was 174 USD/month in 2015 (Ministry of Finance, 2015). The workers were not satisfied with their low income compared to both the government and other private-sector workers. Workers also expressed their dissatisfaction with their social status, and they believed that people had a negative image of their profession.

During the open discussion, two butchers of Mymensingh Sadar shared their bitter experience of finding a suitable groom for their daughters though they completed the graduation course from the National University. Nowadays, children of slaughterhouse and meat selling workers are becoming more educated and desire to find a life partner from the educated civil community. This sentiment also affected the worker's performance and they showed a negative attitude toward animals in their workplaces.

Table 3
Educational status and experiences of slaughterhouses and meat selling centers workers (N=116)

Characteristics		**Percent (%)**
Gender	Male	100
	Female	0
Age	<20	9
	20-30	28
	31-40	37
	41-50	20
	> 50	6
Education	No Education	16
	Primary	64
	Secondary	15
	Tertiary	5
Work Experience	< 2	6
	2-8	35
	8-16	40
	>16	19

Source: Field survey (2017)

Food Safety Knowledge and Hygiene Practices by Workers

The level of food safety knowledge and hygiene practices by workers is shown in Table 4. Out of 20 sampled slaughterhouses and meat selling centres workers interviewed, only 15% of them wore personal protective coats or aprons, and 10% wore rubber or gumboots. Furthermore, only 20% of the workers had a health certificate which guarantees they were free from any kind of contagious disease. The worker of slaughterhouses should use protective clothing to reduce the risk of contamination of meat products. It also minimizes the chance of transmission of zoonotic diseases to meat handlers (Nabukenya et al., 2013). Cook et al. (2017) reported that 53% of slaughterhouses workers of western Kenya wore a protective coat and 49% wore rubber boots. Haileselassieet al. (2013) found 69.2% of abattoirs and butchery workers wore aprons, 96.2% wore gumboots and 84.6% had health certificates in Mekelle city of Ethiopia.

Appropriate and clean clothing helps to reduce the risk of food contamination (Azmi, 2006), but workers were found to be wearing

Table 4
Food safety knowledge and hygienic practices by slaughterhouses and meat selling centres workers (N=20)

Variable		Percent (%)	Yes (%)	No (%)	I don't know (%)
Presence of health certificate			20.0	**80.0**	
Wear protective coat/Apron			15.0	**85.0**	
Wear rubber/gumboots			10.0	**90.0**	
Hands should be washed at least	5 sec	20.0			
	20 sec	**35.0**			
	1 min	20.0			
	I don't know	25.0			
Knowledge of zoonotic disease			**70.0**	30.0	
Food poisoning bacteria can be bought in the food via raw meat			**75.0**	0.0	25.0
Food poisoning bacteria can be bought in the food via meat handler			40.0	30.0	30.0
Using gloves during work can reduce the risk of meat contamination			**90.0**	0.0	10.0
Raw and ready to eat meat can be weighted on the same scales before packing			10.0	**70.0**	20.0
Cleaning of equipment (cutting table, weighing, and knives) during meat handling	Washing with water and soap	5.0			
	Washing with water only	**85.0**			
	smearing with a piece of cloth	10.0			
	other	0.0			
Keeping meat in an open air	Very good handling	0.0			
	Good handling	0.0			
	Bad handling	**55.0**			
	Very bad handling	45.0			
Keeping meat in a condition better than this is very important			**70.0**	30.0	
Training on food safety			15.0	**85.0**	
Willingness to attend training on food safety or meat hygiene			**90.0**	10.0	

Source: Field survey (2017)

dirty clothes in the present study area. Compared to other developing countries, workers of the sample slaughterhouses and meat selling centres showed negligence towards hygiene. With regards to knowledge about hygienic practices such as hands should be washed for at least 20 seconds, 35 % of respondents were able to identify the correct answer. It is not easy to reduce contamination in the meat industry due to a shortage of necessary knowledge of workers (Mann et al., 1983).

About 70% of the workers in the study area knew that zoonotic disease could be transmitted from animals to humans but preventive measures were not taken by most of them. Cook et al. (2017) reported that only 34% of slaughterhouse workers knew about the zoonotic disease. About 75% of the respondents believed that food poisoning

bacteria could be introduced to the food via raw meat and only 40% of the respondents believed that food poisoning bacteria could be transmitted to the food via meat handlers. Proper glove use can decrease the transfer of pathogens from hands to food (Green et al., 2007) and 90% of the respondents understood that using gloves during work can reduce the risk of meat contamination. Unlike previous studies (Jianu & Golet, 2014) observations from this study showed that very few respondents regularly wear gloves.

About 70% of slaughterhouses and meat selling centres workers involved in this study knew that raw and ready to eat meat cannot be weighed on the same scale before packing. The results show that the situation is more similar to the previous study conducted by Smigic et al. (2016) which found that the basic level of hygiene knowledge of developing countries like Bangladesh and Kenya is almost the same.

Most of the sampled slaughterhouses and meat selling centres (85%) used only water for cleaning of equipment (cutting table, weighing and knives) during meat handling. About 55% of respondents believed that keeping meat in the open air is bad handling, while 45% believed that this is very bad handling. Aburi (2012) reported that 40% of respondents stated that keeping meat in the open air was bad handling. Most of the respondents (70%) also believed that meat should be kept under better conditions than storing it in open-air conditions. Compared to the findings on other developing countries, workers in the surveyed slaughterhouses and meat selling centres were more knowledgeable about safe meat handling.

In this study, about 85% of the respondents did not have any training concerning food safety and meat hygiene, although most of the slaughterhouse and meat selling centres workers (90%) expressed their willingness to attend training on food safety or meat hygiene. Training programs improve the knowledge of meat handlers (Ansari-Lari et al., 2010). The training of meat handlers is key to prevent foodborne diseases (Nel et al., 2004; Shojaei et al., 2006). Workers in slaughterhouses are expected to have received training (Nel et al., 2004).

Table 5 shows the differences in workers' knowledge level of those who have had training and who have not had training. Knowledge scoring is the sum of correct answers of sixteen food safety-related

Table 5
Group Statistics of Training and Food Safety Knowledge (N=20)

Knowledge scoring (Full Score=16)		Respondent number	Mean Score *	SD
Training	NO	17	10.8814	2.6899
	YES	3	15.0000	1.0000

Note: * 5 % level of significant
Source: Field survey (2017) (T-Test Groups, IBM SPSS version 22.0)

questions and each question answered correctly rewarded one point and zero for incorrect answers. The level of significance is 0.134 (p>0.05), so there is a significant difference regarding knowledge between the trained and untrained workers. Workers who received training had significantly better knowledge than untrained workers. This demonstrates the importance of training and training of workers should be considered as early as possible.

CONCLUSION

To understand the present hygienic situation and workers' knowledge about food safety of meat, questionnaire and interview surveys were conducted at twenty slaughterhouses and meat selling centres in Mymensingh and Gazipur districts of Bangladesh. The overall working condition of the surveyed slaughterhouses and meat selling centres were not at a satisfactory level. The meat was handled by workers under unsatisfactory sanitary conditions. Slaughtering and dressing operations were not well organised. The present situation may increase occupational hazards among the workers and contaminated meat may enter the meat market. To reduce the risk, improvement of working facilities and hygienic practices are needed to ensure the quality of meat. The government and local authorities should take the initiative to construct simple small modern slaughterhouses and meat selling centres equipped with all the facilities needed for quality meat processing and proper waste disposal to prevent environmental pollution. Training is recommended to improve workers' skills and improve the food safety knowledge of workers, butchers and also meat inspectors to reduce the contamination risk. Improvement in the motivation of workers is also needed and can be addressed through the consideration of their social status and salary. Even with the limited budget of local government in Bangladesh, a training session can be conducted and would be effective to improve the hygienic condition of slaughterhouses and meat selling centres.

ACKNOWLEDGEMENT

The authors would like to thank each respondent for answering the questions during the interview. We are grateful to the anonymous reviewers and editors for their valuable comments and suggestions.

REFERENCES

Aburi, P. A. S. (2012). *Assessment of hygiene practices used by small butchers and slaughter slabs in beef value chain in Juba Town-South Sudan* (Master's thesis, Van Hall Larenstein University of Applied Science, Netherlands). Retrieved September 12, 2018, from https://edepot.wur.nl/298083

Ahsan, M., Hasan, B., Algotsson, M., & Sarenbo, S. (2014). Handling and welfare of bovine livestock at local Abattotoirs in Bangladesh. *Journal of Applied Animal Welfare Science, 17*(4), 340-353.

Alam, M. K., Hossain, M. M., Islam, R., & Akhter, S. (2009). Management of slaughterhouse and meat selling centres to supply quality goat meat for human consumption. *Journal of the Bangladesh Society for Agricultural Science and Technology, 6*(1 &2), 135-140.

Ansari-Lari, M., Soodbakhsh, S., &Lakzadeh, L. (2010). Knowledge, attitudes and practices of workers on food hygienic practices in meat processing plants in Fars, Iran. *Food Control, 21*(3), 260-263.

Assefa, T., Tasew, H., Wondafrash, B., & Beker, J. (2015). Community medicine & health education assessment of bacterial hand contamination and associated factors among food handlers working in the student cafeterias of Jimma. *Journal of Community Medicine and Health Education, 5*(2), 1-8.

Azmi, S. (2006). The evaluation of food hygiene knowledge, attitudes, and practices of food handlers in food businesses in Turkey. *Food Control, 17*(4), 317-322.

Bengtssom, L. P., & Whittaker, J. H. (1986). *Farm structures in tropical climates: A text book for structural engineering and design.* Rome, Italy: FAO.

Brantz, D. (2005). Animal bodies, human health, and the reform of slaughterhouses in nineteenth-century Berlin. *Food & History, 3*(2), 193-215.

Clottey, S. J. A. (1985). *Manual for the slaughter of small ruminants in developing countries.* Rome, Italy: FAO.

Cook, E. A. J., Glanville, W. A. D., Thomas, L. F., Kariuki, S., Bronsvoot, B. M. D. C., & Fevre, E. M. (2017). Working conditions and public health risks in slaughterhouses in western Kenya. *BMC Public Health 17*, 14. https://doi.org/10.1186/s12889-016-3923-y.

Department of Halal Certification, Europe. (2018). *Islamic method of slaughtering,* Retrieved September 13, 2018, from http://halalcertification.ie/islamic-method-of-slaughtering/

Fitzgerald, A. J. (2010). A social history of the slaughterhouse: From inception to contemporary implications. *Human Ecology Review*, *17*(1), 58-69.

Food and Agriculture Organization of the United Nations. (2005).*Code of hygienic practice for meat* (CAC/RCP 58-2005). Rome, Italy: FAO.

Green, L. R., Radke, V., Mason, R., Bushnell, L., Reimann, D. W., & Mack, J. C. (2007). Factors related to food worker hand hygiene practices. *Journal of Food Protection, 70*(3), 661-666.

Haileselassie, M., Taddele, H., Adhana, K., & Kalayou, S. (2013). Food safety knowledge and practices of abattoir and butchery shops and the microbial profile of meat in Mekelle City, Ethiopia. *Asian Pacific Journal of Tropical Biomedicine, 3*(5), 407-412.

Hasan, F. M. M., Hossain, M. M., Akter, S., & Rahman, M. H. (2004). Management of slaughterhouses and meat selling centres in Mymensingh. *Bangladesh Journal of Animal Science, 33*(1-2), 1-10.

Jianu, C., & Golet, I. (2014). Knowledge of food safety and hygiene and personal hygiene practices among meat handlers operating in western Romania. *Food Control, 42*(8), 214-219.

Mann, I., Koulikovskii, A., & Matyas, Z. (1983). *Guidelines on small slaughterhouses and meat hygiene for developing countries.* Geneva, Switzerland: WHO.

Ministry of Finance. (2015). *National pay scale.* Dhaka, Bangladesh: Author. Retrieved October 12, 2018, from http://www.mof.gov.bd/site/page/79e7315c-8455-4c48-9e27 89b8b04e063c/National-Pay-Scale---2015

Nabukenya, I., Kaddu-Mulindwa, D., & Nasinyama, G. W. (2013). Survey of Brucella infection and malaria among Abattoir workers in Kampala and Mbarara Districts, Uganda. *BMC Public Health*, *13*, 901.

Nee, S. O., & Sani, N. A. (2011). Assessment of Knowledge, Attitudes and Practices (KAP) among food handlers at residential colleges and canteen regarding food safety. *Sains Malaysiana, 40*(4), 403-410.

Nel, S., Lues, J. F. R., Buys, E. M., & Venter, P. (2004). The personal and general hygiene practices in the deboning room of a high throughput red meat abattoir. *Food Control, 15*(7), 571-578.

Raghvan, V. (2007). Management of food safety. *Fifth International Poultry Show and Seminar WPSA-BB*, Dhaka, Bangladesh.

Rahman, M. M. (2001). *Fundamentals of meat hygiene* (1st ed.). Mymensingh, Bangladesh: Department of Microbiology and Hygiene.

Ray, T. K., Huntin, Y. J., & Murhekar, M. V. (2009). Cutaneous anthrax, West Bengal, India. *Emerging Infectious Disease, 15*(3), 497-499.

Shojaei, H., Shooshtaripoor, J., & Amiri, M. (2006). Efficacy of simple hand-washing in reduction of microbial hand contamination of Iranian food handlers. *Food Research International, 39*(5), 525-529.

Slaughterhouse Act. (2011). *Ministry of Law, Justice and Parliamentary Affairs, Government of the people's republic of Bangladesh.* Retrieved August 30, 2018, from http://bdlaws.minlaw.gov.bd/bangla_all_sections.php?id=1079.

Smigic, N., Antic, D., Blagojevic, B., Tomasevic, I., & Djekic, I. (2016). The level of food safety knowledge among meat handlers. *British Food Journal, 118*(1), 9-25.

Trading Economics. (2018). Bangladesh minimum wages*. Trading Economics.* Retrieved October 3, 2018, from https://tradingeconomics.com/bangladesh/minimum-wages.

United Nations Educational, Scientific and Cultural Organization. (2017). *Country profile, Bangladesh.* Montreal, Canada: *UNESCO Institute for Statistics.* Retrieved September 10, 2018, from http://uis.unesco.org/country/BD.

Vialles, N. (1994). *Animal to edible.*Cambridge, England: Cambridge University Press.

Wambui, J., Karuri, E., Lamuka, P., & Matofari, J. (2017). Good hygiene practices among meat handler in small and medium enterprise slaughterhouses in Kenya. *Food Control, 81*(11), 34-39.

Williams, N. M. (2008). Affected ignorance and animal suffering: Why our failure to debate factory farming puts US at moral risk. *Journal of Agricultural and Environmental Ethics, 21*(4), 371-384.

Pertanika J. Soc. Sci. & Hum. 28 (2): 883 - 900 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Does the Social Exchange Theory (SET) Work Effectively for New Employees? An Empirical Study of Contingent Worker in Indonesia

Jati Waskito[1,2]*, Asri Laksmi Riani[1], Joko Suyono[1] and Ahmad Ikhwan Setiawan[1]

[1]*Fakultas Ekonomi, Universitas Sebelas Maret, Jawa Tengah 57126, Indonesia*
[2]*Fakultas Ekonomi, Universitas Muhammadiyah Surakarta, Jawa Tengah 57162, Indonesia*

ABSTRACT

Empirical studies should deal with the very important issue of organizational justice and citizenship behavior in contingent workers. This study aimed to determine the role of the leader-member exchange (LMX) theory and perceived organizational support (POS) as a mediator separately against the relationship between organizational justice (OJ) and organizational citizenship behaviors (OCB). The population of the study included 150 non-permanent lecturers at five private universities in Indonesia. Survey methods were used for data collection. Factor analysis output proved that OJ relates to four factors. These four dimensions have various relationships with OCB directed towards the organization (OCBO) and OCB directed towards supervisor (OCBS) separately. The result of the structural equation modeling showed that POS and LMX cannot play a mediating role in the relationship between OJ and OCB in the context of non-regular workers.

Keywords: Leader-member exchange, organizational citizenship behavior directed to supervisor, organizational citizenship behavior directed to organizational, organizational justice, perceived organizational support

INTRODUCTION

The use of non-regular labor has become commonplace in business. There are various reasons for this phenomenon, including problems of flexibility, cost reduction, and rapid changes in environmental dynamics. This fact will affect the company's behavior toward them compared to regular employees. For example, the company will consider the issue of justice in a different manner when facing non-regular employees.

ARTICLE INFO

Article history:
Received: 18 May 2019
Accepted: 03 December 2019
Published: 26 June 2020

E-mail addresses:
Jw271@ums.ac.id (Jati Waskito)
asrilaksmiriani@yahoo.com (Asri Laksmi Riani)
jokosu_jmfeuns@yahoo.co.id (Joko Suyono)
aikhwansse@yahoo.com (Ahmad Ikhwan Setiawan)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

Organizational justice (OJ) is one of the greatest concerns among scholars in the field of organizational industrial psychology, organizational behavior, and human resource management. Further evidence of such a fact is that OJ has consistently been the most popular topic at seminars and scientific journals of management (George et al., 2016).

Every employee would want to be treated fairly by the leaders and companies that hire them. Ambrose and Schminke (2003) suggested that in different structural conditions, interactional justice (IJ) and procedural justice (PJ) would play a different significant role in determining the quality of organizational social exchange as evidenced by the perceived organizational support (POS) and the leader-member exchange (LMX) theory. Rupp et al. (2014) found out that POS, LMX and other variables were the mediated correlation variables between OJ and OCB. Kim and Andrew (2015) examined the relationship between OJ and outcome variables (i.e., job satisfaction and affective commitment to organizations and supervisors) through mediating effects on social exchange variables. The results showed that POS had a fully mediating role in PJ and job satisfaction, while LMX did not play the same mediating role. In addition, the results showed that POS and LMX mediated fully the relationship between PJ and affective commitment.

Oussama and Johari (2012) and Rupp et al. (2014) tested several models that demonstrated the influence of PJ on OCB as mediated by POS, which eventually encouraged employees to adapt OCB. The results showed that PJ was antecedent to POS, which fully mediated its relationship with three of the four dimensions of OCB.

Several researches have been done on the role of OJ as an important predictor of OCB. Most of the studies on OCB found that OCB is related to many pertinent results (Hersberger et al., 2007). The Social Exchange Theory (SET) shows that every intermediate variable in OJ-OCB relations provides mutually acceptable benefits (Moorman & Byrne, 2005). Fair treatment can improve both POS and LMX quality, which ultimately will increase OCB.

Only a few studies discuss social exchange in organizations, especially on non-regular workers by involving multi-dimensional construction to manage the relationship between social exchange and OCB. There are limited studies that address the role of exchange in explaining the relationship between OJ and OCB and the mediatory role of social exchange, particularly POS and LMX. This study integrates the concept of OJ and OCB by using the SET developed by Blau (1964). In addition, it is important to investigate the effects of individual and organizational perceptions of justice on behavior directed towards the organization as a whole (OCB-organization or OCBO) and supervisor (OCB-supervisor or OCBS) (Williams & Anderson, 1991). This opinion was also suggested by Karriker and Williams's (2009) research, in which outcome variables were separately examined at individual and organizational levels.

Furthermore, the developed model includes mediators that help understand how each dimension of justice is interpreted within each type of membership behavior. In particular, this study reveals that justice in the workplace plays an important role in the development of positive and strong social exchanges, such as POS and LMX. Two research questions of the study included 1) how do two different types of social exchanges (POS and LMX) as mediating variables have a specific antecedent and outcome variables and 2) how will different sources of justice take an impact on the different outcome? This current research contributes to ensuring that the justice sources of the relationships among individuals (interpersonal and informational justices) and organizations (distributive and procedural justices) will have an impact on leaders' (OCBS) and organizations' (OCBO) extra-role behavior. Specifically, the purposes of this study were: 1) to analyze constructive differences in the four types of justice (distributive, procedural, interactional, and informational) to non-regular employees, 2) to examine the role of POS as a mediator in the relationship between procedural and distribution of justice and OCBO, 3) to determine the role of LMX as a mediator in the relationship between interpersonal and informational justice and OCBS.

Most of the previous research has examined the workers for manufacturing industries. These have not used the lecturers as a respondent. This recent research is a crucial phenomenon because it investigates knowledgeable and skillful lecturers who have got a three-year working contract. It means that most of them are a newcomer in an organization. Before being a permanent lecturer in a Muhammadiyah university or college, they have signed a three-year working contract. It will dismiss them if they do not actualize their knowledgeable and skillful performances. In a working contract, however, they are permitted to work for another profitable company or institution.

Non-regular laborers, including temporary workers (contingent), experienced tremendous growth in recent years. In Indonesia, according to Elance-oDesk (2014), an annual interest in working from home is still quite high. From a scale of 1-5, Indonesia is ranked top with a value of 4.5; the figure exceeds Bolivia (4.4), Pakistan (4.3) and the Philippines (4.2). Freelance jobs in Indonesia fall into the category of informal workers.

According to the definition provided by the Indonesian Central Bureau of Statistics (BPS, 2016), in the millennial age category; that is, 25-34 years, the number of independent workers is 4.42 million that is equivalent to 6.29% of the total informal workers. Meanwhile, the number of free workers both in agriculture and non-agriculture has been recorded to be 2.86 million or 4.06% of the total informal workers for the same period. However, millennial has not replaced the dominance of workers from Gen X or Baby Boomer age groups. In the independent worker's group, the number of people aged 35-44 years reached 5.47 million workers. Meanwhile,

free workers both in agricultural and non-agricultural sectors amounted to 3.31 million workers in the same age range and categories.

There are many benefits of employing temporary workers, especially in supporting flexibility (Kalleberg et al., 2000) and work-related cost reduction (von Hippel & Kalokerinos, 2012). Regardless of the pros and cons of using this contingent workforce, empirical facts show that academics underlined many benefits of contingent labor in the industry. The present study examined the issues of justice, social exchange, and OCB of new non-regular lecturers employed by private universities in the educational service industry in Indonesia. They were young, dynamic-minded workers and most have just graduated from university.

Private universities in Indonesia rely on student tuition for their funding. One of the efforts to reduce operational costs is to use non-permanent lecturers. For non-permanent workers, the issue of justice in obtaining income and treatment in the workplace from their supervisor and institution is a very sensitive and interesting issue that needs to be studied.

LITERATURE REVIEW

Organ and Bateman (1983) and Smith et al. (1983) suggested that OCB was a crucial study of organizational behavior and management literature. Katz (in Smith et al. (1983) identified three patterns of behavior types that underlay organization's functions: 1) individuals must be a member of the system, 2) individuals must take a specific role in the organization, and 3) individuals must spontaneously innovate beyond their roles. Moreover, he developed that an organization merely dependent on formal behavior was a fragile social system.

Smith et al. (1983) defined a worker's natural and voluntary behavior. It is not a formal requirement of the role, but it can enhance an organization's functions. Ogan and Moorman (1993) identified a number of conceptually different dimensions of membership behaviors, including altruism, courtesy, cheerleading, peacekeeping, sportsmanship, civic virtue, and conscientiousness. However, the research by Podsakoff et al. (1997) suggested that the managers had difficulties to identify the dimensions of behaviors. They tended to generalize altruism, courtesy, cheerleading, peacekeeping, sportsmanship, civic virtue, and conscientiousness as a single dimension of helping behavior. Sportsmanship implies that employees have a positive attitude and are willing to tolerate less than ideal circumstances without complaining. Civic virtue is a behavior that identifies an employee's responsibility for participating and relating to a company's life. Helping behavior is a broader and complex construct and it is one of the deepest roots in the research literature. Organizational behavior researchers have conducted a lot of studies to obtain an antecedent variable of OCB. Organizational justice is an urgent variable as an antecedent. Academicians have strictly debated about these two variables.

The academics vary greatly in using the dimensions of justice. Some used only two

factors (e.g., George et al., 2016; Karriker & Williams, 2009; Pillai et al., 1999), while others (e.g., Bhal, 2006; Bies, 2001; Colquitt et al., 2012) prefer to use the OJ model with three factors comprising distributive justice (acceptance of results), PJ (justice perceived in the formal process by which decisions were made), and interactional justice (acceptance of interpersonal transaction justice between individuals). Although this three-factor model has advantages, several previous types of research showed that the four-factor structure is more accurate in representing the OJ concept (Greenberg, 1987). Confirmatory factor analysis shows evidence of the four different but highly correlated justice constructs. Moorman (1991) proposed four hypotheses, including support for PJ that were significantly related to four of the five dimensions of OCB. On the contrary, no relationship was found between distributive justice and OCB.

Researchers believed that interactional justice has two components: (a) individuals are treated with respect and friendliness, and (b) individuals are given an explanation of why a decision was made (Bies, 2001). Likewise, Colquitt et al. (2001) suggested that although different dimensions of justice were closely related, they contributed to additional variances described in the perception of justice. The results also illustrated the overall and unique relationship between distributive, procedural, interpersonal, and informational justice and some organizational outcomes. Interactional justice must be divided into two types; that is, interpersonal justice (the extent to which a person has recognized the dignity and treated with courtesy) and informational justice (the extent to which employees receive sufficient explanation for the process of making and implementing a decision at work). Studies conducted using the taxonomy of four factors of justice have brought some supporting evidence. However, most of the existing studies were conducted in the context of traditional workplaces. For our knowledge, the four-factor justice model has not been studied by involving temporary workers. This research seeks to replicate four factors of justice in the context of non-regular employment.

> Hypothesis 1: There are significantly different perceptions of the four dimensions of organizational justice about new non-regular workers.

Social exchange theories, especially POS and LMX, study what variables may mediate the distinct effects of interpersonal and informational justices and distributive and procedural ones on an employee's response to supervisions and organizations. It is relevant to the research by Masterson et al. (2000), suggesting that an employee might be involved in social exchange relationships with immediate supervisor and organization. Integrating two theories of social exchange and organizational justice is closely related to different sources and results.

The relationship between OJ and OCB has been explored and supported by several studies (Bies et al., 1993), including the findings on perceptions of justice and OCB categories. Moorman et al. (1993)

examined national cable companies by involving PJ and OCB. Bies et al. (1993) investigated the perceived justice of the layoff process and its effect on OCB after the announcement of layoffs, and Mackenzie et al. (1993) determined the effects of justice on OCB. Other studies supported the role of social exchange in facilitating OJ-OCB relationships.

The beginnings of the justice source model were proposed by Greenberg (1987) and Colquitt et al. (2001). They began to examine whether judicial objects' judgments (e.g., supervisors or organizations) can estimate specific results. Specifically, this study discussed the predictability of the source of justice. If the act of justice comes from an individual, it is categorized as the agency under consideration, if the judicial action comes from the organization itself, it will be categorized as the systemization. Rupp and Cropanzano (2002) examined the perceptions of justice of agents and systems that referred to their potential impact on behaviors.

Wee et al. (2014) collected data from a total of 227 subordinate supervisors from 16 hotels, located in the central region of Malaysia. The findings revealed that procedural justice affected all dimensions of OCB compared to distributive justice. Chen and Jin (2014) examined OJ construct validity in the context of Chinese society. They found that DJ and IJ had a positive effect on OCB. Furthermore, the same findings were obtained by Nisar et al. (2014) who examined 177 education experts, which were randomly selected. Their findings showed that organizational justice directly and significantly affects OCB.

This study individually examined the effect of DJ and PJ on OCBO and the effect of intra-personal and informational justice on OCBS according to two separate models. This study follows Lavelle et al.'s (2007) research suggesting that certain sources of justice will have an impact on certain targets.

Hypothesis (2a): Procedural justice perceptions of a nonregular employee have a positive relationship with OCBO.

Hypothesis (2b): Distributive justice perceptions of a nonregular employee have a positive relationship with OCBO.

Hypothesis (3a): Interpersonal justice perceptions of a nonregular employee have a positive relationship with OCBS.

Hypothesis (3b): Informational justice perceptions of a nonregular employee have a positive relationship with OCBS.

The Relationship between OJ and Social Exchange (POS and LMX)

The prior testing and consequences of POS and LMX were carried out by Wayne et al. (2002). It was assumed that OJ (PJ and distributive justice/DJ) and organizational practices that provided employee recognition would affect POS. Meanwhile, respect and punishment from leaders are important factors for LMX. The results showed that fairness, inclusion, and organizational recognition were related to POS while contingent benefits were related to LMX. In terms of consequence, POS was related

to employee commitment and OCBO, while LMX predicted performance ratings. Thus, this study showed that OCB was directed at the supervisor (OCBS) since the result was related to the leadership.

Research conducted by Tekleab et al. (2005) used a longitudinal design with a sample of 191 employees. As a result, they found that PJ affects POS, and interactional justice affected LMX. The two exchange variables were OJ mediators of employee psychological constructs. El Akremi et al. (2010) conducted a research on 602 employees for three months in two separate periods. They found that PJ and DJ affected POS. POS fully mediated the relationship of procedural justice but not distributive justice due to deviations directed by the organization. Furthermore, Chen and Jin (2014) found that procedural justice was closely related to POS. Their research also proved that POS was a mediator in the effect of PJ on OCBO.

Hypothesis (4a): Procedural justice perceptions of a nonregular employee have a positive relationship with POS.

Hypothesis (4b): Distributive justice perceptions of a nonregular employee have a positive relationship with POS.

Previous studies demonstrated that interpersonal and informational justice had a positive relationship with LMX, while PJ and DJ had a positive relationship with POS (Moorman et al., 1998). Given that this relationship has been studied previously, it will be formally hypothesized. This study also examined a mediating variable. Masterson et al. (2000) found that perceptions of interactional justice affected supervisor-related outcomes through LMX mediation variables. This finding was reinforced by Erdogan (2002) who proposed an antecedent and consequences model of perceptions of organizational justice. The results of his research showed that PJ had an effect on POS. He also showed that IJ affected LMX. POS and LMX were the OJ mediators of job outcomes.

Karriker and Williams (2009) explored the differential effects of multifunctional organizational justice perceptions on OCB. Their findings clarified the nature of distributive and procedural justice, provided a mono-focus of interpersonal justice, and supported the premise that equity investment produced exponential behavioral responses that were sometimes mediated by the quality of supervisor-employee relationships. Rupp et al. (2014) conducted a meta-analysis and found that supervisory justice had an effect on LMX and trust in supervisors. These two social exchange variables mediated the effect of OJ on OCBS.

Hypothesis (5a): Interpersonal justice perceptions of a nonregular employee have a positive relationship with LMX.

Hypothesis (5b): Informational justice perceptions of a nonregular employee have a positive relationship with LMX.

Mediatory Effect of Social Exchange Relationship

Research on POS and LMX showed that the two variables were consequences of organizational justice. However, even with

the widespread use of the social exchange concept as an explanatory mechanism for the outcome of justice (e.g., Moorman, 1991, Rupp et al., 2014; Wee et al., 2014), such mediation relationships had been measured and tested. Furthermore, LMX mediates the influence of OJ on OCB, job satisfaction, and organizational commitment. Overall, these findings suggested that perceptions of fairness were important inputs for employee appraisal toward the quality of their exchange relationships with employers and organizations. Furthermore, these findings further reinforced that OJ affected attitudes and behaviors related to the quality of employee social exchange relationships.

Masterson et al. (2000) found that perceptions of interactional justice affected supervisor-related outcomes through LMX mediation variables. This finding is reinforced by Erdogan's (2002) study, which proposed an antecedent model and consequences of perceptions of organizational justice. The results of his research showed that PJ had an effect on POS, and IJ affected LMX. POS and LMX were OJ mediators of job outcomes. Karriker and Williams (2009) explored the differential effects of multifunctional organizational justice perceptions on OCB. Their findings clarified the nature of distributive and procedural justice, provided a mono-focus of interpersonal justice, and supported the premise that equity investment produced exponential behavioral responses that were sometimes mediated by the quality of supervisor-employee relationships. Rupp, Shao, Jones, and Liao (2014) conducted a meta-analysis and found that supervisory justice had an effect on LMX and trust in supervisors. These two social exchange variables mediate the effect of OJ on OCBS.

Hypothesis 6: There is a direct relationship between PJ and DJ perceptions and OCBO, mediated by POS.

Hypothesis 7: There is a direct relationship between interpersonal and informational perceptions of justice and OCBS, mediated by LMX.

METHODS

Sampling and Data Collection

Muhammadiyah is the largest Islamic organization in Indonesia. It has 172 universities. The population of the study was the temporary lecturers of Universitas Muhammadiyah Malang (UMM), Universitas Muhammadiyah Yogyakarta (UMY), Universitas Muhammadiyah Surakarta (UMS), Universitas Ahmad Dahlan (UAD Yogyakarta), and Universitas Muhammadiyah Prof. Hamka (UHAMKA Jakarta). The samples were selected by using the purposive sampling method. The population obtained from five Human Resources Bureaus of the universities amounted to 380 temporary lecturers. The survey had formally been conducted for three months by visiting them. Based on the survey result, however, it was found that 150 (39.4%), consisting of 52% males and 48% females, were voluntarily ready to be a respondent. They were from 25 to 35 years old. They could generally be categorized as

a productive age. In the early career, they were a temporary and junior lecturer of the five Muhammadiyah universities.

Procedures

The research instrument was tested before it was distributed to the respondents. Before an early survey, five senior lecturers were asked to express their opinions of it before distributed to 30 respondents. They proposed that all of the measurement variables were valid and reliable, but a few changes in diction or word uses must be conformed to the respondents' working setting.

The research members directly distributed the questionnaires to the respondents in the workplaces during working hours. Before answering the questionnaires, one research team explained the objective of the research. They spent enough time answering them and were accompanied by one research member to help the respondents' problems when they had difficulty to understand the questionnaires.

Measurement

The measurement of variables was fully adopted from organizational behavior scholar that has been widely used, with little modification by industry classification (education) where participants work in it. Respondents answered all survey items with a 7-point Likert scale. Organizational justice used measurements of four dimensions (developed by Colquitt, 2001):

Procedural Justice; that is, "The procedures (rules) in the university are applied consistently". Distributive justice; that is, "I get a salary that reflects what I have contributed to the institution". Interpersonal justice; that is, "Department and faculty leaders treat me politely". Informational justice; that is, "My leader can adjust his communication to the specific needs of each individual".

POS was measured using eight questions developed by Eisenberger et al. (1986); that is, "The University is very concerned about my welfare".

LMX was measured using seven questions developed by Graen and Scandura (1987); that is, "My supervisor understands the problem and the need for capacity is very concerned with my welfare".

OCBS and OCBO were measured by seven items developed by Williams and Anderson (1991). OCBS; that is, "I am willing to take the time to listen to problems and concerns of the supervisor". OCBO; that is, "I always maintain and protect campus property".

RESULTS

Table 1 shows the testing of the psychometric properties of scales, such as descriptive statistics, alpha coefficients, and exogenous and endogenous variable correlations before testing the model. Zero-order correlation in the expected direction and all variables have been reliable for research purposes. Reliability ranged from 0.781 to 0.966. Results of CFA indicated that all variables could be treated as conceptually different factors. Total variants that could be explained on these variables were

Table 1
Descriptive statistics, coefficient alpha, and intercorrelations of the variables

Factors	M	SD	1	2	3	4	5	6	7	8
1. LMX	5.82	0.946	**0.895**							
2. POS	5.12	1.093	0.523**	**0.897**						
3. PJ	5.05	1.079	0.619**	0.642**	**0.870**					
4. DJ	4.85	1.399	0.450**	0.617**	0.503**	**0.966**				
5. IJ	6.21	0.862	0.584**	0.342**	0.462**	0.347**	**0.951**			
6. InfJ	5.70	0.965	0.371**	0.627**	0.547**	0.561**	0.556**	**0.956**		
7. OCBS	5.78	0.937	0.448**	0.404*	0.466**	0.267**	0.402**	0.483	**0.926**	
8. OCBO	5.80	0.785	0.523**	0.390**	0.488**	0.306**	0.486**	0.541**	0.614**	**0.781**

Notes: n =150; *p < 0.05; **p <0.01; diagonal entries in bold indicate coefficient alpha; InfJ= Informational Justice

77.04%, while the analyzed variables could be grouped into seven factors (e.g., eigenvalues, which indicate a number greater than one). Rotated component analyses showed that the variables were successfully extracted into eight constructs. In conclusion, the results of the CFA, reliability analysis, and measurement model analyses indicated that the measures have acceptable psychometric properties. OJ was grouped into four different constructs. Using the Friedman test, a comparison of means tests was made on the four constructs. The results showed that the value of the chi-square test is 215.018 with the confidence level (P = 0.000). This result supported the first hypothesis that states the four dimensions of OJ are a strong factor despite being tested on non-regular workers.

Testing the 2nd to 7th hypotheses was done by a comprehensive test, in which two separate models were created for relationships between individuals and supervisors and between individuals and organizations (see Figure 1), and the two models were combined as a comparison.

PJ and DJ have a significant effect (P = 0.000) on POS (Table 2). There is a positive relationship between PJ and OCBO (P = 0.001); however, OCBO was not affected by distributive justice. Finally, it was found that POS had an insignificant relationship with OCBO. This calculation results showed that POS had not a mediating role in the relationship between PJ and DJ variables and OCBO. According to Table 2, hypotheses 2a, 4a, 4b are supported, but hypotheses 2b and 6 are not supported.

Table 3 shows that interpersonal justice (P = 0.002) and informational justice (P = 0.018) significantly correlated to LMX. Informational justice significantly related to OCBS (P = 0.05), while interpersonal justice did not significantly relate to OCBS (P = 0.437). Finally, there was not a significant relationship between LMX and OCBS. These results indicated that LMX was not a mediating factor in the association between informational and interpersonal justice and OCBS. According to Table 3, hypotheses 3b, 5a, and 5b are supported, but hypotheses 3a and 7 are not supported.

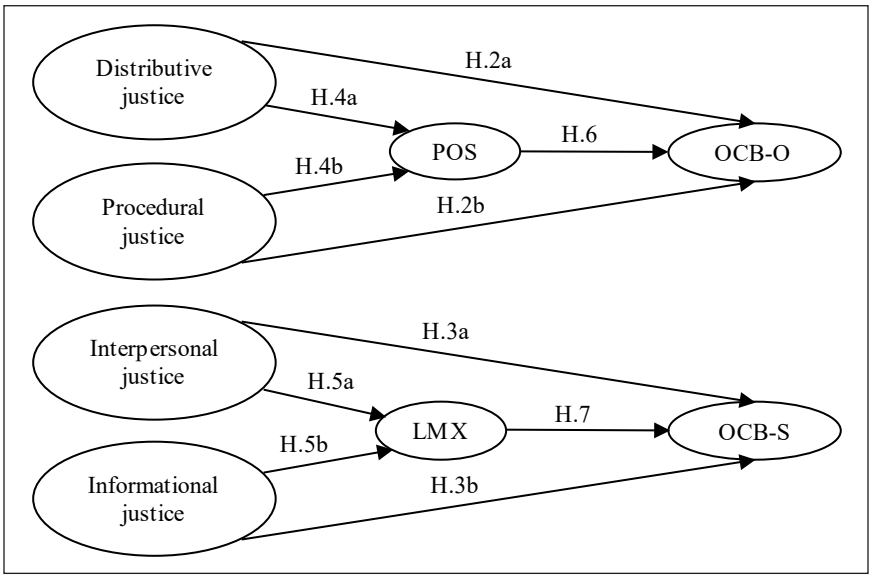


Figure 1. The conceptual framework role of POS and LMX as mediators on the influence of organizational justice on OCBs

Table 2
Results of testing model

Path	Estimate	S.E.	C.R.	P
POS ← Distributive Justice	0.177	0.042	4.174	0.000
POS ← Procedural Justice	0.290	0.061	4.730	0.000
OCBO ← Procedural Justice	0.279	0.087	3.185	0.001
OCBO ← Distributive Justice	-0.013	0.055	-0.233	0.816
OCBO ← POS	0.201	0.144	1.394	0.163

Table 3
Results of testing model 2

Path	Estimate	S.E.	C.R.	P
LMX ← Interpersonal Justice	0.313	0.103	3.057	0.002
LMX ← Informational Justice	0.263	0.111	1.360	0.018
OCBS ← LMX	0.122	0.108	1.126	0.260
OCBS ← Interpersonal Justice	0.080	0.103	0.778	0.437
OCBS ← Informational Justice	0.194	0.099	1.955	0.051

To ensure the acceptance of two models tested separately with different emphases (individual-organizational interaction and interaction between individuals), it is better to test both models into a more comprehensive model, in which it is possible to compare the acceptance criteria between the three models (Table 4).

Table 4
Comparative criteria fit three models

Criteria	Acceptance Criteria	Model 1 (POS)	Model 2 (LMX)	Combined Model
Chi-Square	Prob > 5%	0.000	0.000	0.000
GFI	> 0.9	**0.907**	**0.916**	0.807
CFI	> 0.9	**0.981**	**0.911**	**0.904**
NFI	> 0.9	**0.930**	**0,963**	0.807
TLI	>0.95	**0.975**	**0.956**	0.894
RMSEA	< 0.08	**0.049**	**0.065**	**0.07**
CMIN/DF	< 2	**0,087**	**1.627**	**0.785**

Table 4 shows the model fit criteria of the three models. It indicates that although the chi-square is in marginal reception, the first and second models are still better than the third model, which is the combination of the first and second models.

DISCUSSION

The study aimed to identify the significance of constructive differences of four types of justice (distributive, procedural, interpersonal, and interpersonal) to non-regular employees. The result of factor analysis reinforced by Friedman's average test showed that the four constructs of justice were robust and there was a significant difference between them. Thus, this study supported Colquitt's (2001) study, who successfully clarified some important research questions, including the relative importance of the relationship between dimensions of justice, different criteria of justice, and unique effects of the justice dimension on the main variables. A meta-analytic review of 183 organizational justice studies conducted by Colquitt (2001) indicated that although there was a close relationship between various dimensions of justice, they contribute to additional variances as explained in perceptions of justice. The results illustrated a complete and unique relationship between distributive, procedural, interpersonal, and informational justice and some organizational outcomes (i.e., job satisfaction, organizational commitment, authoritative evaluation, OCB, withdrawal, and performance). The results of this study strengthened the division of OJ into four dimensions, although it was applied to non-permanent workers with a relatively short working period (newcomer).

The second objective of this study was to examine the significance of the POS role in mediating the OJ (procedural and distributional) relationships directed to OCBO. The results of the first model showed that DJ and PJ are positively and significantly related to POS. These results support the results provided by El Akremi et al. (2010), Erdogan (2002), Hasan and Hussain (2015), Lavelle et al. (2007), Stinglhamber et al. (2006), and others.

Respondents noted that accepting the results of their performances would increase their support for the organization. In addition, respondents perceived that

income was important and can increase their support for the organization. Of course, when the income was following their performance, what they brought to the organization as well as a fair income was attributed to their performance.

Nevertheless, the present study has different findings with previous studies, including the weak relationship between POS and OCBO. PJ has a significant direct relationship with OCBO, but not with DJ. POS is not a variable that mediates the relationship between PJ and DJ with OCBO. However, the support of the university or study program could not increase the extra role of non-regular teaching staff in assisting the organization.

This result was very different from the previous studies, such as Chen and Jin (2014), Cheung (2013), Cropanzano and Rupp (2016), and Tekleab et al. (2005), who found POS as a full mediation in the relationship of PJ and DJ with OCBO. Similarly, previous research by Moorman et al. (1998) found that PJ was an antecedent to POS, which eventually fully mediated in its relationship with three of the four dimensions of OCB. An interesting possibility that can be considered from these findings was related to the respondents as non-regular workers within a long period of work on campus. This factor contributed with regard to their status and years of service that had not established a strong relationship between them and the campus, thus an extra role of the organization by relying on POS could not be expected.

The third objective of this study was to examine the role of LMX model in mediating the multi-dimensional relationships (interpersonal and informational) of OJ directed at individual relationships with supervisors (OCBS). Interpersonal justice ($P = 0.02$) and informational justice ($P = 0.018$) were found to be significantly associated with LMX. These results support Chen and Jin (2014), Cheung (2013), Cropanzano and Rupp (2016), and El Akremi et al. (2010). Recognition, proximity, trust, defense, and effectiveness of relationships are some important factors for establishing the quality of superior-subordinate relationships. This study proves that providing information proportionally and evenly can affect the quality of LMX. Among others, leaders pay attention to communication, an accurate and specific explanation of the prevailing procedures, and the special needs of each individual. Courteous and respectful treatment, respect for subordinates, and appropriate speech or words from the superior may also strengthen LMX.

Informational justice is also positively related to OCBS ($P = 0.051$), but interpersonal justice has no significant relationship with OCBS ($P = 0.437$). Similar to POS, beyond prediction, LMX is not significantly related to OCBS. Thus, LMX does not mediate the relationship between interpersonal and informational justice and OCBS. These results do not support studies by Lee and Kim (2015), Oren et al. (2012), Rupp et al. (2014), and Yeo et al. (2015), whose findings discovered the role of LMX mediation in the relationship

between informal and informational justice and OCBS. Nazir et al. (2011) also found that LMX partially mediated the relationship between distributive justice and OCB. The results of the present study can reinforce the above assumptions in terms of the respondents as non-regular workers coupled with the working period. In addition, we cannot expect an extra role aimed at the organization by relying on POS, as well as extra roles intended for individuals not mediated by LMX.

CONCLUSION

Based on the factor analysis output, it can be concluded that the four dimensions of justice are strong constructs for establishing organizational justice, although such construct testing was conducted on contingent workers. However, the quality of POS and LMX cannot mediate OJ and OCB relationships within two dimensions of individuals and organizations. It may be caused by the respondents that involve non-regular worker participants with a relatively short working period; therefore, a good quality social relationship has not established yet. Yet, respondents in this study were dominated by non-regular workers with under two years of service and would likely become permanent employees if they met certain requirements. Furthermore, the work environment (on campus) does not allow non-regular workers to build LMX quality and organizational support (POS).

Some limitations should be noted and examined in future research. This study used all measurements developed in the west. Although validity and reliability are acceptable, as instruments are not original, they may not fully grasp the meaning of constructs in Indonesian settings. Subsequent research can validate this scale, and if needed, modify them to adjust to the Indonesian setting. Our study was based on this single sample. We only used 150 non-permanent lecturers in five colleges. Future research needs to cross-validate with larger samples in different organizational settings so that the results could be generalized. Since the cross-sectional data bias the testing of the effect among variables, it is desirable to use a longitudinal research design.

Despite these limitations, it is suggested that in future researches, model testing needs to be developed by using respondents as a temporary employee with given working periods and involving third parties as an employment agency. Additionally, it is essential to determine a research setting that enables employees to build a good relationship with leaders and organizations. It is essential to review some possibilities of mediating or moderating variables that can improve a fit model. These variables can explain that POS and LMX in a temporary worker research setting are important to enhance employees' other extra-role behaviors in collaboration with supervisors (OCBS) and institutions (OCBO).

This study has an impact on managerial implications. The university leaders needed to pay attention to temporary and permanent lecturers. These heads and institutions needed to give some justice treatment to

them. The results of the study show that both of them have not been successful in building a good relationship with temporary lecturers. It should be built by referring to leadership and institutional perspectives for improving the temporary lecturers' performances.

The results of the study can socially be implicated by higher education and its leaders to build a good relationship with temporary lecturers and optimize their knowledge, skills, and ability to achieve its objective as expected. A university and its heads will take any loss if they do not think about justice factors among lecturers. Additionally, it will cause knowledgeable and skillful lecturers to resign from their jobs. Certainly, they want to work for a higher education that can give more equitable and better compensation among lecturers.

ACKNOWLEDGMENT

The authors acknowledge that this research was fully funded by the Director General of Higher Education of the Republic of Indonesia with the PDUPT scheme.

REFERENCES

Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology*, *88*(2), 295-305. http://doi.org/10.1037/0021-9010.88.2.295

Bhal, K. T. (2006). LMX-citizenship behavior relationship: Justice as a mediator. *Leadership & Organization Development Journal*, *27*(2), 106-117. http://doi.org/ 1 0.1108/01437730610646615

Bies, R. J., Martin, C. L., & Brockner, J. (1993). Just laid off, but still a "good citizen?". Only if the process is fair. *Employee Responsibilities and Rights Journal, 6*(3), 227-238. http://dx.doi.org/10.1007/BF01419446

Bies, R. J. (2001). Interactional (in)justice: The sacred and the profane. In *Advances in organizational justice*. Stanford, USA: Stanford University Press.

Blau, P. M. (1964). *Exchange and power in social life.* New York, USA: John Wiley.

BPS. (2016). *Persentase penduduk yang bekerja di sektor informal di Indonesia* [Percentage of the population working in the informal sector in Indonesia]. Retrieved April 27, 2017, from https://tirto.id/pekerja-freelance-milenial-indonesia-didominasi-pria-cnvL

Chen, H., & Jin, Y. (2014). The effects of organizational justice on organizational citizenship behavior in the Chinese context : The mediating effects of social exchange relationship. *Public Personal Management*, *43*(3), 301313. http://doi.org/10.1177/0091026014533897

Cheung, M. F. Y. (2013). The mediating role of perceived organizational support in the effects of interpersonal and informational justice on organizational citizenship behaviors. *Leadership & Organization Development Journal*, *34*(6), 551-572. http://doi.org/10.1108/LODJ-11-2011-0114

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, *86*(3), 386-400. http://doi.org/10.1037//0021-9010.86.3.386

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the Millenium: A meta-analytic review of

25 years of organizational justice research. *Journal of Applied Psychology*, *86*(3), 425-445. 9010.86.3.425

Colquitt, J. A., LePine, J. A., Piccolo, R. F., Zapata, C. P., & Rich, B. L. (2012). Explaining the justice-performance relationship: Trust as exchange deepener or trust as uncertainty reducer? *Journal of Applied Psychology*, *97*(1), 1-15. http://doi.org/10.1037/a0025208

Cropanzano, R., & Rupp, D. E. (2016). Organizational justice and organizational citizenship. *Oxford handbooks online*. http://doi.org/10.1093/oxfordhb/9780190219000. 013.19

Eisenberger, R. R., Hutchison, H. S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500-507.

Elance-oDesk. (2014). *Elance-oDesk releases. Elance-oDesk.* Retrieved November 25, 2015, from https://www. upwork.com/press /2014/11/25/

El Akremi, A., Vandenberghe, C., & Camerman, J. (2010). The role of justice and social exchange relationships in workplace deviance: Test of a mediated model. *Human Relations*, *63*(11), 1687-1717. http://doi.org/10.1177/0018726710364163

Erdogan, B. (2002). Antecedents and consequences of justice perceptions in performance appraisals. *Human Resource Management Review*, *12*(4), 555-578. http://doi.org/10.1016/S1053-4822(02)00070-0

George, E., Chattopadhyay, P., & Ng, C. K. (2016). The relationship between workgroup blending and perceived organizational inducements: The mediating roles of tasks and relationships. *Australian Journal of Management*, *41*(3), 538-562. http://doi. org/10.1177/0312896215595680

Graen, G., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior, 9*, 175-208.

Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, *12*(1), 9-22. http://doi.org/10.5465/AMR.1987.4306437

Hasan, M., & Hussain, M. (2015). Role of perceived external prestige and organizational justice. *Organizational Identification, 4*(3), 611-625.

Hersberger, J. A., Murray, A. L., & Rioux, K. S. (2007). Examining information exchange and virtual communities: An emergent framework. *Online Information Review*, *31*(2), 135-147. http://doi.org/10.1108/14684520710747194

Kalleberg, A. L., Reskin, B. F., & Hudson, K. (2000) Bad jobs in America: Standard and nonstandard employment relations and job quality in the United States. *American Sociological Review, 65*(1), 256-278.

Karriker, J. H., & Williams, M. L. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model. *Journal of Management*, *35*(1), 112-135. http://doi. org/10.1177/ 0149206307309265

Kim, S., & Andrew, D. P. S. (2015). Relationships between organizational justice and coaches' attitudinal outcomes in intercollegiate sports. *International Journal of Sports Science & Coaching*, *10*(2-3), 305-326. http://doi.org/10.1260/1747-9541.10.2-3.305

Lavelle, J. J., Rupp, D. E., & Brockner, J. (2007). Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The target similarity model. *Journal of Management*, *33*(6), 841-866. https://doi.org/10.1177/0149206307307635

Lee, U. H., & Kim, H. K. (2015). Antecedents of organizational citizenship behavior: The mediating role of leader-member exchange. *Journal of Digital Convergence, 13*(1), 151-162.

Mackenzie, S. B., Podsakoff, P. M., & Fetter, R. (1993). Impact of organization behavior on citizenship

evaluations of salesperson performance. *Journal of Marketing*, *57*(1), 70-80.

Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, *76*(6), 845-855. 0021-9010.76.6.845

Moorman, R. H., Blakely, G. L., & Niehoff, B. P. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, *41*(3), 351-357. http://doi.org/10.2307/256913

Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior : Sorting the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal, 6*(3), 209-225.

Nazir, M., Aslam, M., & Nawaz, M. (2011). Mediating role of LMX in distributive justice-organizational citizenship behavior relationship: Evidence from Pakistan. *European Journal of Social Sciences*, *25*(3), 59-68. Retrieved November 23, 2013, from http://ejournal.narotama.ac.id/files / EJSS_26_1_08.pdf

Nisar, Q. A., Ahmad, S., & Ahmad, U. (2014). Impact of perceived organizational support on organizational citizenship behavior: Empirical evidence from Pakistan. *International Journal of Research*, *1*(5), 231-240.

Oren, L., Tziner, A., Sharoni, G., Amor, I., & Alon, P. (2012). Relations between leader-subordinate personality similarity and job attitudes. *Journal of Managerial Psychology*, *27*(5), 479-496. http://doi. org/10.1108/ 02683941211235391

Organ, D. W., & Bateman, T. S. (1983). Job satisfaction and the good soldier: Relationship between affect and employee "citizenship." *Academy of Management Review*, *26*(4), 587-595.

Organ, D. W., & Moorman, R. H. (1993). Fairness and organizational citizenship behavior: What are the connections? *Social Justice Research*, *6*(1), 5-18. https://doi.org/10.1007/BF01048730

Oussama, S., & Johari, H. (2012). The mediating effect of organizational citizenship behavior on the relationship between perceived organizational support and turnover intention: A proposed framework. *International Review of Management and Marketing*, *6*, 345-354.

Pillai, R., Scandura, T. a., & Williams, E. (1999). Leadership and organizational justice: Similarities and differences across cultures. *Journal of International Business Studies*, *30*(4), 763-779.

Podsakoff, P. M., Mackenzie, S. B., & Bommer, W. B. (1997). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, *22*(2), 259-298.

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes*, *89*(2), 925-946.

Rupp, D. E., Shao, R., Jones, K. S., & Liao, H. (2014). The utility of a multifoci approach to the study of organizational justice: A meta-analytic investigation into the consideration of normative rules, moral accountability, bandwidth-fidelity, and social exchange. *Organizational Behavior and Human Decision Processes*, *123*(2), 159-185. http://doi. org/10.1016/j.obhdp.2013.10.011

Smith, A. C., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedence. *Journal of Applied Psychology*, *68*(4), 653-663.

Stinglhamber, F., Cremer, D. D., & Mercken, L. (2006). Perceived support as a mediator of the relationship between justice and trust. *Group & Organization Management*, *31*(4), 442-468. http://doi.org/10.1177/1059601106286782

Tekleab, A. G., Takeuchi, R., & Taylor, M. S. (2005). Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal*, *48*(1), 146-157. http://doi.org/10.5465/AMJ.2005.15993162

von Hippel, C., & Kalokerinos, E. K. (2012). When temporary employees are perceived as threatening: Antecedents and consequences. *Leadership & Organization Development Journal*, *33*(2), 200-216. http://doi.org/ 10.1108/01437731211203483

Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, *87*(3), 590-598. http://doi. org/10.1037//0021-9010.87.3.590

Wee, Y. G., Ahmad, K. Z., & Fen, Y. S. (2014). Organisational justice and its role in promoting citizenship behaviour among hotel employees in Malaysia. *Institutions and Economies*, *6*(2), 79-104.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, *17*(3), 601-617. http://doi.org/10.1177/014920639101700305

Yeo, M., Ananthram, S., Teo, S. T. T., & Pearson, C. A. (2015). Leader-member exchange and relational quality in a singapore public sector organization. *Public Management Review*, *17*(10), 1379-1402. http://doi.org/10.1080/ 14719037.2013.806573

Pertanika J. Soc. Sci. & Hum. 28 (2): 901 - 920 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Exploring Hipness and its Influence on Women Entrepreneurship

Norela Ahmad[1], Khairul Akmaliah Adham[2] and Nur Sa'adah Muhamad[3]*

[1]UKM-Graduate School of Business, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Selangor, Malaysia
[2]Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia, 71800 Nilai, Negeri Sembilan, Malaysia
[3]Faculty of Economics and Management, Universiti Kebangsaan Malaysia,
43600 UKM Bangi, Selangor, Malaysia

ABSTRACT

The booming global demand for beauty and personal care products seems to lead to a higher number of women getting involved in fashion and vanity-related businesses. An increasingly popular phenomenon that is significant to this context is 'hipness', the state of being knowledgeable about the latest trend in style and fashion. For this study, hipness is defined as one's tendency to partake a situation that seems to be popular, in trend or attractive. Although women entrepreneurship had been extensively researched in the past, the phenomenon of hipness as it relates to women entrepreneurship is yet to be explored. To fulfil this gap, this study aims to understand the role and influence of hipness in the process of venture creation among women entrepreneurs. The study first reviewed the literature on hipness and women entrepreneurship in general. It then employed the qualitative methodology and gathered data from in-depth interviews with selected women who owned a business in the related industry. In a nutshell, the study found that hipness played significant roles at every element of venture creation, namely the individual, organizational, environmental as well as the process element. This understanding contributes towards the awareness and appreciation of the significance of hipness as a construct that influences the process of venture creation among women entrepreneurs.

Keywords: Beauty, entrepreneurial process, fashion, hipness, new venture creation, women entrepreneurs, women entrepreneurship

ARTICLE INFO

Article history:
Received: 22 August 2019
Accepted: 18 December 2019
Published: 26 June 2020

E-mail addresses:
norela@gmail.com (Norela Ahmad)
ka@usim.edu.my (Khairul Akmaliah Adham)
nurs@ukm.edu.my (Nur Sa'adah Muhamad)
* Corresponding author

INTRODUCTION

'Hipness' is defined as the state of being knowledgeable about the latest trends or current developments of styles and fashions; the synonyms for 'hipness' are

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

modishness, stylishness and trendiness, while its antonym 'unfashionableness' (Merriam-Webster, 2014). Hipness seems to be the buzzword of today's business world especially in relation to fashion, trend, style, and beauty. Recent statistics show that textiles, apparel and footwear industry emerged as the 11th export earner for Malaysia, recording about RM15 billion worth of export in 2017, which increased from RM14 billion compared to the previous year (Malaysian Investment Development Authority, 2018). This data shows that the fashion industry is experiencing rapid growth in recent years. The growth of this industry has also been supported by the increase in overall consumption of beauty and personal care products in Malaysia. Similarly, the production of cosmetics and toiletries products in Malaysia was reported to continually increase in recent years (Euromonitor International, 2013; International Trade Administration USA, 2017).

The rapid growth of the fashion and beauty product or the service industry corresponds with the growth in the number of women entrepreneurs, especially within this industry. Apparently, the growth of the demand in these industries also seems to lead to a higher number of women breaking into the fashion and beauty product enterprises. This is because, most women entrepreneurs tend to get involved in business activities that reflect or highlight the attributes of femininity, which is an extension of the traditional roles of women (Norasidah, 1999). Such businesses include restaurants, retail, wholesale, service, boutique and beauty centres (Maimunah, 1996; O'Brien, 1983).

Studies on women entrepreneurship have been conducted on many issues, including education, training and policy (Carter & Marlow, 2007), career development and gender framework (Bowen & Hisrich, 1986; Brush et al., 2009; Greene, et al., 2003), as well as constraints and opportunities (Jamali, 2009). However, the hipness phenomenon, as it relates to women entrepreneurship, is still understudied. While there have been studies that have focused on the fashion or beauty care industries, the focus is mainly on the environment of women entrepreneurship (Bello, 2019) or the support mechanism (Warnecke, 2014) or the personal characteristics of women entrepreneurs (Moreno-Gavara et al., 2019), with less emphasis on the form or strategies of a new venture and the process of its creation. Hence, we establish the need for the present study by focusing on the topic of hipness as it relates to the formation and development of new ventures. The purpose of this study was to understand the role of hipness and its influence towards venture creation process among women entrepreneurs and to shed some light as to the factors influencing women's involvement in the business world, particularly in the fashion and beauty industries.

The research questions which guided this study are:

1. What is the process of venture creation among women entrepreneurs?

2. What are the roles of hipness in the process of venture creation among women entrepreneurs and how does it influence the process?
3. Are women entrepreneurs likely to become involved in entrepreneurship because of the perception of 'hipness' by their followers?
4. What are other supporting factors that contribute to the process of venture creation among women entrepreneurs beside 'hipness'?

LITERATURE REVIEW

Hipness

The root word of hipness is 'hip', which refers to the state of being familiar with or informed about the latest ideas or trends. Hipness can be discussed through many lenses such as music (Ford, 2002; Monson, 1995), fashion (Ford, 2002), or as an urban phenomenon (Wolgamott, 2004). According to Ford (2002), hipness is a matter of fashion and involves no intellectual content in itself; while in the context of music, hipness is more of an attempt to understand it as an aesthetic. It is also said that when some scholars try to define hipness or classify it into categories such as culture, fashion and others, the attempt is more about the taste of the writers than the phenomenon itself (Ford, 2002). This view is concurred by Thornton (2013) who stated that the criteria for hipness was always fetish and exclusiveness. For example, from the point of view of fashion, if one were asked to list a few items considered as hip, one might suggest '*hijab* and scarf'; while others might propose different items. The term hipness itself stems from its root word 'hip', which means to be aware, and according to Ford (2002), the master meaning of hipness is the adversarial relationship between the individual and society, such as being rebellious.

According to Monson (1995), hip is defined as "in the know"; or "not to be duped by the world", or "to react with dignity and 'coolness' when faced with an assault on or of one's being". According to Monson (1995), the concept of hipness is a perpetuated assumption, as it must be viewed through social stratification and should include more debates about moral value. Discipline, dignity, and social consciousness are among the elements that define happiness as transgression or social marginality (Monson, 1995). Hipness is also an inversion of taste, which means the confirmation of class aspiration (James, 2009). Dewan (2006) did mention about hipness while describing the phenomenon in town that attracted youngsters in applying for a job. The article stated that "employers pay for recruits to be matched with hip young professionals in a sort of corporate Big Brothers program." Hip young processionals, in that article, is defined as "mobile but not flighty, fresh but technologically savvy" generation, which also means up-to-date young professionals who are always aware and conscious with current situations.

Based on the definitions forwarded by extant studies, this study defines hipness as the tendency amongst people to partake or

participate in a situation which is deemed as current, trendy and attractive. Within the context of women entrepreneurship, hipness refers to the invention of taste and desire among women entrepreneurs for the purpose of their businesses. Therefore, it is not far-fetched to assume that hipness could play the important role as one of the push factors for women to create their own business ventures, thus explaining the surge in the number of women joining the business world. It is therefore essential to understand the concept of hipness within this context. Understanding this aspect might help millions of women entrepreneurs who are currently still active in business as well as others who aspire to become one.

Women Entrepreneurship

In 2016, it was estimated that about 163 million women across 74 economies had started or managed new business ventures, while another 111 million women across those regions ran businesses that they had launched for at least three and a half years (Global Entrepreneurship Monitor, 2017). These women entrepreneurs made up between 1.4% and 46.4% of the total adult female population in their respective economies (Mastercard, 2018). By 2019, there were about 231 million women who participated in entrepreneurship and business ownership, which is almost a 70 million increase from the number recorded in 2016 (Global Entrepreneurship Monitor, 2017, 2019). The significant involvement of women in entrepreneurship, which has been on an exponential rise, has become a phenomenon that could not be ignored by practitioners and academicians.

A research article focusing on women entrepreneurs by Schwartz (1976) is reported to be the first definitive work on women entrepreneurship (Greene et al., 2003). In subsequent years, numerous academic research papers on women entrepreneurship had been published, covering a wide array of topics including the making of women entrepreneurs (Ahl, 2002; Valencia & Lamolla, 2005), women entrepreneurship framework (Brush et al., 2009; Gartner, 1985), constraints and success factors among women entrepreneurship in different countries namely, India, Saudi Arabia as well as Asian countries including Malaysia (Alam et al., 2011; Ehigie & Umoren, 2013; Hughes, 2006; Jamali, 2009; Muhammad & Basheer, 2010), development and direction of women entrepreneurs (Bowen & Hisrich, 1986; Hughes et al., 2012) and others. Jamali (2009) found that there was a relationship of micro- and macro-level factors in accounting for women entrepreneurship experience and suggested the usefulness of an integrated framework reflecting the embeddedness of women entrepreneurship in both micro and macro environments. However, in Jamali's (2009) study, the opportunities identified by women entrepreneurs were mostly at the micro-level, including opportunity identification and strong motivation as well as opportunities related to personal characteristics of self-efficacy, resilience and autonomy.

Past research has compared both men and women in entrepreneurship in many aspects,

including the differences between women and men MBA graduate entrepreneurs, particularly in explaining family flexibility and wealth creation as career motivators (DeMartino & Barbato, 2003), and effect of both genders' human capital and networking on growth expectancies (Manolova et al., 2007). For instance, the research done by Brush (1992) and Rosa et al. (1994) found that women entrepreneurs tended to have lower achievement compared to their men counterparts. On the other hand, Du Rietz and Henrekson (2000) as well as Bardasi et al. (2007) found that entrepreneurial performances did not vary with gender.

Past research has also studied the topic of training in the context of women entrepreneurship (e.g., Carter & Marlow, 2007; Nagesh & Murthy, 2008; Petridou & Glaveli, 2008). According to Carter and Marlow (2007), training among women entrepreneurs is important to ensure the expansion of women's knowledge in managing the business as well as to have them better trained in entrepreneurship. Botha et al. (2006) suggested that training was not only essential in providing skills to women entrepreneurs but it also helped in improving their business performance indicators. In addition, training was also important to potential women entrepreneurs to start their own businesses and start-ups, as well as for established entrepreneurs to start multiple enterprises.

However, few research had focused on the root causes of establishment or factors which foster the existence of women entrepreneurs. According to Ahl (2002), one-third of the women entrepreneurship' studies in Brush's (1992) review did not base their studies on any theory at all. Most used only the empirical results of past studies on women's entrepreneurship as points of departure. In particular, about 45% of the studies could be characterized as being non-theoretical, while a small percentage of the studies used theories from psychology, sociology or management, or a combination of disciplines. Fast forward to 2016, the latest review of the literature on women entrepreneurship suggests that the situation with lack of theoretical development remained a major issue and most research centred on the positivist paradigm and hence establishes the need for more qualitative research (Yadav & Unni, 2016).

Venture Creation Process and Women Entrepreneurship

In explaining the framework of the venture creation process, Gartner (1985) stated that venture creation was a process of planning, organizing, and establishing new organizations. Gartner also concluded that there were four dimensions identified in the venture creation process, namely individual, environment, organization and process. All these variables are stated as factors influencing the venture creation process, based on past research. According to Shook et al. (2003), venture creation is considered as a an important aspect of entrepreneurship. Issues in venture creation involves the interaction between the environment and entrepreneurs. Carland and Carland (2000)

on the other hand stated that venture creation was based on the act of human volition other than supported by other elements such as cognition and entrepreneurial drive, knowledge, creativity and experience. Human volition consists of a series of human's willful decision of whether to act or not, what action to perform and when to perform it (Haggard, 2008).

How does an individual play a role in the venture creation process? First, it starts with the individual intention and is followed by searching for an opportunity (Shook et al., 2003). Once an opportunity is discovered, a choice must be made whether or not to develop the opportunity (Shane & Venkataraman, 2000). Exploiting the opportunity involves two elements: first, using hierarchical mechanism such as venture creation; and second, making profits from the market (Shane & Venkataraman, 2000; Williamson, 1985). Once the decision to pursue a new venture is made, the entrepreneur must begin with the accumulation of proper resources. An entrepreneur typically does not initially control all resources including business location, facilities, human resources, and supplies. Instead, most of these resources must originate from other people and institutions (Venkataraman, 1997).

According to Gartner (1985), there are two different views of the environment which have been developed. The first view is environmental determinism which observes the environment as an external set of conditions to which the organization must adapt. The other view is strategic choice through which people see the environment as a "reality" created by the organization itself through selectivity based on their own selection criteria. Among the environmental variables influencing new venture creation are living conditions, presence of experienced entrepreneurs, governmental influence and other variables.

Furthermore, according to Gartner (1985), many past studies of new venture creation lack consideration for the characteristics of entrepreneurs and the types of organizations on which they focused. Besides, many past entrepreneurship studies ignore the type of firms as a factor or there is a lack of research that makes the comparison of different type of firms in the process of new venture creation. Overall, it is also argued that the venture creation process is influenced by the characteristics of the organization itself.

There are considerable number of literature on venture creation theory with a focus on entrepreneurship perspectives, such as venture creation and enterprising individual (Shook, 2003) and networks and venture creation process (De Carolis et al., 2009). However, none of them discusses how hipness among women entrepreneurs may influence the process of new venture creation. Of interest, this study seeks to understand the dimensions of hipness in relation to the process of venture creation among women entrepreneurs, as well other possible factors which may contribute to the process of venture creation among women entrepreneurs.

CONCEPTUAL FRAMEWORK

The study utilized Gartner (1985)'s new venture creation framework and the concept of hipness as the underpinning perspectives. Figure 1 presents the study's framework which describes the conceptualization of hipness as it relates to women entrepreneurship and the process of venture creation. Based on Gartner (1985), a new venture creation process consists of four dimensions. The first dimension is *individual*, defined as the person involved in creating the new venture, which, in this study, is the women entrepreneur. The second dimension is *the organization*, which indicates the kind of organization that is being launched by the women entrepreneurs. In this study, the organization refers to the hipness-based company in which the woman entrepreneur started. The third dimension is the *environment*, which in this study refers to the environment in which the venture operates and thrives. Lastly *process* in this study refers to activities undertaken by the woman entrepreneur to launch and develop the venture.

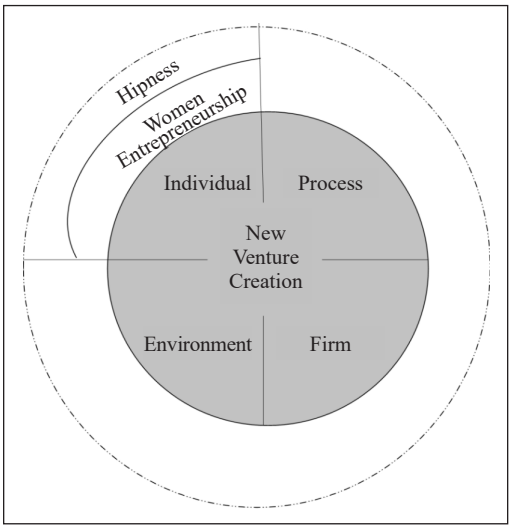


Figure 1. Conceptual framework of the study (adapted from Gartner, 1985)

Women entrepreneurs are central to the purpose of the study, which is to understand the role of hipness and its influence on the process of venture creation among women entrepreneurs. Due to that, hipness (dashed line in Figure 1) is assumed to influence all four elements in the process of venture creation. Hipness can influence the women entrepreneurs in aspects such as personal characteristics and business acumen. Hipness can also predict or influence the process elements such as during accumulation of resources, production and others. It can also influence the dimensions of the environment including rivalry among competitors or barrier to entry.

RESEARCH METHODOLOGY

In this study, we employed a qualitative methodology to address the main objective of this research, which is to understand the role of the hipness factor during the establishment of a business venture and its influence in the process of new venture among women entrepreneurs. As this phenomenon is not yet fully understood, the qualitative methodology is considered as the most appropriate approach (Merriam, 2009). The data for this study were collected through in-depth interviews with women entrepreneurs whom we selected based on a number of criteria. Among others, our participants were the owner(s) or founder(s) of ongoing businesses related to beauty and fashion; the businesses were running

for a period of five years and above, and all of them were full-time entrepreneurs. This purposive approach was useful as our study needed the insights of the expert informants who were directly involved in the phenomenon of interest. We asked the participants to share their experiences of setting up and developing their business ventures.

In total, twelve women entrepreneurs were interviewed using semi-structured interview protocol with flexible and exploratory questions designed to serve the aim of gaining deep understanding (Merriam, 2009). The interview was deemed the best data collection method as we analyzed the in-depth insights that were gathered directly from the entrepreneurs. The interview protocol was developed based on the study's conceptual framework. In term of length of involvement in the business, the study's participants were grouped into three categories: business running for a period of five to six years (four participants), seven to nine years (five participants) and involvement in the business for more than ten years (three participants).

All interviews were digitally recorded, transcribed and later analyzed using the constant comparative method (Merriam, 2009). This method, first involved coding a unit of data from each interview transcript which was relevant to answering the research questions; second, each of the units of data was then combined into categories. Third, the emergent categories from each interview transcript were then cross-compared with each other in the search for a pattern or recurring themes. These recurring themes constitute the main findings of the study.

FINDINGS

Four main findings that emerged from this study, based on the study's research questions, are synthesized as follows:

1. All of the women entrepreneurs' businesses and companies developed in phases over the course of time.
2. In women entrepreneurship, hipness functions as the push factor to launch the venture creation process and in turn influences the whole process.
3. Women entrepreneurs are likely to become involved in entrepreneurship because of the perception of their 'hipness' by their current and prospective customers or followers.
4. Other supporting factors that contribute to the process of venture creation among women entrepreneurship beside 'hipness', include personal characteristics of women entrepreneurs and extensiveness of their social networking.

Venture Creation Process among Women Entrepreneurs

The study found that all women entrepreneurs went through similar phases of venture creation. The process of venture creation typically started with the individual's

intention and was followed by opportunity searching. Once the decision to pursue a new venture was made, the women entrepreneurs began to accumulate proper resources. They then observed the environment and finally took the necessary actions to launch the venture. Lin, who had been involved in business for more than 10 years mentioned:

> *I decided to become an entrepreneur when my kids were about 4 or 5 years old, as at that time I found the opportunity when one of my friends offered me to take over her business as she had some problems. After discussing with my husband, I grabbed the opportunity and started looking for resources.*

Another participant, Hidayati, claimed that the intention to become an entrepreneur had always been on the back of her mind. Prior to starting her business, Hidayati used to write personal blogs and had a significant number of loyal readers or followers. She recognized the opportunity when her blog's followers would consult her about her personal appearances, choice of outfits and shoes. She then quickly worked on the resources to start her own fashion venture. Similarly, Nora explained that the intention and passion to become an entrepreneur had been around since a young age. But the idea to get involved in fashion and clothing business emerged when she noticed there were many clothing shops near her workplace and that they were doing quite well.

Elya was interested to become an entrepreneur after she got married as she resolved that being self-employed would allow her to spend more time with her family. While for Anna, she decided to quit her job and then ventured into business because of her own personal reason. In her own words, Anna said:

> *I had a miscarriage. I then decided to start a business since I found it to be a stress reliever; whenever I put on some makeup, either on myself or on others, I feel very happy*.

Role of Hipness as an Individual Characteristic and as Perceived by Others in the Venture Creation Process among Women Entrepreneurs

Overall, hipness functions as one of the push factors for women entrepreneurs, as hipness triggers their intentions to start the ventures and to search for business opportunities. One of the participants, Nur Aliaa mentioned that during her college days, she and her friends loved to buy new bags. In order to support this expensive hobby, she later decided to make her own bags and started to sell them. Similarly, Hidayati began her entrepreneurship journey after many of her friends and blog followers became interested in her personal taste of clothing. Thus, the entrepreneurs perceived that it was their own hipness that served as one of the push factors for them to see the opportunity to kickstart their own businesses.

Our study also found that women entrepreneurs were likely to become involved in entrepreneurship because of

the perception of hipness by members of their social circle. The following verbatim passages illustrate this finding:

> *The idea began when I was a student. I loved to buy bags from Topshop as they had a lot of fashionable bags. At that time, the tote bag was a hit, my friends were crazy about them as well. But the bags were so expensive. So, I thought maybe I could make my own as I have a sewing machine and I know where to source the material. So, I ended up selling the bags to others too.* – Nur Aliaa.

> *About ten years ago, I was actively blogging. At that time, social media such as Facebook and Instagram were not yet popular. I used to write everything on my blog. I also love to share the outfit of the day; what I was wearing every day. There was quite a number of followers of my blog and they always asked me where I bought my shawls, my shoes and so on. They seemed to like my taste. That was when I started to sell them.* – Hidayati.

> *I started to sell hijab as my first product because many friends and relatives always ask about how I wear my hijab. I used to share the tutorials on my personal social media and received a lot of good feedback.* – Elya.

For Lin and Anna, the decision to start their own ventures were due to their personal interest and passion. Nonetheless, the element of hipness still played a role in their businesses as it appeared later and had in fact helped to grow their businesses. In Lin's case, who had ventured into a cosmetic business more than ten years ago, although hipness was not a trigger for the start of her venture, beauty and cosmetic products, which have become hip in recent years, had boosted her sales and develop her business. According to Anna, due to the booming interest of people in cosmetic products, she, as a beautician, had been receiving a lot of invitation to run beauty and make-up workshops.

Other Supporting Factors Contributing to the Venture Creation Process among Women Entrepreneurs

Other than hipness, the supporting factors that contribute to the process of venture creation among women entrepreneurs are entrepreneur's personal business acumen and social networking. According to Lin:

> *For me, as you decide to become an entrepreneur, the key to success all starts with yourself. You need to have the correct attitude of an entrepreneur such as you need to be patient. Especially, when you deal with fussy customers. Remember that customer is always right. Then you need to be friendly. You have to smile with the customers.*

Elya believed that successful women entrepreneurs need to be hardworking:

> *We need to be hardworking. I work 24 hours a day and 7 days a week. There is no emergency leave and no MC (medical certificate for sick leave). Especially as a woman, we also need to care for the family as well.*

Hidayati summarized the characteristics needed by an entrepreneur:

> *In business, you have to be strong and knowledgeable. But don't get over-confident. You have to know and study who are your target market, what are the things that need to be done, and what are the effects and consequences of your actions.*

Social networking also seems to play a significant role in the process of venture creation among women entrepreneurs. Social networking includes the interaction with current and future customers, competitors and other stakeholders including suppliers. According to Nur Aliaa, sometimes she would entertain her customers' requests to meet up as good relationships should be maintained among customers, suppliers and competitors. Another participant, Hidayati explained:

> *Social networking is very important. In fact, I maintain good networking even with my competitors. I connect with them when we and the competitors meet with each other at fashion events. These occasions would allow us entrepreneurs to share our knowledge and experience. Newcomers like me should get advice from others on how to deal with business issues.*

DISCUSSION

Based on these findings, it is clear that all women entrepreneurs in this study underwent similar phases of venture creation, despite operating in a different environment and leading a different kind of businesses. The process of venture creation is a process of planning, organizing and establishing a new organization which consists of four inter-linked elements including individual, organization, environment and process (Gartner, 1985). Based on the study's findings, women entrepreneurs typically started their venture by first harnessing or capitalizing on their own individual elements, the women entrepreneurs themselves. They started by having the intention to become an entrepreneur; and this supports the theory by Carland and Carland (2000) that a venture creation is based on human volition. Human volition begins with the cognition and entrepreneurial drives, coupled with knowledge, creativity and experience. Then, the women entrepreneurs recognized the opportunities around them and thoroughly studied and examined the opportunities before working on resources such as financial, material and other resources.

Later, the women entrepreneurs examined the second environmental element in various ways including observing their competitors, identifying how economic elements may affect their business and recognizing how their businesses may benefit others. Next is the element of the venture creation process which refers to the actions taken by women entrepreneurs to start their businesses. The process includes locating business opportunity, marketing products and services, producing the products, responding to society and others. Hence, the study's findings showed similarities in the phases and the elements of the venture creation process among women entrepreneurs, even when they were involved in different businesses.

Regarding the role of hipness in the process of venture creation and how it influences the whole process of venture creation, it is identified that hipness functions as the push factor to begin the process of venture creation. Experiences from four participants showed that hipness helped them proceed with their intention to start their business. The definition of hipness in this phenomenon is identified when the women entrepreneurs noticed that their products were in trend at the time as many people were aware of their products. In this sense, hipness also encourages women entrepreneurs to start their businesses as confidence is boosted. Hipness helps these women entrepreneurs find relief in the sense that they have chosen the right decision to become entrepreneurs.

Furthermore, hipness influences the overall process in such a way that hipness is first identified at the beginning of the venture creation process, which is the individual element. It later flows to other three elements namely environment, organization and process. In this regard, hipness is assumed to influence the entire process by affecting all elements in the venture creation process. In all, hipness is clearly identified in certain types of businesses, among others within the beauty and fashion industry.

The findings also indicate that women entrepreneurs are likely to become involved in entrepreneurship because of the perception of hipness by their followers. This finding can be related to the roles of hipness as mentioned above. The women entrepreneurs view hipness as one of the reasons for their choice of becoming entrepreneurs. Other than that, hipness is also assumed as a positive sign for women entrepreneurs when either the business or product chosen are well accepted by the people. At the same time, hipness may reduce the risk of business failure. With regard to risk, women are more likely to be risk-averse, despite the tendency to take risks is observed as an important predictor of entrepreneurial success (Earle & Sakova, 2000; Evans & Leighton, 1989; Schumpeter, 1939). Other than that, some studies also show that women tend to demonstrate higher propensity of risk aversion than men (Barber & Odean, 2001; Dohmen et al., 2005; Jianakoplos & Bernasek, 1998). Therefore, the perception of hipness by followers strongly influences women to become involved in entrepreneurship.

Other supporting factors that contribute to the venture creation process among women entrepreneurs include personal characteristics of women entrepreneurs and their social networking. Literature suggests that entrepreneurial success factors are influenced by a variety of reasons, be they external or internal factors of the individual (Nazar, 2001). However, the most important factor for women entrepreneurs involves work experience and long-time involvement in the work itself (Schiller & Crewson, 1997). According to Itani et al. (2011), entrepreneurship should be supported by the entrepreneurs' efforts to strengthen their background and identity, as well as management skills and leadership. Aspects related to individual women entrepreneurs have often focused on psychological and demographic aspects. Among the personal characteristics identified in this study are patience, friendliness, hardworking, and knowledgeableness or business acumen. These personal characteristics contribute to the process of venture creation among women entrepreneurs by influencing the individual element.

This study also found social networking as one of the elements that contribute to the venture creation process among women entrepreneurs. Social networking can benefit the process of venture creation by sharing of information through establishing good relationships with customers, employees, suppliers and competitors (De Carolis et al., 2009). In this sense, new social relationships are formed through their personal characteristics. Loyal customers are business assets as customers are always prioritized by the women entrepreneurs. Particularly, ease of communication with customers via the cyberspace, allows the entrepreneurs to communicate well with customers and enabled them to build solid relationships with the customer base and hence create a group of loyal customers that will help ensure that their business continues to flourish.

Other than loyal customers, a good relationship also needs to be formed among suppliers and competitors. A good relationship with suppliers is created by always paying on time, providing adequate lead time to suppliers on orders as well as avoiding rush orders whenever possible. Suppliers are essential to the business's good health and growth by affecting the business in many ways. Similarly, maintaining a good relationship with competitors is also critical as sometimes there are some competitors who are willing to share their experience and knowledge. These experience and knowledge may increase motivation level as women entrepreneurs always need good support in order to maintain their motivation and to remain as better business owners in the industry by becoming proactive, alert, creative, and above all, focused.

Over and above that, social networking may contribute to the process of venture creation among women entrepreneurship through the individual element up to the process element. This study posits that social networking begins from the individual element through positive personal characteristics, which are later affecting the

environment by improving the accessibility of suppliers and customers. Overall, personal characteristics and social networking are recognized as the other supporting factors contributing to the venture creation process. Currently, via the cyberspace, it is easier for people to connect and form a network as well as share their experiences with the product and service, compared to the previous times. This kind of networked environment makes it easy for women entrepreneurs to connect and form a network within the scope of each business domain as well as to facilitate their mobility.

Figure 2 and 3 illustrate the emergent conceptualization of hipness, venture creation process, perception of hipness by followers, social networking and personal characteristics as representations of the study's findings. As shown in Figure 2, women entrepreneurs go through a similar process of venture creation, which consists of four elements namely individual, organization, environment and process. Hipness functions as a push factor in the process, while at the same time, women entrepreneurs become involved in entrepreneurship due to the perception of hipness by their followers. Other supporting factors contributing to the venture creation process are social networking and personal characteristics (dashed line in Figure 2 and 3). Overall, as shown in Figure 2, it can be concluded that hipness comes first and influences the women entrepreneurs to be involved in entrepreneurship.

Figure 3 illustrates how hipness plays a role later in the venture creation process, i.e., after the businesses had been set up as evidenced by two cases in this study. Hipness was not the main reason for the two entrepreneurs to embark on their entrepreneurial journeys, but it later played a role in further developing and growing their enterprises. In particular, both entrepreneurs had been involved in the cosmetic business for many years but only later when the beauty and cosmetic industry became hip and boomed, hipness had been noted to bring in more followers and helped their businesses to prosper.

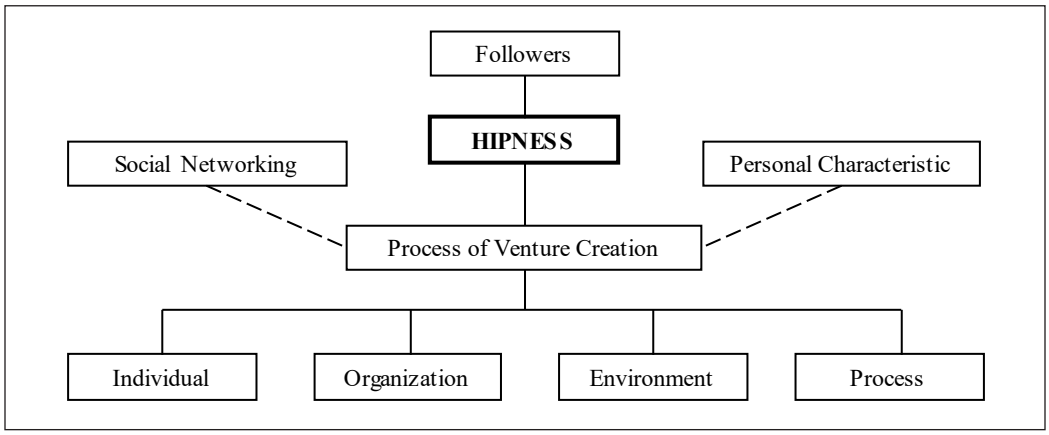


Figure 2. Role of hipness as a push factor for the venture creation process

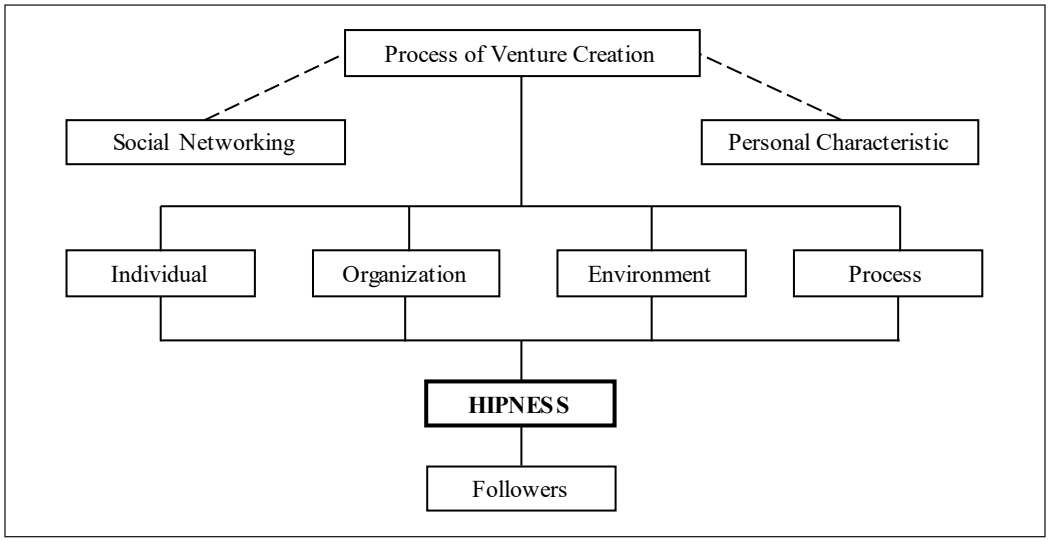


Figure 3. Role of hipness at the later stage of the venture creation process

CONCLUSIONS AND IMPLICATIONS OF THE STUDY

The main purpose of this study is to understand the role of hipness and its influence on venture creation process among women entrepreneurs. On the whole, this study concludes that hipness plays a significant role in the process of venture creation among women entrepreneurs as one of the push factors for them to launch their ventures. Hipness can also influence the venture creation process among women entrepreneurs at a later stage. Overall, hipness influences the venture creation process at every element of venture creation, namely individual element, (particularly the personal characteristics of women entrepreneurs), organizational element, environmental element as well as process element.

Based on the study's findings, women entrepreneurs are likely to become involved in entrepreneurship due to perception of hipness by their followers, which is a part of the environmental dimension. This perception includes, first, the hipness of things, i.e., that followers perceive something to be trendy and up-to-date, and second, on the hipness element that exists in the entrepreneur herself, or in other words, when the followers think that the entrepreneurs whom they look up to represent the epitome of hipness. Similarly, women entrepreneurs are likely to get involved in the business because they believe that the products and services they offer are being received favorably by their social circles or followers, or in other words, being regarded as hip and trendy. This perception of the woman entrepreneur forms a part of the individual dimension.

This study also highlights other supporting factors that contribute to the process of venture creation among women entrepreneurs, namely the personal characteristics of the entrepreneurs and the

extensiveness of their social networking. Among the personal characteristics include patience, friendliness, hardworking, and knowledgeableness. These personal characteristics, in turn, influence the extent of the social networking between women entrepreneurs and their customers, suppliers and competitors. These two factors represent a combination of the individual dimension and environmental dimension.

This study discusses the role of hipness in women entrepreneurship from the dimensions of the venture creation process. In this way, theoretically, this study extends the conversation of women entrepreneurship in relation to hipness which has not been discussed previously. This study also introduces hipness as a new construct related to the venture creation process by women entrepreneurs. All in all, the construct of hipness that plays a role in the venture creation process among women entrepreneurs exists in all four elements. For individual element, for example, hipness exists in the personal characteristics of the women entrepreneurs themselves, which later leads to an increase in their social networking. Hipness also affects the organizational element as it shapes the character of the organization and its strategy (differentiation, or cost leadership or focus). In addition, hipness influences the environmental element by becoming the reason why women entrepreneurs are involved in the business. Other than that, the perception of hipness among followers of the women entrepreneurs and hipness in the process element plays a significant role as a push factor for women entrepreneurs to start their business, as well at the later stage, in their venture creation process.

Practically, the conceptualization of hipness derived from this study may benefit current and future entrepreneurs in maximizing the role of hipness in their business endeavour. The findings can also be used by policymakers to formulate better policies that foster the growth of women entrepreneurship. Future research may want to examine the phenomenon of hipness holistically. We can now observe that hipness helps to promote modest couture, locally produced cosmetic and health supplements, ingredients and products in a booming, sunrise industry. At the extreme, however, such a trend may also indirectly promote narcissistic behaviour and wastage in society, which is against the teachings of Islam and other religions. Thus, future research could focus on a more comprehensive aspect of hipness in new venture development as it intersects moral and societal development.

ACKNOWLEDGEMENT

The authors gratefully acknowledge the invaluable cooperation from all participants of the study, and the financial support of USIM's Matching Grant USIM/MG/MARA/F EM/055012/70518 and UKM's Research Grant EP-2018-001.

REFERENCES

Ahl, H. J. (2002). *The making of the female entrepreneur: A discourse analysis of research texts on women's entrepreneurship*. Jönköping,

Sweden: Jönköping International Business School.

Alam, S. S., Jani, M. F. M., & Omar, N. A. (2011). An empirical study of success factors of women entrepreneurs in southern region in Malaysia. *International Journal of Economics and Finance, 3*(2), 166-175.

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quaterly Journal of Economics, 116*(1), 261-292.

Bardasi, E., Blackden, C. M., & Guzman, J. C. (2007). Gender, entrepreneurship and competitiveness in Africa. In *Africa Competitiveness Report* (pp. 69-85). Geneva, Switzerland: World Bank and African Development Bank.

Bello, H. S. (2019). Female entrepreneurship in the African fashion industry: A review of its determinants and characteristics. In C. Moreno-Gavara, A. Jiménez-Zarco (Eds.), *Sustainable fashion*: *Empowering African women entrepreneurs in the fashion industry* (pp. 99-114). Cham, Switzerland: Palgrave Macmillan.

Botha, M., Nieman, G. H., & Van Vuuren, J. J. (2006). Evaluating the women entrepreneurship training programme: A South African study. *International Indigenous Journal of Entrepreneurship Advancement, Strategy and Education*, 1-16.

Bowen, D. D., & Hisrich, R. D. (1986). The female entrepreneur: A career development perspective. *Academy of Management Review, 11*(2), 393-407.

Brush, C. G. (1992). Research on women business owners: Past trends: A new perspective and future directions. *Entrepreneurship, Theory & Practice, 16*(Summer), 5-30.

Brush, C. G., de Bruin, A., & Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship, 1*(1), 8-24.

Carland, J. C., & Carland, J. W. (2000). New venture creation model. *Journal of Business and Entrepreneurship, 12*(3), 29-48.

Carter, S., & Marlow, S. (2007). Female entrepreneurship: Theoretical perspectives and empirical evidence. In N. Carter, C. Henry, B. Ó. Cinnéide, & K. Johnston (Eds.), *Female entrepreneurship: Implications for education, training and policy* (pp. 11-37). London, England: Routledge.

De Carolis, D. M., Litzky, B. E., & Eddleston, K. A. (2009). Why networks enhance the progress of new venture creation: The influence of social capital and cognition. *Entrepreneurship Theory and Practice, 33*(2), 527-545.

DeMartino, R., & Barbato, R. (2003). Differences between women and men MBA entrepreneurs: Exploring family flexibility and wealth creation as career motivators. *Journal of Business Venturing, 18*(6), 815-832.

Dewan, S. (2006, November 25). Cities compete in hipness battle to attract young. *The New York Times*. Retrieved June 16, 2019, from https://www.nytimes.com/2006/11/25/us/25young.html

Dohmen, T, Falk, A., Huffman, D., Sunde, U., Schipp, J., & Wagner, G. G. (2005). *Individual risk attitudes: New Evidence from a Large, Representative, Experimentally-Validated Survey* (IZA Discussion Paper No. 1730). Retrieved June 16, 2019, from http://ftp.iza.org/dp1730.pdf

Du Rietz, A., & Henrekson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics, 14*(1), 1-10.

Earle, J. S., & Sakova, Z. (2000). Business start-ups or disguised unemployment? Evidence on the character of self-employment from transition countries. *Labour Economics, 7*, 575-601.

Ehigie, B. O., & Umoren, U. E. (2013). Psychological factors influencing perceived entrepreneurial success among Nigerian women in small-scale businesses. *Journal of International Women's Studies, 5*(1), 78-95.

Euromonitor International. (2013). *Beauty and personal care in Malaysia report.* Retrieved June 16, 2019, from http://www.euromonitor.com/beauty-and-personal-care-in-malaysia/report

Evans, D. S., & Leighton, L. S. (1989). Why do smaller firms pay less? *Journal of Human Resources, 24*(2), 299-318.

Ford, P. (2002). Somewhere/nowhere: Hipness as an aesthetic. *The Musical Quarterly, 86*(1), 49-81. Retrieved June 16, 2019, from https://doi.org/10.1093/musqtl/gdg002

Gartner, W. B. (1985). A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review, 10*(4), 696-706.

Global Entrepreneurship Monitor. (2017). *GEM 2016/2017 women's entrepreneurship report.* London, England: Global Entrepreneurship Research Association.

Global Entrepreneurship Monitor. (2019). *GEM 2018/2019 women's entrepreneurship report.* London, England: Global Entrepreneurship Research Association.

Greene, P. G., Hart, M. M., Gatewood, E. J., Brush, C. G., & Carter, N. M. (2003). Women entrepreneurs: Moving front and center: An overview of research and theory. *Coleman White Paper Series, 3*, 1-47.

Haggard, P. (2008). Human volition: Towards a neuroscience of will. *Nature Reviews Neuroscience, 9*(12), 934-946.

Hughes, K. D. (2006). Exploring motivation and success among Canadian women entrepreneurs. *Journal of Small Business & Entrepreneurship, 19*(2), 107-120.

Hughes, K. D., Jennings, J. E., Brush, C., Carter, S., & Welter, F. (2012). Extending women's entrepreneurship research in new directions. *Entrepreneurship Theory and Practice, 36*(3), 429-442.

International Trade Administration USA. (2017). *Asia personal care & cosmetics market guide 2016.* Retrieved June 16, 2019, from https://www.trade.gov/industry/materials/asiacosmeticsmarketguide.pdf

Itani, H., Sidani, Y. M., & Baalbaki, I. (2011). United Arab Emirates female entrepreneurs: Motivations and frustrations. *Equality, Diversity and Inclusion: An International Journal*, *30*(5), 409-424.

Jamali, D. (2009). Constraints and opportunities facing women entrepreneurs in developing countries a relational perspective. *Gender in Management: An International Journal, 24*(4), 232-251.

James, R. (2009). In but not of, of but not in: On taste, hipness, and white embodiment. *Contemporary Aesthetics*, *2,* 1-18. Retrieved June 16, 2019, from https://www.contempaesthetics.org/newvolume/pages/article.php?articleID=549

Jianakoplos, N. A., & Bernasek, A. (1998). Are women more risk averse. *Economic Inquiry, 36*(4), 620-630.

Nazar, M. M. (2001). Usahawan Melayu dan bukan Melayu adakah sifat mereka berbeza? [Malay and non-Malay entrepreneurs, are they different in attributes?]. *Jurnal Pembangunan Sosial, 2*, 15-37.

Maimunah, I. (1996). Gender needs analysis of women entrepreneurs. *Pertanika Journal of Social Sciences and Humanities, 4*(1), 1-9.

Malaysian Investment Development Authority. (2018). *Textiles and textile products.* Retrieved June 16, 2019, from http://www.mida.gov.my/home/textiles-and-textile-products/posts/

Manolova, T. S., Carter, N. M., Manev, I. M., & Gyoshev, B. S. (2007). The differential effect of men and women entrepreneurs' human capital and networking on growth expectancies in Bulgaria. *Entrepreneurship Theory and Practice, 31*(3), 407-426.

Mastercard. (2018). *Mastercard index of women entrepreneurs.* Retrieved November 10, 2019, from https://newsroom.mastercard.com/wp-content/uploads/2018/03/MIWE_2018_Final_Report.pdf

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, USA: John Wiley & Sons.

Merriam-Webster. (2014). *Hip.* Retrieved June 16, 2019, from http://www.merriam-webster.com/dictionary/hipness.

Monson, I. (1995). The problem with white hipness: Race, gender and cultural conceptions in jazz historical discourse. *Journal of the American Musicological Society, 48*(3), 396-422.

Moreno-Gavara, C., Jiménez-Zarco, A. I., Alabi, S. A. O. (2019). Challenges and opportunities for women entrepreneurs. In C. Moreno-Gavara, A. Jiménez-Zarco (Eds.), *Sustainable fashion*: *Empowering African women entrepreneurs in the fashion industry* (pp. 115-146). Cham, Switzerland: Palgrave Macmillan.

Muhammad, A. S., & Basheer. M. A. G. (2010). Doing business with impudence: A focus on women entrepreneurship in Saudi Arabia. *African Journal of Business Management, 4*(1), 1-11.

Nagesh, P., & Murthy, M. N. (2008). The effectiveness of women entrepreneurship training program: A case study. *The ICFAI University Journals of Entrepreneurship Development, 3*, 24-40.

Norasidah, A. (1999). *Factors affecting business performance of Malay women entrepreneurs in the Klang Valley* (Master's thesis), Universiti Sains Malaysia, Pulau Pinang, Malaysia.

O'Brien, L. (1983). Four paces behind: Women's work in Peninsular Malaysia. In L. Manderson (Ed.), *Women's work and women's roles* (monograph). Canberra, Australia: Development Studies Centre Australian National University.

Petridou, E., & Glaveli, N. (2008). Rural women entrepreneurship within co-operatives: Training support. *Gender in Management: An International Journal, 23*(4), 262-277.

Rosa, P., Hamilton, D., Carter, S., & Burns, H. (1994). The impact of gender on small business management: Preliminary findings of a British study. *International Small Business Journal, 12*(3), 25-32.

Schiller, B. R., & Crewson, P. E. (1997). Entrepreneurial origins: A longitudinal inquiry. *Economic Inquiry, 35*(3), 523-531.

Schumpeter, J. A. (1939). *Business cycle: A theoretical, historical and statistical analysis of the capitalist process*. New York, USA: McGraw Hill.

Schwartz, E. B. (1976). Entrepreneurship - New female frontier. *Journal of Contemporary Business, 5*(1), 47-76.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 25*(1), 217-226.

Shook, C. L., Priem, R. L., & McGee, J. E. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of Management, 29*(3), 379-399.

Thornton, S. (2013). *Club cultures: Music, media and subcultural capital.* New York, USA: John Wiley & Sons.

Valencia, M., & Lamolla, L. (2005). *The female-entrepreneurship field: 1990-2004.* Paper presented at the IV Iberoamerican Academy of Management, Lisboa, Portugal.

Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in*

Entrepreneurship, Firm Emergence and Growth, 3(1), 119-138.

Warnecke, T. (2014). Are we fostering opportunity entrepreneurship for women? Exploring policies and programmes in China and India. *International Journal of Entrepreneurship and Innovation Management, 18*(2-3), 154-181.

Williamson, O. E. (1985). *The economic institutions of capitalism*. New York, USA: Simon and Schuster.

Wolgamott, L. K. (2004, November 1). What is hip? *Lincoln Journal Star.* Retrieved April 21, 2020, from https://journalstar.com/lifestyles/what-is-hip/article_c1426b34-421b-54af-9c92-4d8169076ff0.amp.html

Yadav, V., & Unni, J. (2016). Women entrepreneurship: Research review and future directions. *Journal of Global Entrepreneurship Research, 6*, 12. doi: 10.1186/s40497-016-0055-x

Pertanika J. Soc. Sci. & Hum. 28 (2): 921 - 937 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Implementation of NAMS Cycle Model – A Continuous Improvement Model from an Islamic Perspective

Afroza Bulbul Afrin[1], Rafikul Islam[2]* and Md. Yousuf Ali[3]

[1]Department of Business Administration, Faculty of Business Studies, International Islamic University Chittagong, Kumira-4318, Chittagong, Bangladesh
[2]Department of Business Administration, Kulliyyah of Economics and Management Sciences, International Islamic University Malaysia, 53100 Kuala Lumpur, Malaysia
[3]Department of Fundamental and Inter-Disciplinary Studies, Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia, 53100 Kuala Lumpur, Malaysia

ABSTRACT

The main objective of this research was to develop an implementation process of the newly developed continuous improvement (CI) model – NAMS Cycle. Erecting on the affirmative postmodernism philosophy, fundamental epistemological foundations of this research are the Qur'ān and the Sunnah of the Prophet (peace be upon him) and the contributions of scholars in Islam. A qualitative methodology was adopted to conduct this research. Data were collected through focus group discussions (FGD) and semi-structured in-depth interviews and were analysed manually. Based on the data, the researchers had finalised a five-step implementation process of the NAMS cycle started with decision making and followed by education and training, implementation, evaluation, and corrective measures. Organisations should test its practicability by implementing the model.

Keywords: Continuous improvement, implementation process, Islamic values of management, NAMS cycle, TQM

ARTICLE INFO

Article history:
Received: 31 July 2019
Accepted: 5 February 2020
Published: 26 June 2020

E-mail addresses:
afrozabulbul132@gmail.com (Afroza Bulbul Afrin)
rislam@iium.edu.my (Rafikul Islam)
mdyousufaa@gmail.com (Md. Yousuf Ali)
*Corresponding author

INTRODUCTION

The authors of the present article have recently developed a continuous improvement model from the Islamic perspective and named the model as NAMS cycle (Afrin et al., 2019). After developing the model, the next question is 'how to operationalise the model?' To respond to this question, the researchers attempted

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

to develop an implementation process of NAMS Cycle. Based upon a focus group discussion (FGD) meeting and the responses of the participants in the in-depth interview sessions, the researchers have developed a five-stage implementation process model of the NAMS cycle. The stages are started with decision making and followed by education and training, implementation, evaluation, and corrective measures.

LITERATURE REVIEW

Continuous improvement (CI) of quality, one of the fundamental elements of total quality management (TQM), is an essential requirement for any product that a firm produces or any process through which an organisation delivers services to its customers and clients (Ahbabi & Alshawi, 2015; Plenert, 2012).

NAMS Cycle

NAMS Cycle is a newly developed model of CI in TQM from an Islamic perspective (Afrin et al., 2019). There are four components in NAMS Cycle which are*al-Nīyyah bi al-Ikhlās*, al-'*Amal*, al-*Muhāsaba,* and al-*Ṣhukr*. Each of the components has some constructs which are shown in Figure 1.

In every action, people need to think critically whether their activities are like *'Ibādah* (worship Allāh (*swt*)) or, are being done according to Islamic *Sharī'ah* and to please Allāh (swt) only.

The first component of the NAMS Cycle is "*al-Nīyyah bi al- Ikhlās"* which means noble intention behind the action. For Muslims, every action will start with a clear and pure intention of pleasing Allāh (*swt*). Fixing the *al-Nīyyah* is obligatory in Islamic *Sharī'ah*. For example, the doer must be honest, clear, and pure about the *al-Nīyyah,*

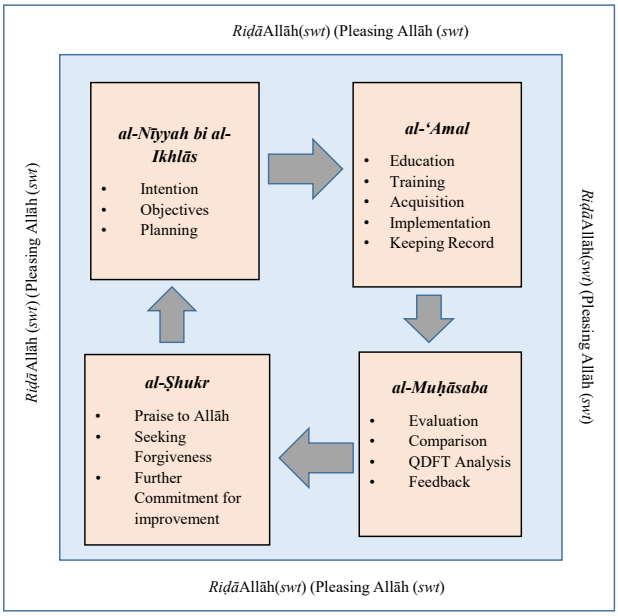


Figure 1. NAMS cycle of continuous improvement (Afrin et al., 2019)

because the result of every task depends on the doer's *al-Nīyyah*. Setting specific objectives and making an effective plan are also included at this stage.

The second component *Al-'Amal* means actions having religious motivation. In this model, *al-'Amal* consists of some constructs - education, training, acquisition, implementation, and recording - which should be implemented and justified by *'Ibādah.*

The third component *al-Muḥāsaba* means accounting. In theology, '*muḥāsabat al-nafs'* means 'inward accounting, spiritual accounting'. *Muḥāsaba* is the doublet of *ḥisab*. In this model, *al-Muḥāsaba* consists of actions that should be integrated and justified by *'Ibādah.* Measurement and evaluation, comparison and constructive analysis, identifying strong and weak points, and feedback are the constructs of this component.

The fourth component *al-Ṣhukr* is an Arabic word that denotes the meaning of thankfulness, gratitude, or acknowledgment by a human. Simply, *al-Ṣhukr* means praising one for his good deed. The term may also be used if the subject is God. In that case it takes the meaning of "divine responsiveness". *Al-Shukr* consists of some components/actions to construct the model such as *praise to Allāh (swt), seeking forgiveness, and commitment to future improvement.*

Islamic Worldview (*Tasawwur)*

Quality management is not overlooked in Islam rather emphasised. Allāh (*swt*) wants people to do all of their works with best of the quality and He will judge them on the basis of the quality of their deeds (He, Who has created death and life that He might test you, as to whose work, is excellent among you. And He is the Esteemed one the Forgiving (Al-Mulk, 67:2). Thus, to perform every task in the best possible way is a religious obligation for all Muslims.

In the Islamic system, management and any other mundane affairs of life are linked with man's mission in life. This leads people to the philosophical underpinnings of quality management in the Islamic framework. Broadly speaking, the philosophical underpinnings of human life and the management of its affairs in the context of the Islamic worldview are classified into four: 1) *Tawḥīd*, 2) *Risalah*, 3) *Khilāfah,* and 4) *Akhirah* (Sadeq, 1996).

al-Tawḥīd: al-Tawḥīd signifies the unity of Allāh (*swt*), the Creator, the Sustainer, the Wise and the Seer of everything, who maintains the universe through His unified law of nature (*fitrah*). The first part of the witness of faith in Islam is *'Lā ilāha illa' Allāh*' (there is no God but Allāh (*swt*)). This declaration is what is universally known in Islam as the principle of *al-Tawḥīd* or Divine Unity (Bakar, 2008). All mundane and other affairs of life and beyond will have to be consistent with this unified system.

Risalah: Risalah is an Arabic word that *me*ans 'message'. *Risalah* is the Divine institution that communicates the unified system of Allāh (*swt*) to mankind. It has two sources: 1) the Divine Books which contain the unified system and the code of life, and

2) the Sunnah, *tha*t is, the interpretation of the Book by the messengers through practice (*fi'l*), instruction (*qawl*), and approvals (*taqrir*). The last Devine book is Al-Qur'ān, the last messenger is Prophet Muh*amm*ad (peace be upon him) and his *Sunnat* has been narrated in several books of Hadith.

Khilafah: *Khilafah* means vicegerency which is the implementation of all the instructions of the Lord according to His desire. The person who implements these is known as vicegerent or representative or *khalifa*. Man has been created in this world with a vision to carry out a mission - to implement Allāh (*swt*)'s rules in the world as His vicegerent for the overall welfare of mankind in this world as well as in the life Hereafter. *"And it is He, Who has made you successors upon the earth"* (Al-An'ām, 6:165).

Akhirah: The concept of *Akhirah* brings about the idea of accountability in the life Hereafter. Vicegerency is subject to accountability. The people having a fear of accountability in *Akhirah* should be a good doer in this world. Allāh (*swt*) says, "*What is the life of this world but play and amusement? But best is the home in the hereafter, for those who are righteous. Will ye not then understand?*" (Al-An'ām, 6:32).

The dual accountability system is present in an Islamic framework. Dual accountability refers to i) accountability towards the employer if it is an appointed position, to manage the entity as best as possible, and ii) accountability towards Allāh (*swt*) for the discharge of responsibilities according to the Islamic normative system which requires high-quality performance.

The contemporary literature on quality management from the Islamic perspective shows that most of the works are on the elaboration on a list of values embedded in the practice of quality management and there are attempts in developing some models of quality management. For example, Musa and Salleh (2005) proposed a model of an Islamic total quality, Jabnoun (2008) developed 'Umar's TQM Control Process and the authors of the present article have recently developed a continuous improvement model from Islamic perspective none of which is being implemented in the organisations. However, the question still around is how the NAMS Cycle model can be implemented in practice. This question has been addressed in the present article and a detailed step-by-step process has been put forward.

Conceptual Framework

The researchers had developed the following conceptual framework to develop a NAMS Cycle implementation process model:

Decision Making → Education and Training → Implementation → Evaluation → Corrective Measures

Decision making is a pervasive function of managers aimed at achieving organizational goals. Most of the cases the decisions of top management and respective participants act as a barrier to implement any new theory or model for continuous improvement (Ingram et al., 2004). In this process model top management decisions are vital to implement the NAMS Cycle.

To improve the capacity of the related manpower it is essential to train them

with the required knowledge, education, and technology. The system of profound knowledge (SoPK) is highly recommended by Deming (1986) to enhance the quality of an organisation. In this process model, the employees are needed to be trained with the professional values of continuous improvement integrated with Islamic principles and values.

After training, all of the departments are responsible to implement and exercise the values in their respective fields. And then the outcome should be recorded and measured. The results will be compared with the standard previously set. If there is any deficiency, the organisation needs to find out the reasons behind those. Most of the time (94%), the reasons are general and only 6% of causes are special (Deming, 1986). After finding out the reasons the next step is to take necessary action to improve the situation.

METHODS

The nature of the present study takes the affirmative postmodernism philosophical stance. The distinctive subjectivist-epistemological and ontological position of affirmative postmodernism induces particular appraisal norms for such management research. The epistemological paradigm of this study is based on the idea of Unity (al-*Tawḥīd*). The fundamental epistemological foundations are the Qur'ān and the Sunnah (Prophetic guidance), and the contributions of scholars in Islam. The traditional Islamic epistemology (theory of knowledge) provides all the necessary safeguards against all kinds of philosophical deviations (Bakar, 2008). These form the foundation of every Islamic methodological inquiry and application (Choudhury & Harahap, 2009). Hence, serving only Allāh (*swt*) and to be successful here and in the life Hereafter, is the ontological standpoint of this study. The philosophical stance, epistemological, and ontological paradigm induced the researchers to follow the qualitative methodology to conduct the research.

Data were collected in two phases-Focus Group Discussion (FGD) and semi-structured in-depth interviews. For FGD, 18 participants were selected and invited purposively among whom 11 were present in the meeting. The meeting was continued for almost two hours. In the interview phase, 30 practitioners were selected purposively based on their knowledge and availability for semi-structured in-depth interviews. Both the discussion meeting and the interviews were recorded in audio form and then transcribed and analysed manually by applying six steps qualitative data analysis method: organise and prepare the data for analysis; read through all the data; begin the detailed analysis with a coding process; themes and description; interrelating themes/description; and interpreting the meaning of themes/interpretation (Creswell, 2010). Conversation analysis and narrative analysis were used for data analysis and interpretation.

Some of the participants in this study were not interested to disclose their names. So, the FGD participants are mentioned as

P1, P2, and P3 up to P11. On the other hand, the participants in interview sessions are stated as Int.1, Int.2, and Int.3 up to Int.30.

RESULTS AND DISCUSSION

How to Operationalise the Newly Developed Model?

From the FGD and interview sessions, researchers acquired valuable comments and suggestions leading to develop an implementation process of NAMS Cycle. The following sections describe the processes to implement the newly developed model of CI.

To implement/operationalise the newly developed NAMS Cycle of CI, an organisation needs to fulfil the following prerequisites:

1. Top management commitment
2. A strongly motivated work team

Top Management Commitment to Implement the Model

Top management's role alone in making decisions, strategies, and policies is vital. Top management, by definition, includes managers who serve at the top of the organisational hierarchy and are responsible for the whole organisation (Enz & Grover, 1992). However, according to Deming's (1986) research, 94% of the problems in quality are caused by general causes and the role of management. In organisations, decisions are made by the top management, so it is the first prerequisite that the top management should have a good intention and strong commitment to implement the newly developed model in their organisation. Top management's commitment can be seen through their active participation in any program, financial involvement, and time investment to provide necessary training.

A Strongly Motivated Work Team to Implement the Model

"One of the more important ingredients, if not the most, for successful, high quality and excellent management is still the age-old one, that is human factor or personnel who actually performs all the tasks in the whole organisation" (Alhabshi & Ghazali, 1994). To be successful in achieving the goals and objectives, mission, and vision of an organisation, top management should develop the manpower according to their needs. Therefore, the second but equally important prerequisite for implementing the newly developed CI model is to develop a strongly motivated work team imbued with Islamic and professional values.

In the pre-Islamic era, there were positive values which Islam reinforced like courage, generosity, and directness. Besides these, Jabnoun (2008) described 18 more values in Islam which were practised by the companions of the Prophet (peace be upon him). Ishak and Osman (2016) described 18 Islamic quality management values which are similar to the values described by Jabnoun (2008).

In FGD, the participants also talked about some of those values. For example, P1 said,

> "Because, the issue of *Itqān*, this issue is very very important".

P3 said,

> "As Dr. said, the word '*Itqān*' is used extensively in the Islamic Arabic literature to refer to 'quality' or 'excellence'…And he is expressing the same issue that you are talking about implicitly that if a person has *Ikhlās*, what are his manifestations? And what will be the destination if a person has *Ikhlās*?"

P4 said,

> "And then, for the *'Amal,* the *Iḥsān* component I think bigger."

And P5 said,

> "As we talk about management, we are going to the corporate, companies, or, practically, our university also. The professor mentioned *Itqān*, *Iḥsān*, and *Ikhlās*. Now, we look at the *'amānāh* that is given to us, the trust."

P6 also mentioned,

> "That is why here we say *Īmān, Taqwa*, and *Iḥsān* are essential components that we have to gather. I believe that with these, *muḥāsabah* comes automatically. *Al-'Amal* is not accepted if there is no *Īmān*. As Allāh (*swt*) says, *"Ittakullah wa kunumā al- sadiqīn"* (Have *Taqwa* in your heart and stay with righteous people who are truthful)."

The following is the merged list of Islamic and professional values mentioned by Ishak and Osman (2016), Jabnoun (2008), Mufti (2013) and also recommended by the participants in the FGD which required to be inculcated into the employees during and after training sessions:

Al-Tawḥīd and Freedom from Tyranny.

*Al-Tawḥīd*is the backbone of Islam, literally means 'making one' or 'unity' or 'oneness' or 'asserting oneness' (Gibb & Kramers, 2001). It is applied theologically to the Oneness *(waḥdānīyya, tawaḥḥud*) of Allāh (*swt*) in all its meanings. It may mean that there is no God except Allāh (*swt*), Who has no partner (*sharīk*); Allāh (*swt*) is the Oneness in Himself (Al-Ikhlās, 112:1-4); He is the only being with real or absolute existence (*al-ḥaqq*) (Faruqi, 1992); all other beings having merely a contingent existence; it may even be developed into a pantheistic assertion that Allāh is All. In consequence, *Tawḥīd* means simply that 'there is no God but Allāh (*swt*)'. If the employees can understand the meaning of al-*Tawḥīd* and maintain the standpoint - to serve only Allāh (*swt*) for pleasing Him, they will be successful in both the worlds.

Ikhlās. *Ikhlās* means to keep clear and transparent and to keep free from tyranny. In connection with the Qurʾānic use, the expression *ikhlāsal-dīnlillāh*, to honour and serve Allāh exclusively, *ikhlās* by itself received the meaning of "absolute devotion to Allāh (*swt*)" (Al-Baqarah, 2:133) and became used in opposition to *ishrāk, shirk,* "associating Divine beings with Allāh (*swt*)". There is one *Sūra* in the Holy Qur'ān called *Sūrat al-Ikhlāṣ* (also *Sūrat al-Tawḥīd*) which emphasises the unity and uniqueness of Allāh (*swt*) and denies that He has any associates (Upadhyay et al., 2017). As the

vicegerent of Allāh (*swt*), people must have this value '*Ikhlāṣ*' which is indeed needed to implement the NAMS Cycle effectively in an organisation.

Iḥsān. *Iḥsān* is an Arabic term meaning "perfection" or "excellence". It is related to faith (*Īmān*) and can be seen in both deed and action. "*Iḥsān* is simply the practice of Islam and the realization of *Īmān* at the level of excellence" (Bakar, 2008). It pertains to a person's internalisation of Islam and *Īmān*.

Once Angel Jibraīl (as) visited Prophet Muhammad (peace be upon him) and asked him to tell about *Iḥsān.* Then Prophet (peace be upon him) replied: "That you worship Allāh *(swt*) as if you are seeing Him, and in case you fail to see Him, then observe prayer (with this idea in your mind) that (at least) He is seeing you…" (al-Muslim, 2007a: 4). Having this sense in the work environment when people will do their duties, surely, they will do better and gradually improve their performances and achievement.

Abstaining from Ḥarām. *Ḥarām* means prohibition. According to the Islamic *Sharī'ah*, which is prohibited or forbidden is known as *Ḥarām*. People in the organisation must not practice *Ḥarām* in any form. As the Qur'ān says, "*Allāh (swt) hath permitted trade and forbidden usury*" (Al-Baqarah, 2:275). They cannot make any transaction of interest or *riba,* but they are allowed to do business but not to do the business of *Ḥarām* products like an intoxicant, telling lie, and not to be fraudulent. If people practice this value in action, they will be helped by Allāh (*swt*).

Unity of Purpose. It means the Divine purpose of the creation of human beings in this world is to serve Allāh (*swt*) as His servant (by doing *'Ibādah*- according to the will of Allāh (*swt*). Good Muslims should not divide their *dunia* (worldly) and *Akhirah* (Hereafter) goals, and their individual and organisational goals. The purpose is one 'to please Allāh (*swt*)'. This purpose is clearly mentioned in the verse, "*I (Allāh (swt)) have created Jinns and Men with the purpose of nothing but worshiping only Me"* (Al-Zariyat, 51:56).

Humility and Modesty. Another important value is humility and the person who possesses this value is known as '*Halim*'. This is one of the attributing names of Allāh (*swt*). People should be polite and humble to their parents, bosses and/or seniors. A humble person should never feel pride which is *Harām* (prohibited). Being Muslims and *Mu'minūn*, people must be humble and modest as well. These values are very essential in the organisational life to work together and achieve the goals together.

Trustworthiness/Amanah. Trustworthiness is another important quality for every human being. It is also a part of *Īmān*. People should be very careful, cordial, and sincere to keep their *Amanah*. Man is bound to keep his trust. Likewise, when people are appointed in an organisation, they are also given trust, which they are bound to keep. They will be asked about those on the Day of Judgement and will be rewarded or punished accordingly.

Brotherhood. Brotherhood is another important and essential value for mankind in this world. The Prophet Muhammad (peace be upon him) told us, "None of you will have faith till he wishes for his (Muslim) brother what he likes for himself" (al-Bukhari, 1997a: 12).

Likewise, in any organisation, employees should build up and maintain a relationship of brotherhood among them. If they can do this, they will be cooperative with each other, will improve gradually, and none can suppress them.

Dignity and Respect for Others. Dignity and respect for others is another essential attribute for mankind. Allāh (*swt*) does not like those who do not respect others. "*Woe to every [kind of] scandal-monger and-backbiter*" (Al-Humazah, 104:1). So, as co-workers, employees should respect each other, and honour and acknowledge everyone's contributions to the organisation. It will create a positive environment to increase or improve their performances which the organisations demand from them.

Cost and Time Efficiency. Allāh (*swt*) does not like people who waste any resource. They will be asked on the Day of Judgement about the resources given to them. Allāh (*swt*) says, "*For the wasteful are the brothers of Satan; and Satan is ungrateful to his Lord*" (Al-Isra', 17:27). A Muslim must make every effort to remove wastage around him, at home, the workplace, or in society, even when faced with confrontation. A common example would be to control the use of water, food, and electricity according to needs. Wastage of resources such as material in the workplace, man-hours, machine-hours, human potential, and time, cause poor quality of products or services and loss to the organisation. Waste should be minimised as much as possible by efficiently utilising resources. While 100% elimination is not possible, it should nevertheless be an aim through continuous effort. Muslims should find this easier than others because they have been instructed to avoid wastage by their Lord.

Quality/Diligence. In Islam, quality is a process of positive change for excellent performance in all human endeavours. Excellence is a requirement not only in big matters but also in matters like slaughtering an animal. Shaddid b. Aus said: Two are the things which I remember Allah's Messenger (peace be upon him) having said: "*Verily Allah has enjoined goodness to everything; so, when you slaughter, slaughter in a good way. So, every one of you should sharpen his knife, and let the slaughtered animal die comfortably*" (al- Muslim, 2007b: 4810). The people in any organisation should have and practice this value to ensure the expected quality of their tasks all the time.

Flexibility. Flexibility is another value that helps people avoid hardship and enjoy the freedom and lets others enjoy their freedom too. So, the people should have this value to practice in the organisations to allow others to exercise their knowledge who have the expertise.

Fairness/Justice. People must be fair with every dealing in their life. Otherwise, they will be punished accordingly (Al-Mā'idah, 5:8-9). This value is equally significant for the administration, HRM, leadership, production, and marketing divisions to achieve their respective and collective goals and objectives of the organisation.

Cooperation. In any organisation, to achieve the goals and objectives, cooperation among the employees and staff is a must. Many organisations fail due to a lack of proper cooperation. The Muslim *Ummah* is not beyond the need for cooperation. Allāh (*swt*) asks people to cooperate with each other in good deeds and not to cooperate with each other in evil tasks. So, in any organisation, people must be cooperative and helpful to each other to achieve their goals.

Discipline and Obedience to Leaders. Discipline means to obey the rules and regulations of any organisation. Allāh (*swt*) wants every creature to be disciplined. He says in the Qur'ān, "*And strive in His cause as ye ought to strive"* (Al-Ḥajj, 22:78). *"O ye who believe! Obey Allāh (swt), and obey the Messenger, and those charged with authority among you*" (Al-Nisā, 4:59).

In an organisation, an employee must obey the organisational rules and regulations and obey his superior until or unless they directly oppose Allāh (*swt*) and His Messenger (peace be upon him).

Participative Management. Everyone should take part in the participatory management process as per their capacity with good intentions. The Prophet (peace be upon him) said that religion is sincere advice and whoever sees wrong among Muslim brothers, should correct it.

When people can take part in the organisation's decision-making process, they are motivated to implement and execute that decision, which helps the organisation to achieve its target.

Innovativeness/Eagerness to Learn and to Share Knowledge. Allāh (*swt*) has created human beings with the faculties to think, analyse and understand the issues and matters in this universe and they can produce many necessary goods that can bring *falāḥ* (welfare) to mankind. To acquire true knowledge and spread it to people is a divine command (Al-'Imrān, 3:187). By practising this the individuals will be aware of all related matters and will be able to improve significantly.

Responsibility and Accountability. Everyone in the organisation is responsible for his/her duties, and they will be asked about it by the supervisor and by Allāh (*swt*) on the Day of Judgement. Everyone should be very responsible for his/her duties and responsibilities and be very careful about that because of being asked on the Day of Judgment (al-Bukhari, 1997b: 18).

This sense of responsibility and accountability leads people to do their duties rightly and without any negligence, which may help the organisation to do better in a competitive age.

Trust on Others. After putting trust in Allāh (*swt*), people also have to put trust in their co-workers and Muslim brothers. Trusting on others helps us to reduce our workload and pressure, and to obtain the love and best performances of others. In this way, the employees in an organisation can build a positive environment that may help them achieve their goals efficiently and to do better day by day.

Optimism. Optimism is a very positive force that makes a man successful. Allāh (*swt*) asks people to be optimistic, and He helps the optimists. As such, people should be optimistic in all aspects and have to say, '*in shaAllāh'* meaning 'If Allāh (*swt*) wills'. This value is equally important in individual life as well as in organisational life.

Consistency. For effective implementation and gradual improvement, one must be consistent with his/her actions. The Prophet (peace be upon him) emphasised the consistency in action which is found in the following Hadiths:

Masruq is reported to have asked 'A'isha about the action (most pleasing to Allāh (*swt*)) the Messenger of Allāh (*swt*) (peace be upon him). "*She said: He (the Holy Prophet) loved (that action) which one keeps on doing regularly"* (al-Muslim, 2007c: 1614). Similarly, in any organisation, people should be very consistent in their actions which will help them to improve their quality as well.

Patience. The implementation of any plan and decision requires patience. Islam has asked people to be steadfast, patient, and to help one another to maintain patience while doing righteous work. It is one of the attributes of successful people (Al-'Aṣr, 103:1-3).

So, keeping patience is very vital to establish any good thing, to improve continuously, and to have any reward.

Thankfulness. In any organisation, people should be thankful to each other, thankful to the supervisor, and thankful to Allāh (*swt*). If there is a culture of thankfulness in the organisation, people will be happy to work there, and the productivity and the quality of their activities will be increased.

Tawakkul. *Tawakkul* means doing any task with one's utmost best and putting trust in Allāh (*swt*) for its result. Once a Bedouin who had confused *Tawakkul,* came to the Prophet (peace be upon him) and asked about the matter, he (peace be upon him) explained that it was to take the appropriate action and then trust in Allāh (*swt*). He asked, "*Should I tie my camel and rely upon Allāh (swt), or should I leave her untied and rely upon Allāh (swt)?*" The Messenger (peace be upon him) replied, "*Tie her and then rely upon Allāh (swt)*" (al-Bukhari, 1997c: 169).

Employees and owners should practice this value in their every day activities by investing their level best and trusting in Allāh (*swt*) for the best result.

Implementation Process Model of NAMS Cycle

P7 (in FGD) commented on operationalisation of the newly developed model. She said,

> "I am wondering how do you want to apply this model. How can the *ulul al bab* (an Islamic concept) be applied in the organisation? If you can answer, wonderful."

Based on the comments of the discussants, the researchers developed an implementation process as shown in Figure 2. Like many other models, the NAMS Cycle can be implemented in any organisation through a process comprising five steps. In every step, there are specific tasks to be carried out by a particular group of people as mentioned and briefly described in the following sections:

Step 1: Decision Making

At this stage, the heads/managers of all divisions should (Int.8, Int.11, Int.12, Int.13, Int.17, Int.23)

1. be determined to implement the NAMS Cycle in their own areas of responsibilities;
2. set standard for their actions;
3. make a budget and allocate finance as per requirements; and
4. spend enough time to implement the model.

Step 2: Education and Training

Int.2, Int.4, Int.5, Int.9, Int.10, Int.13, Int.14, Int.16, Int.17, Int.18, Int.20, and most of the participants mentioned the necessity of education and training of the employees to let them know about the mission, vision, and objectives of the organisation. In this step:

1. All of the employees should know about their Divine identity and Divine purpose.
2. All of the employees should be trained on 'how to make every task as *"Ibādah'*.
3. For every division, there would be a separate and specialised training session.

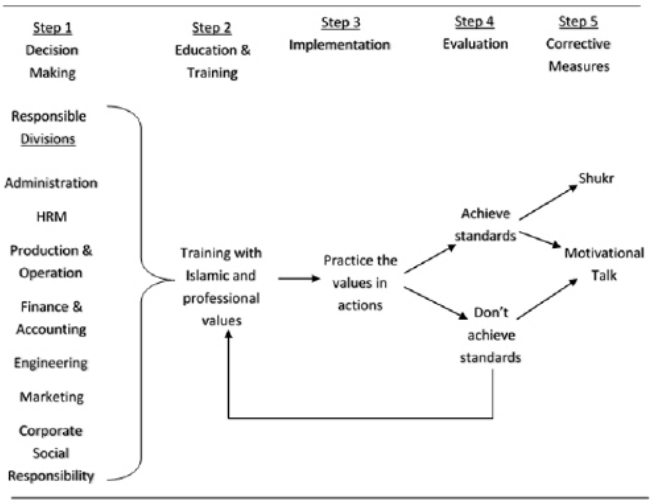


Figure 2. NAMS cycle implementation process (newly developed by the researchers)

4. The non-Muslim employees should be educated and trained on how to work in an Islamic environment and together they can help achieve the goals of the organisation.

Step 3: Implementation

This is the most vital step where all the decisions should be executed. Here all the staff should remember their divine identity (vicegerent of Allāh (*swt*)) and divine responsibility (to worship/serve Allāh (*swt*)) at the time of doing any task in this organisation/world (Int.10, Int.19, Int.20, Int.24, Int.25).

Staff should take any decision and/or make any policy that will bring *falāḥ* (welfare) for the organisation, for the employees, for the customers, for the stakeholders, and for the society at large. They must not do any task which is harmful to any group or individual, or which is *Harām* (prohibited) in Islamic *Sharī'ah*. It is observed that people who have belief in Allāh (*swt*) and do or practise the good deeds, only they will enter into Heaven (Al-Nisā, 4:57). It is also indicating that without implementing any good plan, no good result will come. So, effective implementation is essential for the organisation to improve.

The human resource division has a very vital role in developing human resources in line with Islamic as well as professional teachings. They need to arrange training programs for all the staff of the organisation and to create a positive environment to fulfil the divine purpose of the creation of human beings in an effective and efficient manner. Secondly, they have to practise Islamic teachings in their activities. They should be fair in recruiting new employees, to train them, to promote them, to pay them, and to maintain them. Allāh (*swt*) says in the Holy Qur'ān, "*Allāh (swt) doth command you to render back your trusts to those to whom they are due; ... Verily, how excellent is the teaching which He giveth you!*" (Al-Nisā, 4:58).

The production division must be conscious about *ḥalāl* and *harām* issues along with cleanliness and goodness at the time of producing the products. They should always try their level best to maintain standards. They should ensure the quality of the products by using the right ingredients as needed. They have to mention all ingredients with their measurement, their food values, or energy so that customers can know. They should not hide anything that the customers should know.

The finance division should provide all the necessary costs as and when needed but no waste of money. They should not allocate money for work which is not allowed in Islamic *Sharī'ah* and which is directly prohibited by Allāh (*swt*) and His Messenger (peace be upon him). The accounting division is responsible for keeping proper records of all financial transactions of the organisation. To keep such records, they must be fair and transparent. They should not maintain different accounts to deprive any party like the government and other stakeholders of the organisation.

The functions of the engineering division are significant to the organisation. They should not follow any formula or

production system which is contradictory to Islam or which violates the rules of Allāh (*swt*). They also should be conscious of the *ḥalāl-harām* issue and should not design products and processes which Islam does not allow. For example, they should not produce any product following the physical appearance of human beings or any animals. They also should not use any non-Islamic signs. Producing only *ḥalāl* products is not enough; they must be careful about the goodness of those products for mankind and for the environment as well.

The marketing division has a significant role in promoting and selling the products and services they produce. If this division does not perform their duties and responsibilities efficiently, the organisation may incur a loss. Money flow is like the blood of an organisation and selling the products and services is the only way of money inflow in the organisation. This division is very vital for the organisation. Nowadays, many organisations are practising unethical and un-Islamic marketing activities to maximise their sales and profits. They are unnecessarily using images of women dressed indecently to advertise their products and services which are not permitted in Islam. Also, the organisation should not convey any message to the customers which are not true for that product or service. If there are drawbacks to the product, they need to inform the customers. Also, at the time of pricing the products and services, the organisations should set a fair price, not less which may cause loss of the organisation or an excessive price to maximise profits.

Every organisation works within a social community and neighbour organisations. Along with the staff, customers, and stockholders, organisations also have responsibilities to neighbours, the community, and the society as a whole. They must take the necessary steps so that society will not be polluted. They have to provide jobs and work for the community. They can open service centres for the poor community for education, training, and medical services. They have to abstain from harming neighbour organisations and communities. It is narrated on the authority of Abu Huraira (*ra*) that the Messenger of Allāh (*swt*) observed: '*He will not enter Paradise whose neighbour is not secure from his wrongful conduct'* (al-Muslim, 2007d: 174).

Step 4: Evaluation

This step was suggested by Int.4, Int.5, Int.11, and Int.12. In this step, actual practices should be measured and compared with the standard (set in step 1) from the viewpoint of Islam. Though it is subjective, and we cannot see the intention of human beings, the intention is reflected in the practices and actions of the doers. Truly, the *Muttaqīn* (Allāh (*swt*) conscious people) do all tasks only for the sake of Allāh (*swt*) to please Him, and not for showing off to people. In the holy Qur'ān, many characteristics have been mentioned to recognise the *Muttaqīn* (Al-Baqarah, 2:3-4).

From the above discussion, it may be concluded that if the organisation/divisions do not produce and provide any *harām* or harmful products or services, and they deal

properly with the staff and customers and follow Islamic teachings and principles at the time of dealing with customers and society, then they are doing their job for the sake of Allāh (*swt*) to please Him. The organisation or groups may use a checklist for evaluation as per their purposes.

Step 5: Taking Corrective Measure

This step was also suggested by Int.4, Int.5, Int.11, and Int.12. At step 4, whoever achieved the standard goals to be appraised (*al-Ṣhukr)* for their success, and who did not achieve the standards, the organisation should identify the reasons for their failure and arrange training programs. For both groups, the organisation needs to arrange motivational talks to improve their morality, spirituality, and other values. By following the above steps, an organisation can easily implement the NAMS Cycle to continuously improve the quality of its products/services/ processes.

CONCLUSION

The contemporary models of continuous quality improvement in the organisations are based on the worldly purpose only. They do not address the purpose of the life Hereafter. On the other hand, the newly developed Islamic model of CI is very new to the practitioners to implement. This study tried to help the organisations and practitioners by developing an implementation process of the NAMS Cycle, and thus satisfy the ontological standpoint of this study. Therefore, this research has contributed to practising Islamic principles and values to improve the quality and performance of an organisation continuously.

The outcome of this research is a theoretical model of implementing the newly developed continuous improvement model from an Islamic perspective. Its fundamental theory is based on the basic Islamic values and principles related to quality improvement. Future researchers-individuals and/or organisations- can test its practicability in the organisations by implementing the model.

ACKNOWLEDGEMENT

The authors would like to express and extend their heartfelt thanks and gratitude to all the participants in the FGD meeting and acknowledge their contributions to modify and improve the NAMS cycle. The authors also like to thank all the reviewers and editors of this journal for their valuable comments and suggestions to make the paper better in terms of quality and presentation.

REFERENCES

Afrin, A. B., Islam, R., Fontaine, R. A. H., Ali, M. Y., & Rahman, M. (2019). A new model of continuous improvement in total quality management from an Islamic perspective. *Asian Academy of Management Journal*, *24*(1), 129-149. https://doi.org/10.21315/aamj2019.24.1.6

Ahbabi, A. M., & Alshawi, M. (2015). BIM for client organisations: A continuous improvement approach. *Construction Innovation, 15*(4), 402-408.

Alhabshi, S. O., & Ghazali, A. H. (1994). *Islamic values and management*. Kuala Lumpur, Malaysia: Institute of Islamic Understanding Malaysia.

al-Bukhari. (1997a). *Book 2: Belief.* In M. M. Khan (Ed.), *Sahih al-Bukhari*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Bukhari. (1997b). *Book 13: Friday prayer.* In M. M. Khan (Ed.), *Sahih al-Bukhari*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Bukhari. (1997c). *Book 62: Marraige.* In M. M. Khan (Ed.), *Sahih al-Bukhari*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Muslim. (2007a). *Book 2: Faith*. In H. A. T. Z. Ali Zai (Ed.), *Sahih al-Muslim*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Muslim. (2007b). Book 21: *Games and the animals*. In H. A. T. Z. Ali Zai (Ed.), *Sahih al-Muslim*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Muslim. (2007c). Book 4: *Prayers*. In H. A. T. Z. Ali Zai (Ed.), *Sahih al-Muslim*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

al-Muslim. (2007d). Book 1: *Faith.* In H. A. T. Z. Ali Zai (Ed.), *Sahih al-Muslim*. Riyadh, Saudi Arabia: Dar-us-Salam Publications.

Bakar, O. (2008). *Tawhid and science: Islamic perspectives on religion and science* (2nd ed.). Shah Alam, Malaysia: ARAH Publications.

Choudhury, M. A., & Harahap, S. S. (2009). Complementing community, business and microenterprise by the Islamic epistemological methodology. *International Journal of Islamic and Middle Eastern Finance and Management, 2*(2), 139-159.

Creswell, J. (2010). Mapping the developing landscape of mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research* (pp 45-68). California, USA: Sage.

Deming, W. E. (1986). *Out of the crisis.* Cambridge, USA: Massachusetts Institute of Technology Press.

Enz, C. A., & Grover, R. A. (1992). The importance of top management visibility for service-based professionals. *Journal of Managerial Issues, 4*(3), 414-423.

Faruqi, I. R. (1992). *.Al Tawḥīd: Its implication for thought and life*. Herndon, Virginia: Islamic Institute of Islamic Thought.

Gibb, H. A. R., & Kramers, J. H. (2001). *Concise encyclopaedia of Islam.* 4th impression. Boston, USA: BRILL Academic Publishers Inc.

Ingram, D., Louis, K. S., & Schroeder, R. G. (2004). *Accountability policies and teacher decision making: Barriers to the use of data to improve practice.* Retrieved January 18, 2020, from https://www.semanticscholar.org/paper/Accountability-policies-and-teacher-decision-to-the-Ingra

Ishak, A. H., & Osman, M. R. (2016). A systematic literature review on Islamic values applied in quality management context. *Journal of Business Ethics, 138*(1), 103-112.

Jabnoun, N. (2008). *Islam and management* (2nd ed.). Riyadh, Saudi Arabia: International Islamic Publishing House.

Mufti, I. K. (2013). *Core values in Islam.* Retrieved January 2, 2018, from https://www.islamreligion.com/pdf/en/core_values_of_islam_10256_en.pdf

Musa, M., & Salleh, S. M. S. S. M. (2005). The elements of an ideal total quality from the Islamic perspective. In M. Musa & S. M. S. S. M. Salleh (Eds.), *Quality standard from the Islamic perspective* (pp.149-172). Kuala Lumpur, Malaysia: IKIM.

Plenert, G. (2012). *Strategic continuous process improvement*. New York, USA: McGraw-Hill.

Sadeq, A. H. M. (1996). Quality management in the Islamic framework. In A. H. M. Sadeq & A. K. Ahmad (Eds.), *Quality management: Islamic perspectives.* Kuala Lumpur, Malaysia: Leeds Publications.

Upadhyay, M. R., Chen, W., Lenstra, J. A., Goderie, C. R. J., MacHugh, D. E., Park, S. D. E., ... & Van Arendonk, J. A. M. (2017). Genetic origin, admixture and population history of aurochs (*Bosprimigenius*) and primitive European cattle. *Heredity, 118*(2), 169-176.

Pertanika J. Soc. Sci. & Hum. 28 (2): 939 - 955 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Translation Strategies of Humor in Subtitling

Mozhgan Ghassemiazghandi* and Tengku Mahadi Tengku-Sepora

School of Languages, Literacies and Translation, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia

ABSTRACT

Audiovisual translation, especially subtitling, attracts the attention of many scholars. However, the translation of Persian subtitles is scarce. Translation of cultural differences is even more difficult when an animation has to convey the interesting parts such as humour that includes a broad collection of cultural and linguistic expressions. The present study attempts to investigate the translation strategies of humour in subtitles into Persian and determine the extent each translation strategies are utilised. The study focused on personification-based animation subtitles and primarily on three types of humour -universal, cultural and linguistic- from Schmitz's categorisation of humour. Sixteen animations form the corpus of the study. The study was carried out based on Gottlieb's classification of subtitling strategies to determine the translation strategies employed by subtitlers. This descriptive research examined the transferring strategies employed by the subtitler by comparing the segments of the source text and the equivalent of the target text. The outcomes of the study indicate that the most common translation strategies applied by translators in the subtitling of animation comedies from English into Persian are "transfer", following by "paraphrase", and the less common translation strategies are "deletion" and "resignation". Such usage suggests that the translation is aided by the simplicity of the source language and the non-verbal elements of the animation.

Keywords: Animation, audiovisual translation, subtitling translation, translation strategy

ARTICLE INFO

Article history:
Received: 10 December 2019
Accepted: 30 January 2020
Published: 26 June 2020

E-mail addresses:
mozhgan@usm.my (Mozhgan Ghassemiazghandi)
tsepora@usm.my (Tengku Mahadi Tengku-Sepora)
* Corresponding author

INTRODUCTION

The increasing significance of audiovisual translation (AVT) is self-evident with the growth of multimedia technology and rapid globalisation. One of the primary ways of connecting with foreign languages and cultures is audiovisual products. AVT is the most-proliferated translation activity

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

nowadays due to the number of people who can access it and a large number of translated products that are distributed globally (Cintas, 2004). Díaz-Cintas and Remael (2007) identified the limit on subtitling as a system of translation where the text was often written on the bottom of the movie screen. Subtitling also illustrates original information in regard to the soundtrack of voices and songs (Díaz-Cintas & Remael, 2007).

The increasing development of digital technology has led to an increase in attention to the audiovisual translation, and its types include subtitling, dubbing, and voice-overing, but most of the research done in this field centres on the European scene (Gambier, 2008). The language pairs studied are the languages that the cultures involved are closely related and the languages all belong to the same alphabetical writing system. However, the Persian culture and language are very different from the English culture and language, and the writing systems are different. Furthermore, Iranian are less familiar with English culture than Europeans. Considering the fact that studies in Persian subtitles are not sufficient and the fact that Persian language and Iranian culture are very different from English language and culture, this study is conducted with the aim of studying the methods of translating Persian subtitles of humour in English-language animation.

Literature Review

Many scholars in translation field have defined the subtitling. Gottlieb defines subtitling as translating media messages into another language, which is represented in the form of a line or lines of text written on the screen simultaneously with the original verbal message (Gottlieb, 2005). From a linguistic perspective, there are two types of subtitles: interlingual subtitles, which transfers from source language to target language, and the intralingual subtitles, which moves the language into the same language (Cintas, 2003).

Gottlieb believes that interlingual subtitling with societal and language-political implications is a tool for improving reading skills, improving foreign language skills, exchanging free international education programs and dominating English (Gottlieb, 1992). Gottlieb (1992) emphasized that to evaluate the quality of particular subtitling, the translation of each verbal segment should be examined according to the stylistic and semantic features). Accordingly, he proposes ten translation strategies for the movie subtitling. Gottlieb believed that these ten types of translation strategies of subtitling were found in the translation of a variety of genres including humour because the humour was the inseparable part of Western movies and culture. Gottlieb's interlingual subtitling strategies are discussed in detail in this study.

Most of AVT researches into Persian is in the form of short articles and case studies, and the majority of analyses focus on dubbing which is the primary method of AVT in Iran. Investigations in this area include difficulties in interlingual subtitling

(Vazifehkhah, 2017), subtitling strategies in translation of humour (Hassanvandi et al., 2016), translation of allusions (Salehi, 2013), humour translation in Persian subtitled comedy movies: Lizard case study (Sadeghpour & Omar, 2015), and revisiting the humour translation, the case of Woody Allen (Kianbakht, 2015) amongst others, are clear examples. Since there is not much research in this specific field, it may be accompanied by generalization, introspection, and bias, as can be observed most of the translation strategies by these authors, are based on their personal experience and subjective opinions.

MATERIALS AND METHODS

This descriptive research examined the transferring strategies employed by the subtitler by comparing the segments of the source text and the equivalent of the target text. The study was organized based on Schmitz's categories of humour and Gottlieb's classification of subtitling was used as the primary theoretical framework of the research.

Sixteen personification-based animations subtitled by official translators and known agencies were collected to conduct comprehensive research and explore the translation of the subtitle in the Persian language. In this research, the strategies of translation used were examined, the original text was compared with the Persian subtitles, as well as non-verbal elements and translation constraints. The selected animation had been released and subtitled between 2005 to 2016 years.

The study seeks to categorise elements of humour from personification-based animation based on Gottlieb's classification of subtitling strategies in the light of the Sapir-Whorf theory as the underlying theoretical framework. The Sapir-Whorf hypothesis which is also known as the hypothesis of linguistic relativity that suggests the structure of a language affects its speakers' world view or cognition. The Sapir-Whorf hypothesis has been used as evidence that the way the researchers looks at humour is rooted in her culture and language, in other words, the language and culture of a person has a significant role in understanding and perceiving a concept. Perhaps, if another person with a different cultural, linguistic background wants to analyse and evaluate the data in this research, it will yield somewhat different results. Although the selected data, 16 animations with different translators indicate that the results are comprehensive and not subjective and it is not affected by personal preference of the interpreter or researcher's impression, as the results of the research also indicate this.

As the result of the study, the researchers determined the type, frequency, and percentage of the transferring strategies using SPSS in which elements of humour had been used in the subtitling of animation from English into Persian and provided an example of each component.

RESULTS

Among 17,150 jokes found in 16 animation, 444 times "expansion" translation strategy

(2.59%), 4,837 times "paraphrase" translation strategy (28.2%), 6,746 times "transfer" translation strategy (39.33%), 902 times "imitation" translation strategy (5.26%), 1,327 times "transcription" translation strategy (7.74%), 656 times "dislocation" translation strategy (3.83%), 1,704 times "condensation" translation strategy (9.94%), 342 times "decimation" translation strategy (2%), 149 times "deletion" translation strategy (0.87%), and 43 times "resignation" translation strategy (0.25%) were applied by subtitlers in this study.

It should also be noted that, in some cases, there might be more than one translation strategy observed in a translation unit, but the most dominant one which is mainly focused on the translation of the elements of humour is considered as the translation strategy used in the TT. The study conducted among the Persian subtitles revealed that the most commonly used technique was a transfer (39.33%), paraphrase (28.2%) and condensation (9.94%). The perception of the Persian viewers is that they are less familiar with the source language. Even with this challenge, studies conducted on Persian viewers still showed some similarities with other previous major research.

The data collected from this examination can be compared with similar studies such as Hartama (1996) and Gottlieb (1992), which show that although Persian language and culture are very different, the result is somehow similar to the result of the studies between languages which are closely related. The results of this study indicate that direct translation strategies are used more than any other transferring strategy in the Persian subtitles, and the original text usually does not undergo significant changes, which suggests that Persian subtitlers tend not to show much change in the original text.

The study illustrates the frequency of each approach in the translation of elements of humour in personification-based animation based on Gottlieb's classification of subtitling strategies, however, the result suggests that this classification is inadequate in Persian subtitles, and the choice of a translation strategy by subtitler(s) is affected. The subtitler has to use other methods of translation, such as addition, euphemism, generalization, compensation, substitution, lexical creation, paraphrasing and many other transferring strategies to convey the elements of humour accurately. It also suggests that whilst the source language is directly inputted into the target text, the jokes have been preserved in the target language, which is due to the simplicity of the language used in animation, in which the primary audience is children, as well as non-linguistic, non-verbal elements regardless of transferring strategy deployed by translator helps to understand the original conversation. Globalisation and the impact of English language and culture in Persian and the breaking of the cultural and linguistic boundaries are some other reasons to preserve the humour in the target language.

DISCUSSIONS

One of the pioneering endeavours to conclude strategies for subtitling is Gottlieb's (1992) ten strategies (expansion, paraphrase, transfer, imitation, transcription, dislocation, condensation, decimation, deletion, and resignation), upon which many other researches are based (Lomheim, 1999; Schwarz, 2002; Taylor, 2000). The translation strategies are discussed below with Gottlieb's definitions (1992).

Expansion

According to Gottlieb, the expansion is used when the original text is incomprehensible due to cultural differences in the target language and needs further explanation and interpretation (Gottlieb, 1992). The most significant challenge in AVT is the exact and precise expression of the source text, considering the limitation of the subtitling of the animation.

Karamitroglou (1998) in his proposed set of subtitling standards in Europe pointed out that each subtitle on the screen could include two lines, each line could only contain 35 characters in order to accommodate the satisfactory requirement for the translated text and translation. The reduction and deletion of the original text should be reduced as much as possible. To increase the number of characters, sometimes a line can contain even 40 characters because sometimes the text font makes the text inevitably shorter (Karamitroglou, 1998). Referring to this guideline, it is expedient that there should not be more than about 35 characters in a line in English. In Persian, regardless of the different writing systems, the suggested number of characters per line is still applicable. The only notable difference is that Persian is written in contrast to English from right to left, which, regarding the relatively equal number of words between English texts (277,138 original English words) and Persian text (267,572 Persian translated words) do not differ significantly from each other. Although the Persian script and English version are very different, comparing the Persian and English translations suggests that translators have used an almost identical number of words.

The expansion is usually used when the original text, or the expression and the original spoken language, goes beyond the perception of the target reader. For example, in English-language films that cast Western festivals such as Halloween, the subtitler translates the words into a translated text to convey the festival to the target audience; therefore, it uses the method of explaining and developing words.

In practice, this strategy helps the target viewers to have a better and more appropriate understanding of the new reference and, for example, to understand if the event is shown in the jokes, what purpose and meaning are there. However, this translation method is in no way suitable for translating elements of humour, especially if the source and target culture/culture are entirely different, since the translation restrictions, especially the space constraints, do not give the translator an opportunity to explain much of the problem.

Therefore, direct translation, based on the guideline proposed for subtitling, will not be a significant challenge for the subtitlers, but since "expansion" translation strategy is used more often in cultural cases, which requires a broader explanation than the word-to-word translation of the source text, and since Iranian and English culture is very different, translating cultural elements and explaining the references with respect to the limited number of characters allowed in each line requires careful consideration.

For the subtitlers dealing with cultural humour, accordingly, the possibility to make the translation more readable by attaching more information and knowledge, for example, to heighten the appreciation of particular cultural settings, is extremely restricted. Furthermore, in the means of investigating the 16 animation's subtitling, it can also be observed that some subtitlers use the strategy of condensation (9.94%) rather than expansion (2.59%), whereas visually, the translated Persian subtitles are not longer than the original ones. In spite of the English-Persian cultural gap, subtitlers prefer to use word-for-word translation or direct translation instead of explaining the culture-related humour to avoid translation constraints.

Although this transfer of cultural issues in the way expressed in the culture of origin is a great help to TT viewers in terms of getting to know the culture and the English language, but in terms of translating the cultural humour, there is a high probability that the TT will lose its initial meaning and content, and the jokes are not adequately understood or misleadingly perceived by Persian viewers, or even no longer funny.

The following example is taken from the "Madagascar 3: Europe's Most Wanted" animation, in which the subtitler has used the "expansion" translation strategy, therefore the cultural humour can be readily and clearly understood by Persian viewers. The researcher needs to point out here, additional phrases from the conversations before or after the central Translation Unit from that scene have been included in the provided examples to discuss the subject. The reason is that it is complicated to understand the jokes for someone who has not seen the actual scene of the animation and cannot have a precise understanding of the subject. In the following example, the translation unit "Well, someone else has the Canadian work ethic!" has been discussed considering "expansion" translation strategy. In my data, 444 out of 17,150 subtitles of humour are translated by "expansion" translation strategy.

It is the scene right after they get away from the casino. The comments about French labour laws and Canadian work ethics are hilarious. Also, the singing of "New York, New York" after this conversation is comical. Table 1 demonstrates the example of the "expansion" transferring strategy that is taken from "Madagascar 3: Europe's Most Wanted" animation (2012).

The funny part is when the skipper says, "someone else has the Canadian work ethic!" which means they have a Canadian

Table 1
Expansion translation strategy

Original Texts	Persian Subtitles
Alex: Skipper, what about the plane?	الکس: اسکیپر، هواپیما چی میشه؟
Skipper: Well, the chimps will work all through the night no breaks, no safety restrictions...	اسکیپر: خب، میمون ها کل شب رو کار میکنن ، بدون استراحت، بدون محدودیت های ایمنی
Skipper: Hey! Where are you going? Get back here, we have a contract!	اسکیپر: هی !کجا دارین میرین؟ برگردین. ما قرار داد داریم!
Mason: Yes, well, I'm afraid the labour laws are slightly more lenient in France.	میسون: من فکر میکنم قوانین حزب کارگر در فرانسه یکم ملایم تر باشه.
You see, they only have to work 2 weeks a year.	میبینید، اونها فقط مجبورن ۲ هفته در سال کار کنن
Skipper: Well, someone else has the Canadian work ethic!	اسکیپر: خوب یه نفر دیگه با اخلاق کاری کانادایی دل به کار نمیده

work ethic. It refers to the fact that the Canadian work ethic is not as severe as would be expected; instead, it is lenient and flexible. Persian viewers may not have any knowledge of the rules of work in France or Canada, so in the Persian subtitles, the translator uses the "expansion" translation strategy to explain the subject further and make it understandable to the TT readers.

The sentence "Well, someone else has the Canadian work ethic" has been translated into "well, someone with Canadian work ethic doesn't give heart to work". دل به کار ندادن is an idiomatic expression which literally means "not giving heart to something". This sentence is used when someone is not interested in the heart and does not want to work. The number of words in both texts is shown below. The original translation unit has 5 words, which is expanded to 12 words in the target language.

By applying the "expansion" translation strategy, the subtitler has made the jokes understandable to TT viewers and made them laugh at the joke. The added phrase, which is usually used in a ridiculous tune, makes the joker even funnier.

Paraphrase

Paraphrase strategy is used when the original language structure cannot be preserved in a syntactic way in the target language and the translator has to restructure the phrase or sentence (Gottlieb, 1992). Despite the possible relations of some common concepts between English and Persian, the expression of these languages in many respects needs to be restructured so as to give the same impression to the target text viewers. This translation strategy is the translation of the concept in the form of "sense for sense" versus "word-for-word" or literal translation. Applying 'paraphrase,' the subtitler tries to reach the same meaning of the word by using other words in a different

structure, which is obviously understandable to the TT audience. In most of these cases, this translation method is also accompanied by other processes such as condensation and expansion.

Out of 17,150, 4,837 subtitles of humour are translated by "paraphrase" translation strategy. Table 2 demonstrates the example of the "paraphrase" transferring strategy that is taken from "Sing" animation (2016).

When Buster Moon suggests Eddie to guide her 90 years old grandmother to the royal box, Nana annoyingly replies, "Oh, for heaven's sake, I'm perfectly capable of walking". That is funny because, in reality, she is incapable of walking in a perfect way without help due to her age. Subtitler translated the "Oh, for heaven's sakes, I'm perfectly capable of walking" to یا خدا، من خودم قابلیت راه رفتن عالی دارم which literally means "O God, I have the ability to walk perfectly". The sentence has been reconstructed to accommodate the Persian language syntactically. Despite the structural change of the statement, the meaning and concept of the sentence have been preserved, and the TT viewer, knowing that Nana is physically unable to walk perfectly, sees the joke as funny when hearing his claim that he does not need help. So, the jokes retain the meaning in the subtitled translation.

Transfer

A transfer is a strategy in which the original text is fully and accurately translated (Gottlieb, 1992). The primary purpose of the transfer is to ensure that the meaning of the jokes is not weakened or not lost. Gottlieb says that this translation strategy should accurately and completely state the original text with the correct equivalent of the same or a similar expression in the target language. Besides, this strategy is often used in cognate languages, for example, for translating from English into European languages, all of which belong to the same language family.

Therefore, it can be said that this method may not be suitable for English and Persian, which do not belong to the same linguistic family, and therefore there is no close relationship between the languages, and the terms and words used in the animation do not have the appropriate equivalent in the Persian language. However, the number of 6,746 out of 17,150 subtitles of humour is translated by the "transfer" translation strategy. The characteristics of animation can explain this large number of examples applying the strategy of the transfer. The target audiences and expected viewers for animation are mainly kids, teenagers, and their parents. As a consequence, the

Table 2
Paraphrase translation strategy

Original Texts	Persian Subtitles
Buster Moon: You got it, Eddie Please show your Nana to the royal box.	باستر مون: حتما. ادی لطفا مادربزرگت را به سمت جایگاه ویژه راهنمایی کن
Nana: Oh, for heaven's sakes, I'm perfectly capable of walking.	نانا: یا خدا، من خودم قابلیت راه رفتن عالی دارم

"transfer" translation strategy applies to some degree because of the target audiences' appropriate reading age, and educational and informative background as well as the content of the animation itself. Besides, other factors, such as non-verbal elements, signs, etc., also help viewers to understand the original language. In turn, translators can deploy literal translation or find equivalence between the original English text and Persian subtitles.

Another reason for the high percentage of "transfer" translation strategy is that Persian subtitlers are reluctant to change the original text; the subtitle as a preferred and favoured method for the majority of Iranians is a tool to transfer the excitement and exotic experience of the original film to target viewers. It also shows that most of the elements of the source texts are directly moved to the target text without making any changes to the original version. Table 3 demonstrates the example of the "transfer" transferring strategy that is taken from "Trolls" animation (2016).

Branch, who is extremely tired of listening to Poppy, tries to interrupt her and says, "Shhhh" which indirectly ask her to be quiet and stop talking. Poppy realizes his will and says with annoyance، "There's no Bergen is there? You just said that, so I'd stop talking" and Branch confesses that "Yes Maybe."

The subtitler translated the "there's no Bergen is there? You just said that, so I'd stop talking" to هیچ برگنی وجود نداره، اینطوری گفتی که من دیگه دیگه حرف نزنم (There's no Bergen is there? You just said that, so I'd stop talking) completely and accurately without any change. Hence it can be said that "transfer" translation strategies forward the jokes correctly and without change to the target language.

Imitation

Imitation preserves the original language form, this method is particularly applicable to the names of individuals and places (Gottlieb, 1992). Imitation forms a similar phrase, comparable transferring of proper nouns, multicultural greetings, etc. The expression of meaning is not limited by translating into what is stated literally but may have a cultural concept that requires more reflection. For example, European countries have a lot of festivals and occasions, and they share common

Table 3
Transfer translation strategy

Original Texts	Persian Subtitles
Branch: Shhh!	برنچ: هیس!
Poppy: A Bergen is coming?	پاپی: برگن داره میاد؟
Branch: Maybe.	برنچ: شاید
Poppy: There's no Bergen is there? You just said that so I'd stop talking.	پاپی: هیچ برگنی هم وجود نداره ، اینطوری گفتی که من دیگه حرف نزنم
Branch: Yes Maybe.	برنچ:آره شاید

culture and customs. For example, the United States and many European countries celebrate Christmas and are therefore well versed in Christmas Eve and can easily communicate with the concept of Santa. While the Iranians do not celebrate Christmas and celebrate Nowruz for the start of the New Year, in order for Iranians to understand the idea of Santa Claus, they need to get acquainted with the culture and the ceremony of Christmas and Santa Claus in other countries. Otherwise, Christmas or Santa Clause, which are simple terms, may not be understood by many Iranian viewers.

Imitation translation strategy aims to maintain the original text in a very precise and exact manner as if no translation has ever been done. Santa's example suggests this strategy, like transfer, is suitable for translating between languages that have many common features, such as English and Swedish. In fact, the connections and interactions of the European countries with English are much more than those of Iran in English; a European person can more easily communicate with an American concept or a specific culture in the English language than a Persian viewer.

Out of 17,150, 902 subtitles of humour are translated by the "imitation" translation strategy. This number indicates that Iranian translators are now inclined to imitate the names of famous people and places such as the streets, Penang bridge, Malaysia, the Eiffel Tower of Paris. However, trying to translate names into Persian can eliminate the original English meaning, and in practice, there may not be any logical and correct equivalents in TT. Also, due to the rapid growth of globalization, people more than ever have external communications and interactions with other countries, so they are gradually getting to know different cultures and languages. Due to these justifications, keeping the original name promotes intercultural communication and, in the primary sense, respects and accepts the names of the English culture and language.

Table 4 demonstrates the example of the "imitation" transferring strategy that is taken from "The Secret Life of Pets" animation (2016).

Snowball sees Max and Duke on a ferry and informs Tattoo that they are heading to Brooklyn Bridge. Tattoo assumes he is talking about the business trend, Hipster Real Estate located in Brooklyn and says, "They say everyone's going to Brooklyn these days. It's making a real comeback".

Table 4
Imitation translation strategy

Original Texts	Persian Subtitles
Snowball: They're going to Brooklyn.	اسنوبال: اونا به‌بروکلین میرن.
Tattoo: They say everyone's going to Brooklyn these days. It's making a real comeback.	تاتو: اونها میگن این روزها همه دارن به‌بروکلین میرن ، تا به‌اوج برسن
Snowball: I'm not talking about hipster real estate trends. I'm taking vengeance, Tattoo!	اسنوبال: من در مورد اژانس مشاور املاکی هیپستر صحبت نمیکنم. من در مورد انتقام صحبت میکنم، تاتو!

Snowball clarifies that what he means is that they are going to Brooklyn Bridge to revenge and rescue their friend. Brooklyn is the most populous borough of New York City, and for most Americans, it is a well-known and famous place. Despite its reputation, Brooklyn Bridge is not known to most Iranian viewers, so Tattoo's interpretation of Snowball's statement at first may not look so funny.

The subtitler deploys "imitation" translation strategy and has precisely brought the word B to the Persian subtitle. Although this transferring strategy has weakened the joke, it has introduced Iranian viewers to the culture and the country of the United States by transmitting a cultural element.

Transcription

Transcription strategy is used when a word or phrase is not even meaningful in the original language, for example, a third language or meaningless language is used in the original language (Gottlieb, 1992). In cases of nicknames, foreign vocabularies, pet names, or slips of the tongue, which is generally viewed as meaningless in the source language, the subtitler applies this transferring strategy. Despite creating a little division of the application, the "transcription" translation strategy is not discarded from subtitling strategies. In this transferring strategy, people's names, place names and some popular or well-known abbreviations are imitated directly from the original text, which means there is no pressure to transcribe them into a meaningless combination of several similarly pronounced Persian words. Hence, the strategy of transcription is applicable when translators confront the vague language or nonsense language.

Out of 17,150, 1,327 subtitles of humour are translated by "transcription" translation strategy. Table 5 demonstrates the example of the "transcription" transferring strategy that is taken from "The Secret Life of Pets" animation (2016).

The Sausages gleefully sing a song for them, while Max and Duke swallow them up one by one in their imagination. The song "We go together" was first released in 1978 in the American movie "Grease," and then became a viral song. The song has a lot of vague words that are meaningless even to the source language viewers, so the subtitler has

Table 5
Transcription translation strategy

Original Texts	Persian Subtitles
Sausages: We go together Like rama lama	سوسیس ها : ما با هم میریم. مثل راما لاما
lama ka dinga da dinga dong.	لاما کا دینگا دا دینگا دونگ
Remembered forever	به‌یاد میمونیم
As shoo-bop sha wadda wadda yippity boom de boom	مثل شوبوپ شا وادا وادا ایویتی بوم د بوم
Chang chang	چانگ چانگ
changitty chang sha-bop	چانگیتی پانگ ها بوپ

used a "transcription" strategy. It is therefore assumed that the Persian transcription of the song will have the same effect and meaning of the ST, and the humorous aspect of the scene is still preserved, both viewers laugh at the joy and celebration of sausages, while they are at the risk of being eaten by Max and Duke.

Dislocation

Dislocation strategy is used when the original language uses some special effects in the film, such as a stupid song, in which the translation of this effect is more important than text and content (Gottlieb, 1992). It was applied for different phrases and adjusted content of lyric or visualised language-related aspects. Sometimes the translation process emphasizes the impact of the expression and does not stress the content of the text, for example, when a song or poem is displayed in an animation. In order to meet these conditions, Gottlieb proposed the dislocation translation approach to produce a musical and rhythmic text for the TT viewers. However, this requires the subtitler to have a high degree of understanding of the target language, and at the same time have a high degree of knowledge and information about TT culture and literature.

According to Gottlieb's definition, when a subtitler faces a lyric, poem, song, old song, uses a dislocation method between two languages, which emphasizes and focuses not only on the content but also on the impact of its expressions, such as repetition, a new rhythm, and stress. For example, poetry and song adapted to the Persian viewer have a better voice and rhythm for the second audience. As a result, the Iranian audience feels that he/she knows the song and can relate to it.

Out of 17,150, 656 subtitles of humour are translated by "dislocation" translation strategy. Table 6 demonstrates the example of the "dislocation" transferring strategy that is taken from "Ice Age: Collision Course" animation (2016).

Since in "dislocation" translation strategy, the emphasis is not on the content of the song and the viewer's impression of that animation scene will not be much affected, it can sometimes be used in the translation of animation in which the main target audience are mainly children and their parents. The initial part of the song has been translated to شکلاتی شکلاتی ... تو تو قند و نباتی ... which literally means "You, You, you are candy and sugar-cube! You chocolate chocolate". The Persian translation is a funny, popular kids' song in the Persian language. For this song, the subtitler practices a dislocation strategy between the two languages to highlight the effect of expression. The song's lyrics in Persian have a new rhythm and

Table 6
Dislocation translation strategy

Original Texts	Persian Subtitles
Brooke: You, You, you make me happy! You keep me laughing! You make my world a better place.	بروک: تو تو قند و نباتی .... شکلاتی شکلاتی... تو دنیای منو با خودت بردی.

music of the Persian language. The target audience may feel that the poem seems more familiar to their way of expression.

Condensation

Condensation is a typical strategy in which the text is shortened in a way that the original text retains its original meaning (Gottlieb, 1992). Shortening or cutting down on redundant expressions is a common strategy used in the subtitling of animation. The mechanical constraints of subtitling mean that subtitlers always leave nothing untested to condense the original phrase, especially when they are redundant. Shortening or summarising a phrase is a common way of translating an animation subtitle. The technical constraints sometimes force a subtitler to look for a way to write a shorter text that occupies less space. Given the time and space constraints in the subtitle translation and the short-term appearance and fade of images at a very short pace, the message must be accurately translated into the target language, despite all of these conditions. However, no original text or critical information is deleted in the text; deletions with the least effort can be understood with the help of non-verbal factors, for example, visual effects and sounding. Karamitroglou (1998) in his proposed set of subtitling standards in Europe pointed: "The reading speed of a full two-line of the "average" viewers for a text of average complexity has been proven to range between 150-180 words per minute, i.e. between 2 1/2-3 words per second. This means that a full two-line subtitle containing 14-16 words should remain on the screen for a maximum time of something less than 5 1/2 seconds."

Out of 17,150, 1,704 subtitles of humour are accommodated by the "condensation" translation strategy. Table 7 demonstrates the example of the "condensation" transferring strategy that is taken from "Ratatouille" animation (2007).

In the Persian subtitle, some words and phrases are removed from the original text, which does not have much effect on the original version and the story, and the "condensation" translation strategy is used only to shorten the sentence. As mentioned earlier, the average reading speed of adult viewers based on the proposed guideline for subtitling is 150-180 words per minute, while the average reading speed for children (aged 6-14) that are the main target

Table 7
Condensation translation strategy

Original Texts	Persian Subtitles
Colette: What are you doing?	کولت: چی کار داری میکنی؟
Linguini: Uh, I'm cutting vegetables. I'm cutting the... vegetables?	لینگوییني: من دارم سبزیجات خورد میکنم. من دارم سبزیجات خورد میکنم؟
Colette: No! You waste energy and time! You think cooking is a cute job, eh? Like Mommy in the kitchen? Every second count, you CANNOT be MOMMY!	کولت: تو انرژی و زمان رو تلف میکنی! آشپزی کار بامزه ایه؟ مثل مامان تو آشپزخونه؟ نمی تونی مثل مامان باشی

audience of the animation is around 90-120 words per minute (Karamitroglou, 1998). Therefore, the subtitler sometimes has to use a "condensation" strategy because of the time constraint.

Decimation

Decimation is more extreme than the condensation, in which the text may be shortened due to the high speed of the speech speed of the source language, in this way some important and essential elements may have been eliminated (Gottlieb, 1992). This translation strategy is usually used to translate lengthy subtitle translations with too many words and wordy content in which a large part of the text and the original information are deleted. In this way, the critical information is removed from the original text; as a result, the joke greatly loses its meaning and hilarity.

In the entire comparison of the source text with the subtitles in 16 animations, 342 out of 17,150 subtitles of humour are found when a significant moment of expression is lengthy or spoken quickly, and subtitler applies "decimation" translation strategy. Due to the cultural difference between the two languages, the use of the "decimation" strategy in the Persian language is not recommended. Table 8 demonstrates the example of the "decimation" transferring strategy that is taken from "The Angry Birds" animation (2016).

The statement is reduced in the above example. Since this character expresses a lot of words and phrases speedily and swiftly, due to the subtitles time limitations which previously described in the "condensation" strategy, the subtitler has no other option than to shorten the text as much as possible. However, the subtitler has tried to remove words that are less necessary and less likely to affect the story.

Deletion

In the deletion strategy, part of the text is completely deleted (Gottlieb, 1992). Deletion means removing a significant portion of the original text. In the selected data, the elimination of the content of the source text is rarely seen. Deletion due to the animation features such as shortness and simplicity of conversations and dialogues,

Table 8
Decimation translation strategy

Original Texts	Persian Subtitles
Matilda: Chuck, Share your story with Red	ماتیلدا: چاک ، داستانت رو برای قرمز تعریف کن
Chuck: Me? I am the last guy who should be here. A simple speeding ticket. The judge tells me I was going too fast. So I say, "Your Honor, to be honest, I was. "You caught me" I'm not angry. I'm honest. So shouldn't I be in an honesty management class? 'Cause we gotta manage my honesty.	چاک: من؟ بلیط سرعت معمولی. قانون به من میگه من خیلی سریع میرفتم. بنابراین من میگم آره تند می رفتم. پس من باید در کلاس مدیریت صداقت باشم؟
Matilda: My one problem, that's a different story than you told last time.	ماتیلدا: تنها مشکل من اینه که تو دفعه قبل داستان دیگه ای رو تعریف کردی

there has not been applied much. Sometimes a subtitler, along with condensation and decimation, may want to use the deletion strategy and not translate a part of the text entirely. As with the translation strategy of decimation, nevertheless, deletion is also recognized in preference to a more intense approach in subtitling. Since deletion is stronger than decimation, the use of this strategy in animation film subtitle translation is also limited.

Out of 17,150, 149 subtitles of humour are accommodated by the "deletion" translation strategy. Table 9 demonstrates the example of the "deletion" transferring strategy that is taken from "Hoodwinked" animation (2005).

Twitchy finds something which he assumes is a box of candles and when Wolf asks what kind of candle it is, Twitchy tries to read the label on the "candle," it is "Deen-a-mee-tay." The word "dynamite" is written in the Italian language; then Twitchy says: "Must be Italian." The subtitler has deleted this section for an unknown reason. Although in this example, the deletion of this phrase has not drastically affected the jokes, however, "deletion" strategy is not recommended at all.

Resignation

When the translator finds no solution or strategy for translation, and meaning is inevitably lost, this translation strategy is called resignation (Gottlieb, 1992). This subtitling translation strategy is similar to the deletion approach. "Resignation" translation strategy would employ where the subtitler gives up on the translation of particular aspects of verbal communication. It is not recommended for subtitlers to use resignation to prevent losing any meaning from the source text. Therefore, to keep the essence of the limited original purpose, it is a commonplace that the strategies of deletion, decimation, and resignation are seldom used in the subtitling of animation. From one aspect, the target audience may need as much explanation and information as possible from the translation to perceive the animation fully.

From another viewpoint, given the characteristics of the animation, the original text should not too challenging or complex language, because the film producers consider the age range that constitutes the majority of the audience. In my data, 43 cases of resignation out of 17,150 subtitles are seen. Table 10 demonstrates the example of the "resignation" transferring strategy that is taken from the "Norm of the North" animation (2016).

Table 9
Deletion translation strategy

Original Texts	Persian Subtitles
The Wolf: What kind of candles are those?	گرگ: این چه جور شمع هایی هستن؟
Twitchy: Dee-na-mee-tay. Must be Italian.	توییچی: د ی ن ا می تی.
The Wolf: Ah! Lose the Candle!	گرگ: اوه. شمع رو بنداز

Table 10
Resignation translation strategy

Original Texts	Persian Subtitles
Vera: Mr. Greene, you can't sell the homes yet. We don't have approval from the Council. It's illegal	ورا: آقای گرین، شما نیتونین این خونه ها رو بفروشین ما اجازه اجازه اش رو از کنسول نگرفتیم. این غیر قانونیه
Mr. Greene: Aw, I'm wittle Vee-wa I'm scared of po-weece	آقای گرین: اوه، ترسیدم!

It seems Persian subtitler has given up translating "Aw, I'm wittle Vee-wa I'm scared of po-weece" and just replaced it with ترسیدم (I'm scared). The subtitler has been unable to find an appropriate equivalent, and this has dramatically curtailed the scenes the joke, and the TT viewer does not see it funny.

ACKNOWLEDGEMENT

I would like to thank the School of Languages, Literacies, and Translation, at the Universiti Sains Malaysia which gave me the opportunity to attend the 8th International Language Learning Conference in Penang, Malaysia. This paper was made possible because of this valuable experience.

REFERENCES

Cintas, J. D. (2004). Subtitling: the long journey to academic acknowledgement. *The Journal of Specialised Translation, 1*(1), 50-68.

Cintas, J. D. (2003). Audiovisual translation in the third millennium. In G. M. Anderman & M. Rogers (Eds.), *Translation today: Trends and perspectives* (pp. 192-204). Toronto, Canada: Multilingual Matters.

Díaz-Cintas, J., & Remael, A. (2007). *Audiovisual translation: Subtitling*. Manchester: St. Jerome.

Dollerup, C. (1974). On subtitles in television programmes. *Babel*, *20*(1), 197-202.

EF English Proficiency Index. (2017). *Seventh edition*. Retrieved December 24, 2019, from http://www.ef.com/epi/

Gottlieb, H. (2005). *Multidimensional translation: Semantics turned semiotics.* In EU - High-Level Scientific Conference Series, MuTra (pp. 33-61). Copenhagen: MuTra.

Gottlieb, H. (1992). Subtitling - A new university discipline. In C. Dollerup & A. Loddegaard (Eds.), *Teaching translation and interpreting. Training, talent, experience* (pp. 161-170). Amsterdam, Philadelphia: John Benjamins.

Hartama, M. (1996). Disclosure of subtitling strategies - An analysis of cinema and video subtitling in a feature film (Master's dissertation), University of Helsinki, Finland.

Hassanvandi, S., Ilani, A., & Kazemi, A. (2016). "Chicks Love it" "It's not Ha-wee-wee": Subtitling strategies in translation of humour from English into Persian. *Mediterranean Journal of Social Sciences, 7*(4), 593-600.

Karamitroglou, F. (1998). *A proposed set of subtitling standards in Europe.* Retrieved September 1, 2019, from http://translationjournal.net/journal/04stndrd.htm

Kenny, D. (2009). Unit of translation. In M. Baker & G. Saldanha (Eds.), *Routledge encyclopedia of translation studies* (pp. 304-306). London, UK: Routledge.

Kianbakht, S. (2015). Humour translation revisited: The case of Woody Allen's "Annie Hall" subtitled into Persian. *International Journal of Comparative Literature & Translation Studies, 3*(4), 27-31.

Lomheim, S. (1999). The writing on the screen. Subtitling: A case study from Norwegian broadcasting (NRK). In G. Anderman & M. Rogers (Eds.), *Word, text, translation. Liber amicorum for Peter Newmark* (pp. 190-207). Bristol, UK: Multilingual Matters.

Sadeghpour, H. R., & Omar, H. C. (2015). Humour translation in Persian subtitled comedy movies into English: A case study of 'Lizard'. *Theory and Practice in Language Studies, 5*(10), 1995-2004.

Salehi, A. (2013). Translation of allusions in subtitling from English into Persian. *International Journal of Comparative Literature & Translation Studies, 1*(1), 18-31.

Schwarz, B. (2002). *Translation in a confined space - Film sub-titling with special reference to Dennis Potter's "Lipstick on Your Collar" Part 1*. Retrieved September 1, 2019, from https://translationjournal.net/journal/22subtitles.htm

Taylor, C. (2000). The subtitling of film: Reaching another community. In E. Ventola (Ed.), *Discourse and community: Doing functional linguistics* (pp. 309-330). Tübingen: Gunter Narr Verlag.

Vazifehkhah, A. E. (2017). Difficulties in inter-lingual subtitling and the strategies to deal with: A case study of English translation into Persian. *International Journal of English Linguistics, 7*(3), 97-102.

Pertanika J. Soc. Sci. & Hum. 28 (2): 957 - 978 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

The Importance of Japanese Language Skills Proficiency among Malaysian Graduates in Japanese-based Companies

Yeoh Lee Su*, Kaur Manjet and Tengku Mahadi Tengku-Sepora

School of Languages, Literacies and Translation, Universiti Sains Malaysia, 11800 USM Penang, Malaysia

ABSTRACT

The relationship in commerce and business between Japan and Malaysia has been rapidly developing and expanding in recent times. As a result, there is a dramatic rise in the demand for individuals who have Japanese language proficiency to work in Japanese companies. However, a very limited number of studies have focused on the requirements of Japanese language proficiency and importance of Japanese language skills among employees in JRCSM (Japanese Related Companies in Malaysia), especially in Southeast Asian context. This quantitative research investigated the level of importance of Japanese language proficiency in listening, speaking, reading, and writing among Malaysia Japanese Speaking Graduate Employees working at JRCSM. The results indicate that listening and speaking skills as the most important skills required in JRCSM workplace for communication purposes. The implications of this study indicate the need for the establishment of Japanese language degree programme at Malaysian universities to provide academic support for the Japanese language learners and to make sure that they are equipped with good Japanese listening, speaking, reading and writing skills.

Keywords: Japanese Related Companies in Malaysia (JRCSM), Japanese language skills' proficiency, Malaysian Japanese Speaking Graduate Employees (MJSGEs), workplace communication

ARTICLE INFO

Article history:
Received: 10 December 2019
Accepted: 30 January 2020
Published: 26 June 2020

E-mail addresses:
lsyeoh@usm.my (Yeoh Lee Su)
manjeet@usm.my (Kaur Manjet)
tsepora@usm.my (Tengku Mahadi Tengku-Sepora)
* Corresponding author

INTRODUCTION

In the early 1980s, Malaysia's former Prime Minister, Tun Dr. Mahathir bin Mohamed introduced the country's "Look East" policy, which was one of the factors that enhanced the bilateral relations, especially those related to commerce and economics. Since then, not only economic relations but also diplomatic and cultural relations and

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

exchanges between Malaysia and Japan have strengthened and flourished. These issues altogether have resulted in more Japanese firms opting to invest in Malaysia. Japan positions itself as one of the main trade partners of Malaysia as well as a major provider of direct foreign investment and economic assistance (Furuoka, 2007; The Ministry of Foreign Affairs, 2003).

Research Background and Problem

The relationship in commerce and business between Japan and Malaysia has been rapidly developing and expanding in recent times. This is evident in the increase in the number of joint-ventures between Japanese and Malaysian firms as well as Japanese subsidiaries in Malaysia. In April 2014, there was a total of 1,412 Japanese Related Companies in Malaysia, (JRCSM) which are either joint ventures or wholly-owned Japanese companies (Japan External Tade Organization [JETRO], 2014). As a result, there was a dramatic rise in the demand for individuals who had Japanese language proficiency to work in Japanese companies. Taking this into account, Japanese language proficiency has become vital for Malaysians looking for jobs in JRCSM (Ooi, 2013). Consequently, Malaysian job seekers need to require a specific level of Japanese language proficiency to find employment in JRCSM. Furthermore, the increasing number of Japanese related companies has attributed to the need of employing ASEAN countries' university graduates such as those from Malaysia who have both good proficiency in Japanese language and knowledge of Japanese business practices (Izumi et al., 2014; Maeno et al., 2013, 2015). Izumi et al. (2014) had conducted a study regarding the problems with business Japanese competencies of business people working in Japan-related workplace in Singapore. However, a very limited number of studies have focused on requirements of Japanese language proficiency and importance of Japanese language skills among employees in JRCSM, especially in Southeast Asian context (Izumi et al., 2014; Yeoh, 2018). This research, therefore, investigates the level of importance of Japanese language proficiency in listening, speaking, reading, and writing among Malaysia Japanese Speaking Graduate Employees (MJSGEs) working in JRCSM.

Objective of the Study

The main purpose of this study is to investigate Japanese language skills' proficiency among MJSGEs working in JRCSM. The study examined the level of importance of Japanese language proficiency in listening, speaking, reading, and writing among MJSGEs. The study aims to answer how important are the Japanese language skills (reading, writing, speaking and listening) for MJSGEs working in JRCSM.

Literature Review

Japanese Language Proficiency in a Multinational Workplace. In JRCSM, the Japanese language is considered as the medium of communication. Since there are a total of 1412 Japanese-Related Companies in Malaysia and most Japanese

people's proficiency of English is still low (Iwasaki, 2006), Japanese language skills are considered to be essential for local employees (Yoshida et al., 2013) such as MJSGEs and other graduates for employment. According to Ainol et al. (2007), in the Malaysian context, most MJSGEs learn the Japanese language because they believe that it is useful for gaining employment.

Multinational companies (MNCs) such as JRCSM, more often are formed through branches and subsidiaries and hence a number of languages co-exist due to both the geographical dispersion of MNCs across national borders and the multilingual profile of their workforce (Angouri, 2007). Cooren (2006) explained that proficiency in Japanese language skills was important for the MJSGEs to build good relationships with their Japanese employers. A language is also an important tool for information transfer and organising social relationship, thought patterns and actions (Robichaud, 2006). Hence, the use of the Japanese language may have a great effect on relationship building and knowledge sharing between and among local employees and Japanese expatriates in JRCSM. Therefore, if MJSGEs are able to communicate in the Japanese language with good Japanese language skills, they are expected to understand the Japanese culture better and this will contribute to their business communication wellbeing in JRCSM (Peltokorpi, 2007). Furthermore, parallel research done by Yoshihara (1999) highlighted the importance of language issues in Japanese MNCs describing the two pillars of their international human resources management strategy as "Management by Japanese" and "Management in the Japanese language". Studies cited above show that the Japanese language played an important role in JRCSM and also influences the way JRCSM manage their subsidiary operations. According to Yoshihara (1999), even though Japanese manufacturing companies have extensive experience in international operations, foreign subsidiaries are traditionally managed by Japanese expatriates. Communication-related to important issues (such as work-related matters and technology and project transfers between subsidiaries and headquarters) has been traditionally conducted in the Japanese language.

According to Asakawa et al. (2013), internationalisation of Japanese companies, with the majority being manufacturing companies, has been particularly rapid in the 2000s due to the globalisation process and the economic recession at that time. Japanese companies are now trying to be on par with corporations in other developed countries in order to be competitive in the global business environment (Disco Inc., 2012a). This includes hiring more non-Japanese employees with intercultural communication and language skills (Disco Inc., 2012b). Therefore, proficiency in Japanese language skills is needed in JRCSM, even though English has become an important language in Japan (Disco Inc. 2012a). Iwasaki (2006) pointed out that the English language proficiency of most Japanese people was still limited. Therefore,

Japanese language skills are essential for local employees such as MJSGEs and other graduates for employment (Yoshida et al., 2013).

Bloch (1995) and Ojanperä (2014) mentioned the effects of foreign language skills on individuals' job performance in multinational corporations such as JRCSM. Firstly, it is stated that foreign language skills affect career opportunities. Secondly, foreign language skills have an indirect effect on job performance such as contributing to better cultural awareness and intellectual growth (Bloch, 1995; Ojanperä, 2014). This is particularly true in the context of Japanese language as it is a highly contextualized language, and Japanese people usually do not express themselves in a straightforward way (Hall & Hall, 1977, 1989). Therefore, in order to understand information accurately in the Japanese society, MJSGEs with good proficiency in Japanese language skills are expected to be more sensitive to subtle hints and be able to decode hidden meanings within the Japanese communication context.

Japanese Language Proficiency in the Workplace. Japanese language proficiency refers to what individuals can do with their knowledge of the Japanese language and how well they can use the language to communicate effectively in the real world. Flynn et al. (2008) stated that "listening is considered by some to be the single most important element in the communication process, even more highly valued than speaking as a communication skill necessary in the business world" (p. 143-144). In addition, according to Wolvin and Coakley (1996), listening is instrumental in the workplace. Furthermore, employers have identified listening as one of the most important communication skills for employees at all levels and indicate that good listening skills are an important indication of employee competence. According to Lynch (2011), communicative events require effective use of two-way listening skills in group discussions and team projects, meeting, training and seminars sessions, and interactions with clients, superiors, and others. Each of these tasks places specific demands on the ability of the workers to process and respond to spoken language.

According to Brown (2007), listening and speaking are learners' language tools. Doff (2007) also pointed out that learners could improve their speaking ability unless they developed listening ability. Baker and Westrup (2003) stated that speaking was of vital importance in the workplace, therefore, Japanese language speakers had more opportunities to find jobs in different organisations and companies.

Falsgraf et al. (1993) conducted a study to identify issues faced by Japanese language learners who worked in a Japanese workplace setting. Similar to other language environments, the workplace environment requires foreign Japanese speakers to participate in the context of making presentations, interacting with colleagues, making enquiries, and participating in group discussions. These interactions require foreign Japanese speakers to participate actively and show their professionalism

on the job. However, the study done by Shimada and Shibukawa (1999) revealed that local employees in Kuala Lumpur used the Japanese language for the purpose of greeting and daily conversation with Japanese expatriates. In Singapore, Izumi et al. (2014) revealed foreign Japanese language speakers who used Japanese in Japanese related companies in Singapore were more to a daily conversation with their Japanese expatriates in their workplace.

In literacy, reading is regarded as a set of skills that can be compartmentalised, taught, and tested. At the same time, linguistic knowledge of the foreign language (for instance, vocabulary and grammar) is an important influence on comprehension. One of the components of reading is knowledge about text structures. This is an important factor to consider in foreign language reading, especially Japanese language reading because the way in which ideas are organised in texts often varies from culture to culture. Chikamatsu (2003) supported this notion of reading and stated that:

> "Japanese texts often begin with ambiguous, indirect meta-phonic statements, followed by a series of non-subjective, seemingly irrelevant examples or statements with the topic finally mentioned at the end of the text" (p. 192).

Chikamatsu (2003) added that the conclusion of Japanese texts was often vague, and required the readers to create their own conclusions. Therefore, knowledge of Japanese language text structures assists in reading comprehension. With the required knowledge, it is easier to identify the topic and main sentences, and relationships between sentences and paragraphs.

According to Alderson (2000), reading involves bringing background and external knowledge to a text. Good reading skills are vital for learners to understand the concepts and good readers are able to effectively transmit their competency to written and oral communication tasks. Therefore, reading is very important for MJSGEs in the workplace because reading does not only affect their reading abilities but also affects their writing skill and negotiating other Japanese language elements.

The above statement revealed that learners' writing skills in a foreign language can be affected by their reading experience in a foreign language (Krashen, 1984). This is because learners are able to gain greater exposure to the foreign language if they read various types of reading texts. By reading widely, they expand their vocabulary knowledge, learn grammar incidentally, discover the way texts are organised and enrich their experiences in various ways of life. Laufer and Nation (1995), who mentioned that learners' vocabulary knowledge and writing performance had a strong and significant correlation.

Therefore, writing skills can be greatly developed when the learners' interest is recognised and when they are exposed to situations where they can produce authentic pieces of writing. For MJSGEs, the concepts and requirements of writing can be fulfilled as it is in JRCSM where they are required

to produce authentic writing task. However, it is important to note that communication requires using words correctly and appropriately in sentences. Furthermore, grammatical knowledge is also important. As such, MJSGEs are required to have a wider vocabulary and a strong foundation in grammar to enable them to cope with writing tasks and organising written texts in the Japanese language in JRCSM.

Existing literature has not focused on the writing skill for occupational purposes, skills such as assisting learners to develop competence in the specific genres to help them in their academic study, workplace, and their lives in general. Izumi et al. (2014) was the only study that had focused on writing skills for occupational purpose in Singapore. The findings of Izumi et al.'s study revealed that the most frequent requirements for writing skill among the local employees in the Japanese related companies in Singapore were writing e-mails and writing reports.

METHODS

Research Design

This is a quantitative study involving the collection of data through a survey questionnaire. The participants involved MJSGEs who graduated from public Malaysian higher education (HE) institutions. The Japanese Language Questionnaire (JLQ) was administered to participants selected through purposive sampling. The questionnaires were completed by 65 MJSGEs. The selection of this group of participants was based on three criteria. First, participants have to be a degree holder who graduated from public Malaysian HE institutions. Second, they have learned the Japanese language in public Malaysian HE institutions and have a minimum level of N3 or above qualification for The Japanese Language Proficiency Test (JLPT). With a minimum of N3 qualification, graduates have the ability to understand Japanese language used in everyday situations, and they are able to navigate through more complex daily living situations. The public Malaysian HE institutions' graduates were selected as the JLPT registration data for the northern region of Malaysia indicated more than 70% of the candidates were from the public Malaysian HE institutions (Penang Japanese Language Society, 2016). Third, they have worked in the manufacturing field related JRCSM for more than one year and have interacted with JRCSM employers in their workplace. One year of experience would have helped them gain experience in dealing with JRCSM employers in their workplace.

Instruments

Questionnaire. JLQ was adapted from Shimada and Shibukawa (1999) and Tiong (2002). The questionnaire includes four sections that requested information on respondents' personal information, academic achievement and JLPT grade, the use of the Japanese language for work-related matters and the level of importance of Japanese language skills used in JRCSM.

Implementation of the Study

Phase One. JLQ was developed and pilot tested. JLQ was administered to a small sample (n=20) similar to the potential participants. The results obtained from the pilot test was analyzed using Statistical Pack of Social Sciences (SPSS) software and the Cronbach Alpha obtained is 0.859, suggesting that the items have relatively high internal consistency. The pilot test was followed with the selection of the actual study's participants. Initially, four organizations in Malaysia were selected based on purposive sampling and the organizations were approached through invitation letter. These four organizations are Penang Japanese Language Society, Perak Malaysia-Japanese Friendship Society, Malaysia Japanese Language Society, and Japan Foundation Kuala Lumpur.

Phase Two. Organizations mentioned above were approached in order to get the relevant data about possible participants for this study. The questionnaire was completed by 65 MJSGEs.

Phase Three. In this phase, the Statistical Package for Social Sciences (SPSS) version 20 was used to analyse the participants' responses in the JLQ. Specifically, descriptive and inferential statistics were used to analyse the quantitative data.

RESULTS

The result of the level of importance of Japanese language proficiency in listening, speaking, reading, and writing among MJSGEs are presented according to the research questions.

Research Question: How important are the Japanese Language Skills (Reading, Writing, Speaking and Listening) for MJSGEs Working in JRCSM?

The profile of the participants based on the data in the personal and demographic information section of the questionnaire are reported as in Figure 1.

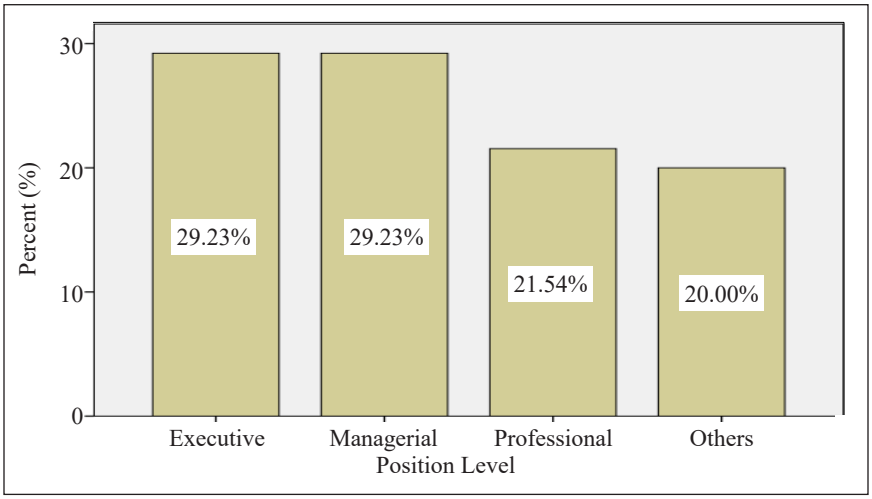


Figure 1. Distribution of participants' position level

This section reports the participants' position level in JRCSM. It is essential to mention here that the position level used in this study refers to the position of a participant in his/her organisation. Four categories were constructed for the participant's current position. There were "professional", "managerial", "executive" and "others". General workers were grouped under the "others" category. The bar chart displayed in Figure 1 reveals that the majority of the participants are in the executive (29.23%), managerial (29.23%), and professional (21.54%) levels.

The bar chart in Figure 2 below shows that the majority of the participants obtained JLPT N3 level and N1 level with 40% and 35.4% respectively. 24.6% of the participants obtained the JLPT N2 level.

Table 1 shows the cross-tabulation of participants' position level and JLPT level using the exact count and percentage. Based on the results reported in Table 1, the chi-square test ($X^2(n = 4) = 36.356$) showed that p-value is less than 0.05, indicating that there is a significant relationship between the levels of JLPT and position of the participants. Participants with higher JLPT levels tend to hold managerial and professional positions in JRCSM and participants with lower JLPT level tend to hold other positions which include general workers under the "others" category. The majority of the participants who had JLPT N1 level held managerial and professional positions. Both of these two categories accounted for 86.9% of participants with JLPT N1 level.

This section displays the results of the level of importance of Japanese language skills based on views of participants working in JRCSM. In these 38 items, Likert scale ranging from one (very important) to four (not important at all) was used to evaluate the relative importance of the items. For a better reporting of the results, scale one (very important) and scale two (important) were combined; and scale three (less important) and scale four (not important at all) were also combined.

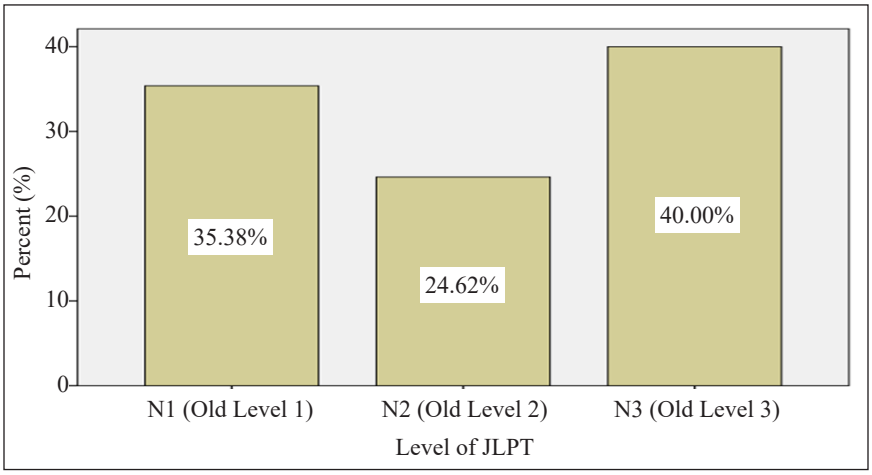


Figure 2. Participants' level of JLPT

Table 1
Cross-tabulation of position level and JLPT levels

JLPT level		Position level			
		Others	Executive	Managerial	Professional
N1 (Old Level 1)	Count	0	3	9	11
	%	0.00%	13.00%	39.10%	47.80%
N2 (Old Level 2)	Count	1	5	7	3
	%	6.30%	31.30%	43.80%	18.80%
N3 (Old Level 3)	Count	12	11	3	0
	%	46.20%	42.30%	11.50%	0.00%

Notes: $X^2(n = 4) = 36.356$, p-value ≈ 0.000

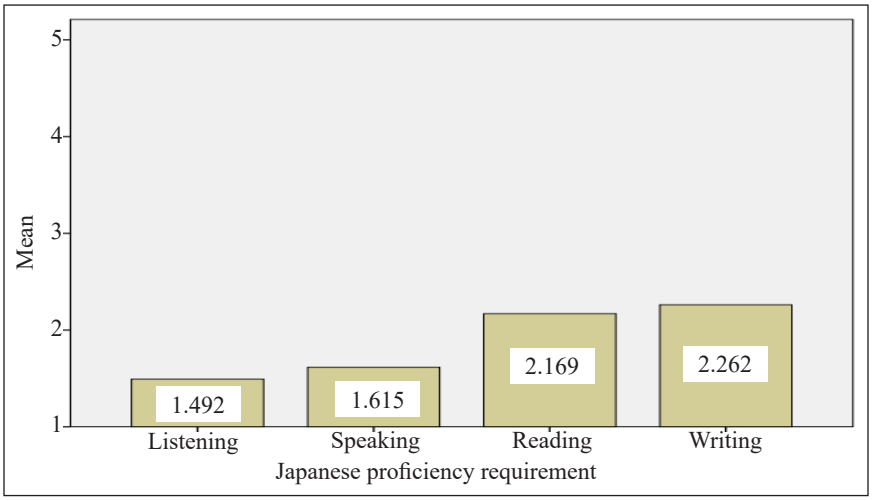


Figure 3. Level of importance of Japanese language skills in JRCSM

Figure 3 shows participants' responses regarding the level of importance of four major skills in Japanese language proficiency. Based on the data reported in the bar chart (Figure 3), it can be observed that listening and speaking skills are the top two most important Japanese language skills that are required by participants for Japanese language proficiency. Both these two skills reflect a relatively low mean value of 1.492 and 1.615, respectively. Furthermore, one-way ANOVA was conducted to examine the significant difference in the level of importance of the four major skills in the Japanese language across different position levels (Table 2).

Based on the results reported in Table 2 above, no significant difference was found for listening and speaking skills because their corresponding *p* values (sig. column) were greater than 0.05 (the significance level that was set before the analysis). Therefore, across all position levels, listening and speaking skills are viewed to be equally important for Japanese language proficiency in the workplace of MJSGEs.

Table 2
Japanese language proficiency requirements in four major skills by position level

Variable		Sum of Squares	df	Mean square	F	Sig.
Listening	Between groups	0.692	3	0.231	0.476	0.700
	Within groups	29.554	61	0.484		
	Total	30.246	64			
Speaking	Between groups	1.106	3	0.369	0.697	0.558
	Within groups	32.279	61	0.529		
	Total	33.385	64			
Reading	Between groups	26.594	3	8.865	15.654	0.000
	Within groups	34.545	61	0.566		
	Total	61.138	64			
Writing	Between groups	23.995	3	7.998	14.118	0.000
	Within groups	34.558	61	0.567		
	Total	58.554	64			

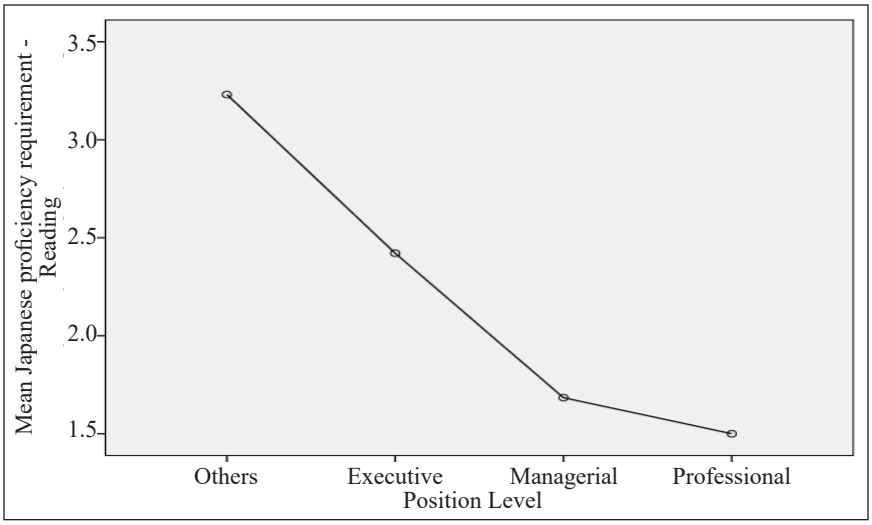


Figure 4. Reading skill requirement for Japanese language proficiency by position level

As far as reading skill is concerned, the result revealed that there was a significant difference in the level of importance for Japanese language proficiency among position levels of participants at 0.05 ($F_{3,61}$ = 15.654, p ≈ 0.000). Furthermore, Figure 4 shows that the participants who held the managerial and professional positions required reading skill in the Japanese language, compared to those who held the positions as executive and others. Apart from that, the results in Table 2 also showed that there was a significant difference in the level of writing skills requirement for Japanese language proficiency between different position levels of participants at 0.05 ($F_{3,61}$ = 14.118, p ≈ 0.000).

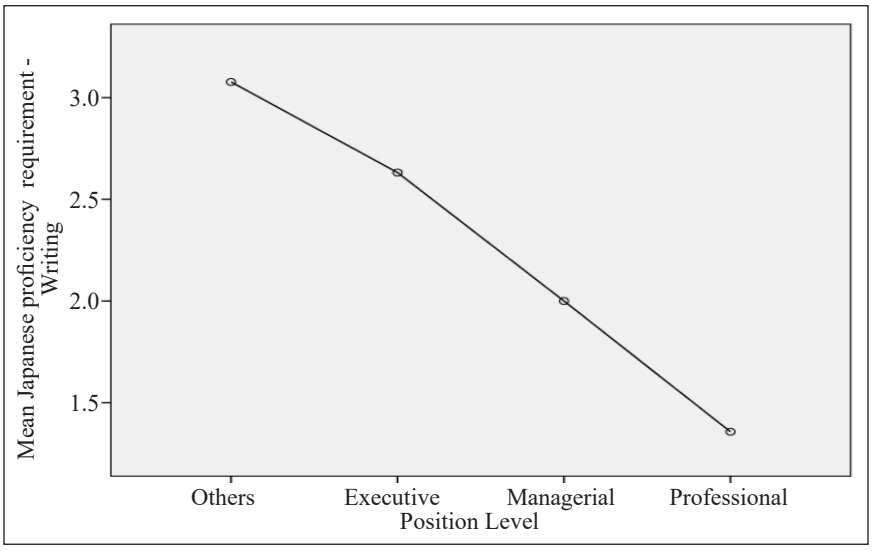


Figure 5. Writing skill requirement for Japanese language proficiency by position level

In addition, Figure 5 reveals that participants' who held the position as managerial and professional were the individuals who required writing skill (lower mean score indicates higher requirement level). Therefore, participants who held managerial and professional positions (associated with higher JLPT levels) showed that they needed to use reading and writing skills in their work more than those who held the position as executive and others (had lower JLPT level).

Level of Importance of Four Major Skills' Sub Skill in JRCSM

The levels of importance of the four major skills in Japanese were calculated based on their underlying sub-skills.

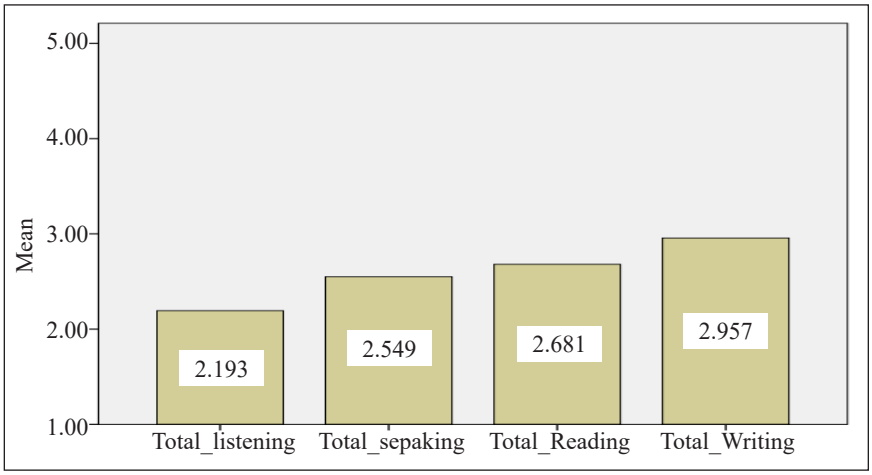


Figure 6. Level of importance of Japanese language skills in JRCSM

Figure 6 shows the level of importance (mean values) for four major skills. The data revealed that listening skill is the most important skill, supported by the lowest mean value of 2.193 (lower value indicates more important). Next, the second most important skill (in relative comparison) is speaking with a mean value of 2.549, followed by reading skill (mean = 2.681), and lastly, writing skill (mean = 2.957).

For in-depth analysis, the level of importance for the four major skills was compared across the position levels' of participants using ANOVA, as summarised in Table 3. Based on these results, p values (Sig. column) for the listening skill, speaking skill, reading skill and writing skill was greater than 0.05. Thus, there was no significant difference in the level of importance for listening, speaking, reading, and writing skills for participants of different position levels. This study concludes that across all position levels, speaking, listening, reading, and writing skills in the Japanese language are equally important for the participants.

Level of Importance of Japanese Language Listening Skill

Figure 7 depicts the level of importance for each sub-skill of the Japanese listening skill using a bar chart. Based on the chart, it can be noticed that understanding oral instruction (mean = 1.923), understanding discussion (mean = 1.8), and understanding face to face conversation (mean = 1.769) are the three most important listening sub-skills. Besides that, all of the sub-skills except understanding formal talks and speeches showed mean values less than 2.5 (midpoint of 4 points Likert scale), indicating that they are all important.

In conclusion, the six sub-skills of listening skill (which are answering phone calls, understanding oral instructions, understanding discussions, understanding proceedings of meetings, understanding face-to-face conversations,

Table 3
Level of importance for Japanese language skills by position level

Variable		Sum of Squares	df	Mean square	F	Sig.
Listening	Between groups	1.593	3	0.531	0.923	0.435
	Within groups	35.118	61	0.576		
	Total	36.711	64			
Speaking	Between groups	1.162	3	0.387	0.628	0.600
	Within groups	37.628	61	0.617		
	Total	38.79	64			
Reading	Between groups	1.301	3	0.434	0.568	0.638
	Within groups	46.544	61	0.763		
	Total	47.845	64			
Writing	Between groups	0.389	3	0.13	0.177	0.912
	Within groups	44.687	61	0.733		
	Total	45.076	64			

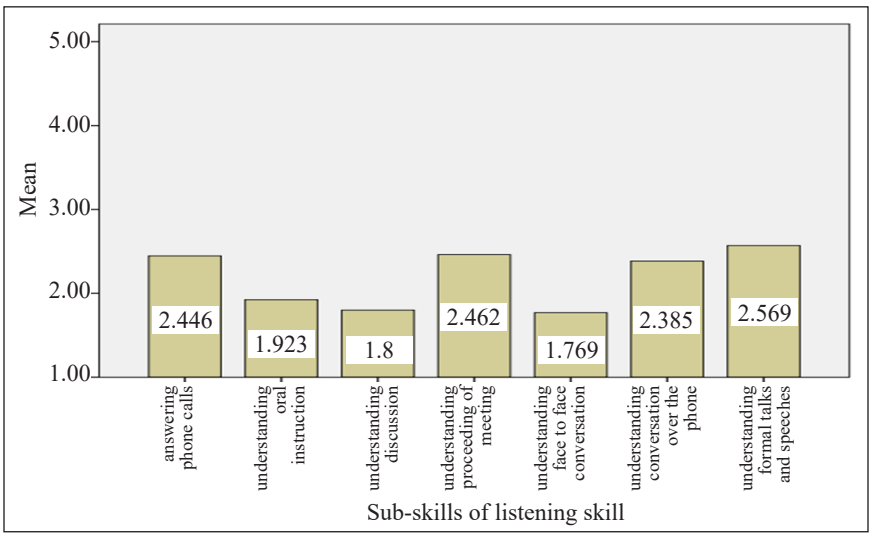


Figure 7. Level of importance for each sub-skill of the Japanese language listening skill

and understanding conversation over the phone) are important for the participants. The specific important sub-skills for the participants include understanding oral instructions, understanding discussions, and understanding face-to-face conversations.

The importance level of each specific sub-skills of listening skill was compared among the different levels of position. The results in Table 4 show that participants from different position levels did not show a significant difference in the level of importance for all the sub-skills of listening skill at 0.05 significance levels. Thus, all seven sub-skills of listening skill are equally important across different position levels of the participants.

Table 4
*Level of importance for listening sub-skills of the Japanese language by position leve*l

Variable		Sum of Squares	df	Mean Square	F	Sig.
Answer phone calls	Between groups	8.872	3	2.957	2.117	0.107
	Within groups	85.19	61	1.397		
	Total	94.062	64			
Understand oral instruction	Between groups	1.695	3	0.565	0.515	0.674
	Within groups	66.92	61	1.097		
	Total	68.615	64			
Understand discussion	Between groups	2.997	3	0.999	1.404	0.25
	Within groups	43.403	61	0.712		
	Total	46.4	64			
Understand proceeding of meeting	Between groups	3.949	3	1.316	0.954	0.42
	Within groups	84.204	61	1.38		
	Total	88.154	64			

Table 4 *(continue)*

Variable		Sum of Squares	df	Mean Square	F	Sig.
Understand face to face conversation	Between groups	0.77	3	0.257	0.308	0.819
	Within groups	50.769	61	0.832		
	Total	51.538	64			
Understand conversation over the phone	Between groups	4.719	3	1.573	1.082	0.363
	Within groups	88.666	61	1.454		
	Total	93.385	64			
Understand formal talks and speeches	Between groups	8.061	3	2.687	2.28	0.088
	Within groups	71.877	61	1.178		
	Total	79.938	64			

Level of Importance of Japanese Language Speaking Skills

Twelve sub-skills were measured under the speaking skill of the Japanese language. The bar chart in Figure 8 depicts the level of importance for each sub-skill in Japanese speaking skill. By comparing the mean scores of all sub-skills, the participants pointed out that the top three most important sub-skill of the speaking skills are greetings (mean = 1.862), face to face conversations with Japanese colleagues (mean = 1.923), and communicating with Japanese colleagues (mean = 2.138).

In general, the five speaking sub-skills that were deemed to be important encompassed greetings, telephone conversations, face to face conversations, communicating with Japanese colleagues, and work-related conversations with Japanese colleagues.

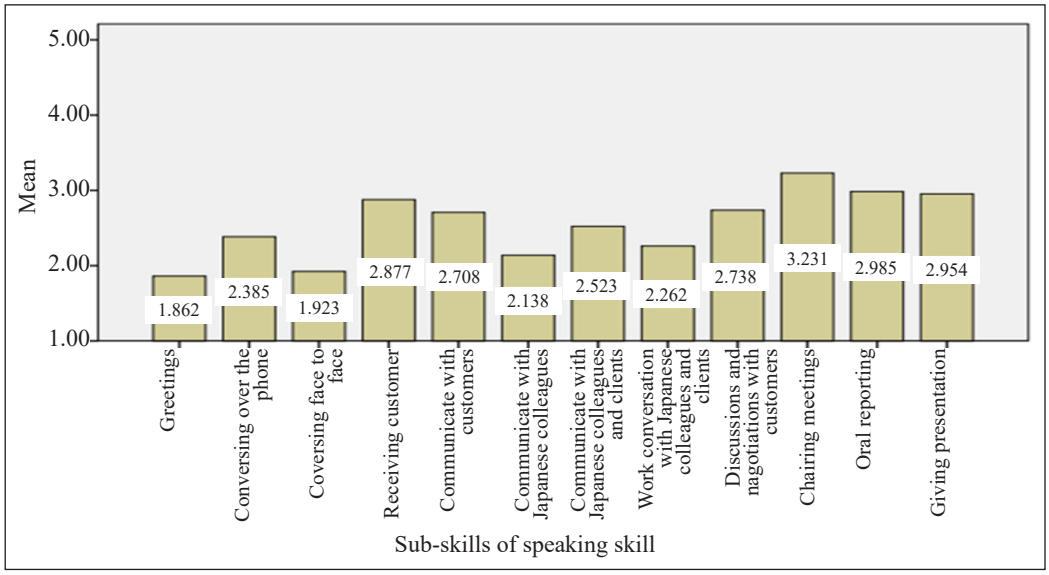


Figure 8. Level of importance for each sub-skill of the Japanese language speaking skill

Table 5 shows the analysis of variance (ANOVA) for the differences in the level of importance of Japanese speaking sub-skills among participants with different levels of position. No significant differences were found between the level of importance

Table 5
Level of importance of speaking sub-skills of the Japanese language by position level

Variable		Sum of squares	Df	Mean square	F	Sig.
Greetings	Between groups	4.455	3	1.485	1.528	0.216
	Within groups	59.299	61	0.972		
	Total	63.754	64			
Cconversing over the phone	Between groups	7.424	3	2.475	1.756	0.165
	Within groups	85.96	61	1.409		
	Total	93.385	64			
Conversing face to face	Between groups	4.702	3	1.567	2.083	0.112
	Within groups	45.913	61	0.753		
	Total	50.615	64			
Receiving customers	Between groups	3.99	3	1.33	1.053	0.376
	Within groups	77.026	61	1.263		
	Total	81.015	64			
Communicate with customers	Between groups	1.667	3	0.556	0.369	0.775
	Within groups	91.779	61	1.505		
	Total	93.446	64			
Communicate with Japanese colleagues	Between groups	2.548	3	0.849	0.689	0.562
	Within groups	75.206	61	1.233		
	Total	77.754	64			
Communicate with Japanese customers and clients	Between groups	3.738	3	1.246	0.788	0.505
	Within groups	96.477	61	1.582		
	Total	100.215	64			
Work conversation with Japanese colleagues	Between groups	2.244	3	0.748	0.529	0.664
	Within groups	86.31	61	1.415		
	Total	88.554	64			
Discussions and negotiations with customers	Between groups	1.074	3	0.358	0.229	0.876
	Within groups	95.479	61	1.565		
	Total	96.554	64			
Chairing meetings	Between groups	5.671	3	1.89	1.65	0.187
	Within groups	69.868	61	1.145		
	Total	75.538	64			
Oral reporting	Between groups	6.603	3	2.201	1.423	0.245
	Within groups	94.381	61	1.547		
	Total	100.985	64			
Giving presentation	Between groups	1.46	3	0.487	0.293	0.830
	Within groups	101.402	61	1.662		
	Total	102.862	64			

for all speaking sub-skills and different positions held. Subsequently, it can be noted that all twelve Japanese speaking sub-skills are equally important across different position levels.

Level of Importance of Japanese Language Reading Skills

For Japanese reading skills, the level of importance of eight sub-skills is presented in Figure 9. Based on the results given in the bar chart, reading e-mail (mean = 2.031) is the only sub-skill with a mean value of less than 2.5. This obviously indicates that this skill is the most important for the majority of participants. The finding also revealed that the sub-skill of reading e-mail was rated by the majority of the participants as the most important skill among other reading sub-skills in JRCSM. This was clear as the mean value of this sub-skill was the lowest (mean = 2.031). In addition, reading memos, reading business letters, and reading business reports showed a significant level of importance. Therefore, reading e-mails and the three reading sub-skills mentioned above were also viewed to be important by the participants.

The differences between the level of importance of each specific sub-skills of the reading skill and different levels of position were examined and the result is reported in Table 6. At the 0.05 significance level, all the sub-skills showed insignificant differences in the level of importance between the positions held by the participants, except for reading memos ($F_{3, 61} = 3.338$, $p = 0.025$).

The result presented in Figure 10 reveals that the sub-skill of reading memos is more important to managers and general workers (other categories in the questionnaire). This is because this sub-skill scored low mean scores by managers and general workers, compared to executive and professional positions.

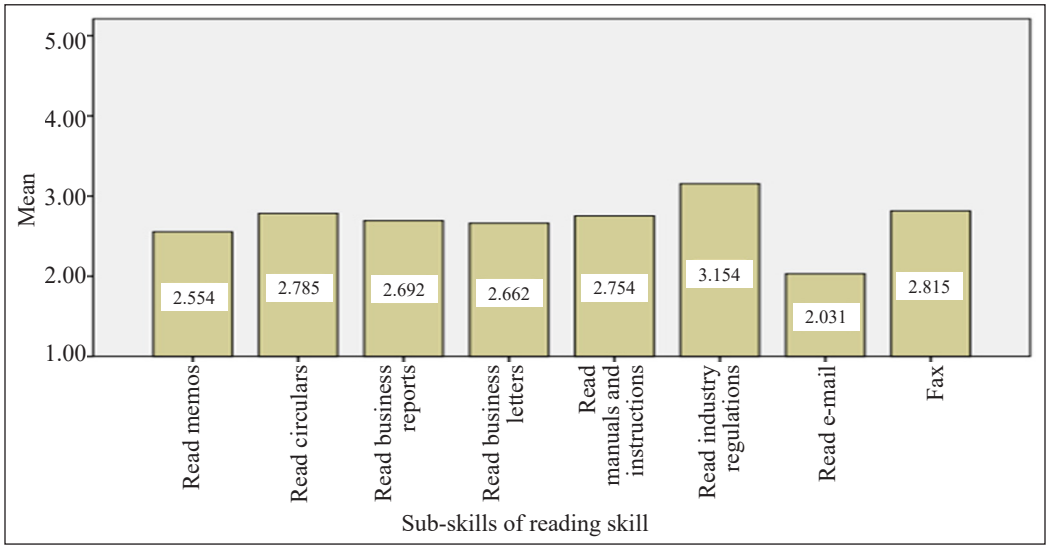


Figure 9. Level of importance of sub-skills of Japanese language reading skill

Table 6
Level of importance for each sub-skill of Japanese language reading skill by position level

Variable		Sum of squares	df	Mean square	F	Sig.
Read memos	Between groups	13.546	3	4.515	3.338	0.025
	Within groups	82.516	61	1.353		
	Total	96.062	64			
Read circulars	Between groups	8.645	3	2.882	2.302	0.086
	Within groups	76.34	61	1.251		
	Total	84.985	64			
Reading business reports	Between groups	3.528	3	1.176	0.851	0.472
	Within groups	84.318	61	1.382		
	Total	87.846	64			
Reading business letters	Between groups	1.538	3	0.513	0.368	0.776
	Within groups	85.016	61	1.394		
	Total	86.554	64			
Reading manuals and instructions	Between groups	1.232	3	0.411	0.289	0.833
	Within groups	86.829	61	1.423		
	Total	88.062	64			
Reading industry regulations	Between groups	0.423	3	0.141	0.139	0.936
	Within groups	62.038	61	1.017		
	Total	62.462	64			
Reading email	Between groups	0.969	3	0.323	0.238	0.87
	Within groups	82.969	61	1.36		
	Total	83.938	64			
Reading fax	Between groups	5.357	3	1.786	1.29	0.286
	Within groups	84.428	61	1.384		
	Total	89.785	64			

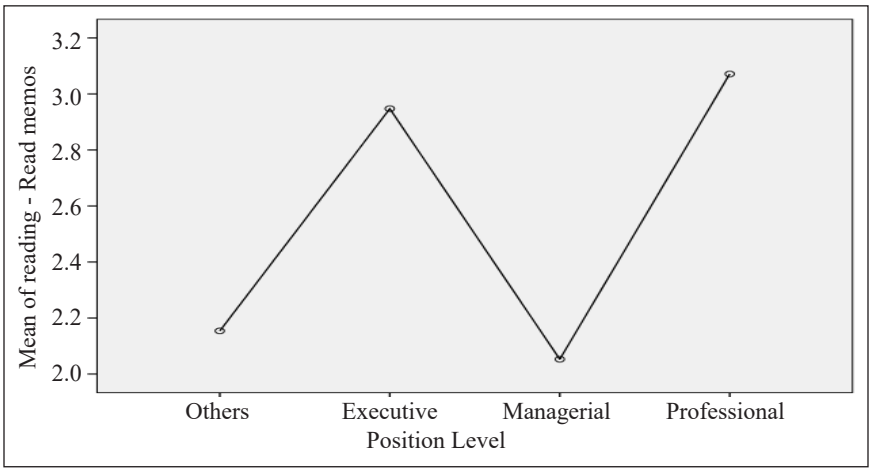


Figure 10. Mean plot for the level of importance of reading memos by position levels

Level of Importance of Japanese Language Writing Skill

Figure 11 presents the importance level of eleven sub-skills of Japanese writing skill. Based on the data presented in the chart, writing e-mail (mean = 2.492), and translating from other languages into Japanese (mean = 2.462) are the two most important sub-skills for writing in the Japanese language. The study also revealed that nine writing sub-skills that are less important for participants because the mean values of these nine sub-skills were greater than 2.5. These nine less important sub-skills are translating from Japanese into other languages (mean = 2.523), writing reports (mean = 2.954), filling up forms (mean = 2.954), writing letters (mean = 3.077), writing notices (mean = 3.338), writing memos (mean = 3.292), writing fax messages (mean = 3.185), editing written materials (mean = 3.138), and writing proposals (mean = 3.108). Therefore, the two sub-skills that are deemed to be important for the participants are writing e-mails and translating from other languages into Japanese.

Table 7 shows the analysis of variance (ANOVA) for the differences in the importance of Japanese writing sub-skills across different levels of position. The results show that there is no significant difference in the level of importance for all the writing sub-skills across different positions held by the participants. Thus, all eleven Japanese writing sub-skills are equally important across different position levels.

DISCUSSIONS AND CONCLUSION

Based on the findings obtained from the quantitative research study to explore the level of importance of Japanese language skills which are used by MJSGEs working

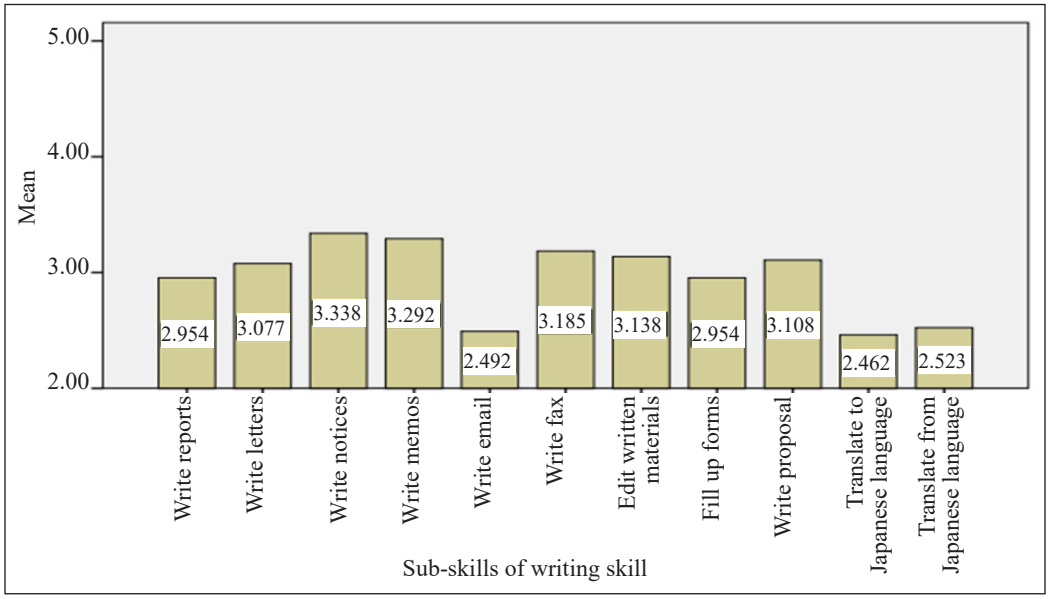


Figure 11. Level of importance of sub-skills of Japanese language writing skill

Table 7
Level of importance for writing sub-skills of Japanese language according to position level

Variable		Sum of squares	df	Mean square	F	Sig.
Write reports	Between groups	3.469	3	1.156	0.888	0.452
	Within groups	79.393	61	1.302		
	Total	82.862	64			
Write letters	Between groups	1.594	3	0.531	0.373	0.773
	Within groups	87.021	61	1.427		
	Total	88.615	64			
Write notices	Between groups	1.71	3	0.57	0.612	0.610
	Within groups	56.844	61	0.932		
	Total	58.554	64			
Write memos	Between groups	0.796	3	0.265	0.243	0.866
	Within groups	66.65	61	1.093		
	Total	67.446	64			
Write email	Between groups	0.042	3	0.014	0.008	0.999
	Within groups	104.2	61	1.708		
	Total	104.25	64			
Write fax	Between groups	4.996	3	1.665	1.477	0.230
	Within groups	68.789	61	1.128		
	Total	73.785	64			
Edit written materials	Between groups	0.789	3	0.263	0.214	0.886
	Within groups	74.964	61	1.229		
	Total	75.754	64			
Fill up forms	Between groups	2.529	3	0.843	0.61	0.611
	Within groups	84.333	61	1.383		
	Total	86.862	64			
Write proposal	Between groups	0.87	3	0.29	0.202	0.894
	Within groups	87.377	61	1.432		
	Total	88.246	64			
Translate to Japanese language	Between groups	6	3	2	1.108	0.353
	Within groups	110.15	61	1.806		
	Total	116.15	64			
Translate from Japanese language	Between groups	6.45	3	2.15	1.133	0.343
	Within groups	115.77	61	1.898		
	Total	122.22	64			

in JRCSM, it shows that listening skill is the most important skill in JRCSM workplace communication. This finding supported by the comments of Flynn et al. (2008), Yeoh et al. (2016), and Yeoh (2018) pointed out that listening was considered by some to be the single most important element in the communication process, even more highly valued than speaking as a communication skill necessary in the business world. These

findings also concur with Wolvin and Coakley (1995) that listening is instrumental at the workplace where employers identified listening as one of the most important communication skills for employees at all levels. This indicates that good listening skills are important components of employee competence.

In addition, the findings from the MJSGEs indicated that speaking skill is also important. Speaking skill is crucial to build a good relationship with the Japanese expatriate and gain more trust from them. This finding echoes Cooren (2006), Yeoh et al. (2016), and Yeoh's (2018) views that proficiency in Japanese language skills is important for the MJSGEs to build a good relationship with their Japanese employers.

The finding indicates that knowing the Japanese language can be an advantage for those working in JRCSM. It echoes the statement made by Bloch (1995) that foreign language skills can contribute to career enhancement and according to Yoshida et al. (2013), Japanese language skills are essential for local employees such as MJSGEs and other graduates for employment. Currently, most universities in Malaysia only offer elementary level Japanese language course except for a few universities such as Universiti Malaya and Universiti Sains Malaysia. Therefore, the proficiency level that can be achieved before starting work at Japanese companies is limited. The study proposes the establishment of Japanese language degree programme in Malaysia universities in order to provide a more conducive academic support for the Japanese language learners and to make sure they are equipped with the good Japanese language listening, speaking, reading and writing skills. The study also indicated that the language competencies would help MJSGEs to understand the Japanese way of thinking and behaviour. This is important in Malaysian context because Malaysia is made up of Malays, Chinese, and Indians besides its minority ethnic groups from the east. Each ethnic group has its own cultural norms, lifestyle, traditions, and belief systems (Manjet et al., 2017). These findings of this study will also provide useful teaching implications for Japanese education in Malaysia by introducing the Japanese language, thinking and behaviour to the different ethnic groups who hold different belief systems. These can be achieved by introducing Japanese work culture into the Japanese language courses.

ACKNOWLEDGEMENT

We would like to express our cordial thanks to all the participants that voluntarily took part in this study.

REFERENCES

Ainol, M., Isarji, H., & Mohamad Sahari, N. (2007). A study of the effectiveness o foreign language programs in Malaysia. In *32nd Annual Congress of the Applied Linguistics Association of Australia, Making a Difference: Challenges for Applied Linguistics* (pp. 73-87). Wollongong: University of Wollongong.

Alderson, J. C. (2000). *Assessing reading*. Cambridge: Cambridge University Press.

Angouri, P. (2007). *Language in the workplace: a multimethod study of the communicative activity in seven multinational companies situated in Europe* (Doctoral dissertation), University of Essex, Colchester, England.

Asakawa, K., Ito, K., Rose, E., & Westney, D. (2013). Internationalization in Japan's service industries. *Asia Pacific Journal of Management*, *30*(4), 1155-1168.

Baker, J., & Westrup, H. (2003). *Essential speaking skills*. London [u.a.]: Continuum.

Bloch, B. (1995). Career enhancement through foreign language skills. *International Journal of Career Management*, *7*(6), 15-26.

Brown, H. (2007). *Teaching by principles an interactive approach to language pedagogy*. San Francisco: State University.

Brownell, J. (1990). Perceptions of effective listeners: A management study. *Journal of Business Communication*, *27*(4), 401-415.

Chikamatsu, N. (2003). The effects of computer use on L2 Japanese writing. *Foreign Language Annals*, *36*(1), 114-127.

Cooren, F. (2006). The organizational communication-discourse tilt: A refugee's perspective. *Management Communication Quarterly*, *19*(4), 653-660.

Disco Inc. (2012a). *Beyond English capability - Hilten Amin reports, Tokyo, Japan*. Retrieved January 2, 2018, from http://disco.co.jp/en/resource/pdf/BeyongEnglishCapability.pdf.

Disco Inc. (2012b). *Recent recruitment trends in Japan - Hilten Amin reports, Tokyo, Japan*. Retrieved January 2, 2018, from http://disco.co.jp/en/resource/pdf/RecruitmentTrendsJapan.pdf.

Doff, A. (2007). *Teach English*. Cambridge: Cambridge University Press.

Falsgraf, C., Fujii, N., & Kataoka, H. (1993). English speakers in Japanese work environments: An analysis of Japanese language functions and needs. *The Journal of The Association Of Teachers Of Japanese*, *27*(2), 177-204.

Flynn, J., Valikoski, T., & Grau, J. (2008). Listening in the business context: Reviewing the state of research. *International Journal of Listening*, *22*(2), 141-151.

Furuoka, F. (2007). Malaysia-Japan relations under the Mahathir administration: Case studies of the look east policy and Japanese investment in Malaysia. *Asian Survey*, *47*(3), 505-519.

Hall, E. & Hall, M. (1977). Nonverbal communication for educators. *Theory into Practice*, *16*(3), 141-143.

Hall, E. & Hall, M. (1989). *Hidden differences*. New York: Doubleday.

Iwasaki, S. (2006). Japan: Language situation. In K. Brown (Ed.), *The encyclopedia of languages and linguistics* (pp. 93-95). Oxford: Elsevier.

Izumi, W., Ito, A., & Ishihara, E. (2014). What are the problems with business Japanese competencies? A study based on surveys of business people working in Japan-related Workplaces. In *The Sixth CLS International Conference CLaSIC 2014 Knowledge, Skills and Competencies in Foreign Language Education* (pp. 487-511). Singapore: National University of Singapore.

Japan External Trade Organization. (2014). *JETRO*. Retrieved January 3, 2018, from http://www.jetro.go.jp/.

Krashen, S. (1984). *Writing. Research, theory and applications*. New York: Prentice-Hall.

Laufer, B. & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied. Linguistics. 16*(3), 307-322.

Lynch, T. (2011). Academic listening in the 21st century: Reviewing a decade of research. *Journal of English for Academic Purposes*, *10*(2), 79-88.

Maeno, F., Katsuda, C., & Larpsrisawad, N. (2013). 在タイ日系企業が求める日本語人材ーアンケート調査よりー [The need for Japanese related companies in Thailand for the Japanese speaking employees: Finding from a questionnaire survey]. *Japanese Education Bulletin*, *10*(1), 67-76.

Maeno, F., Katsuda, C., & Larpsrisawad, N. (2015). 在タイ日系企業が求める日本語人材 ―インタビュー調査より―.日本語教育紀要, *12* [The need for Japanese related companies in Thailand for the Japanese speaking employees: Finding from a questionnaire survey]. *Japanese Education Bulletin*, *12*(1), 47-56.

Manjet, K., Fatin, N., Jaganathan, P., & Karupiah P. (2017). Exploring Malaysian based intercultural knowledge and behaviour among secondary school students through the English Language Intercultural Reading Programme (ELIRP). *Pertanika Journal of Social Sciences & Humanities*, *25*(3), 1383-1400.

Ojanperä, M. (2014). *Effects of using English in business communication in Japanese-based multinational corporations* (Master's dissertation). University of Oulu, Finland.

Ooi, C. K. (2013). ASCOJA towards the cooperation and development of ASEAN & Japan. In *The 20th ASEAN Council of Japan Alumni (ASCOJA) Conference.* Hanoi: The International Conference Centre.

Peltokorpi, V. (2007). Intercultural communication patterns and tactics: Nordic expatriates in Japan. *International Business Review*, *16*(1), 68-82.

Penang Japanese Language Society. (2016). *Registration Report.* Retrieved January 2, 2019, from http://www.pjls.org/

Robichaud, D. (2006). Steps toward a relational view of agency. In F. Cooren, J. Taylor & E. VanEvery. (Eds.), *Communication as organizing* (pp.101-115). London: LEA.

Shimada, M., & Shibukawa, S. (1999). Japanese language usage in Japanese companies in five Asian cities. *Journal of Japanese Language Teaching*, *103*(1), 109-118.

The Ministry of Foreign Affairs. (2003). *Japan-Malaysia Economic Partnership* Agreement. Retrieved January 11, 2018, from https://www.mofa.go.jp/policy/economy/fta/malaysia.html.

Tiong, W. (2002). *Language needs of a multinational company in Penang, Malaysia: A case study of Robert Bosch (M) Sendirian Berhad* (Master's dissertation), Universiti Sains Malaysia, Malaysia.

Wolvin, A., & Coakley, C. (1995). *Listening*. Madison: Brown & Benchmark.

Yeoh, L., Tengku Sepora, T., & Manjet, K. (2016). Business communication needs of Japanese companies in Malaysia. *Advance in Language and Literary Studies*, *7*(2), 156-162.

Yeoh, L. (2018). *Japanese language proficiency among Malaysian Japanese speaking graduate employees: A study in Japanese companies in Malaysia* (Doctoral dissertation), Universiti Sains Malaysia, Malaysia.

Yoshida, T., Yashiro, K., & Suzuki, Y. (2013). Intercultural communication skills: What Japanese business today need. *International Journal of Intercultural Relations*, *37*(1), 72-85.

Yoshihara, M. (1999). *Global operation managed by Japanese in Japanese* (RIEB Kobe Working Paper No. 108). Retrieved March 3, 2018, https://www.rieb.kobe-u.ac.jp/research/publication/dp_en/index.html

Pertanika J. Soc. Sci. & Hum. 28 (2): 979 - 993 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Language and Social Identity: Language Choice and Language Attitude of Diaspora Communities in Bali

Ni Made Dhanawaty[1]*, Ni Luh Nyoman Seri Malini[2], Ni Made Wiasti[3] and Ida Bagus Putra Yadnya[2]

[1]Department of Indonesian Language, Faculty of Arts, Udayana University, 80114 Bali, Indonesia
[2]Department of English, Faculty of Arts, Udayana University, 80114 Bali, Indonesia
[3]Department of Anthropology, Faculty of Arts, Udayana University, 80114 Bali, Indonesia

ABSTRACT

Migration contributes significantly to the occurrence of language contact and language changes. Migrant communities as diaspora are always faced with choices whether maintaining the use of mother tongue in interacting, switching to using the word of the host, or using ethnic languages side by side with the host language in a new place. This research is intended to provide evidence of the phenomena of communication and social identity focusing on the language use and attitude of diaspora communities in Bali. It is a sociolinguistic study using descriptive qualitative methods on the Muslim community in three regencies that had lived in Bali for more than a generation. The data were collected through questionnaires, in-depth interviews, and direct observation. The result shows that most diaspora communities see the mother tongue as an essential means of maintaining their social identity. From language choice and attitude perspective, the diaspora community leads to three categories, namely (1) the population that identifies themselves as more diaspora than Balinese; (2) the community claiming themselves as more Balinese than diaspora and (3) the community considering themselves as diaspora and Balinese (dual identity).

Keywords: Diaspora community, language attitude, language choice, social identity

ARTICLE INFO

Article history:
Received: 14 May 2019
Accepted: 18 October 2019
Published: 26 June 2020

E-mail addresses:
md_dhanawaty@unud.ac.id (Ni Made Dhanawaty)
seri.malini@unud.ac.id (Ni Luh Nyoman Seri Malini)
mwiasti@yahoo.com (Ni Made Wiasti)
putrayadnya@yahoo.com (Ida Bagus Putra Yadnya)
* Corresponding author

INTRODUCTION

Human mobility, especially migration and its influence on the practice of language and ideology, has become an attraction for sociolinguistic studies. In reality, migrants as diaspora communities are always to

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

consider whether maintaining the use of mother tongue in interacting, switching to using the language of the host, or using ethnic languages side by side with the local language in a new place. They strive to establish positive contacts with the host society, and at the same time maintain their ethnolinguistic heritage. The process, on the one hand, causes language phenomenon and cultural communication resulting in mutual influence and enrich the repertoire of language and culture respectively and, on the other hand, can eliminate the purity of language and culture (Dhanawaty, 2002; Hamers & Blanc, 1989; Malini, 2011).

Studies on the relationship between identity and minority language maintenance and shift have been done by many authors (Breitborde, 1998; Carbaugh, 1996; Edwards, 1984, 1988; Edwards & Chisholm, 1987; Giles, 1979; Giles et al., 1977; Giles & Johnson, 1987). In the Indonesian context the development of language has resulted from the interaction between (1) regional languages due to the influence of mobility as happened in border areas and transmigration areas, (2) local language interactions with the national language and (3) various processes of globalization (Abdullah, 2006). As a phenomenon of cultural mobility the diaspora communities can no longer be considered only as a group of people with their demographic characteristics, but as humans who have a culture, including the value system, social system, and material culture. The spread of culture goes hand in hand with the movement of Indonesian human groups, which are eventually followed by the spread of cultural elements (including language) through the diffusion process (Yadnya & Ardika, 2017).

The Province of Bali is part of Indonesia. The plurality of languages or the presence of various styles in the island resulted from language contact by different ethnic groups who inhabit Bali, both ethnic migrants through migration (such as Javanese, Bugis, Madurese, Sasak, Chinese, and others) and Balinese as natives. Sociolinguistically, research on Balinese diaspora (transmigrants) living in various regions in Indonesia, especially concerning its linguistic aspects, has been carried out. Sutjaja (1992), Kismosuwartono (1991), Dhanawaty (2002), Yadnya et al. (2010), and Malini (2011) examined several social aspects of the language of Balinese transmigrants in Lampung, including the construction of ethnic identity, patterns of language use, linguistic characteristics, and the continued use of Balinese. On the other hand, research on the diaspora community from various regions in Indonesia living in Bali is very limited and it is more studied from an anthropological and historical perspective. This research is intended to fill this gap and provide evidence of the phenomena of language and identity focused on the use and language attitude of diaspora communities in Bali.

LITERATURE REVIEW

The interaction between people with different cultures is a phenomenon that occurs in everyday life. Each interaction indicates

a different intercultural understanding that focuses on the role of verbal and nonverbal communication and is based on the belief that people from various cultural communities will adjust their communication to accommodate other cultures. In each communication event, there is a strategy used by communicators and communicants to stabilize the process by making the connection run well so that it creates a harmonious relationship. Every individual who communicates will surely bring an identity that will determine how the individual behaves.

Cultural identity can be seen as the membership of a group where everyone uses the same symbol system. Sociolinguistics considers the phenomenon of language choice as a social fact and places it in a system of symbols (codes), cultural behavior systems, and logical systems. Fishman (1985) considered that the relationship between language and culture could be seen in three perspectives, namely (1) as part of a culture, (2) as a cultural index, and (3) as a cultural symbol. As part of the culture, language is the embodiment of human behavior. For example ceremonies, rituals, songs, stories, prayers are speech acts or speech events. All who want to be involved and understand a culture must master the language because by learning the language that then they can participate and experience the culture. As a cultural index, language also reveals how to think and organize the experience of speakers appearing on the surface in lexical items and as a cultural symbol, word shows ethnic, cultural identity.

In the event of communication, speakers apply basic assumptions about the linguistic potential of their interlocutors in a bilingual or multilingual society. When a speaker experiences a process of interactive discourse, he may be converging on the language of the other person or diverging on his language code. A person's decision in choosing a style or using one language code depends on the cost or perceived benefit to be obtained. As stated by Fasold (1984) the choice of language was not as simple as imagined, in the sense of choosing a style as a whole in a communication event. The choice of expression in the sociolinguistic paradigm meets not only with linguistic problems, but also with social, cultural, psychological, and situational issues. In the event of interaction, the necessity to choose a language or variety of words that are suitable for an interaction situation cannot be avoided because mistakes in selecting a dialect or type of languages can result in losses for participants in that interaction (Giles & Coupland, 1991). The event of interaction using language as something culturally shaped in the context of social life is clearly presented in Hymes's (1962) ethnography of communication that offers a theoretical basis for language study that accounts for both linguistic variation from individual to individual and relative linguistic coherence across the social realm, while also offering a methodological heuristic for investigating communication, often represented in terms of the SPEAKING mnemonic.

In a multilingual society, various codes are available, both in the form of language, dialect, variety, and style for use in social interactions. With the availability of the codes, community members will choose the available code according to the factors that influence it. In daily interactions, community members constantly change the variety of language uses. According to Giles and Coupland (1991) changes in linguistic behavior can occur because (a) a speaker is trying to adjust to the ability of the interlocutors because he wants to communicate with them and (b) a speaker is not trying to adjust his speech to the interests of the interlocutors and instead deliberately makes his speech utterly not the same as his interlocutors. Furthermore, Giles and Coupland (1991) used the terms convergence to refer to the process if there were two or more speakers who changed speech to adjust to the interlocutor and divergence to refer to the way a person who maintained his speech, both verbal and non-verbal in order to distinguish himself from other speakers. Ervin-Tripp (1964) identified that language choice in bilingual/multilingual social interactions was caused by four main factors, namely (1) setting (time and place) and situation like having breakfast in the family environment, meeting in the household, happy birth in a family, going to college, and bargaining with goods at the market; (2) participants in interaction that includes things like age, sex, occupation, socioeconomic status, and their role in relationships with speech partners, (3) conversation topics such as topics about work, children's success, actual events, and the topic of prices on the market, and (4) interaction functions like offering information, requests, routine habits (greetings, apologizing, or saying thank you). Theoretically, Hymes's ethnography of communication, Giles and Coupland's linguistic accommodation perspectives, and Evin-Tripp's arguments on factors of language choice have contributed in this study in the sense that they provided the researcher perspectives of the occurrence of language contact and language changes and a rationalization that migrant communities as diaspora are always faced with choices whether maintaining the use of mother tongue in interacting, switching to using the word of the host, or using ethnic languages side by side with the host language in a new place.

On the empirical level, many studies have been conducted in different parts of the world examining the outcome of language contact and the status of ethnic or immigrant languages such as in the field of social psychology showing that immigrants can feel emotionally attached to the new country without losing their attachment to their homeland (Harris, 1980). Holmes et al. (1993) investigated the language situation among ethnic groups in New Zealand and listed the factors that fostered language maintenance including regular social interaction between community members, use of the mother tongue in the home, positive attitudes towards the language and high values placed on it to retain social identity, and a positive orientation to the

homeland. The result of investigation by Dweik and Al-Obaidi (2014) indicated the different language domains used mainly at home, in religious settings, and their inner speech.The previous studies carried out especially by Fishman (1964, 1966), Dweik (2000), Freed and Collentine (2004), and Al-Khatib and Al-Ali (2005) have contributed to this study methodologically in designing the sociolinguistic survey.

Patterns of language maintenance and shift that are driven by both social and cultural factors have been noted by many authors (Dorian, 1989; Gal, 1979; Giles et al., 1977). Minority languages are identified not to serve only as a means of communication; they are essential tools for expressing cultural heritage and ethnic identity (Auer, 1998; Crystal, 2000; Fishman, 1989, 1991, 1999; Lanca et al., 1994; Padilla, 1999; Spolsky, 1999). Fishman (1989) revealed three consequences of language contact. First, immigrant languages dominate the speech situation and defeat the use of the host language. Second, the opposite situation occurs where the language of immigrants is defeated. The third is the ethnic immigrant language is used side by side with the host language tied by a diglossic relationship where each language is used in specific domains and each language speakers have positive attitudes to it. With reference to the three possible situations, the present study is concerned with the investigation of ethnic identity on the level of group membership identification and seeks for insights into the relationships between ethnic identity and first language maintenance to especially providing evidence of the language choice and language attitude of the diaspora community in Bali, Indonesia**.**

METHODS

This sociolinguistic study was conducted with a qualitative descriptive method supported by a quantitative method to find out the linguistic characteristics of diaspora communities in Bali, including the language choice and attitude of the diaspora in daily communication. This research is not intended to test specific hypotheses but instead describes "as it is" about a variable, symptom or circumstance in three diaspora settlements in Bali, namely (1) Loloan Muslim diaspora community, in Jembrana Regency; (2) Pegayaman Muslim diaspora community in the Regency of Buleleng; and (3) of Tegal Linggah Muslim diaspora community in Karangasem Regency. The selection of the three diaspora communities is based on subject homogeneity in terms of place and time. In terms of location, geographically the three diaspora community groups come from the area or island closest to Bali, namely Java to the west (Loloan and Pegayaman Muslim diaspora Communities) and Lombok to the east (Tegal Linggah Muslim diaspora Community). From a time perspective, the three diaspora communities are the result of migration that has long been in existence, and they have settled in Bali for more than a generation. Besides, the diaspora community has an identical migration history related to the presence of a ruling kingdom in Bali (the Pegayaman diaspora community is associated with the

royal government of Buleleng and the Sasak Muslim diaspora community is related to the rule of King Karangasem).

In the process of collecting data, survey methods, interviews, and participatory observation were used supported by focus group discussion. The survey method was carried out through the distribution of structured and detailed questionnaires to obtain information from informants who were considered representative of the study population. In collecting data the research team was assisted by field staff who had been previously trained and observed and were involved in community activities in the diaspora community in Bali. To get answers to language attitude and language choice questions from the communities in the three research locations, the sociolinguistic questionnaire was distributed to 30 respondents from each district. The sociolinguistic survey was in principle designed based on Fishman (1964, 1966), Dweik (2000), Freed and Collentine (2004) and Al-Khatib and Al-Ali (2005) which of course had been adjusted for this study. The questionnaire consists of three sections including demographic data about their background, the language used in different domains including home, school, neighborhood, workplace, religion, media and self-expression, and their attitudes towards mother tongue, the national language (Indonesian) and the host language (Balinese). The statements in each part are followed by five options: 5- Strongly agree 4- Agree 3- Neutral 2- Disagree 1- Strongly disagree.

The interviews were done in three locations directly by making contact or conversation with the informant as the resource person using Indonesian and Balinese to get information about the profile and historical background of their existence as the diaspora community in Bali. By making direct observations, researchers can find out how the activities of the diaspora community in Bali are in their social life. In this study, the participatory observation method is carried out by participating in the conversation and listening to the conversation conducted by conversing with the speaker. To maintain the validity and reliability of the data a focus group discussion was carried out, as a means for data triangulation. It was carried out by inviting linguists, anthropologists, and cultural experts as well as community leaders and diaspora communities in three research locations. This forum was meant to make some sort of data verification and obtaining additional information and expert judgment for revision and betterment of the result of the analysis.

As a sociolinguistics study, it is focused on the relationship of language with the speaker community with the paradigm of seeing language as a medium for integrating oneself as a social being or as part of society. Data analysis combines qualitative and quantitative methods using communication ethnographic theory (Hymes, 1972), language choice theory (Evin-Tripp in Grosjean, 1982), language accommodation (Giles & Coupland, 1991). The application of communication ethnographic theory is

intended to base the argument that the event of interaction using language is something culturally shaped in the context of social life. Language choice theory is applied to describe the choice of languages of diasporas in interacting in a multilingual Bali area. With the availability of several languages, each speaker is able to choose the language according to the communication situation. The application of accommodation theory is intended to understand the adjustment made by the diaspora community verbally by modifying the speech so that it becomes similar or may be increasingly different from the interlocutors.

The result of the analysis is presented with interpretative descriptive explanations. Descriptive explanations are presented in the form of narrative exposures about the quality of various symptoms that are studied extensively and deeply. While interpretative explanations are intended as an effort to interpret various phenomena that are examined using relevant theories.

RESULT AND DISCUSSION

All diaspora communities coming to Bali must have interacted with the local community (Bali) or other communities who have settled in Bali first. In addition to their mother tongue, they also brought identities that determined the way how they made a communication. As a group of migrants with Islamic culture, the diaspora community is faced with a dominant culture, namely Balinese culture which in principle has different features, especially in the field of religion. The intensity of interaction with Balinese people causes the process of absorbing elements of Balinese culture. In the process of cooperation, of course, they use language as a means of communication. The implication is that language contacts, language choices, or language competition will emerge to smooth the inter-ethnic interaction and communication or maintain their ethnicity and culture. Therefore the following discussion will be focused on two main issues including (1) language choice and (2) language attitude that come from the relationship between acculturation, cross-cultural attitudes, identity, and maintenance and the first language shift.

Language Choice

A person's decision in choosing a language depends on the cost or perceived reward that will be obtained. The next presentation will reveal the phenomenon of language use in different context situation including the domain of family, school, neighborhood, place of work, religion, media, and self-expression choice made by diaspora community in three research locations. In the family domain, the use of mother tongue by the three diaspora communities is reflected in the following Table 1.

In the Loloan community, most people claimed that the language used by their mother and biological father was Malay. The use of Malay language is still strong and most respondents (93.3%) use Malay when talking daily to family including father, mother, grandfather, grandmother, and siblings especially when they have family gatherings. Demographic data of

Table 1
The use of mother tongue in the family domain

Context of Situation	Community	M	B	S	I	J	O/Mix
		(%)	(%)	(%)	(%)	(%)	(%)
The language used when talking with parents, siblings, and grandparents.	***Loloan***	93.3	-	-	-	-	-
	Pegayaman	-	100	-	-	-	-
	Tegal Linggah	-	72	33.3	6.7	5	-
The language used when talking with relatives in Bali.	***Loloan***	63.3	6.7	-	23.3	-	3.3
	Pegayaman	-	100	-	-	-	-
	Tegal Linggah	-	70	10	-	5	15

Note. M = Malay; B = Balinese; S= Sasakese; I = Indonesian; J = Javanese and O = other/mix language

Pegayaman community shows that out of 30 respondents a total of 29 stated that their mother tongue and biological father were Balinese (96.7%) and in the family domain, all respondents (100%) used Balinese when speaking with their parents, grandparents, and siblings. This shows that the Pegayaman diaspora community has considered Balinese as part of their identity. Tegal Linggah community, Karangasem is a community that still considers itself a diaspora and a part of Balinese. Although most of the biological mother and father are Balinese, there is a mixture of language usage found. In the family domain, most respondents use Balinese (72%). The use of Sasak language in the family domain only 33.3%. Aside from Balinese and Sasak words, the choice of the community also exists in other languages such as Indonesian and Javanese (respectively 6.7% and 5%). Thus the choice of language in this community is very flexible and tends to be more in line with the speech situation or with the other participants.

When talking to relatives in Bali, most Loloan respondents used Malay (63.3%) and Indonesian (23.3%). The use of host language (Balinese) among the Loloan respondent was only 6.7%. In Pegayaman, on the contrary, all respondents (100%) claimed to have used Balinese when talking to their relatives in Bali. Meanwhile, in Tegal Linggah Karangasem, the community used mostly Balinese (70%) and Sasakese (10%) when they had a conversation with relatives in Bali.

In a neighboring environment, the selection of Malay language is mainly seen when talking to neighbors from the same ethnic as reflected in the following Table 2.

Table 2 shows that most respondents in three locations claimed to use mother tounge when talking to neighbors of the same ethnic. This also happens when shopping for vegetables/goods from shops/ stalls belonging to the same ethnic neighbor. In terms of talking to neighbors when shopping for vegetables/goods from shops/ stalls belonging to different ethnic neighbor respondents from Loloan, Pegayaman and Tegal Linggah prefer to use Indonesian.

In the religious domain, especially when there are religious meetings outside the mosque, 82.8% of Loloan respondents claimed to use Malay. This shows that in

Table 2
The language used in neighboring domain

Context of Situation	Community	M	B	S	I	J	O/Mix
		%	%	%	%	%	%
The language used when talking to the same ethnic neighbor	***Loloan***	93.5	3.2	-	3.2	-	-
	Pegayaman	-	96.7	-	3.3	-	-
	Tegal Linggah	-	65	25	-	-	10
The language used when speaking with neighbors of different ethnicities	***Loloan***	32.3	-	-	41.9	-	6.5
	Pegayaman	-	44	-	56	-	-
	Tegal Linggah	-	40	5	35	-	20
The language used when shopping for vegetables/goods from shops/stalls belonging to the same ethnic neighbor	***Loloan***	100	-	-	-	-	-
	Pegayaman	-	93.3	-	6.7	-	-
	Tegal Linggah	-	70	15	10	-	5
The language used when shopping for vegetables/goods from shops/stalls belonging to a different ethnic neighbor	***Loloan***	29	6.5	-	48.4	-	16.1
	Pegayaman	-	33.3	-	66.7	-	-
	Tegal Linggah	-	40	-	50	-	10

Note. M = Malay; B = Balinese; S= Sasakese; I = Indonesian; J = Javanese and O = other/mix language

the daily lives of Loloan community, Malay is the primary choice. This is again seen in the use of language when worshiping in the mosque. As many as 51.6% of respondents used Malay to carry out their worship. As a Muslim community, the use of Arabic was high when worshiping (32.3%), and requesting after praying (41.9%). In Pegayaman, the Islamic nuance was more apparent for 73.3% of the Pegayaman community used Arabic when worshiping in the mosque while 16.7% used Indonesian, and only 10% used Balinese. However, when speaking in religious meetings outside the mosque, the community of Pegayaman prefered to indicate their social identity as Balinese by using the local language (60%) and Indonesian (36.7%). The language choices made by Tegal Linggah Muslim community seems to be flexible. When there are religious meetings outside the mosque, 30% of the respondents claimed to use Balinese, 25% used Indonesian, and 25% Arabic respectively.

The dominance of mother tongue usage in the three diaspora communities is seen significantly in personal emotional expressions. Most respondents in Loloan chose to use Malay to express feelings of happiness, anger, and their ideals. So is the case with Pegayaman respondents who prefer to use the Balinese. This certainly makes sense because all personal feelings or emotions will be more naturally revealed by using the mother tounge. There are variations in the use of language to express feelings with the community in Tegal Linggah Karangasem. When expressing their feelings of happiness, 45% of respondents chose to use Balinese, 15% used Sasak language, and 25% of respondents chose Indonesian. When expressing anger, 45% of respondents decided to use Balinese, 25% used the Sasak language, and 20% Indonesian. Finally,

when expressing dreams/ideals, 40% of respondents chose to use Balinese, 15% used a Sasak word and 40% Indonesian.

To sum up, the existence of the observed variations can be a reliable indicator that, linguistically, the choice and use of language in social interactions seem to signal their respective identity showing that the Loloan community feels more as diaspora than Balinese. The Pegayaman community indicates Balinese as a part of social identity and they consider themselves more Balinese than the diaspora meanwhile Tegal Linggah diaspora community in Karangasem linguistically considers themselves as both Balinese and diaspora. This fact can be explained by Fasold's statement (1984) that language shift is one of the results of a long process of language selection exercised by the speaking community.

Language Attitude

Language Attitude toward Mother Tongue

Language attitude can take the form of language loyalty, which encourages speakers to maintain their language and if necessary prevent any influence from other languages. A sense of pride in language can also encourage speakers to use it as a symbol of community identity and unity. In general, the three diasporic communities showed a positive attitude towards their mother tongue. Empirically, the Loloan Muslim community considers that their mother tongue (Malay) was the most beautiful language (as many as 74.2% of respondents stated strongly agree, and 22.6% agree) and a symbol of individual ethnic identity (50% strongly agree and 46.7% agree). Pegayaman community's language attitude towards the native language also tends to be positive. There were 48% of respondents who agreed and added 44% of respondents who stated that their mother tongue was the most beautiful language. Even more significant is that 66.7% of respondents said to agree that their native language was a symbol of their ethnic identity. Language attitude in the Sasak Muslim community of Tegal Linggah Karangasem also showed a definite tendency in which 75% of respondents claimed that their mother tongue was the most beautiful language and 65% agreed that their mother tongue was a symbol of their ethnic identity.

Symptoms of the retention of Malay as a mother tongue in the Loloan community have also been seen. More than half (58.1%) of respondents agreed, and 25.8 strongly agreed to enable children to communicate effectively using their mother tongue. As many as 53.3% of respondents also strongly agreed to consider mother tongue related to ancestral heritage and history. In Pegayaman, 43.3% of respondents agreed that their mother tongue was essential for use in everyday life and 70% agreed for use in religious activities and gatherings. In line with their recognition of mother tongue as the most beautiful language, 75% of respondents in Tegal Linggah agreed that their mother tongue was essential to use in various aspects of daily life and 57.9% agreed that it was essential for use in religious activities. As many as 66.7% of

respondents in Pegayaman and 90% in Tegal Linggah agreed that their mother tongue was related to ancestral heritage and history.

Language Attitude toward the Host Language (Balinese)

Language attitude towards Balinese as the host language is reflected in Table 3. All responses to the statements in the above table reinforce that the Loloan community is more powerful concerning Malay as its identity than Balinese. Majority (64.3%) of respondents disagreed with believing that the Balinese language was uniting them with Balinese people although they strongly claimed that Balinese was not the language they hate the most (50% disagreed with the statement, and 46.4% strongly disagreed). Their firm belief to be non-Balinese as social identity was reflected in the absence of response to the statement about the importance of their children to communicate effectively in Balinese. Although attitudes towards Indonesian also tend to be positive, the Loloan people still tend to be more of a diaspora (Malay) identity. Meanwhile, the people of Pegayaman, on the contrary, tend to be more Balinese than the diaspora. All respondents claimed to believe that Balinese was uniting them with all Balinese people (76% agreed to the statement and the rest 24% strongly agreed). This firm confession is supported by their response to the statement related to the importance of their children to communicate effectively in Balinese (84.6% agreed to the statement and 7.7% strongly agreed). Finally, the Tegal Linggah community showed a dualism between Balinese and diaspora. On the one hand, 57.1% of respondents agreed, and 14.3% strongly agreed that Balinese was uniting them with all Balinese people and 78.6 % agreed and 21.4% strongly agreed to believe that the Balinese language was

Table 3
Language attitude toward the host language (Balinese)

Statement ***I believe that the Balinese language is…***	**Community**	**5**	**4**	**3**	**2**	**1**
		%	%	%	%	%
Uniting me with all Balinese people	***Loloan***	-	7.1	28.6	64.3	-
	Pegayaman	24	76	-	-	-
	Tegal Linggah	14.3	57.1	14.3	14.3	-
Unifying chain among all Indonesian people	***Loloan***	7.1	39.3	28.6	25	-
	Pegayaman	7.7	15.4	23.1	53.8	-
	Tegal Linggah	21.4	78.6	-	-	-
The language I hate the most.	***Loloan***	-	-	3.6	50	46.4
	Pegayaman	-	3.8	3.8	46.2	46.2
	Tegal Linggah	-	-	-	57.1	42.9
It is essential for my children to communicate effectively in Balinese.	***Loloan***	-	-	-	-	-
	Pegayaman	7.7	84.6	7.7	-	-
	Tegal Linggah	-	-	-	-	-

Note. 5 = strongly agree; 4 = agree; 3 = neutral / doubtful; 2 = disagree; and 1 = strongly disagree)

unifying chain among all Indonesian people but, on the other hand, there was no response as regards the statement whether their children needed to communicate effectively in Balinese. This is an interesting trend to study further before concluding that Tegal Linggah Muslim community in Karangasem beginning to abandon its old identity and turning to another identity.

CONCLUSION

The choice of language turned out to be the evidence of the way how local diaspora communities in the three research locations maintain their social identity. There is a relationship between language activation in various domains and self-identities. Diaspora communities in all three locations saw mother tongue as an essential tool for maintaining identity, and an indicator of success for intergenerational survival.

The three communities linguistically have different characteristics and can be grouped into (1) the communities that identify themselves as more diaspora than Balinese. This community is the Loloan Muslim Community of Jembrana who feels that their mother tongue is Malay so that its use in the family domain and kinship is very essential. So is the case in the use of language in the religious realm; (2) the communities who identify themselves as more Balinese than the diaspora group, i.e the Pegayaman Muslim community, Buleleng. They claim to be fully Balinese and Balinese language is seen as their mother tongue and is spoken in the family domain and kinship and non-formal; and (3) those who feel as diaspora and Balinese communities, namely the Muslim population of Tegal Linggah in Karangasem. They consider both Balinese and Sasak language as mother tongue and uses it interchangeably in the family domain and neighborhood signaling a dual social identity.

Judging from the language attitude, all diaspora communities have positive attitudes towards their mother tongue and feel the need always to be used primarily in the family and neighbor domain especially in religious activities. Retention of the mother tongue is stated to be very necessary between generations to preserve the language. Nevertheless, the three diaspora communities indicate the need for Indonesian as a unifying and national language that must be used in a formal or inter-ethnic interaction.

ACKNOWLEDGEMENT

This research project was funded by Udayana University. Our thankfulness and appreciation are extended to the Rector and the head of Research and Community Service of Udayana University who have decided to support our research through a grant on the Research and Academic Publication for Professorship Grant scheme. We also thank our postgraduate students who helped us in collecting data.

REFERENCES

Abdullah, I. (2006). *Cultural construction and reproduction.* Yogyakarta, Indonesia: Pustaka Pelajar.

Al-Khatib, M., & Al-Ali, M. (2005). Language and cultural maintenance among the gypsies of Jordan. *Journal of Multilingual and Multicultural Development, 26*(3), 187-215.

Auer, P. (1998). *Code-switching in conversation. Language, interaction and identity*. London, England: Routledge.

Breitborde, L. B. (1998). *Speaking and social identity: English in the lives of Urban Africans (Studies in Anthropological Linguistics)*. Berlin, Germany: Mouton de Gruyter.

Carbaugh, D. (1996). *Situating selves: The communication of social identities in American scenes (Human communication processes*). New York, USA: State University of New York.

Crystal, D. (2000). *Language death*. Cambridge, England: Cambridge University Press.

Dhanawaty, N. M. (2002). *Dialectal variations in Balinese Language in transmigration areas in Central Lampung* (Doctoral dissertation), Universitas Gajah Mada, Indonesia.

Dorian, N. (1989). *Investigating obsolescence: Studies in language contraction and death.* New York, USA: Cambridge University Press.

Dweik, B. (2000). Linguistic and cultural maintenance among the Chechens of Jordan. *Language, Culture and Curriculum, 13*(2), 184-195.

Dweik, B., & Al-Obaidi, T. (2014). Language contact, use and attitudes among the Chaldo-Assyrians of Baghdad, Iraq: A sociolinguistic study. *Journal of Advances in Linguistics, 3*(3), 219-231.

Edwards, J. (1984). *Linguistic minorities: Policies and pluralism*. London, England: Academic Press.

Edwards, J. (1988). Bilingualism, education, and identity. *Journal of Multilingual and Multicultural Development, 9*(1&2), 203-210.

Edwards, J., & Chisholm, J. (1987). Language, multiculturalism, and identity: A Canadian study. *Journal of Multilingual and Multicultural Development, 8*(5), 391-408.

Ervin-Tripp, S. (1964). An analysis of the interaction of language, topic, and listener. *American Anthropologist, 66*(6, Pt 2), 86-102. https://doi.org/10.1525/aa.1964.66.suppl_3.02a00050

Fasold, R. (1984). *The sociolinguistics of society*. Oxford, England: Basil Blackwell.

Fishman, J. A. (1964). Language maintenance and language shift as fields of inquiry. *Linguistics, 9,* 32-70.

Fishman, J. A. (1966). *Language loyalty in the United States*. The Hague, Netherlands: Mouton and Co.

Fishman, J. A. (1985). Language. In A. Kuper & J. Kuper (Eds.), *The social science encyclopedia.* London, England: Routledge.

Fishman, J. A. (1989). *Language and ethnicity in the minority sociolinguistic perspective.* Clevedon, England: Multilingual Matters LTD.

Fishman, J. A. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened language*s. Clevedon, England: Multilingual Matters.

Fishman, J. A. (Ed.). (1999). *Handbook of language and ethnic identity*. Oxford, England: Oxford University Press.

Freed, B., & Collentine, J. (2004). Learning context and its effects on second language acquisition. *Studies in Second Language Acquisition, 26,* 349- 356.

Gal, S. (1979). *Language shift: Social determinants of linguistic change in bilingual Austria.* New York, USA: Academic Press.

Giles, H. (1979). Ethnicity markers in speech. In K. R. Scherer & H. Giles (Eds.), *Social marker in speech* (pp. 251-289). Cambridge, England: Cambridge University Press.

Giles, H., Bourhis, R., & Taylor, D. M. (1977). Towards a theory of language in ethnic group relations In H. Giles (Ed.), *Language, ethnicity and intergroup relations* (pp. 307-348). London, England: Academic Press.

Giles, H., & Coupland, N. (1991). *Language: Contexts and consequences*. Keynes, England: Open University Press.

Giles, H., & Johnson, P. (1987). Ethnolinguistic theory: A social psychological approach to language maintenance. *International Journal of the Sociology of Language,* (68), 69-99.

Grosjean, F. (1982). *Life with two languages: An introduction to bilingualism.* England: Harvard University Press.

Hamers, J. A., & Blanc, M. H. A. (1989). *Bilinguality and bilingualism*. Cambridge, England: Cambridge University Press.

Harris, J. (1980). *Identity: A study of the concept in Education for a Multicultural Australia* (ERDC Report No. 22). Canberra, Australia: Australian Government Publishing Service.

Hymes, D. (1962). The ethnography of speaking. In T. Gladwin & W. Sturtevant (Eds.), *Anthropology and human behavior* (pp. 13-53). Washington, USA: Anthropological Society of Washington.

Hymes, D. (1972). Models of the interaction of language and social life. In J. Gumperz & D. Hymes (Eds.), *Directions in sociolinguistics: The ethnography of communication* (pp. 35-71). New York, USA: Holt, Rinehart and Winston.

Holmes, J., Roberts, M., Verivaki, M., & Aipolo, A. (1993). Language maintenance and language shift in three New Zealand speech communities. *Applied Linguistics, 14*(1), 1-24.

Kismosuwartono, I. (1991). *Parenting system of Javanese and Balinese transmigrant farmers' families in the transmigration area of Ruktiharjo Village, Seputih Raman District, Central Lampung Regency, Lampung Province. Comparative study of Javanese and Balinese farmers' families.* Denpasar, Indonesia: Fakultas Sastra Universitas Udayana.

Lanca, M., Alksnis, C., Roese, N. J., & Gardner, R. C. (1994). Effects of language choice on acculturation, a study of Portuguese immigrants in a multicultural setting. *Journal of Language and Social Psychology, 13*(3), 315-330.

Malini, N. L. N. S. (2011). *Dynamics of Balinese Language in transmigrant areas in Lampung Province* (Doctoral dissertation), Universitas Udayana, Indonesia.

Padilla, A. (1999). Psychology. In J. Fishman (Ed.), *Handbook of Language and Ethnic Identity* (pp. 109-121). Oxford, England: Oxford University Press.

Yadnya, I. B. P., Malini, N. L. N. S., & Dhanawati, N. M. (2010). *Linguistic and social accommodation of intra ethnic in Lampung Province: towards the pattern of overcoming social disharmonization*. Research Report on DIKTI's National Strategic Competitive Grants. Available from www.unud.ac.id

Yadnya, I. B. P., & Ardika, I. W. (Eds.). (2017). *Dynamics of human and Indonesian culture from time to time.* Denpasar, Indonesia: Pustaka Larasan dan Fakultas Ilmu Budaya, Universitas Udayana.

Spolsky, B. (1999). Second-language learning. In J. Fishman (Ed.), *Handbook of language and ethnic identity* (pp. 181-192). Oxford, England: Oxford University Press.

Sutjaja, I. G. M. (1992). *Language change: The case of Balinese in the transmigration areas of Lampung, Sulawesi, Sumbawa, and Timor.* Research Report funded by Toyota Foundation, Tokyo. Available from www.unud.ac.id

Pertanika J. Soc. Sci. & Hum. 28 (2): 995 - 1013 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Iran's Nuclear Programme: An Analysis of Face in Political Interviews

Zuraidah Mohd Don[1] and Masoumeh Bahman[2]*

[1]Language Academy, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Malaysia
[2]Department of English Language, Faculty of Languages and Linguistics, University of Malaya, 50603 Kuala Lumpur, Malaysia

ABSTRACT

We adopt Spencer-Oatey's approach to examine face concerns relating to self-presentation and identity attributes. Selected extracts from political interviews involving Western interviewers and Iranian interviewees were analysed to examine how participants constructed and negotiated their personal, collective and relational selves as they unfolded in the interaction. The number of political interviews examined was 19, amounting to ten hours of talk. Extracts presented for analysis came from four interviews. The topic raised was concerned with Iran's nuclear power programme, which had aroused concern and had been the focus of international attention. Iranian public figures interviewed on global broadcast news were often questioned about Iran's refusal to give up its nuclear power programme, which they had to address with care to present Iran and the Iranian people and their individual selves with a more positive self-image to the global public at large.

Keywords: Attributes, face, identity, Iran, nuclear programme

INTRODUCTION

The article seeks to make a contribution to the study of face in political interviews involving interviewers who hold politicians accountable before the public (Ekström et al., 2006). Anchimbe (2009) described political interviews as "a highly ritualized, mediated, public game of … face-threatening thrusts by the interviewer and parries by the interviewee". Political figures are invited to provide an account on an issue with

ARTICLE INFO

Article history:
Received: 12 October 2019
Accepted: 07 February 2020
Published: 26 June 2020

E-mail addresses:
zuraidah.don@gmail.com (Zuraidah Mohd Don)
masoumeh_bahman@yahoo.com (Masoumeh Bahman)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

which they are associated (Montgomery, 2008), for example, the issue of nuclear energy in Iran, which is the concern of the interviews selected for investigation. Face is particularly at issue here.

The aim is to examine how face from an identity perspective emerges dynamically in the interaction between the interviewer and interviewee which focuses on Iran's nuclear programme, an issue which is not only face-sensitive but also of international concern since the early 2000s, making it newsworthy (Epstein, 1973). Guided by Spencer-Oatey's (2009) action-oriented identity approach, we address two face-related issues: face sensitivities relating to attributes ascribed, claimed or contested that emerge in the course of an interaction, and the performance of self-presentation acts to project positive self-image in the context of responding to questions containing face-sensitive concerns.

Analysing face in interaction is appropriate because "Face … is something that resides not within an individual but rather within the flow of events in an encounter" (Holtgraves, 2002). Spencer-Oatey (2009) examined face using data from official meetings in intercultural business contexts. We extended Spencer-Oatey's work (2009) which examined face using data from official business meetings to analyse face in the context of political interviews. Adopting the interactional aspect of her approach, we examined the emergence of face concerning issues sensitive to the interviewee's face taking into consideration the contributions of both interactants.

Spencer-Oatey investigated face issues related to interactional goals. This study looks at those related to self-presentational concerns and identity attributes. The focus is on how the interviewee deals with the face needs of self in individual, relational and collective terms in the context of responding to the interviewer's questioning. Anchimbe (2009) examined political interviews to highlight face-saving strategies used by politicians which address their individual face demands and their 'political face'. Whereas Anchimbe analysed linguistic avoidance as a face-saving strategy, we concentrate on what interactants do to address their face concerns as they emerge in the course of the interaction.

The focus is on how the interviewee deals with the face needs of self in individual, relational and collective terms in the context of responding to the interviewer's questioning. Anchimbe (2009) examined political interviews to highlight face-saving strategies used by politicians which addressed their individual face demands and their 'political face'. Whereas Anchimbe analysed linguistic avoidance as a face-saving strategy, we concentrate on what interactants do to address their face concerns as they emerge in the course of the interaction.

Face in Political Interviews

Political Interviews. Political interviews are formal and institutionalised, managed through questions and answers (Clayman & Heritage, 2002), and produced for an overhearing audience that do not play an

active role in the interaction. They are "both a consumable news product" for the public and "an emergent process of news production", a form of interviewer-interviewee interpersonal communication (Clayman & Heritage, 2002), which can develop towards "a higher degree of aggressiveness and argumentativeness" (Hirsch & Blum-Kulka, 2014).

Interviewers are expected to be appropriately adversarial (Bull & Wells, 2012) to hold interviewees accountable before the viewing public (Clayman, 2002) and to prevent them from using interviews as a platform to propagate their agenda (Li, 2008). Interviewees are expected to answer questions which set up restrictions to their responses (Sacks et al.,1974), but they can resort to different ways of disaligning from the agendas or presuppositions embodied in the questions. When responding to questions, politicians must strive to create a favourable impression of themselves on the audience not only as an individual, but as members of a group and representatives of their government and country.

Face. Reported to originate in China (Bargiela-Chiappini, 2003), interest in face in Western scholarship can be attributed to the work of Goffman (1959) and Brown and Levinson (1978, 1987), which offers "useful insights, drawing attention to different analytic perspectives" (Wang & Spencer-Oatey, 2015, p. 51). Goffman (1967) defined face as the positive social value effectively claimed for the self by the line others "assume he has taken during a particular contact".

According to Goffman (1967, p. 5) "Face is an image of self delineated in terms of approved social attributes (…), as when a person makes a good showing for his profession or religion by making a good showing of himself". This 'socially attributed aspect of face', which embodies the individual as a social being managing and negotiating the self in social interaction is fundamental to theorising about face (Watts, 2003). Interlocutors maintain or enhance not just their own face but also the face of the addressee, by behaving in a manner that shows they are worthy of respect (Ruhi, 2007).

Although Brown and Levinson's notion of face is drawn from Goffman, it differs from Goffman's original formulation which is realised in interaction (Watts, 2003). Face is viewed from the perspective of an individual, which is the concern with his or her face, the public self-image. It is a personal possession consisting of two sides, negative and positive face. Negative face is defined as a person' "want to have his freedom of action unhindered" (Brown & Levinson, 1987, p. 129), and positive face is concerned with a person's "desire that he wants … should be thought of as desirable" (Brown & Levinson, 1987,p. 101). Critiques of the notion of negative face which is more individualistic in nature from researchers in Asian languages (Koutlaki, 2009; Matsumoto, 1988), have stimulated renewed interest in face.

In her analysis of spontaneous conversations among acquaintances, Koutlaki (2010) postulated that Persian

face consisted of "two interrelated aspects": *šæxsiæt* and *ehteram*, also known as aberu. *šæxsiæt* (social standing, personality, character) was "rooted in the individual's characteristics" and demonstrated through the speaker's behaviour which reflects his upbringing and education. Ehteram (respect, dignity, honour), which is more dynamic, is demonstrated through a show of mutual respect by adhering to the conventions of ritual politeness ('*tæarof'*) and other norms of behaviour. Both are constituted in interaction between interlocutors and "come into play in Persian communication and behaviour" (Koutlaki, 2010).

According to Izadi (2017; see also Don & Izadi, 2011) *ehteram* which he refers to as *aberu* (literal 'water of the face') is "the semantic equivalent of the term face", which can be gained, maintained or lost. Persian face is associated with the "image of a person, a family, or a group, particularly as viewed by others in the society" (Sharifian, 2007, p. 36). It is somewhat similar to Spencer-Oatey's (2005) respectability face defined as the 'good name' a person holds and claims within a community.

In a collectivist society like Iran, individual face and collective face are equally important. Iranians do not see themselves only as individuals but also as members of social groups including primarily their family, professional networks and Iranian nationality (Koutlaki, 2009). They are expected to show allegiance to the group, uphold the group's collective face and stake their claim to their face by adhering to the established behavioural conventions expected of them as members of the group (Koutlaki, 2010). In political interviews designed for public consumption, both *šæxsiæt* and *ehteram* are particularly relevant. The role that Persian culture plays in the performance of face in public space is important and will be brought into the discussion at relevant points in the analysis.

Face and Identity. The critiques led to alternative notions of face, some going back to Goffman's original concept and others extending it, e.g. reconceptualising face from the perspective of identity (Blitvich, 2013; Hosseini et al., 2018; Spencer-Oatey, 2007, 2009). An issue widely debated in the recent literature is whether face is similar to identity; if so, what the interconnection is (Spencer-Oatey, 2009). This explains the need for empirical studies on the relationship between face and identity in real interaction, which this study attempts to address.

Face and identity are "widely accepted as two separate conceptual entities" (Blitvich, 2013). Arundale (2005, 2010) and others (e.g. Imahori & Cupach, 2005) differentiated the two concepts treating "identity as situated within an individual" and "face as a relational phenomenon" (Spencer-Oatey, 2007).

From a social psychological perspective, identity as a relational concept seems to be linked to face which can be negotiated in interaction (Locher & Watts, 2008). In cognitive terms face and identity are closely related; both "relate to the notion of self image" comprising multiple self-aspects or attributes (Spencer-Oatey, 2007).

Sifianou's (2011) conceptualisation of face as encompassing "qualities accumulated over time" seems to concur with Spencer-Oatey's notion of face as comprising a range of attributes.

What distinguishes face from identity is that while identity refers to all positive, neutral and negative attributes that are not necessarily sensitive to the interactants,

> face is only associated with attributes that are actively sensitive to the claimant. It is associated with positively evaluated attributes that the claimant wants others to acknowledge …, and with negatively evaluated attributes that the claimant wants others NOT to ascribe to him/her. (Spencer-Oatey, 2007, p. 644).

Taking an *a priori* approach to face disregards the dynamic aspects of interactants' face sensitivities. Spencer-Oatey (2009, p. 144) proposed an action-oriented identity perspective to the analysis of face which highlights three key issues: "participants' self-presentational concerns, the identity attributes that they became face sensitive to and their interactional goals". The first two are further discussed below.

Self Concept and Face Sensitive Attributes. The relationship between face and identity examined through self makes it necessary to focus on the face needs of self, which has been neglected due to concern for the face needs of others (Haugh, 2009). Applying Simon's (2004) insights into identity, Spencer-Oatey and Ruhi (2007) argued that Brown and Levinson's negative and positive face disregarded people's self-concept. According to Spencer-Oatey (2009) self-concept comprises "beliefs about his/her own attributes" distinguished at three levels: "at the individual level, there is the 'personal self'; at the interpersonal level, there is the 'relational self'; and at the group level, there is the 'collective self'" (Spencer-Oatey, 2007).

Individual self refers to a unique identification of the personhood that distinguishes the self from all others. Collective self is the social extension of the individual self derived from significant group memberships which relies "on shared symbols and cognitive representations of the group as a unit independent of personal relationships within the group" (Brewer, 2007, p. 3). Both entail claims to different attributes (Spencer-Oatey, 2007). Relational self represents the self-concept derived from connections and role relationships with significant others (Chen et al., 2011), which in the context of interviews involves relationships between interviewer and interviewee. This differentiates it from the collective self which involves a connection with people whose identities may not be known. Spencer-Oatey (2007), thus, argued that Brown and Levinson's model with its focus on individual sensitivities to the exclusion of collective and relational perspectives was 'an incomplete analytic perspective'.

Self Presentation. Drawing on theatrical metaphor, the 'self' is constructed through self-presentation performances during

which impressions are *given* or *given off* (Goffman, 1959). The former refers to those that speakers intended to communicate, and the latter those not intended but nevertheless received by the audience (Goffman, 1959). The self in interaction, continuously projects, maintains and negotiates and produces an impression of self which is amenable and open to acceptance by those one communicates with.

In social settings, interactants constantly engage in self-presentation and impression management, presenting themselves or behaving in a way that will make others have a good impression of them and prevent the embarrassment of themselves or others. They are concerned about the identity attributes they wish to communicate to project a positive public image. This image or face as defined by Goffman (1967) claimed by speakers to be associated with approved social attributes, is bestowed by others "as a result of what the speakers project" (Dippold, 2009).

Analysing how interviewees respond to conflictual questions concerning Iran's nuclear programme in highly evaluative situations like political interviews will demonstrate that self-presentation is an integral part of the management of face. People adhere to certain conventions to convey an impression to others which it is in their interest to convey (Goffman, 1959). Failing to do so will cause the loss of face.

MATERIALS AND METHODS

The corpus consisted of nineteen political interviews amounting to ten hours of talk conducted wholly in English and downloaded from YouTube. These were transcribed orthographically and presented in tabular form during 80 hours of work. The transcribed data were examined in detail to identify those most relevant for the study of face in political interviews from an identity perspective. Four interviews were identified as particularly relevant, and five extracts were selected from these interviews for further analysis. Table 1 presents information about the interviewers and interviewees.

The analysis focused on interviewees' self-presentational concerns and face-sensitive attributes construed in terms of individual, relational or collective face. Concerning self-presentation, we examined how interviewees projected a positive self-image of themselves and avoided negative impressions ascribed by others. Schütz's (1998) taxonomy of self-presentational styles was used where appropriate to describe the interviewee's self-presentation. These included assertive self-presentation which involved strategies to achieve a positive self-image; offensive self-presentation which included aggressive moves that made the self look good by making others look bad; protective self-presentation which involved damage avoidance or opportunities to avoid negative impressions, and defensive self-presentation which included compensatory acts to repair self-images that had been threatened or damaged (Ruhi, 2010).

The face-sensitive attributes examined include positively valued attributes that interviewees wanted others to acknowledge,

Table 1
Interviewers and interviewees

Interviewer	Role/Position	Interviewee	Role/Position	Duration	Date
George Robert Stephanopoulos	an American television journalist and a former U.S. Democratic Party political	Mohammad Javad Zarif	Iranian Foreign Minister since 2013	15 minutes 33 seconds	29 September 2013
Charlie Rose	an American television talk show host and journalist	Mohammad-Javad Larijani	Head of Iranian Human Rights Council of Judiciary and the adviser to the Supreme Leader Ayatollah Khamenei	53 minutes 59 seconds	18 November 2011
Jon Davies	A journalist with the English service in Euronews	Mohammad Javad Larjani	Same as above	8 minutes	13 March 2012
Charlie Rose	Same as above	Mohammad Khazaee	Ambassador of Iran to the United Nations from 25 July 2007 to 25 July 2015	28 minutes 33 seconds	8 January 2014

and negatively valued attributes that interviewees denied and wanted others not to ascribe to them. Context plays a central role in determining how attributes are evaluated, and consequently, the face claims made, and the importance given to them varies across people in different contexts. This suggests that "frameworks that make *a priori* assumptions about face sensitivities will inevitably be inaccurate" (Spencer-Oatey, 2009, p. 142).

RESULTS

Face in Face Threatening Contexts

Extracts 1 to 5 deal with Iran's nuclear programme, which has become a major international issue and a source of concern for the P5+1 group comprising the US, UK, Russia, China, Germany and France. Iran's nuclear programme is a sensitive issue because of the allegation that it is "a cover for an eventual nuclear programme", which Iran has denied (Jenkins & Dalton, 2014).

We examine how the contentious issues concerned with Iran's nuclear programme are brought into the interaction through skilled questioning and how they are dealt with accordingly. Government spokesmen are expected to take the opportunity of this public appearance to promote their government's or country's public image, which will influence the way the interviewee seeks to save face in responding to questions that challenge this image (Li, 2008; see Goffman, 1967 on the relationship between face and image).

From its early development in the 1950s until the 1979 Iranian revolution, Iran's nuclear programme was supported by the US. Iran was then the ally of America, under the control of the West-friendly Shah of Iran. After the revolution, Iran became anti-Western, and its nuclear activities were initially stalled but started again in the 1990s with the support of Russia. In 2002, Iran faced international censure concerning its nuclear activities, when the International Atomic Energy Agency (henceforth 'IAEA') discovered that Iran failed to declare its two nuclear sites, a uranium enrichment plant in Natanz and a heavy-water reactor at Arak.

Iran signed an agreement in 2003 to suspend its nuclear enrichment programme. When Mahmoud Ahmadinejad took office as president in 2005, Iran resumed its nuclear enrichment programme and halted any progress in talks. There was a lot of distrust concerning Iran's nuclear activities, and it was suspected that Iran was seeking to develop nuclear weapons. In June 2013, an interim deal was agreed. Then, the six world powers asked Iran to curb its nuclear programme in return for the lifting of UN sanctions imposed on Iran in 2006. High-level negotiations on Iran's nuclear programme between Iran and the P5+1 which started in February 2014 continued. In April 2014, a framework deal was reached. After lots of negotiations between Iran and P5+1, the nuclear agreement was eventually signed on 14 July 2015. This information provides the context for the analysis and interpretation of our data.

Presentation of Self. Goffman (1959) argued that in any interaction, the individuals employed different presentational acts to project the preferred social image. The texts analysed present a preferred image of the self, and a negative image of the other, which could be done explicitly or by implication. Interaction is dyadic, and interviewers' questions provide the context for the interviewees' responses, which explains why interviewers' contributions are also analysed.

Extract 1 from Zarif (2013), is concerned with the tense relationship between Iran and America concerning Iran's nuclear programme, and whether "there is a fundamental shift in the relationship" (lines 1-3). This relationship is a face-sensitive issue, which worsened when Ahmadinejad became president. The interviewer (IR) began the exchange with a yes/no question which seeked confirmation of the change in the relationship between America and Iran, but the interviewee's (IE) response (lines 4-21) went beyond the question and addresses issues not specifically called for:

Extract 1

George Robert Stephanopoulos (IR) and Mohammad Javad Zarif (IE)

ABC News: This Week: 29 September 2013, 15 minutes and 33 seconds

1 IR: "Has there been a fundamental
2 shift in the relationship
3 between the U. S. and Iran?"

4 IE: "Well, I think *we* have taken
5 the first step to address an
6 important issue both for Iran

for the United States and for the international community, an issue which *I believe* … should not have become an issue in the first place but it has unfortunately become a global problem and now *we* need to resolve it and the resolution of that issue will be a first step, a necessary first step towards removing the tensions, doubts and misgivings … that *we* have had about each other for the last thirty years"

IE oriented to his accountability to respond to the agenda in the interviewer's question which was expected of him in his role as interviewee (lines 4-21). He used assertive self-presentation as a strategy to make 'we' the collective self looked good and prevented the loss of '*aberu'*. Instead of a simple *yes* or *no*, IE made collective face claims to achieve favourable impressions for Iran at a global level: '**we** have taken the first step to address an important issue'. Here, IE wanted 'we' to be perceived as being proactive, as indicated by the phrase "the first step" in "… *we* have taken **the first step** to address an important issue…". The use of 'we' (line 4) to represent group membership to speak on behalf of the government was appropriate for IE as Iranian foreign minister. There was a shift from 'I' when expressing his opinion as an individual to 'we' when representing Iran as the foreign minister.

The second 'we', which was inclusive, as in "**we** need to resolve it" (lines 14-21) included "the United States" and "the international community" because Iran nuclear issue had now "become a global problem". This is a strategic assertive move which suggests conformity to what 'we need to do', i.e. to remove 'the tensions, doubts and misgivings' that both Iran and America "have had about each other for the last thirty years". Embodying his '*šæxsiæt'* as an Iranian, IE mitigated his views with 'think' and 'believe' to make them more acceptable without at the same time giving them up. This self-presentational behaviour is primarily driven by a desire to avoid social conflict and reduce tension.

Extract 2 from Larijani (2011), is concerned with the suggestion that Iran is involved in the development of nuclear bombs. IR began by steering the talk towards nuclear issues, which were sensitive to IE's collective face as an Iranian. Iran has always asserted that its nuclear programme is for peaceful purposes only, and has denied the allegation that it is seeking to develop the capability to produce nuclear weapons. IR's claimed that IAEA "had credible information … there is [sic] ongoing activities to develop an explosive device" (lines 1-9) questions Iran's assertion that its nuclear programs are benign, which is face-threatening. Let us examine the extract:

Extract 2
Charlie Rose and Mohammad Javad Larijani
PBS: Charlie Rose, 18 November 2011, 53 minutes and 59 seconds

IR: "Let's first talk about nuclear issues. IAEA says that it has credible information gathered from Iranian documents and other sources including Russian scientists that suggest there is ongoing activities to develop an explosive device".

IE: "Well as Iran explained before, the evidence that is cited by the Agency is *an old laptop gathering of different pieces which none of them could be considered a document in the professional sense*. *Four years ago* has been put to Iran by the Agency. *Iran explained in detail and it was considered by the Agency a year acceptable answer* but it is interesting the whole thing again has been revived".

IR: "*There's a new document and new information here not old information*".

IE: "Well, information and documents they have professional meaning in the Agency's vocabulary. Anybody could pass any piece of information but the Agency should create documents. Countries can claim a lot of things against each other. *No single document in the professional sense indicates that Iran is leading or was attempting to build a bomb*. This is *absolutely true"*.

IR: *"But they read it differently*. IAEA reads it differently and they see there is".

IE: "Well, in fact, the Agency has plenty of difficult time to convince others that this document is relevant".

Calling attention to the existence of credible information (lines 1-9) concerning Iran's "ongoing activities to develop an explosive device" threatens IE's collective face as Iranian and gives negative impressions about Iran as it raises doubts about its real intention in developing its nuclear programme. The interviewee used 'Iran' ("**Iran** explained before …"; "***Iran*** *explained in detail …"*) to represent his collective self derived from a group membership as Iranian in response to a suggestion that Iran was involved in "ongoing activities" related to the development of "an explosive device". Using defensive self-presentation, IE criticised the agency's outdated data gathering method ("an old laptop gathering of different pieces", line 13) and questions the veracity of the evidence "which none of them could be considered a document" (lines 14-16). This is followed by IE's assertive self-presentation that "Four years ago" Iran's detailed explanation "was considered an acceptable answer by IAEA".

IR denied that the information was old, stating his claim as a fact: "There's new document and new information here not old information" (line 25). The unhedged and unmitigated disclaimer may threaten IE's relational face, and the suggestion that what the interviewee claims about the evidence and the documents is not true may threaten his individual face. To save face, IE used offensive self-presentation which implicitly challenged the reliability and validity of the evidence ("information and documents … have professional meaning in the Agency's vocabulary. Anybody could pass any piece of information …") and questions the claim ("Countries can claim a lot of things against each other").

IE ended his turn with the rejection of IR's assertion in the previous turn (line 42), and using the assertive presentational style, stated with conviction that it was "absolutely true" that none of the documents "in the professional sense" "indicates that Iran … was attempting to build a bomb". This face-challenging encounter shows IE's concern for his identity image when his individual face is threatened by IR's assertion which challenges his explanation.

IR continued to challenge in his next response (line 43), marking it as a disagreement with the word "but". He contested IE's assertion with a third party attributed claim that "IAEA reads it differently and they see there is", posing a threat to IR's individual face. Also, the interviewer's unmitigated disagreement stated as a fact ("But they read it differently. IAEA reads it differently …") which does not allow for any dispute may threaten IR's relational face.

IE's subsequent response which adopts an offensive presentational style draws attention to the difficulty faced by IAEA to convince others of the relevance of the document raising doubts about its status (line 46-49). Notice how IE responds to IR's seemingly face-threatening acts. IE produced strategies which challenge IR's assertions, namely that Iran continued to produce "an explosive device", that there was new information supporting that Iran was still doing it and that IAEA thought Iran was still doing it. These strategies satisfy IE's face-oriented end, namely that what he says about Iran not intending to "build a bomb" is true and that there is no contrary evidence.

In Extract 3 from Khazaee (2014), IR asked IE for an explanation of how Iran was going to convince others that its uranium enrichment was not for the development of nuclear weapons, but for 'peaceful purposes' (lines 1-6). The question presupposes that others are not convinced, which is a threat to IE's collective face indicated by the use of "we" (underlined in the extract).

Extract 3

Charlie Rose (IR) and Mohammad Khazaee (IE)

PBS: Charlie Rose, 8 January 2014, 28 minutes 33 seconds

1 IR: "How does Iran convince
2 others that it does not want
3 enrichment of uranium
4 because it wants nuclear

programme but it wants to do it for peaceful purposes?"

IE: "I think at least the last 30 or 35 years of Iranian history as well as the negotiation that we had before and all the reports by the Agency have made it clear for everybody".

IR: "No it hasn't, with respect, it has done exactly the opposite. It has not convinced people of your real intent because of not fully disclosing because of things would be revealed that the international community did know about".

IE: "… these kinds of allegations or suspicions comes from the countries and a regime in the region that they already have nuclear bombs"

IE's first response (lines 7-12) was in the form of assertive self-presentation, which claimed that Iran had made clear its intention concerning its nuclear programme through history, its past negotiations and the Agency's reports. However, IR's unmitigated refutation ('No it hasn't', line 13), although downtoned with 'with respect', was a direct threat to IE's relational face, and contradicted the interviewee by stating categorically that these had the opposite effect which was a threat to his individual face. IR then asserted that Iran had not convinced the international community that the real intent of its nuclear programme was for peaceful purposes on account of its failure to make a full disclosure of its activities (lines 13-20). This threatens IE's collective face. To repair the possible face damage, IE adopted an offensive presentation style labelling the claims as mere allegations, which implied that they were unsupportable, made by 'the countries and a regime in the region that already have nuclear bombs', perhaps suggesting that there is a vested interest in stopping Iran from embarking on its nuclear programmes.

Face Sensitive Attributes. We aim to capture the dynamic face sensitivities associated with attributes that emerge in the course of the interaction. Two extracts are examined to illustrate how the interviewees claim positive attributes or contest negative ones, and how they make face claims to different positive attributes which are more important to them in that specific context, and how they are in turn appraised. Face-sensitive attributes that emerge can be collective, individual or relational, depending on the specific interactional context.

In Extracts 4 and 5, the interviewees contested the negative attributes ascribed to them as individuals, and as Iranians and representatives of the Iranian government, and how they, in turn, made face claims to positive attributes. Extract 4 from Larijani (2012), illustrated the threat to IE's collective face when three negative qualities were by implication ascribed to the Iranian government: 'lack of transparency', 'lack of cooperation' and 'untrustworthiness'. IE chose to contest only one, namely the lack

of transparency which was judged as more important in this specific context. The other two were claims made as a consequence of the alleged lack of transparency. Consider Extract 4:

Extract 4
Jon Davies (IR) and Mohammad Javad Larijani (IE)
Euronews: Larijani on Iran's new democracy, 13 March 2012, 8 minutes

IR: "*You say the nuclear programme is transparent, but even the Russians have said ... Iran must keep its promise to allow international inspectors' access to the nuclear programme which didn't happen* early in February when the mission from IAEA came back empty-handed having said that they were being refused and blocked along the way. *Where is the transparency?*"

IE: Monitoring is continuous over there, the cameras are there. … obviously, they should define their mission beforehand. They cannot wave their hands I want to watch to go there and watch it, but let's go to the idea of transparency … Even in a transparent system it is (.) it doesn't mean that you can give a telephone call I want to go to that place. We agree to transparency fully-fledged".

IR began by attributing the claim of transparency to IE ('*You* say'), and ended his turn by challenging the claim 'Where is the transparency?' There is a clear threat to face at individual, collective and relational levels. The turn (lines 1-14) was designed to challenge IE without overtly taking up a position in his own right. The suggestion of a lack of transparency threatens IE's collective face as an Iranian and as a representative of the Iranian government.

At the same time, IE's individual face is also at stake when IR nominates IE as the sayer of the attribute claimed ('You say… but'), then raises doubts about the claim using 'but'. The presupposition is that there is no transparency. The comments from the Russians (1-7) drawn intertextually were presented as evidence that the claim was questionable. This face-sensitivity concerns IE's individual, personal quality. IR's unmitigated and unhedged question 'Where is the transparency?' threatens IE's relational face. It is designed to directly challenge IE's claim that 'the nuclear programme is transparent' and to expose contradictions.

To regain face, IE implicitly contested the suggestion of the lack of transparency. He raised other issues that could have contributed to 'the mission from IAEA' coming back 'empty-handed' including strict security at the nuclear programme sites, the lack of planning, and what transparency means. Implicit is the suggestion that the failure is not due to Iran's lack of

transparency but to the lack of planning on the part of the international inspectors. IE implied that a transparent system did not give the mission *carte blanche*, i.e. the inspectors did not have complete freedom to act as they wished: 'Even in a transparent system … it doesn't mean that you can give a telephone call I want to go to that place'. By making group face claims related to the attribute of transparency ('We agree to transparency fully pledged'), IE rejects IR's initial appraisal that it is not. IE claims a collective identity using 'we' on behalf of the Iranian government.

Another negative attribute implicitly ascribed to Iran and contested is untrustworthiness, especially its nuclear programme. The issue of 'distrust' is a threat to the IE's collective face. IR begins by orienting to the relational face needs of IE. He shows objectivity and unbiasedness, behaving neutrally and recognising the rights and obligations associated with their relationship as interviewer-interviewee. Consider Extract 5 from Larijani (2012):

Extract 5

Jon Davies (IR) and Mohammad-Javad Larijani (IE)

Euronews: Larijani on Iran's new democracy: 13 March 2012**,** 8 minutes

IR: "What would you recommend be done to show clearly that there is no programme? Yet you *have the right* and the United States recognises this, to develop uranium for peaceful uses including medical. How do you get past *the distrust* and *the evidence* that the IAEA says there is"

IE: "Well, distrust is mutual from both sides at least. I believe sincerely the United States of America definitely knows that we are not after the weapon this is my sincere belief but politically they say something else …"

The benign question does not express or imply anything critical to threaten IE's individual or collective face. IR ascribed to Iran a positive attribute that the interviewee wanted to claim, namely that Iran had the right to use uranium for medical purposes (line 8). Following this was a request for the interviewee to present the case for Iran concerning the issue of distrust and the evidence for the existence of the nuclear programme (lines 8-10), which are face-sensitive and face-threatening.

IE oriented to his accountability to respond to the question's agenda, which implied that there was a strong case against Iran. To pay the appropriate amount of '*ehteram'* to IR and maintained relational face, IE did not respond with an outright denial or contest the attribute assigned, but evaded a direct reply by stating that "distrust is mutual", i.e. America distrusts Iran, and Iran distrusts America. Through conformity to the behavioural norms in interviewees, IE demonstrated his '*šœxsiœt'*. Here he identified the relational element of face, namely the lack of trust between

Iran and America. IE claimed the group attribute of sincerity signalled by 'we', and at the same time ascribed by implication negative attributes to the United States: untrustworthiness and lack of sincerity. He claimed that his belief that "the United States … knows that *we* are not after the weapon" was sincere. Notice the claim to group membership through 'we'.

DISCUSSION

We examined in detail the way the interviewees deal with face-threatening encounters centred on the Iranian nuclear programme. Findings from the analysis show that they conformed to social norms expected of them as Iranians. Although the main goal of the interviewees was to enhance their face through positive self-presentations, and claims of positive attributes and denials of negative attributes, they avoided socially reprehensible behaviour. By paying the appropriate amount of '*ehteram'* to the interviewers they demonstrated their own '*šæxsiæt'* thus upholding their face as Iranians.

The incorporation of self-presentational concerns into the analysis of face elucidates the way the interviewees deal with threats from the interviewers, who have strong opinions on the controversial issues brought into the interview. Examining face as self-image expressed through self-presentation deepens our understanding of the relationship between face and self in interaction. The interviewers exercised their right to the fullest, threatening the interviewees' face with hard-hitting and non-neutral questions and assertions. The interviewees responded in a manner expected of them in their roles as interviewees, while at the same time making a conscious effort to protect their self-image against the negative impressions associated with allegations that Iran was seeking to develop nuclear weapons.

The interviewer raised issues that represented the view or opinion of some powerful group, which might offend not only the interviewee's individual face but the face of the whole nation, which are threats to collective face. For Iranians, the loss of face is more serious because it reflects adversely on their family's or group's collective face (Koutlaki, 2010). Here, the interviewees' face claims are associated with attributes potentially sensitive for Iran and Iranian people, which illustrate that the emerging face concerns go beyond the demands of the individual face.

By adopting Spencer-Oatey's analytic frames, we can unpack face concerns from individual, collective and relational perspectives. The interviewee's claims to face in the extracts analysed are usually related to their collective rather than individual attributes. The issues raised are not personal, but of national and international interests. The relational aspects of political interviews are somewhat different from other kinds of social encounter. They involve evaluation and contain questions and assertions which are highly threatening to the interviewees' face. In general, there is a tendency on the part of the interviewer not to mitigate actions which are critical and accusatory, and not to minimise disagreement as would

be expected in other contexts to maintain good communicative relations. However, the face-threatening acts which play a central role are considered normal and appropriate in this specific context. One of the strategies commonly used by the interviewer to justify a face threat and package the questions as neutralistic involves attributing the assertions to a third party.

CONCLUSION

This study takes an identity perspective to the study of face, examining the self-presentational concerns of the interviewee in response to the interviewer's line of questioning, and the sensitive attributes which are ascribed and acknowledged, and claimed and contested or denied. The theoretical approach lends itself to an analytical model that can be successfully applied in the analysis of real interaction. We do not only consider the unique relationship that the interactants jointly construct but the self in interaction, with a focus on self-presentation and attributes. The implication here is that face from this perspective has to be examined as it emerges dynamically in interaction because the claim to face "with regard to individual attributes, relational associations and collective affiliations … can all vary in an ongoing interaction" (Spencer-Oatey, 2007, p. 647).

Face linked to self-image is not only located in the person as an individual or group but constituted through interaction in the dialogical sphere. Although face has cognitive foundations, it is also interactively achieved in the sense that while a person may have face claims, face is ultimately ascribed by others. This explains the need for analysing face in real-time verbal exchanges which will help us understand what is going on interactionally with participants interacting and negotiating with one another, and responding to the changing context.

ACKNOWLEDGEMENTS

The authors would like to thank the anonymous reviewers and the editor for their helpful feedback on an earlier version of this article.

REFERENCES

Anchimbe, E. (2009). That's a myth: Linguistic avoidance as a political face-saving strategy in broadcast interviews. In F. Bargiela-Chiappini & M. Haugh (Eds.), *Face, communication and social interaction* (pp. 96-111). London, England: Equinox.

Arundale, R. B. (2005). Pragmatics, conversational implicature, and conversation. In K. L. Fitch & R. E. Sanders (Eds.), *Handbook of language and social interaction* (pp. 41-63). Mahwah, USA: Lawrence Erlbaum.

Arundale, R. B. (2010). Constituting face in conversation: Face, facework, and interactional achievement. *Journal of Pragmatics, 42*, 2078-2105.

Bargiela-Chiappini, F. (2003). Face and politeness: New (insights) for old (concepts). *Journal of Pragmatics, 35*(10-11), 1453-1469.

Blitvich, P. G.-C. (2013). Face, identity and im/politeness. Looking backward, moving forward: From Goffman to practice theory. *Journal of Politeness Research, 9*(1), 1-33.

Brewer, M. (2007). Social identity and close relationships: What is the connection? In J. P. Forgas & J. Fitness (Eds.), *Sydney Symposium of Social Psychology* (pp. 1-32). Retrieved May 3, 2016, from http://www.sydneysymposium.unsw.edu.au/2007/Chapters/BrewerSSSP07.pdf

Brown, P., & Levinson, S. C. (1978). Universals in language usage: Politeness phenomenon. In E. Goody (Ed.), *Questions and politeness: Strategies in social interaction* (pp. 56-310). Cambridge, England: Cambridge University Press.

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. Cambridge, England: Cambridge University Press.

Bull, P., & Wells, P. (2012). Adversarial discourse in Prime Minister's questions. *Journal of Language and Social Psychology*, *31*(1), 30-48.

Chen, S., Boucher, H., & Kraus, M. W. (2011) The relational self. In S. Schwartz, K. Luyckx, & V. Vignoles (Eds.), *Handbook of Identity Theory and Research.* New York, USA: Springer.

Clayman, S. E. (2002). Disagreements and third parties: Dilemmas of neutralism in panel interviews. *Journal of Pragmatics, 34*(10-11), 1385-1401.

Clayman, S., & Heritage, J. (2002). *The news interview: Journalists and public figures on the air.* Cambridge, England: Cambridge University Press.

Dippold, D. (2009). Face and self-presentation in spoken L2 discourse: Renewing the research agenda in interlanguage pragmatics. *Intercultural Pragmatics, 6*(1), 1-28.

Don, Z. M., & Izadi, A. (2011). Relational connection and separation in Iranian dissertation defences. *Journal of Pragmatics, 43*(15), 3782-3792.

Ekström, M., Kroon, A., & Nylund, M. (Eds.). (2006). *News from the interview society*. Göteborg, Sweden: Nordicom.

Epstein, S. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist, 28*(5), 404-416.

Goffman, E. (1959). *The presentation of self in everyday life*. New York, USA: Doubleday.

Goffman, E. (1967). On face work. In E. Goffman (Ed.), *Interaction ritual: Essays on face-to-face behavior* (pp. 5-45). New York, USA: Pantheon.

Haugh, M. (2009). Face and interaction. In F. Bargiela-Chiappini & M. Haugh (Eds.), *Face, communication and interaction* (pp. 1-30). London, England: Equinox.

Hirsch, G., & Blum-Kulka, S. (2014). Identifying irony in news interviews. *Journal of Pragmatics,* 70, 31-51.

Holtgraves, T. M. (2002). *Language as social action: Social psychology and language use*. Mahwah, USA: Erlbaum.

Hosseini, S. M., Aghagolzadeh, F., & Zaferanlou, A. K. (2018). Ru and aberu: Two aspects of face in the Iranian culture: An ethnographic study in pragmatics. *Jastarhaye Zabani, 8*(6), 215-246.

Imahori, T. T., & Cupach, W. R. (2005). Identity management theory: Facework in intercultural relationships. In W. R. Gudykunst, (Ed.), *Theorizing about intercultural communication* (pp. 195-210). Thousand Oaks, USA: Sage.

Izadi, A. (2017). Culture-generality and culture-specificity of face: Insights from argumentative talk in Iranian dissertation defences. *Pragmatics and Society, 8*(2), 208-230.

Jenkins, P., & Dalton, R. (2014). *Iran's nuclear future*. London, England: Chatham House, The Royal Institute of International Affairs.

Khazaee, M. (2014, January 8). *Iranian Ambassador to the United Nations Mohammad Khazaee examines the relationship between the United States and Iran and its evolution in recent years* [Video file]. Retrieved August 4, 2016, from https://charlierose.com/videos/17284

Koutlaki, S. A. (2009). Two sides of the same coin: How the notion of 'face' is encoded in Persian communication. In F. Bargiella-Chiappini & M. Haugh, (Eds.), *Face, communication and social interaction* (pp. 115-130). London, England: Equinox.

Koutlaki, S. A. (2010). *Among the Iranians: A guide to Iran's culture and customs*. Boston, USA: Intercultural Press.

Larijani, M. J. (2011, November 18). *Mohammad-Javad Larijani, head of Iran's Human Rights Council, joins Charlie at the table for a full hour to tackle the Iranian nuclear deal and tensions between the U.S. and his country* [Video file]. Retrieved July 22, 2016, from https://charlerose.com/videos/14322

Larijani, M. J. (2012, March 13). *Euronews interview - Larijani on Iran's new democracy* [Video file]. Retrieved December 30, 2016, from https://youtu.be/cwipRsIKlO0

Li, S. (2008). A performative perspective of flouting and politeness in political interview. *SKASE Journal of Theoretical Linguistics*, *5*(2), 32-47.

Locher, M. A., & Watts, R. J. (2008). Relational work and impoliteness: Negotiating norms of linguistic behaviour. In D. Bousfield & M. Locher (Eds.), *Impoliteness in language: Studies on its interplay with power in theory and practice* (pp. 77-99). Berlin, Germany: Mouton de Gruyter.

Matsumoto, Y. (1988). Reexamination of the universality of face: Politeness in Japanese. *Journal of Pragmatics,* 12, 403-426.

Montgomery, M. (2008). The discourse of the broadcast news interview. *Journalism Studies, 9*(2), 260-277.

Ruhi, Ş. (2007). Higher-order intentions and self-politeness in evaluations of (im)politeness: The relevance of compliment responses. *Australian Journal of Linguistics, 27*(2), 107-145.

Ruhi, Ş. (2010). Evoking face in self and other-presentation in Turkish. In F. Bargiela- Chiappini & M. Haugh (Eds.), *Face, communication and social interaction* (pp. 155-174). London, England: Equinox.

Sacks, H., Schegloff, E. A., & Jefferson, G. A. (1974). Simplest systematics for the organisations of turn-taking for conversation. *Language, 50*(4), 696-735.

Schütz, A. (1998). Assertive, offensive, protective, and defensive styles of self-presentation: A taxonomy. *The Journal of Psychology Interdisciplinary and Applied, 132*(6), 611-628.

Sharifian, F. (2007). L1 cultural conceptualisations in L2 learning: The case of Persian speaking learners of English. In F. Sharifian & G. B. Palmer (Eds.), *Applied cultural linguistics* (pp. 33-51). Amsterdam, Netherlands: John Benjamins.

Sifianou, M. (2011). On the concept of face and politeness. In F. Bargiela-Chiappini & D. Kádár (Eds.), *Politeness across cultures* (pp. 42-58). Basingstoke, England: Palgrave Macmillan.

Simon, B. (2004). *Identity in modern society: A social psychological perspective*. Oxford, England: Wiley-Blackwell.

Spencer-Oatey, H. (2005). (Im)politeness, face and perceptions of rapport: Unpackaging their bases and interrelationships. *Journal of Politeness Research, 1*(1), 95-119.

Spencer-Oatey, H. (2007). Theories of identity and the analysis of face. *Journal of Pragmatics, 39*(4), 639-656.

Spencer-Oatey, H. (2009). Face, identity and interactional goals. In F. Bargiela-Chiappini & M. Haugh (Eds.), *Face, communication and social interaction* (pp. 137-154). London, England: Equinox.

Spencer-Oatey, H., & Ruhi, Ş. (2007). Editorial: Identity, face and (im)politeness. *Journal of Pragmatics, 39*(4), 635-638.

Wang, J., & Spencer-Oatey, H. (2015). The gains and losses of face in ongoing intercultural interaction: A case of Chinese participant perspectives. *Journal of Pragmatics,* 89, 50-65.

Watts, R. J. (2003). *Politeness*. Cambridge, England: Cambridge University Press.

Zarif, M. J. (2013, September 29). *'This Week' exclusive interview: Iran's foreign minister Javad Zarif* [Video file]. Retrieved September 9, 2016, from https://youtu.be/INmpOJqjHIM

Pertanika J. Soc. Sci. & Hum. 28 (2): 1015 - 1033 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

The Realization of Experiential Meaning in Indonesian Subtitles of *The Kingdom* (2007): Cases of Transitivity System Clausal Constituents Reduction

Romel Noverino[1]*, Mangatur Rudolf Nababan[2], Riyadi Santosa[2] and Djatmika[2]

[1]Doctoral Program of Linguistics, Sebelas Maret University, Surakarta, 57126, Indonesia
[2]English Department, Faculty of Cultural Science, Sebelas Maret University, Surakarta, 57126, Indonesia

ABSTRACT

In Systemic Functional Linguistics, experience is part of the ideational function, consisting of clausal constituents of process, participant, and circumstance. This article discusses the results of a qualitative study, within the framework analysis of Halliday's transitivity system, on how clausal constituent reductions in subtitles have contributed to experiential meaning realizations systemically and functionally. Objective data were collected through purposive sampling from *The Kingdom* (2007) and its official Indonesian subtitles. The results show that, systemically, reduction happened in seven combinations, namely reduction of participant; process; circumstance; participant and process; participant and circumstance; process and circumstance; and participant, process, and circumstance. The reduction of process resulted in the absence of experiential meaning in the subtitles, which dominantly related to material, relational, and mental processes. The reduction of participant contributed to the nonappearance of one or all of the entities in the process, such as actor and/or goal in material process; senser in mental process; and token in identifying relational process. The reduction of circumstance resulted in the nonattendance of circumstantial information in the process, which dominantly related to location. Functionally, some data show that reduction was imposed obligatorily to accommodate the socio-cultural context of acceptability in Indonesia through film censorship with a religious motivation.

Keywords: Clausal constituents, experiential meaning, subtitles reduction, systemic functional linguistics, transitivity system

ARTICLE INFO

Article history:
Received: 25 October 2019
Accepted: 13 March 2020
Published: 26 June 2020

E-mail addresses:
romel@student.uns.ac.id (Romel Noverino)
amantaradja@yahoo.com (Mangatur Rudolf Nababan)
riyadisantosa@staff.uns.ac.id (Riyadi Santosa)
djatmika@staff.uns.ac.id (Djatmika)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

Systemic Functional Linguistics (SFL) emphasizes two main aspects of language: system and function. The term 'systemic' relates to language as a discourse, consisting of systems that operate hierarchically and simultaneously from the lower system (phonology/graphology) to the higher system (lexicogrammar, text structure, and semantic discourse) (Halliday as cited in Santosa, 2010). The term 'functional' engages language as a text in its inherent relation to context (Manfredi, 2008). A text is always constructed in two contexts, cultural and situational. The cultural context refers to values and norms that shape social processes in society and consequently, culture influences the way language is used (Martin, Liddicoat as cited in Santosa, 2009). Meanwhile, in SFL, situational context refers to variables of field (domain of experience/subject matter of a text), tenor (roles and relationships of those involved in a text) and mode (rhetorical mode, medium, and channel of a text). These variables outline "a multi-dimensional semiotic space – the environment of meanings in which language, other semiotic systems, and social systems operate" (Halliday & Matthiessen, 2014).

As domain of experience, field refers to the ideational function and here, the experience is realized through the system of transitivity. Halliday (1967) stated that "the transitivity systems are concerned with the type of process expressed in the clause, with the participants in this process, animate and inanimate, and with various attributes and circumstances of the process and the participants". By referring to this statement, it is through a clause that experience is transformed into meaning by its main constituent, i.e. process. However, as a whole, constituents of participant and circumstance also have functions, namely as entities involved in the process and as circumstantial information in the process (Eggins, 2004; Halliday & Matthiessen, 2006, 2014).

One of the areas of studies closely related to meaning is translation. In translating a text, the pivotal point is on producing equivalence, namely equality of meaning. Halliday (2001) stated that "equivalence is the aspect taken into account in assessing whether a translation is good or bad". Since the basic concept of translating a text is to transfer an event (experience) from the source text (ST) with its embedded socio-cultural context into that of the target text (TT) (Santosa, 2009), the equivalence is mostly placed on the ideational function. Halliday (2001) stated that "translation equivalence is defined in ideational terms; if a text does not match its source text ideationally, it does not qualify as a translation". Therefore, through transitivity system analysis, the ideational meaning of ST and TT can be compared to determine whether or not the two texts embody the same experiential meaning realization.

As part of Audiovisual Translation, subtitles are translation products that have distinctive characteristics compared to other written translations. Spatially, there should only be two lines of subtitles appearing at the bottom of a screen and each line consists

of up to 40-45 characters. Temporally, the appearance of subtitles is within 3-7 seconds, depending on synchronization (Diaz-Cintas & Remael, 2007; de Linde & Kay, 1999; Dries, 1995; Gottlieb, 1998; Zhang & Liu, 2009). Synchronization means the appearance of subtitles is in line with the verbal utterances of the film (Diaz-Cintas & Remael, 2007).

Due to the above-mentioned technical rules of space and time and synchronization, subtitles tend to undergo reduction. Diaz-Cintas and Remael (as cited in Noverino et al., 2019) stated that subtitles could never maintain a complete and detailed meaning of film verbal text due to reduction but there are reasons for applying it: 1) Viewers/ listeners can absorb verbal text faster than written text so the subtitles must give them enough time to be understood; 2) In addition to reading subtitles, viewers also see the action on the screen and listen to non-voiced sounds so they must have sufficient time to combine reading the subtitles and seeing the action; 3) Subtitles are limited to only a maximum of two lines per caption.

Studies of subtitles and SFL have been conducted by Espindola (2010), Feitosa (2009), Kovačič (1998), Matielo (2011), Matielo et al. (2015), Noverino et al. (2019), and Taylor (2000). These empirical studies all serve as exemplars of SFL being fruitful in analysing meaning between ST in film and its subtitles from ideational, interpersonal and textual metafunction perspectives.

As far as the authors are aware, there has been little work dedicated specifically to the study of experiential meaning realization in subtitles featuring reduction. Matielo et al.'s study (2015) investigated experiential meaning in Brazilian Portuguese subtitles in relation to reduction but their finding was only based on the systemic analysis. Another study was conducted by Noverino et al. (2019) who systemically and functionally investigated the reduction of English nominal group experiential structures in Indonesian subtitles. However, their study examined how the reduction affected the realization of the entity and not on the realization of experiential meaning.

As an illustration, understanding the meaning of a clause can be done by breaking the clause into process, participant and circumstance, which is the concrete expression of ideational meaning. A text is analyzed in the transitivity system with the following formula: "Who (or what) did what to whom (or what) where, when, how and why" (Halliday & Matthiessen, 2014). "Who and what" represents participant; "did what" represents process; and "where, when, how and why" represents circumstance.

In the semantic and functional perspectives of ideational meaning, the way events are realized in a linguistic structure reflects the reality of experiential meaning that exists in the world. Although the lexicogrammatical structure between languages is different, meaning can be transferred from one language to another through functional 'pieces'. Transferring the same linguistic units from ST to TT is difficult because of the potential for shifts but the main thing in SFL perception is to produce meaning with the same

function. So, it can be said that studying the experiential meaning within the transitivity system in the text is done by identifying the functional role of the constituents in the clause. Therefore, when one or more clausal constituents are reduced in the TT, the functional role of the constituents in realizing experiential meaning will be lost and this causes the meaning to be different from the one in the ST.

This present study is an attempt to investigate experiential meaning realization in Indonesian subtitles of *The Kingdom* (2007) as the impact of the clausal constituent reduction. The experiential meaning realization is analysed not only systemically (within the transitivity system) but also functionally (within the situational and cultural context of acceptability in Indonesia).

LITERATURE REVIEW

Transitivity System

Experience is construed through transitivity system as "…the whole grammatical resources for construing goings-on" (Martin et al., 1997). In functional grammar, it refers to the system for describing all clausal constituents (Thompson, 2014).

In a clause, the experiential meaning is fundamentally represented in the process, realized in a verbal group. Each process has a number of participants, realised in a nominal group, and circumstance, realised in an adverbial group or a prepositional phrase (Halliday & Matthiessen, 2014). Table 1 below shows the realizations of clausal constituents

Table 1
Clausal constituents and their realizations

Clausal constituents	Typically realized by
Process	Verbal Group
Participant	Nominal Group
Circumstance	Adverbial Group or Prepositional Phrase

The transitivity system conceptualizes a clause as being of a particular process type. There are six types of processes, namely material, mental, relational, behavioural, verbal, and existential. Each type has a different set of participants (Halliday & Matthiessen, 2014) (see Table 2).

The material process relates to the physical action of doing and happening. Its main participants are actor (doer of the action) and goal (target of the action). Additionally, the other participants are beneficiary (recipient of the action) and scope (range of the action) (Fontaine, 2013; Halliday & Matthiessen, 2014).

The mental process relates to sensory power. Its participants are senser, the participant who feels/senses event cognitively, perceptively or emotionally, and phenomenon, the participant that becomes the perceived object (Fontaine, 2013; Halliday & Matthiessen, 2014).

The relational process connects participants in an abstract relationship. In English, this type of process, generally, involves linking verbs or verbs that indicate possession. The relational process is divided into attributive and identifying. Attributive relates to the process of connecting carrier, the participant that a particular quality is attributed to, with attribute, the participant

expressing the particular quality of the carrier. Meanwhile, identifying relates to the process of connecting token, the participant for which identification is intended, with value, the participant expressing the identification of the token (Fontaine, 2013; Halliday & Matthiessen, 2014).

The behavioural process is a type of process between material and mental processes. This type of process involves physical and psychological process. There is only one participant in behavioural process, behaver (Fontaine, 2013; Halliday & Matthiessen, 2014).

The verbal process relates to a verbal statement. Its participants consist of sayer, the participant expressing the verbal statement; verbiage, the content of the verbal statement; and receiver, the recipient of the verbal statement (Fontaine, 2013; Halliday & Matthiessen, 2014).

The existential process indicates the existence of its participant. In English, this process uses a special clause structure, namely 'there' as the subject and then followed by a verb (such as *be*). The existing entity as indicated by the subject *there* is the participant, called existent (Fontaine, 2013; Halliday & Matthiessen, 2014).

Another constituent in a clause that also contributes to experiential meaning although its existence tends to be optional is circumstance. Circumstance is the name for elements in a clause having semantic content concerning the condition of processes and participants (Bloor & Bloor, 2014). Halliday and Matthiessen (2014) divided circumstance into nine elements, namely extent, location, manner, cause, contingency, accompaniment, role, matter and guise.

Audiovisual Translation and the Idiosyncrasies of Reduction in Subtitles

The term audiovisual translation has been applied since the 1990s to the practice of translation which covers visual semiotic channels and has become an academic term that is commonly used by translation scholars (Diaz-Cintas & Remael, 2007). Three activities in the audiovisual translation are subtitling, dubbing, and voice-over.

When examining issues related to subtitling, it is important to understand how the function of this form of translation and why this must be seen differently from other types of translation? Subtitling is a process of translating film verbal text into written text (Diaz-Cintas & Remael, 2007).

Table 2
Types of Process and their interrelated types of participant

Processes		Participants
Material		Actor; Goal; Beneficiary; Scope
Mental		Senser; Phenomenon
Relational	(Attributive)	Carrier; Attribute
	(Identifying)	Token; Value
Behavioural		Behaver
Verbal		Sayer; Verbiage; Receiver
Existential		Existent

The written text at the bottom part of the screen is called subtitles. It is within translation between languages (interlingual translation) that subtitles are considered to be the most effective because film audiences who do not understand the verbal language of the film access the flow of information through subtitles.

Hatim and Mason (1997) stated four main obstacles in subtitling: 1. Shift mode from verbal to written. This may cause certain speech characteristics, e.g. non-standard dialects, intonation over codes, and turn-taking not represented in the subtitles; 2. Engagement with the media or channel for transferring the meaning of the verbal text includes the limitation of time and place related to the number of lines and characters; 3. Reduction of ST. This is somehow inherent in subtitling; 4. Conformity with visual images. Because visual and audio are inseparable from the film, the coherence between subtitles and moving images must be appropriate.

All these obstacles inevitably lead to reduction in subtitles. There are two types of reduction in subtitles: partial and total. Partial reduction is achieved through condensation and the total reduction is achieved through the elimination or removal of lexical elements. (Diaz-Cintas & Remael, 2007).

Since films and TV programs are produced, sold, re-edited, translated, reproduced, re-translated, and distributed in different formats, for different media, and by different people, the notions of 'original text' and 'original authors' seem to have evaporated. In other words, ST is still translated into TT but because translating is an activity within the scope of linguistic and culture, the original text in the film that contains the message as intended by the author has the potential to experience changes in meaning which are different from the author's intentions by way of reduction due to adjustments to the culture of the target language.

Buden et al. (2009) stated that etymologically, translation was able to connect various humans who were bound by their respective cultures with different languages and showed mutual existence in general. In addition, Xie (2014) argued that because of the problems of environmental crisis, uneven development, injustice, and human rights issues, the world needed to start anew and redefine modernity. The first step to do this is through translation as a way to change the concept of universality into political space and (re)negotiations between local and global, hegemony and marginal, and the West and the rest, so that it can reflect or represent different ways of human, political heritage and cultural traditions in shared global concepts related to development, democracy, and happiness. Placing translation as a way to construct universality with the aim of having a positive impact on humans means that the translator's ability to convey meaning and messages for his readers is an absolute requirement.

METHODS

This product-oriented translation study used qualitative research method with a case study

design in assessing experiential meaning realization in the Indonesian subtitles of *The Kingdom* (2007) as the impact of clausal constituent reduction. The experiential meaning realization was analyzed under Halliday's transitivity system framework. The sources of data are English-language film entitled *The Kingdom* (2007) and its official Indonesian subtitles. This film and its Indonesian subtitles passed censorship by the Indonesian Film Censorship Board on December 19, 2007, with an identification number of 6092/VCD/R/PA/2.2008/2007 under the distribution of Vision Home Entertainment (Vision Interprima Pictures).

The collected data, by way of purposive sampling, are English clauses having reduction in their constituent(s) in the subtitles. Content analysis (Spradley as cited in Santosa, 2017) was used to crosscheck the subtitles with their original text transcriptions in identifying the reduction on clausal constituents.

The data were analysed inductively through three stages of analysis, namely domain, taxonomy, and componential (Spradley, as cited in Santosa, 2017). The focus of domain analysis is to make sure that the data are clauses of which constituent(s) is/are reduced in the subtitles. Afterwards, the data were analysed taxonomically by classifying them into types of reduced constituent(s), which are reduction of participant; process; circumstance; and combinations between the three.

The next stage is componential analysis. Since one of the underlying concepts of componential analysis is to highlight differences for analysis, used to answer the structural problems of a study, the emphasis is on highlighting the differences of clausal constituent structure between ST and TT and explaining the experiential meaning realization on each respective text.

The film tells the story of an FBI team, Ronald Fleury (Jamie Foxx), Grant Sykes (Chris Cooper), Janet Mayes (Jennifer Garner), and Adam Leavitt (Jason Bateman) in investigating a bomb attack in the Ar-Rahmah settlement, home to American workers in Saudi Arabia, with the help of Colonel Al-Ghazi, commander of Saudi Arabia Police Force. This film requires maturity of thinking and logic for its audiences, especially in the portrayal of Muslims as terrorists. Hence, it is interesting to examine how information in the English clausal constituents with such portrayal is translated into Indonesian because the population of Indonesia is predominantly Muslim.

RESULTS

There were 483 English clausal instances of data whose constituents were reduced in the Indonesian subtitles in seven combinations. The combinations and frequencies of the reduction can be seen in Table 3. In detail, the types of each reduced constituent are displayed in Table 4.

When the process is reduced, it leads to the absence of experiential meaning realization in the subtitles. As seen in Table 4 that reduction of process, dominantly, happened to the material process. It means that the experiential meaning of doing or

Table 3
Combinations and frequencies of reduction of clausal constituent(s)

Combinations of Reduction of Constituents	∑	Reduction of Participants	Reduction of Processes	Reduction of Circumstances
Participant	120	120	-	-
Process	40	-	40	-
Circumstance	51	-	-	51
Participant and Process	194	194	194	-
Participant and Circumstance	7	7	-	7
Process and Circumstance	18	-	18	18
Participant, Process and Circumstance	53	53	53	53
Total Clausal Data	483	-	-	-
Total Reductions of Constituents	**-**	**374**	**305**	**129**
			808	

Table 4
Reduction of constituents and their types

Reduction of Constituents and Their Types		∑
Process	Material	153
	Mental	50
	Relational	85
	Verbal	10
	Existential	6
	Behavioral	1
Participant	Actor	87
	Goal	55
	Beneficiary	6
	Senser	70
	Phenomenon	19
	Carrier	17
	Token	66
	Values	22
	Sayer	11
	Verbiage	8
	Receiver	8
	Existent	5
Circumstance	Location	86
	Matter	9
	Manner	11
	Extent	7
	Contingency	3
	Cause	5
	Accompaniment	6
	Angle	2
		808

happening from *The Kingdom* (2007) as an action film was not realized in the subtitles. Although the physical activities could still be viewed from the motion pictures, the flow of information which led one action to another was not represented in the subtitles. The participants in the material process were also those which were mostly reduced in the subtitles, namely actor and goal (see Table 4). It means that the experiential meaning concerning the doer of the action and target of the action was also not realized in the subtitles.

The second type of process which is reduced significantly is relational. It means that the experiential meaning in connecting one entity to another as a way to represent characters and to build a series of events is not realized in the subtitles. The identifying relational process and its participant, token, are those which are mostly reduced in this type of process. This leads to the absence of relating events and characters to certain identification in the subtitles.

Another type of process which is reduced considerably is the mental process.

Its participant, senser, is also reduced quite immensely. It means that the experiential meaning concerning entity that senses events of cognition, perception, and emotion is not realized in the subtitles.

Meanwhile, the type of circumstance which is mostly reduced is location. The reduction of location is mostly associated with the material process because such a process commonly relates to place and time of action. In detail, there were 64 spatial reductions and 22 temporal reductions which led to the absence of information about the attendances of places and time in the processes.

Reduction of Participant

The reduction of this constituent has removed the existence of one of the entities involved in the process (see Table 5).

In Table 5, the nominal group, *Suweidi*, as the participant of goal was reduced in the subtitles. In the ST, this clause represented an utterance of Agent Sykes, responding to Colonel Al-Ghazi's statement that seemingly declined the FBI agents' request to investigate a building outside the housing compound due to security reasons. *Suweidi* (As-Suweidi or Al-Suweidi) is a settlement in the city of Riyadh, Saudi Arabia which was portrayed in the film as a militant stronghold in which Al Qaeda could recruit for their acts of terrorism. Also in the ST, *Suweidi* was equated with North Korea, which might indicate that from the American perspective, these two entities were considered as hostile areas.

The experiential meaning realization in the ST was that they had the military force to eliminate threats coming from the two entities. Meanwhile, the experiential meaning realization in the TT was that they had such force to be imposed on North Korea only. Since Islam is the state religion of Saudi Arabia and its law requires all citizens to be Muslims (U. S. Department of State, 2004), the ST seems to portray the inhabitants of *Suweidi* as Muslims associated with terrorism. It is postulated that *Suweidi* was reduced in the subtitles because this entity was not considered to be a hostile area as it was inhabited by Muslims and Indonesia as well as Saudi Arabia have emotional attachment to the idea that Muslims should not be equated with terrorism. North Korea, on the other hand, is a country having no emotional

Table 5
Example of reduction of participant

ST	We	Got	enough security	to invade	North Korea and Suweidi
Constituent	Participant	Process	Participant	Process	Participant
TT	Pasukan keamanan kita		cukup	menggempur	Korea Utara
Constituent	Participant			Process	Participant
BT	Our security forces		are enough	to invade	North Korea
Constituent	Participant		Process	Process	Participant

BT: Back Translation

attachment to Indonesians. Furthermore, it is a communist country, and communism is perceived as a latent threat in Indonesia. So, by clearly stating the equivalence of North Korea in the subtitles, it does not evoke any sentiments among Indonesians.

Therefore, the reduction of *Suweidi* as an entity associated with terrorism is functionally obligatory because it contradicts the socio-cultural context of acceptability in perceiving Muslims. This reduction is an act of censorship as regulated in the Indonesian Government Regulation Number 18 of 2014 concerning Guidelines and Criteria for Film Censorship, chapter III, article 29, section 2, and article 30, section 6 pertaining to censorship motivated by religious considerations. It is possible that if *Suweidi* were not censored, it may potentially evoke a sense among Indonesians that *Suweidi* is indeed a place associated with terrorism and this could elicit the impression that Muslims allow terrorism to flourish among them. Even worse, this may elicit an impression that Islam is associated with terrorism.

An interesting fact regarding *Suweidi* can be seen from how different it is informed in the English and Indonesian version websites of Wikipedia. The English version website, https://en.wikipedia.org/wiki/As-Suwaidi_(Riyadh), not only informs readers of its geographical and demographic conditions but also clearly states that *Suweidi* is associated with terrorism. On the other hand, its Indonesian version, https://id.wikipedia.org/wiki/As-Suwaidi_(Riyadh), simply states its geographical information. Even though Wikipedia can be edited by anyone but at the very least, when the author accessed the two sites on August 26, 2019, there had been no edits in the Indonesian version to state that it is associated with terrorism.

Reduction of Process

The reduction of this constituent has removed the essence of experiential meaning in the clause (see Table 6).

In Table 6, four sequences of process, represented by the verbal group *breathe,* were reduced in the subtitles into only one. In the ST, this clause represented an utterance of Agent Fleury when trying to help Colonel Al-Ghazi who got shot during a raid at a house which turned out to be the house of Abu Hamza, the main perpetrator of terrorism in the film.

The repetitive instructions in the ST clearly construed experiential meaning

Table 6
Example of reduction of process

ST	Breathe,	*breathe,*	*breathe,*	*fucking breathe!*
Constituent	Process	Process	Process	Process
TT	Tarik nafas			
Constituent	Process			
BT	Breathe			
Constituent	Process			

which indicated a sense of emergency, urging Al-Ghazi to continue breathing until further medical assistance got there and helped him. However, the Indonesian subtitles did not construe the same experiential meaning as in the ST, i.e. it did not implicate any senses of emergency because it was not repetitive as in the ST.

Reduction of Circumstance

Reduction of this type removed the circumstantial information in the process (see Table 7).

In the subtitles, reduction happened in the constituent of circumstance, *(to) mosques*. In the ST, this clause represented an utterance regarding Osama Bin Laden's reaction when The Kingdom of Saudi Arabia rejected his offer to expel Iraq from Kuwait and prefered US military assistance. The reduced circumstantial information was related to the location element of the place. The subtitles construed different experiential meaning realization from its ST, namely the process only took place at streets but not at mosques.

In the ST, since mosques were depicted as places that were used by Osama bin Laden to provoke hatred against The Kingdom of Saudi Arabia and America and this serves as justification for any acts of terrorism against the two countries, naturally, the circumstance was reduced in the Indonesian subtitles because within the socio-cultural context of Indonesia, mosques are perceived as sanctified places and are not construed as settings to disseminate the idea of terror as elicited in the ST. This reduction is functionally obligatory as it aims to protect the people of Indonesia, who are predominantly the followers of Islam, from the sentiment that a Mosque is a place to spread hostility. This kind of reduction is a manifestation of censorship related to religion (Scandura, 2004).

Guidelines and criteria for film censorship as regulated in *Peraturan Pemerintah No. 18 2014 tentang Lembaga Sensor Film* (Indonesian Government Regulation Number 18, 2014 on Film Censorship Board), chapter III, article 29, section 2 clearly states that one of the aspects for a film to be censored is

Table 7
Example of reduction of circumstance

ST	Osama	took	to the streets and *mosques*	to denounce	the U.S., the Royal Family and their unholy alliance.
Constituent	Participant	Process	Circumstance	Process	Participant
TT	Osama	turun	ke jalan-jalan	untuk mengecam	hubungan AS dengan keluarga kerajaan sebagai hubungan najis
Constituent	Participant	Process	Circumstance	Process	Participant
BT	Osama	took	to the streets	to denounce	the U.S., the Royal Family and their unholy alliance.
Constituent	Participant	Process	Circumstance	Process	Participant

related to religion. This aspect is further explained in article 30, section 6 which states that material related to religion that is subject to censorship includes visual scenes, dialogues, and/or monologues that can cause religious disharmony – those which taunt and/or underestimate the sanctity of religion or religious symbols.

Reduction of Participant and Process

In the data, the reduction of these two types of constituents predominantly removes the verbal group as a material process and the nominal group as participant of actor (see Table 8).

In Table 8, the nominal group *I* as participant of actor and the verbal group *spent* as material process are reduced in the subtitles. In the ST, this clause represents an utterance of Colonel Al-Ghazi responding to a question asked by Agent Fleury of whether or not he has been in the US.

In the ST, the experiential meaning realization is about an activity carried out in the past by the actor over a certain period of time at a particular place. Meanwhile, in the subtitles, the experiential meaning realization cannot be construed similarly as in the ST because the doer and the action are reduced.

Since one of the reduced constituents is the process, principally, the subtitles do not construe any experiential meaning. However, experiential meaning as realized in the ST can still be generated cohesively by referring to the preceding utterance, namely the question asked by Agent Fleury.

Reduction of Participant and Circumstance

The reduction of these two types of constituents removes information concerning one of the entities involved in the process and circumstantial information associated with the process (see Table 9).

In Table 9, the nominal group *us* as a participant of the receiver and the prepositional phrase *about that day* as a circumstance of matter are reduced in the subtitles. In the ST, this clause represents an utterance of Mr. Fleury's son's teacher asking Mr. Fleury to tell her and his son's classmates about the childbirth process of his son. The teacher seems intrigued to ask as previously Kevin, Mr. Fleury's son, says that when he was born, this was the happiest day of Mr. Fleury's life.

Experiential meaning realization in the ST projects a verbal event that involves participants of sayer (you and Mr. Fleury)

Table 8
Example of reduction of participant and process

ST	*I*	*Spent*	4 days	in Quantico
Constituent	Participant	Process	Participant	Circumstance
TT			4 hari	di Quantico
Constituent			Participant	Circumstance
BT			4 days	in Quantico
Constituent			Participant	Circumstance

Table 9
Example of reduction of participant and circumstance

ST	Can	you	tell	*us*	*about that day,*	Mr. Fleury?
Constituent	Process	Participant	Process	Participant	Circumstance	Participant
TT	Bisa	Anda	ceritakan,		Tn. Fleury?	
Constituent	Process	Participant	Process		Participant	
BT	Can	you	tell,		Mr. Fleury?	
Constituent	Process	Participant	Process		Participant	

and receiver (*us*) concerning a particular matter (*about that day*). However, in the subtitles, the experiential meaning realization merely projects a verbal event which involves the participant of sayer. However, the same experiential meaning realization as projected in the ST can still be generated cohesively by referring to the previous reference as contextually described in the previous paragraph.

Reduction of Process and Circumstance

The reduction of these two types of constituents removes information concerning the event and the situation associated with the event (see Table 10).

In Table 10, the verbal group *come* and the adverbial group *here* are reduced in the subtitles. The ST is a compound sentence consisting of two clauses and both are imperative. It is in the first clause that reduction of the process and the circumstance takes place. In the ST, this clause represents an utterance of Agent Leavitt asking Agent Fleury to advance toward him because he wants to show him a footage. In the first clause, the verbal group *come* indicates a material process, asking someone to move. Meanwhile, the adverbial group *here* indicates that the movement is associated with a spatial distance.

By examining the ST, it can be acknowledged that the experiential meaning realization is related to two kinds of processes, namely material which is associated with spatial circumstance and mental which involves a phenomenon. Meanwhile, the subtitles reduce the first clause totally, resulting in experiential meaning realization which only depicts the mental process having the same entity as in

Table 10
Example of reduction of process and circumstance

ST	*Come*	*here*	and	look at	this
Constituent	Process	Circumstance		Process	Participant
TT				Lihat	ini
Constituent				Pocess	Participant
BT				Look at	this
Constituent				Process	Participant

the ST. However, although the experiential meaning of the first clause is not realized in the subtitles, it is implicitly accommodated by the equivalence of the second clause because normatively, when a person asks someone whose position is at a certain distance to see something near to the person, s/he will make a physical movement of approaching the person.

Reduction of Participant, Process and Circumstance

Typically, this type of reduction does indicate a total reduction of a clause, namely it leads to the absence of holistic experiential meaning realization in the subtitles. However, in some data, although reduction happens on the three types of constituents but there is one constituent left in the subtitles, which is participant. This happens when the clause has more than one participant (see Table 11).

In Table 11, the nominal group *we* as the participant of token, the verbal group *got* as relational process and the adverbial group *down here* as circumstance of location are reduced in the subtitles. There is one participant which is not reduced in the subtitles, namely "a lot of bodies".

In the ST, this clause represents an utterance of Agent Fran when he calls Agent Fleury, informing that there is a bomb attack at the American housing compound in Riyadh, Saudi Arabia, and the attack has caused many casualties. Agent Fran calls Agent Fleury from the crime scene. Therefore, the intended experiential meaning realization in the ST is informing that FBI Agents, stationed in Riyadh, are now at the bomb attack crime scene and there, many victims have been killed there. The adverbial group *down here* indicates the spatial location from where Agent Fran calls.

Supposedly, the reduction of the three constituents will lead to the absence of holistic experiential meaning realization in the subtitles. However, what is so interesting that the subtitles are in the form of a clause, having the word "down" misinterpreted by the subtitler as a verb. The misinterpretation leads the subtitles to become as such in the TT and when it is translated back into English, it becomes as displayed in the BT. Therefore, although the subtitles are in the form of a clause, it does not construe the same experiential meaning realization as in the ST because the subtitles realize it into there are many bodies/corpses which are falling vertically.

Table 11
Example of reduction of participant, process and circumstance

ST	*We*	*got*	a lot of bodies	*down here*
Constituent	Participant	Process	Participant	Circumstance
TT		Mayat		berjatuhan
Constituent		Participant		Process
BT		Bodies		fell down
Constituent		Participant		Process

DISCUSSION

The results show the reduction occurs with all three constituents in seven combinations. The analysis indicates that the subtitles have different experiential meaning realizations compared to their original counterparts because the flow of information, related to participant(s) involved in an event, the event itself and situation as well as conditions accompanying the event, is lost in the subtitles. Consequently, the flow of information concerning the construction and development of the film storyline is not the same between those instantiated by the film verbal texts and their subtitles.

The reduction of participants has an impact on experiential meaning concerning identity as well as a reference in realizing an event. Within communicative situation and discourse, the existence of participants is essential in providing a contextual understanding of an event (Halliday & Matthiessen, 2014; Thompson, 2014). Also, the reduction of participants represents the loss of an entity because in a language, an entity is an embodiment of existing objects, people, objects, ideas, or concepts in this world (Fontaine, 2013).

Bloor and Bloor (2014) stated that participants were used by speakers as entities involved in a particular set of events. Therefore, the reduction of participants in the subtitles has led to experiential meaning realization not including one or more entities which is supposedly included in the inherent event. This is in line with the finding of a study conducted by Matielo et al. (2015) that subtitles which omit participants seem to neglect the importance of this constituent in realizing processes.

Related to the reduction of processes, this leads to the dismissal of experiential meaning in the subtitles, which dominantly happens on material processes. This is an important finding because the process is the essence of experiential meaning in the clause. Semantically, the experiential meaning in the process provides a model of the speaker's experience and serves to represent the experience by interpreting the configuration of the process, the participants involved in it, and all the accompanying circumstances (Halliday & Matthiessen, 2014).

Concerning the reduction of circumstance, dominantly, it relates to the circumstantial element of location (temporal and spatial). Since *The Kingdom* (2007) is an action film, the dominant process is material and commonly such process is attended in time and place. This is in accordance with de Souza (2008) who states that the material process relates to manner, range, and location.

Lakoff and Johnson (1980) state that the circumstantial information of location informs an event which is indicated as orientation. This is in accordance with the storyline developments of *The Kingdom* (2007) which are related to nationalism, efforts to eradicate terrorism and the chronology of events. The reduction of location concerning spatial information results in the loss of physical activities which, according to Lakoff and Johnson (1980), are the basis of processes.

Meanwhile, the reduction of temporal information results in the loss of process links with historical discourse. *The Kingdom* (2007) includes historical facts in the plot as the basis for the story revolving around terrorism. These allow this film to have some kind of hybridity, mixing reality with fiction. The experiential meaning realization due to the reduction of temporal information results in the storyline depicted in the subtitles no longer positioning history as the foundation for the plot development in the film.

It is accepted that experiential meaning realization of subtitles reduction can be analyzed systemically in the transitivity system (see Matielo et al., 2015), however, no studies have assessed it functionally, especially in the context of Indonesia. Although Noverino et al.'s study (2019) investigated subtitles reduction systemically and functionally, their findings reported on the experiential realization of the entity and not on the experiential realization of meaning because the scope of their study is on nominal group reduction. Therefore, one of the important findings of the present study is on the functional issue – how reduction of clausal constituents is imposed obligatorily when the meaning contradicts the socio-cultural context of acceptability in Indonesia.

Acceptability refers to whether a translation has been in accordance with the socio-cultural norms and values of the TT (Nababan et al., 2012). Also, Puurtinen (1998) argues that acceptability is crucial in translation as it ensures that the content of the translated text is in line not only with the cultures of the target language but also with the target readers. In addition, taking into account the aspect of acceptability in a translation means that it deals with the application of certain ideology in a community. Van Dijk (as cited in Puurtinen, 2007) gives the view that ideology is a framework for organizing and monitoring beliefs and attitudes in a community. This definition shows that ideology is a reference or benchmark for people in behaving in a society.

With film subtitles, acceptability is commonly achieved through censorship. Of the four reasons for film censorship, namely politics, political correctness, religion and self-censorship (Scandura, 2004), censorship in this film is motivated by religious considerations. Since *The Kingdom* (2007), purposively or not, portrays terrorism and its related situations to Islam and Muslims, some constituents which contain such portrayals are reduced in the subtitles. The reduction is a censorship policy by the Indonesian Film Censorship Board as regulated by the Indonesian government. Since the population of Indonesia is predominantly Muslims, any sensitive materials in the film which may potentially cause religious disharmony and degrade Islamic sanctities or symbols are subjects to censorship.

The findings and analysis of this study have to be seen in the light of some limitations. Since the data are objective, the analysis is generated from the data. There is no actual information of why the

constituents are reduced by the subtitler. Therefore, methodologically, a suggestion for further study would be to include genetic data, namely data that are obtained firsthand from the subtitler regarding reasons for reducing the clause constituents in the subtitles, which would enhance a more valid and reliable qualitative analysis. Also, the transitivity system as the framework to analyze the data is substantively used within the verbal text and its subtitles while the visual motion pictures are used as context to understand the meaning. Hence, it would be significant for further study to add a multi-modal approach because the analysis covers not only the spoken and the written modes but also the visual modes and non-voiced sounds. This would provide thorough and comprehensive findings that truly represent film as a multi-modes medium.

CONCLUSION

This study is an attempt to highlight how the ideational metafunction of SFL within the framework of transitivity system analysis has contributed insights to the inquiry of experiential meaning realization due to the reduction of English clausal constituents in the Indonesian subtitles of *The Kingdom* (2007). Of 483 collected data instances, the findings show reduction happens systemically on constituents of participant, process, and circumstance in seven combinations which leads to different experiential meaning realization in the Indonesian subtitles. Functionally, the analysis of some data reveals that some constituents which portray terrorism to be associated with Islam and Muslims are reduced obligatorily as to accommodate the socio-cultural context of acceptability in Indonesia, implemented through censorship.

ACKNOWLEDGEMENT

The writer would like to extend his gratitude and appreciation to his Doctoral Thesis Advisors, Postgraduate Doctoral Program of Sebelas Maret University and Gunadarma University for their support.

REFERENCES

Bloor, T., & Bloor, M. (2014). *The functional analysis of English: A Hallidayan approach* (3rd ed.). New York, USA: Routledge.

Buden, B., Nowotny, S., Simon, S., Bery, A., & Cronin, M. (2009). Cultural translation: An introduction to the problem and responses. *Translation Studies*, *2*(2), 196-219. https://doi.org/10.1080/14781700902937730

de Linde, Z., & Kay, N. (1999). *The semiotics of subtitling*. Manchester, England: St. Jerome.

de Souza, A. A. (2008). *'Do the right, be firm, be fair': A systemic functional investigation of national anthems written in English*. (Doctoral Thesis, Universidade Federal de Santa Catarina, Brazil). Retrieved April 4, 2018, from https://repositorio.ufsc.br/bitstream/handle/123456789/91436/247919.pdf?sequence=1&isAllowed=y

Diaz-Cintas, J., & Remael, A. (2007). *Audiovisual translation: Subtitling*. Manchester, England: St Jerome.

Dries, J. (1995). *Dubbing and subtitling: Guidelines for production and distribution*. Düsseldorf, Germany: EIM.

Eggins, S. (2004). *An introduction to systemic functional linguistics* (2nd ed.). London, England

/New York, USA: Continuum International Publishing Group.

Espindola, E. B. (2010). *Illuminated the analysis of the translation is: Systemic functional linguistics strikes Yoda back*. (Doctoral thesis, Universidade Federal de Santa Catarina, Brazil). Retrieved March 21, 2018, from https://repositorio.ufsc.br/xmlui/bitstream/handle/123456789/103251/284637.pdf?sequence=1&isAllowed=y

Feitosa, M. P. (2009) *Legendagem comercial e legendagem pirata: Um estudo comparado* [Commercial subtitling and fan subtitling: A comparative study]. (Doctoral thesis, Universidade Federal de Minas Gerais, Brazil). Retrieved September 3, 2018, from http://www.bibliotecadigital.ufmg.br/dspace/bitstream/handle/1843/ALDR-832HSQ/743d.pdf?sequence=1

Fontaine, L. (2013). *Analysing English grammar. A systemic functional introduction.* New York, USA: Cambridge University Press.

Gottlieb, H. (1998). Subtitling. In M. Baker (Ed.), *Routledge encyclopedia of translation studies* (pp. 244-248). London, England, and New York, USA: Routledge

Halliday, M. A. K. (1967). Notes on transitivity and theme in English: Part 1. *Journal of Linguistics, 3*(1), 37-81. Retrieved January 25, 2017, from http://www.jstor.org/stable/4174950

Halliday, M. A. K. (2001). Towards a theory of good translation. In E. Steiner & C. Yallop (Eds.), *Exploring translation and multilingual text production: Beyond content* (pp. 13-18). Berlin, Germany, and New York, USA: Mouton de Gruyter.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2006). *Construing experience through meaning: A language based approach to cognition*. London, England, and New York, USA: Continuum.

Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *Halliday's introduction to functional grammar* (4th ed.). New York, USA: Routledge.

Hatim, B., & Mason, I. (1997). *The Translator as communicator.* London, England, and New York, USA: Routledge Taylor & Francis Group.

Kovačič, I. (1998). Six subtitlesrs – Six subtitling texts. In L. Bowker., M. Cronin., D. Kenny., & J. Pearson (Eds.), *Unity in diversity: Current trends in translation studies* (pp. 75-82). Manchester, England: St. Jerome.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, USA: University of Chicago Press.

Manfredi, M. (2008). *Translating text and context. Translation studies and systemic functional linguistics* (Volume I: Translation theory). Bologna, Italy: Dupress. Retrieved August 5, 2018, from http://amsacta.unibo.it/2393/1/Manfredi_2008_Monografia.pdf

Martin, J. R., Matthiessen, C. M. I. M., & Painter, C. (1997). *Working with functional grammar.* New York, USA: Arnold.

Matielo, R. (2011). *Subtitling words or omitting worlds? Systemic functional linguistics unveiling meanings translated out of the subtitles of the tv series heroes*. (Doctoral thesis, Universidade Federal de Santa Catarina, Brazil). Retrieved December 12, 2018, from https://repositorio.ufsc.br/bitstream/handle/123456789/94929/294683.pdf?sequence=1&isAllowed=y

Matielo, R., de Vasconcellos, M. L. B., & Baldiserra, E. E. (2015). Subtitling words or omitting worlds? A metafunctionally oriented analysis. *Revista de Estudos da Linguagem, Belo Horizonte*, *23*(2), 363-388. doi: 10.17851/2237.2083.23.2.363-388

Nababan, M. R.,Nuraeni, A., & Sumardiono. (2012). Pengembangan model penilaian kualitas terjemahan [Translation quality assessment model development]. *Kajian Linguistik dan Sastra*, *24*(1), 39-57. Retrieved March 17, 2015,

from https://publikasiilmiah.ums.ac.id/bitstream/handle/11617/2220/4.%20MANGATUR%20NABABAN.pdf?sequence=1&isAllowed=y

Noverino, R., Nababan, M. R., Santosa, R., & Djatmika. (2019). Reduction of English nominal group experiential structure in Indonesian subtitle: Becoming new entity? *Proceedings of 3rd English Language and Literature International Conference (ELLiC)*, Semarang, Indonesia: Faculty of Foreign Language and Culture Universitas Muhammadiyah Semarang. Retrieved June 24, 2019, from https://jurnal.unimus.ac.id/index.php/ELLIC/article/view/4725/4252

Peraturan Pemerintah No. 18, 2014 tentang Lembaga Sensor Film (IDN) [Government Regulation Number 18, 2014 on Film Censorship Board]. Retrieved July 15, 2019, from http://www.lsf.go.id/publik/content/582db6283616c.

Puurtinen, T. (1998). Syntax, readability, and ideology in children's literature. *Meta: Translators' Journal*, *43*(4), 524-533. https://doi.org/10.7202/003879ar

Puurtinen, T. (2007). Evaluative noun phrases in journalism and their translation from English to Finnish. In Y. Gambier, M. Shlesinger, & R. Stolze (Eds.), *Doubts and directions in translation studies: Selected contributions from the EST Congress, Lisbon 2004*. Amsterdam: John Benjamin Publishing Company.

Santosa, R. (2009). SFL and problems of equivalence in translation. In M. R. Nababan, T. Wiratno, & Djatmika (Eds.), *Proceedings of International Conference on SFL and Its Contribution on Translation Studies* (pp. 9-15). Surakarta, Indonesia: Sebelas Maret University, Indonesian Society of Translation, & Association of Systemic Functional Linguistics in Indonesia

Santosa, R. (2010). *Logika wacana: Analisis hubungan konjungtif dengan pendekatan linguistik sistemik fungsional* [Discourse logic: Analysis of conjunctive relationships with systemic functional linguistic approaches]. Available from https://digilib.uns.ac.id/dokumen/detail/17816/Logika-wacana-analisis-hubungan-konjigtif-dengan-pendekatan-liguistik-sistemik-fungsional

Santosa, R. (2017). *Metode penelitian kualitatif kebahasaan* [Qualitatif research method on language]. Surakarta, Indonesia: UNS Press.

Scandura, G. L. (2004). Sex, lies and tv: Censorship and subtitling. *Meta: journal des traducteurs/Meta: Translators' Journal*, *49*(1), 125-134. https://doi.org/10.7202/009028ar

Taylor, C. (2000). The subtitling of film: Reaching another community. In E. Ventola (Ed.), *Discourse and community: Doing functional linguistics*. Tübingen, Germany: Günter Narr Verlag. Retrieved April 20, 2018, from http://www.sub2learn.ie/downloads/taylorthe_subtitlingof_film_reachin g_another_community.pdf

Thompson, G. (2014). *Introducing functional grammar* (3rd ed.). Abingdon, England: Routledge.

U. S. Department of State. (2004). *Annual Report on International Religious Freedom: 2004*. Retrieved August 5, 2019, from https://www.govinfo.gov/content/pkg/CPRT-108JPRT20429/pdf/CPRT-108JPRT20429.pdf

Xie, S. (2014). Translation and the politics of the universal. *Asia Pacific Translation and Intercultural Studies*, *1*(1), 2-11. https://doi.org/10.1080/23306343.2014.883806

Zhang, Y., & Liu, J. (2009). Subtitles translation strategies as a reflection of technical limitations: A case study of Ang Lee's films. *Asian Social Science*, *5*(1), 113-118. Retrieved October 16, 2018, from http://www.ccsenet.org/journal/index.php/ass/article/download/545/526

Pertanika J. Soc. Sci. & Hum. 28 (2): 1035 - 1054 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

The Fall of Egyptian President Morsi and the Media Representation: A Critical Discourse Analysis of *Kompas* Daily Newspaper

Nuruddin[1]*, Yayan Nurbayan[2], Hanik Mahliatussikah[3], Sri Harini Ekowati[4], Hanip Pujiati[5] and Syarfuni[6]

[1]Department of Arabic Language Education, Universitas Negeri Jakarta, 13220 Jakarta, Indonesia
[2]Department of Arabic Language Education, Universitas Pendidikan Indonesia, 40154 Kota Bandung, Indonesia
[3]Department of Arabic Language Education, Universitas Negeri Malang, 65145 Malang, Indonesia
[4]Department of France Language Education, Universitas Negeri Jakarta, 13220 Jakarta, Indonesia
[5]Department of English Language Education, Universitas Negeri Jakarta, 13220 Jakarta, Indonesia
[6]Department of English Language Education, Sekolah Tinggi Keguruan dan Ilmu Pendidikan Bina Bangsa Getsempena, 23112 Aceh, Indonesia

ABSTRACT

Kompas is one of the most well-known media outlets in Indonesia. Reporting about the fall of President Morsi on 3 July 2013 and the political conflict in Egypt that followed had attracted the attention of international media, including in Indonesia. Using Norman Fairclough's critical discourse analysis, this study aimed to find out how the discourse of political strife was packaged in the daily newspaper of *Kompas*. Six editions were investigated as the data sources and analyzed by using the content analysis technique. This research proves that *Kompas,* from the linguistic aspect, in reporting the political conflicts of Egypt after the coup, inclined to be balanced and straightforward. This was evidenced by particular word choices and quotations from natural speakers with no inclination towards the military and Morsi's supporters. In the aspect of text production, the *Kompas* produced an independent news production which is free from all the pressures by accommodating and channeling a fair share of different voices. And In the aspect of the socio-cultural practices, *Kompas* in producing text cannot be separated from the context that built the news. Therefore,

ARTICLE INFO

Article history:
Received: 03 January 2020
Accepted: 13 March 2020
Published: 26 June 2020

E-mail addresses:
nuruddin.unj@unj.ac.id (Nuruddin)
yayannurbayan@upi.edu (Yayan Nurbayan)
hanik.mahliatussikah.fs@um.ac.id (Hanik Mahliatussikah)
sriharini@unj.ac.id (Sri Harini Ekowati)
hanifpujiati@unj.ac.id (Hanip Pujiati)
syarfuni@stkipgetsempena.ac.id (Syarfuni)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

it can be concluded that *Kompas* provides a platform from both parties that views a difference in a relatively fair manner.

Keywords: Critical discourse analysis, Egyptian President, Kompas, media representation

INTRODUCTION

Mohamed Morsi's victory in the 30 June 2012 election made him the first civilian president to represent the Islamic party camp in Egypt (El-Mallakh, 2017; Karkazis et al., 2018; Özkan, 2013). However, Morsi's reign of power did not last long. The situation began to heat up when the military started to interfere with political affairs. Military involvement in Egyptian political issues resulted in a government coup and ended Morsi's rule (Beck, 2013; Lust, 2014; Rezaei, 2015).

Another contributing factor to the political conflict was the role of the media in forming public opinion. Headlines in global media at that time were dominated by reports on Egyptian political conflict from two camps: Arabian media that supported Egyptian military action on one side, and media supporters of *Ikhwān al-Muslimīn* on the other (Abdulla, 2014; Mansour, 2015). Several mainstream Western media outlets also contributed significantly in shaping public opinion and criticism of the perpetrators of the conflict in Egypt (Halawa, 2013).

Elena (2016) analyzed and compared the role of two international English-language television news networks, *Al Jazeera* and *CNN,* informing a public opinion of the post-coup events in Egypt. Through the framing analysis approach, the results showed that *CNN* framed the coup as a necessary evil, whereas *Al Jazeera* took a more Islamic approach and regarded the coup as a form of democratic legitimacy. The transition to democracy in Egypt was not seen as a linear process of progress without interruption, but the coup was seen as a setback in the development of the conflict. This was the result of power dynamics in Egypt, where the military remained above and beyond social movements.

In Egypt itself, after the military coup, Egyptian media faced the problematic reality of building an independent standpoint. El Issawi (2014) was concerned with the role played by Egyptian national media in supporting a military coup which led to the overthrow of the elected government from the Muslim Brotherhood and Morsi.

Egypt's internal crisis did not escape the attention of Indonesia. Various opinions also spread into two major narratives: supporters of the Egyptian military who rejected the Muslim Brotherhood and supporters of the Muslim Brotherhood who rejected the military. Pringgandani (2014) saw a different point of view between the two major media outlets in Indonesia, *Republika* and *Kompas,* in discussing the resignation of Morsi from the Presidency by using Theo van Leeuwen's model of critical discourse analysis which focuses on actors involved in the event. Prianggandani wrote that in the 5 July reporting on the fall of Morsi, *Republika* tended to be more straightforward in reporting on the event, as evidenced by the dominant use of the verb "strategy." Meanwhile, *Kompas* tended to defend the

military and discourage Morsi supporters. As for the 14 August coverage of the military clash with Morsi supporters, both media outlets tended to preach negatively about the army and highlight Morsi supporters.

This paper seeks to identify trends in reporting on the Egyptian political conflict after the fall of President Morsi, especially in *Kompas,* by using the Fairclough's critical discourse analysis approach. In contrast to Pringgandani's conclusions, this paper looks more at Kompas, who tends to report equally between the military and Morsi supporters. This is evidenced among others by the selection of proportional diction and resource persons.

LITERATURE REVIEW

Media and Critical Discourse Analysis

Today, news discourse has moved beyond the surface of the structure of language. News articles can be analyzed to reveal the ideology behind the construction of the discussion, Therefore, it can be one of the goals of a news producer to manipulate facts and convince the audience in line with their interests. In fact, in the political process, there is a strong relationship between the media and the political process in which the media is the link between the public and the decision-making regime. These methods contribute significantly to the success or failure of the political system through its governmental functions and activities (Al-Katatsheh, 2019; Sadeghi et al., 2014).

According to Mills (1997), discourse is not a group of signs or parts of the text, but rather a systematic practice of forming the object in question. In this sense, the dialogue is something that produces something else (speech, concept, effect), not something that is inside and that can be analyzed separately. Thus, analyzing text discourse means having the aim to make implicit norms and rules for producing language explicitly.

In the connection between discourse with the social sphere, critical discourse analysis (CDA) provides a reasonably broad scope of studies, both from the aspect of methodology and meaning. CDA has different characteristics from the analysis of non-critical discourse which tends only to describe the structure of a discourse. This analysis goes further, namely by exploring the reasons why a discussion has a specific structure which will ultimately lead to a study of social relations between the parties involved in the discourse. According to Philips and Jørgensen (2004), CDA makes a significant contribution of methods for empirical studies relating to discussion and social and cultural development in different social domains. CDA is a social construction approach that believes that world representation is linguistic-discursive, containing a historical meaning, and knowledge created through social interaction. This is also the reason why critical discourse analysis is multidisciplinary–its relationship with social science, politics, and culture is inevitable (Widuna, 2018).

The use of CDA in social science research has been highly valued in recent decades. However, critical discourse analysis is not a research method in the conventional

sense because it does not consist of a series of procedural techniques. CDA is more than an approach used in social science research that seeks to identify practical solutions to various social problems (Abdullah, 2014; Wodak & Meyer, 2001).

CDA emerges as one of the most effective approaches in the analysis of discursive power relations. CDA's emancipatory agenda is to analyze power relations that do not highlight the hidden ideologies embedded in them (Fairclough, 1995a; Paniagua et al., 2007). As an overall characteristic of media language, Fairclough (1995b) pointed out conversationalization. In many media texts, for instance, in documentaries that deal with scientific or technological subjects, the public language of these disciplines presents properties of conversational style, which belongs to the sphere of the private. Science and technology are part of public, institutional life, as indeed is the whole business of producing television programs, but the applications signalled are received and consumed overwhelmingly in private contexts, in the home, within the family. Public life and private life involve different ways of using language, and Fairclough found this tension realized in a combination of private and public communication in a large number of media texts (Fairclough, 1995b).

CDA aims to make transparent connections between discourse practices, social practices, and social structures, relationships that may be blurry to laypeople. From these two views, it can be said that the CDA plan is both clear and sophisticated because it relates not only to social practice but also social structure, namely the sequence of discourse. Another essential dimension of CDA is to express power relations through specific techniques and methods.

METHODS

The data used in this study were 22 daily news articles published by *Kompas* newspaper from 5 to 9 July 2013 that contained headlines about the Egyptian political conflict after the overthrow of President Morsi. *Kompas* daily was chosen as the source of research data because, aside from being one of the mainstream newspapers and having a significant market share, *Kompas* has also frequently been a reference source for public discourse in Indonesia.

Using a qualitative descriptive model that aimed to systematically describe data, properties, and relationships of phenomena to be studied (Rosman & Rallis, 2003), this study used the technique of critical discourse analysis from Norman Fairclough's perspective. The analytical discourse analysis framework from Fairclough's perspective uses a three-dimensional analysis model, namely (1) textual (micro), which is a description of the text; (2) discourse practice (meso), namely interpretation of the relationship between the discourse process and the manuscript; and (3) sociocultural practice (macro), namely an explanation of the relationship between the discourse process and social processes (Fairclough, 1995b).

RESULTS AND DISCUSSION

Micro-Structural Analysis: Text

The first analytical focus of Fairclough's model is text. Its analysis includes linguistic analysis of vocabulary, grammar, semantics, the sound system and writing system and cohesion-organization above the sentence level as well as the organization of turn-taking in the case of media shaped in a dialogue form (Fairclough, 1995a). Any analysis is selective and the textual features in focus in CDA are those that are most significant for a critical analysis, an analysis designed to contribute to the understanding of power relations and ideological processes in discourse (Fairclough, 1989). Through an analysis of both syntagmatic and paradigmatic relations in a text, CDA can inform one's reading of a text by providing evidence for identifying underlying experiential, relational and expressive values in the choices made concerning vocabulary, grammar, and textual structures (Kean-Wah & Ming, 2010).

Based on the language used by *Kompa*s in reporting political conflicts in Egypt after the fall of President Morsi, three tools mark the representation of themes and figures involved in the reporting, namely through: (1) lexical choice (2) use of causal sentences, and (3) the use of direct quotations of sources.

Lexical Choice

After reading the text in the *Kompas*, forms of discourse were discovered through the discovery of the use of the diction of specific discourses.

(1) The Egyptian armed forces say they will allow "*protes damai*" (peaceful protests) to be held ahead of demonstrations held by the party supporting ousted President Muhammad Morsi (Patnistik, 2013b).

(2) Coordinating Minister of Economics Affairs Hatta Rajasa said: "*gejolak politik*" (political turmoil) in Egypt could disrupt regional security stability and affect world oil prices (Djumena, 2013).

(3) We hope that the Egyptian situation can recover soon, internal "*ketegangan politik*" (political tensions) are easing and have a positive impact on the economic situation in the region," said Hatta (Djumena, 2013).

(4) For this reason, he hopes that the condition of Egypt can recover, and "*krisis politik*" (the political crisis) can be overcome so that regional stability in North Africa and the Middle East region can occur (Djumena, 2013).

(5) "*Intervensi militer*" (military intervention) is supported by millions of Egyptians, including liberal leaders and religious leaders, who expect new elections under a revised set of rules (Patnistik, 2013a).

Data (1) - (5) came from a Friday edition of the newspaper, July 5, 2013. In lexical semantics, the data (1) phrasing of "*protes damai*" (peaceful protest) has the meaning

of a statement not agreeing to a friendly decision. Meanwhile, the phrase "*gejolak politik*" (political upheavals) in data (2) also tends to have a meaning that leads to political rebellion. In data (3), the phrase "*ketegangan politik*" (political tensions) means violent opposition in politics. Data (4), "*krisis politik*" (political crisis), says the dangerous situation that occurs in the political field. Meanwhile, the use of the phrase "*intervensi militer*" (military intervention) in data (5) refers more to the existence of military intervention in the political sphere.

(6) Seventeen people were killed in violence in Egypt in a "*bentrok*" (clash) between supporters of ousted Egyptian President Mohamed Morsi against the military and the opposition stronghold of Morsi on Friday (7/5/2013). Local government TV reported this data, citing a statement by the local health office (Auliani, 2013a).

(7) "*Pertempuran*" (battle) erupted Friday night local time. The two opposing parties faced each other on a bridge. This incident further increased fears of widespread violence, following the overthrow of Morsi by the military on Wednesday (3/7/2013) (Auliani, 2013a).

Data (6) - (7) were quotes from *Kompas* on Saturday, 6 July 2013 edition. In data (6), the word "*bentrok*" (clash) means disputes. This word refers to the differences that cause strife. Meanwhile, the use of "*pertempuran*" (combat), for example (7), means a great fight or battle and tends to refer to a rebellion between two opposing parties with the use of weapons. This word choice reinforces the use of the previous word "*bentrok*" (clashed) which, if interpreted, means that the clashes that occurred in Egypt led to a battle between the parties involved in the conflict.

(8) "*Aksi kekerasan*" (violent acts) in Egypt after the overthrow of Mohamed Morsi continues, and now the death toll has reached 36 people throughout Egypt due to pro-anti-Morsi mass clashes (Hardoko, 2013a).

(9) Egypt's "*transisi politik*" (political transition) after the overthrow of Mohamed Morsi did not turn out smoothly. One problem that arose was the appointment of Mohammed ElBaradei as interim prime minister (Hardoko, 2013b).

In *Kompas*, on Sunday, 7 July 2013, the phrases "*aksi kekerasan*" (violence acts) and "*transisi politik*" (political transition) were used. In data (8), the phrase "*aksi kekerasan*" (violent acts) means a movement that refers more to actions that contain violence. Meanwhile, in data (9), the phrase "*transisi politik*" (political transition) means a transformation that occurs in the political field which tends to refer to the change of power in a country's government structure.

(10) The *Ikhwān al-Muslimīn* group, Monday (07/08/2013), called for "*pemberontakan*" (rebellion) against the new Egyptian

government after dozens of supporters were shot dead outside the Cairo army headquarters (Hardoko, 2013c).

(11) Erdogan called the Egyptian military intervention a coup and criticized Western reluctance to call the overthrow of Morsi as "*kudeta*" (coup) (Hardoko, 2013e).

(12) The *Ikhwān al-Muslimīn* called for "*perlawanan*" (resistance) to the government after dozens of followers were shot dead by the Egyptian military on Monday morning (Hardoko, 2013d).

In the Monday, 8 July 2013 edition of *Kompas*, the articles used the words "*pemberontakan*" (rebellion), "*intervensi*" (intervention), "*kudeta*" (coup), and "*perlawanan*" (resistance). In data (10), the word "*pemberontakan*" (rebellion) refers to a process of opposing power or something that is considered contrary to policy. In data (11), "*kudeta*" (the coup) means the seizure of government power by force. Meanwhile, in data (12), "*perlawanan*" (resistance) tends to refer to efforts to survive or prevent undesirable things.

(13) In the midst of "*konflik politik*" (political conflict), Egypt established Ramadhan 1434 H beginning on Wednesday (07/10/2013). Although the new moon has been seen throughout the country, there has been no report of the sighting of the new moon on the western horizon (Auliani, 2013c).

(14) Currently, "*krisis politik*" (the political crisis) is bubbling in Egypt. Monday morning, at least 42 people were killed and 322 injured from supporters of ousted Egyptian President Muhammad Morsi (Auliani, 2013c).

(15) Hamdeen Sabahi, the former presidential candidate and leftist opposition leader, said the only beneficiary of this bloody incident in the midst of Egypt's *"krisis politik"* (political crisis) was the *Ikhwān al-Muslimīn* and "others" who were trying to polarize the situation, and Egypt would be pushed into civil war (Hardoko, 2013a).

(16) The *Ikhwān al-Muslimīn* supporters of Morsi, who led a demonstration to protest the overthrow of Morsi by the military on Wednesday, have called for "*pemberontakan*" (rebellion) (Patnistik, 2013f).

In *Kompas*, on Tuesday, 9 July 2013, the phrases used still have lexical similarities to the sentences in the previous *Kompas* editions, like data (14) and (15), "*krisis politik*" (political crisis), (see also data 4), and data (16), "*pemberontakan*" (rebellion), (see also data 10). However, except for this edition, *Kompas* used the phrase "*konflik politik*" (political conflict). "*Konflik politik*" refers to a political battle that leads to disputes between two or more parties in the political field.

In the editions of *Kompas* from 5 – 9 July 2019, which contained news about the

political conflict in Egypt after the fall of President Morsi, 18 phrases were found in the reporting. The better political conflicts reporting in Egyptian media have different semantic meanings. Seen from a lexical semantic perspective, for example, the use of the phrase "peaceful protest" has a more neutral meaning than the divisive phrase "*pergolakan politik*" (political upheaval). The phrase "*Protes damai*" (peaceful protest) means a statement of disapproval of a decision made amicably. Meanwhile, the phrase "*pergolakan politik*" (political upheaval) means turbidity in the political sphere which tends to point to a resistance movement. Another example is "*krisis politik*" (the political crisis) which means dangerous situations that occur in the political sphere. The use of this phrase is the most neutral compared to the other phrases used by *Kompas* in reporting on the political conflict in Egypt after the fall of President Morsi. "*Krisis politik*" (the political crisis) has a more affirmative meaning to describe the political slump that occurred in Egypt, creating political conflict between the Egyptian people and the government.

Kompas dominantly used the phrase "krisis politik" (the political crisis) in reporting political conflicts in Egypt after the fall of President Morsi. Therefore, it can be understood that *Kompas* viewed the conflict in Egypt as a political turmoil between the *Ikhwān al-Muslimīn* as a support group for President Morsi and the Egyptian government. Details about the recapitulation of using word choice *of Kompas* edition are shown in Table 1.

Cause and Effect Sentences

From 22 articles in the *Kompas* about the political conflict in Egypt after the fall of

Table 1
Recapitulation of linguistic aspect through word choice

No	*Kompas* edition	Word Choice	Total
1	5 July 2013	*Protes damai* (peaceful protests)	1
2		*Gejolak politik* (political turmoil)	1
3		*Ketegangan politik* (political tensions)	1
4		*Intervensi militer* (military intervention)	1
5		*Krisis politik* (political crisis)	3
6	5 and 9 July 2013	*Bentrok* (clash)	1
7	6 July 2013	*Pertempuran* (battle)	1
8		*Aksi kekerasan* (violence acts)	1
9	7 July 2013	*Transisi politik* (political transition)	1
10		*Kudeta* (coup)	1
11	8 July 2013	*Perlawanan* (resistance)	1
12		*Pemberontakan* (rebellion)	2
13		*Konflik politik* (political conflict)	1
14	9 July 2013	*Konflik politik* (political conflict)	1
Total			**16**

President Morsi, 4 data were found that used the linguistic strategies of cause and effect sentences. Below are a few examples of news text excerpts.

(1) According to Hatta, the upward trend in oil prices due to the Egyptian crisis could "*mengakibatkan*" (cause) disruptions in national fiscal security and hurt long-term economic growth (Djumena, 2013).

(2) Violence also occurred in cities in the southern region of Egypt along the Suez Canal and the Nile Delta that "*mengakibatkan*" (cause) at least 200 people injured (Hardoko, 2013a).

(3) ElBaradei's appointment "*menjadi*" (will be) a drastic shift for someone who is not gaining widespread popularity among the Egyptian people (Patnistik, 2013d).

(4) The fall of dozens of deaths from the supporters of ousted Egyptian President Mohamed Morsi has "*mengundang*" (invited) the international condemnation (Auliani, 2013b).

Data (1) and (2) have a causal relationship marked by the verb "*mengakibatkan*" (cause), connecting the main clause at the beginning with the subclause at the end of the sentence. Meanwhile, in data (3), the relationship of cause-effect is marked by a verb that connects the main clause "*pengangkatan ElBaradei*" (the ElBaradei appointment) with the subclause "*pergeseran drastis bagi seorang yang tidak mendapat popularitas luas di kalangan masyarakat Mesir*" (a drastic shift clause for someone who is not gaining widespread popularity among Egyptian society). Finally, in data (4), the causal relationship is marked by the use of verbs "*mengundang*" (invite) which connects the main clause "*jatuhnya puluhan korban tewas dari kubu pendukung Presiden Mesir Mohamed Morsi*" (the deaths of dozens of supporters from the stronghold of Egyptian President Mohamed Morsi) with "*kecaman internasional*" (international condemnation) clause.

From this finding, it can be understood that the *Kompas* strategy in reporting on political conflicts in Egypt after the fall of President Morsi tended to label political conflicts in Egypt as a cause of disruption to national fiscal security, the adverse effects of international economic growth and the emergence of violence that resulted in the deaths and injuries of many civilians in Egypt.

Direct Quotations of Resource Interviewees

In addition to the use of particular grammatical and lexical choices, *Kompas* voiced its aspirations through direct quotations of statements from figures who became the news sources related to the political conflicts in Egypt after the fall of President Morsi. From the findings obtained, it can be seen that in *Kompas,* there is a direct quote from the informant's statement in favor of the *Ikhwān al-Muslimīn*, both directly and indirectly. Among the figures who stated their support for the *Ikhwān al-Muslimīn* are: (1) Hidayat Nur Wahid,

Chairperson of the Regional Leadership Council (DPD) of the Prosperous Justice Party, Indonesia (Asril, 2013); (2) Ahmed Aref, spokesman for the *Ikhwān al-Muslimīn* (Patnistik, 2013c); (3) Turkish Foreign Minister Ahmet Davutoğlu (Auliani, 2013b; Hardoko, 2013e); and (4) Heba Morayef, from Human Rights Watch (Hardoko, 2013a). The partiality of the figures towards Ikhwān al-Muslimīn can be observed from the following quotations:

Ahmed Aref, the spokesman for *Ikhwān al-Muslimīn* points out:

(1) "Sixteen people died, and hundreds were injured. Many of them are in a serious condition," *Ikhwān al-Muslimīn* spokesman Ahmed Aref told AFP. Police barricades prevented journalists from accessing the area (Patnistik, 2013c).

Turkish Foreign Minister Ahmet Davutoğlu made a statement:

(2) "I strongly condemn the massacre of Morsi's followers in the name of the human values we stand for," Davutoglu said through his Twitter account (Hardoko, 2013e).

Herba Morayef from Human Rights Watch states in his Twitter account:

(3) "Regardless of what started violence ... the military and police have a responsibility to refrain and not use excessive and deadly violence" (Hardoko, 2013a).

In Indonesia, the figure who appeared to side with the *Ikhwān al-Muslimīn* was Hidayat Nur Wahid, the Chairman of Central Leadership Council (DPP) of Prosperous Justice Party (PKS). This can be seen from his statement as follows:

(4) The Prosperous Justice Party (PKS) regretted a military coup against the recently overthrown Egyptian President Mohamed Morsi. The Chairman of DPP PKS Hidayat Nur Wahid assessed the military had heated the political situation in Egypt and finally carried out unconstitutional actions that were far from the spirit of democracy. "In principle, we deeply regret the democracy that had been properly built by the Egyptian people was destroyed by the military and then was couped to dissolve the government and establish a new government," Hidayat said in Jakarta, Friday (05/07/2013) (Asril, 2013).

On the other hand, we found related quotes from figures who were neutral, in the sense that they did not side with the *Ikhwān al-Muslimīn* or with the Egyptian government and military. These figures, among others, were (1) Hatta Rajasa, Coordinating Minister for Economic Affairs of the Republic of Indonesia, (2) Ahmed al-Meslemani, the assistant of Adly Mansour, Interim President, (3) Nadder Bakkar, Al-Nur's spokesman for the Egyptian Salafi Islamic group, (4) Egypt's National Mufti, Prof. Dr. Syeikh Shauqi Abdel Karim Allam, (5) Mohamed Saber el-Sebaei, one of the Egyptian people, (6) Salafi Noor from

Egypt's conservative camp, (7) Michael Mann, the spokesman of the European Union Foreign Policy Chief Chaterine Ashton, and (8) Abbas Araqchi, the Spokesman of the Iranian Foreign Ministry.

The neutrality shown by these figures and the organizations in which they were affiliated can be observed in the following quotations. The first one is the statement from the Coordinating Minister for Economic Affairs of the Republic of Indonesia Hatta Rajasa:

> (5) Coordinating Minister for the Economy Hatta Rajasa said political turmoil in Egypt could disrupt regional security stability and affect world oil prices. "This could lead to a market situation that can be said to be unstable, especially fears that could trigger an increase in oil prices," he said in Jakarta, Thursday 94/7/2013 (Djumena, 2013).

There was also an attitude of neutrality in the quotations from some Egyptians interviewed by *Kompas*. This, for example, can be recognized from the statement of Ahmed al-Meslemani, an aide to Adly Mansour, the Egyptian interim President who was appointed following the Egyptian military coup before the democratic election of President Mohamed Morsi.

> (6) Ahmed al-Meslemani, Mansour's aide, expressed that talks were still ongoing regarding the prime minister's position. "We must consider objections to (people occupying) the position of the prime minister," he said (Patnistik, 2013d)

Also, one direct quote was found which tended to favor the government and the military. This can be obviously observed from the following statement:

> (7) The Egyptian army said Monday (07/08/2013) that "armed terrorists had tried to storm the headquarters of the elite Republican forces and killed a security officer." The country's military statement was quoted as saying by the state-owned daily website, *Al-Ahram*. "At dawn, an armed terrorist group tried to storm the Republican Guard building ... attacking army and police forces, which caused the death of an officer and injured several others, including six in a critical condition," the statement wrote. (Patnistik, 2013e).

Based on the findings related to the selection of direct quotation sources in its articles, *Kompas* daily used the voices of neutral parties regarding political conflicts in Egypt after the fall of President Morsi compared to those who supported the *Ikhwān al-Muslimīn* and those who supported the Egyptian government and military. This can be seen from the eight neutral sources, compared to the four sources who favored the *Ikhwān al-Muslimīn*. In the meantime, there was only one source that favored the Egyptian government and military. Therefore, it can be concluded that *Kompas* daily prefers not to lean on one side and be neutral in reporting political conflicts in Egypt after the fall of President Morsi.

Meso-Structural Analysis: Practices of Text Production

Concerning discourse practices of a community, Fairclough (1995a) defined these as its standard ways of using language and understands them in terms of networks, which he called orders of discourse. In a particular discussion, there was an alternation between twin and complementary focuses, communicative events (for instance, a specific newspaper editorial) and the overall structure of the order of discourse, the configurations of genres and discussions, and the way it evolved in the context of social and cultural changes and the relations with other socially adjacent orders of discourses (Cremades, 2007; Fairclough, 1995a).

In meso-analysis, interpretation is made on discourse processing which includes aspects of production, distribution, and use of texts. This section analyzes how media workers produce documents. Therefore, through this discourse analysis, people not only know how the contents of the news text are written but also how the message is conveyed. Some of these aspects have a more institutional character, while others are processes of using and spreading discourse. Concerning institutional processes, Fairclough (1995b) refers to institutional routines such as editorial procedures involved in the production of media texts. Discourse practices include how media workers produce documents. Discourse analysis not only concerns how the contents of the news text are created but also how the message is conveyed.

Kompas began publishing on June 28, 1965. Since 1969, *Kompa*s has dominated the national newspaper sales. In 2004, the daily circulation reached 530,000 copies. The Sunday edition specifically reached 610,000 copies. The newspaper reaches 2.25 million people throughout Indonesia ("Kompas," 2019).

In 2011, the printed *Kompas* daily (not online version) had an average circulation of 500,000 copies per day, which were distributed to all regions in Indonesia and reached an average of 1.85 million readers per day. With an average circulation of 500,000 copies every day and 600,000 copies for the Sunday edition, *Kompas* is not only the largest newspaper in circulation in Indonesia but also in Southeast Asia. To ensure the accountability of its distribution, *Kompas* daily uses the services of ABC (Audit Bureau of Circulations), which has conducted audits since 1976.

In working in the press, the vision of *Kompas* is to develop a new Indonesian society based on the *Pancasila* (the Five National Principles of the Republic of Indonesia). This is implemented through the principle of unity and difference by respecting individuals and embodying a just and prosperous community (Sutanto, 2015). In running its journalistic profession, *Kompas* holds on these five principles: First, *Kompas* is a free and public institution. Second, *Kompas* does not involve itself in a certain group of society, whether it is political, religious, social, or economic. Third, *Kompas* actively opens a dialogue and interacts positively with all groups.

Fourth, *Kompas* is a national newspaper that seeks to realize the ideals of the nation. Fifth, *Kompas* is broad and free in the views developed.

Based on the description above, it is known that as one of the mainstream newspapers in Indonesia, Kompas can seriously influence the opinion of the Indonesian people, especially within the urban society where media literacy is high. The text production in *Kompas* newspaper is not only a stand-alone series, but an institutional series involving journalists, editors, and others to build a new Indonesian society based on *Pancasila* through the principle of unity and difference. The creation of the text produced by *Kompas*, especially its reporting on political conflicts in Egypt after the fall of President Morsi, is also considered to be in line with one of the missions carried out, namely to produce news that is independent and free from all pressures by accommodating and distributing a fair share of different voices. In this relation, *Kompas,* in its reporting, does not involve itself in a certain group of society, whether it is political, religious, social, or economic to in this sense.

Macro-Structural Analysis: Social and Cultural Practices

A macro-level analysis is based on the idea that the social context that exists outside the media influences the discourse in the media. The editorial room or journalist is not a sterile field or space, but also very much influenced by factors outside the media itself. The socio-cultural practice, in turn, includes three aspects: economic (economy of the media), political (power and ideology of the press) and cultural (issues of values).

Concerning the economy of the media, one must bear in mind that the media have a product to sell, and their product is the audience of interest to advertisers and, consequently, the mass media "are very much open to the effects of commercial pressures." Related to this advertising function of the media is the issue of the concentrated ownership of mass media, which has an essential influence on media discourse (Cremades, 2007).

With regard to the politics of the media, many critics have argued that the commercial mainstream media work ideologically and are in the service of the powerful, the elite, and mass media raise the state (Cremades, 2007). Phenomena or events have news value because they are considered essential and necessary to be informed to the public. A political conflict, for example, whatever its form, is regularly covered in the media. Political conflicts always have the magnetic power to draw public attention. Therefore, it is natural that the main presentation of media coverage is generally about political conflicts in various forms.

The political situation that occurred when reporting political conflict in Egypt after the fall of President Morsi also cannot be separated from the context that built the news. As it is known, throughout 2013, there had been various open conflicts between the Egyptian military and the *Ikhwān al-Muslimīn* as supporters of overthrown President Morsi. Also, this conflict was

compounded by the emergence of multiple responses from Middle Eastern countries. One of the Middle Eastern countries that responded to the Egyptian coup was Saudi Arabia. The Saudis responded by supporting the coup in Egypt. King Abdullah conveyed this support in various news outlets, both national and international (Hearst, 2013; "Saudi King backs", 2013).

In the Indonesian context, the political crisis that struck Egypt is also a concern of Islamic mass organizations in Indonesia (Ruslan, 2013). In fact, some communities close to the *Ikhwān al-Muslimīn* strongly condemned the coup. This position can be understood because of the emotional closeness between the *Ikhwān al-Muslimīn* and some groups in Indonesia, such as the Prosperous Justice Party (PKS) (Asril, 2013). For these reasons, all of these events received extensive coverage, not only the attention of international media but also the media in Indonesia, including *Kompas*.

On the other hand, writing news texts in the *Kompas* daily editions on 5 – 9 July 2013 concerning political conflicts in Egypt after the fall of President Morsi involved many informants. The involvement of the resource persons in the reporting showed that *Kompas* used voices from parties who were neutral compared to those who supported the *Ikhwān al-Muslimīn* and the Egyptian military. This is proven by the dominant quoting of neutral speakers compared to those who favored the *Ikhwān al-Muslimīn* and the Egyptian army.

From the 13 speakers involved, eight of them were more neutral in responding to the Egyptian conflict, namely (1) Hatta Rajasa, Coordinating Minister for Economic Affairs of the Republic of Indonesia, (2) Ahmed al-Meslemani, the assistant of Adly Mansour, Interim President, (3) Nadder Bakkar, Al-Nur's spokesman for the Egyptian Salafi Islamic group, (4) Egypt's National Mufti, Prof. Dr. Syeikh Shauqi Abdel Karim Allam, (5) Mohamed Saber el-Sebaei, one of the Egyptian people, (6) Salafi Noor from Egypt's conservative camp, (7) Michael Mann, the spokesman of the European Union Foreign Policy Chief Chaterine Ashton, and (8) Abbas Araqchi, the Spokesman of the Iranian Foreign.

As for the selection of speakers who stated their partiality towards the *Ikhwān al-Muslimīn*, *Kompas* only involved four speakers, namely (1) Hidayat Nur Wahid, Chairperson of the Regional Leadership Council of the Prosperous Justice Party, Indonesia, (2) Ahmed Aref, the spokesman of *Ikhwān al-Muslimīn*, (3) Turkish Foreign Minister, Ahmet Davutoğlu, and (4) Heba Morayef from *Human Rights Watch*. Meanwhile, there was only one resource who sided with the Egyptian government, namely the Egyptian military

At the social level, in reporting the event of Morsi's resignation from his position as the president of Egypt, *Kompas* tended to convey the information as it was. *Kompas* provided an opportunity for both parties to contradict the facts in a relatively fair manner. In the meantime, regarding the bloody clashes between the Egyptian military and Morsi's support groups, *Kompas* also tended to report it reasonably.

This is designated by the tendency to write positively about groups that supported Morsi and the meaning that tended to be negative towards the acts of violence committed by the Egyptian military.

Apart from that, *Kompas* prefers the theme of reporting on political conflicts in Egypt after the fall of President Morsi as a polemic cause of national fiscal disruption and the adverse effects of regional and international economic growth, as well as the emergence of acts of violence which resulted in Egyptian civilians being killed and injured.

CONCLUSION

From the linguistic aspect, *Kompas* more dominantly used the phrase "*krisis politik*" (political crisis) because it seems that it tends to have a more neutral meaning for reporting the political turmoil and conflict in Egypt. In this case, using linguistic strategies in the form of broad sentence structure of cause and effect, *Kompas* tends to place the political conflict in Egypt as a polemic cause of disruption to national fiscal security and the adverse effects of international economic growth. Thus, this condition then led to violence that resulted in many civilians that became victims.

From the aspect of text production, especially in terms of reporting political conflicts in Egypt after the fall of President Morsi, the consideration is that the reporting is required to be in line with one of the missions to be implemented, namely to produce an independent news production which is free from all the pressures by accommodating and channeling a fair share of different voices. *Kompas,* in its reporting, does not involve itself in a certain group of society, whether with regard to political, religious, social, or economic affiliation.

From the aspect of socio-cultural practices, the political situation that occurred when reporting on the political conflict in Egypt after the fall of President Morsi indeed cannot be separated from the context that built the news. The overthrow of President Morsi by the Egyptian military on 3 July 2013 has not only become a national feud within Egypt, but it has spread to become an international issue. In Indonesia, the political crisis that struck Egypt was also a concern for Islamic mass organizations. Thus, all these events received extensive coverage. It not only attracts the attention of international media but also the media in Indonesia, including *Kompas*.

Irrespective of those, *Kompas'* reporting tends to be balanced and is marked by the involvement of the informants. In the coverage, *Kompas* showed that it favored the voices of those who were more neutral rather than those who supported the *Ikhwān al-Muslimīn* and the Egyptian military. This can be recognized from the utterances of the speakers who are considered neutral compared to those who favored the *Ikhwān al-Muslimīn* and the Egyptian army. Therefore, it can be interpreted that Kompas provides fair information on the news of the fall of President Morsi without distinguishing the contradictory views of both opposition parties and supporters of Morsi. So that the compass media can be

used as a media that can present peaceful information on the turmoil in a country that is being hit by the conflict.

ACKNOWLEDGMENTS

The researchers would like to thank the colleagues and Rector of the State University of Jakarta, which kindly sponsored this study.

REFERENCES

Abdulla, R. (2014). *Egypt's media in the midst revolution* [e-book]. Available from http://carnegieendowment.org

Abdullah, F. S. (2014). Mass media discourse: A critical analysis research agenda. *Pertanika Journals of Social Sciences & Humanities, 22*(S), 1-16.

Al-Katatsheh, M. H. M. (2019). Mechanism of utilizing the media: Its role in political communication and impact on public opinion. *Dirasat*: *Human and Social Sciences, 46*(2), 571-588.

Asril, S. (2013, July 5). PKS: Mursi dikudeta, kemunduran demokrasi Mesir [PKS: Mursi in the coup, the decline of Egyptian democracy]. *Kompas.com*. Retrieved April 22, 2019, from https://internasional.*Kompas*.com/read/2013/07/05/1229398/PKS.Mursi.Dikudeta.Kemunduran.Demokrasi.Mesir

Auliani, P. A. (2013a, July 6). 17 tewas, bentrok Jumat malam di Mesir [17 dead, clash Friday night in Egypt]. *Kompas.com.* Retrieved April 14, 2019, from https://ekonomi.kompas.com/read/2013/07/06/0425047/17.Tewas.Bentrok.Jumat.Malam.di.Mesir

Auliani, P. A. (2013b, July 9). Pembunuhan atas pendukung Mursi dulang kecaman internasional [Murder of supporters of mursi tray international criticism]. *Kompas.com*. Retrieved April 10, 2019, from https://internasional.kompas.com/read/2013/07/09/0059542/Pembunuhan.Atas.Pendukung.Mursi.Dulang.Kecaman.Internasional?page=all

Auliani, P. A. (2013c, July 9). Rabu, Mesir masuki Ramadhan [Wednesday, Egypt enters Ramadan]. *Kompas.com*. Retrieved April 21, 2019, from https://internasional.kompas.com/read/2013/07/09/0357075/Rabu.Mesir.Masuki.Ramadhan

Beck, M. (2013). The July 2013 military coupt in Egypt: One normative clarification and some empirical issues. *Center for Mellemøststudier*, 1-6. Available from https://portal.findresearcher.sdu.dk/

Cremades, P. S. (2007). An overview of the critical discourse analysis approach to mass communication. In J. M. B. Paniagua, G. L. García, P. S. Cremades, & E. S. Alegre (Eds.), *Critical discourse analysis of media texts* (pp. 17-38). Aldaia, Spain: Universitat de València Servei de Publicacions.

Djumena, E. (2013, July 5). Hatta: Gejolak Mesir bisa pengaruhi harga minyak [Hatta: Egypt's turmoil could affect oil prices]. *Kompas.com.* Retrieved April 12, 2019, from https://ekonomi.kompas.com/read/2013/07/05/1058446/Hatta.Gejolak.Mesir.Bisa.Pengaruhi.Harga.Minyak

El Issawi, F. (2014). The role of Egyptian media in the coup. *European Institute of the Mediterranean* (IEMed), 299-304.

El-Mallakh, N. (2017). Did the Egyptian protests lead to change: Evidence from Egypt's first free presidential elections. *Documents de Travail du Centre d'Economie de la Sorbonne, 44*, 1-47.

Elena, M. (2016). Framing international media in the face of social movements: CNN and Al-Jazeera English in the fall of Morsi. *Communication & Society, 29*(3), 119-130. doi: 10.15581/003.29.3.119-130

Fairclough, N. (1989). *Language and power*. London, England: Longman.

Fairclough, N. (1995a). *Media discourse*. London, England: Edward Arnold.

Fairclough, N. (1995b). *Critical discourse analysis: The critical study of language*. London, England: Longman.

Halawa, S. H. (2013). *Ousted Egyptian President Morsi in United States media: A framing analysis of The Washington Post and The New York Times* (Master's thesis). The American University, Cairo, Egypt.

Hardoko, E. (Ed.). (2013a, July 7). Kekerasan terus berlanjut di Mesir, 36 tewas [Violence continues in Egypt, 36 killed]. *Kompas.com.* Retrieved April 24, 2019, from https://internasional.kompas.com/read/2013/07/07/0047494/Kekerasan.Terus.Berlanjut.di.Mesir.36.Tewas

Hardoko, E. (2013b, July 7). Penunjukan Perdana Menteri Interim picu krisis baru di Mesir [Appointment of Interim Prime Minister triggers new crisis in Egypt]. *Kompas.com*. Retrieved April 22, 2019, from https://internasional.kompas.com/read/2013/07/07/0839519/Penunjukan.Perdana.Menteri.Interim.Picu.Krisis.Baru.di.Mesir

Hardoko, E. (2013c, July 8). Ikhwanul Muslimin ajak rakyat Mesir kobarkan perlawanan [Ikhwanul Muslimin invites Egyptians to spread resistance]. *Kompas.com.* Retrieved April 23, 2019, from https://internasional.kompas.com/read/2013/07/08/1610145/Ikhwanul.Muslimin.Ajak.Rakyat.Mesir.Kobarkan.Perlawanan

Hardoko, E. (2013d, July 8). Mesir tutup markas besar sebuah partai Islam [Egypt closes headquarters of an Islamic party]. *Kompas.com.* Retrieved April 22, 2019, from https://internasional.kompas.com/read/2013/07/08/1901252/Mesir.Tutup.Markas.Besar.Sebuah.Partai.Islam

Hardoko, E. (2013e, July 8). Turki kecam pembantaian puluhan pendukung Mursi [Turkey condemns the massacre of dozens of Mursi supporters]. *Kompas.com*. Retrieved April 22, 2019, from https://tekno.kompas.com/read/2013/07/08/1638159/Turki.Kecam.Pembantaian.Puluhan.Pendukung.Mursi

Hearst, D. (2013, August 20). Why Saudi Arabia is taking a risk by backing the Egyptian coup. *The Guardian*. Retrieved April 11, 2019, from https://www.theguardian.com/commentisfree/2013/aug/20/saudi-arabia-coup-egypt

Karkazis, J., Baltos, G. C., & Balodis, J. (2018). An analysis of the social factors that resulted in the 2011 social unrest in Egypt, integrated with a personality profiler of its revolutionary leadership. *Mediterranean Journal of Social Sciences, 9*(2), 215-225. https://doi.org/10.2478/mjss-2018-0041

Kean-Wah, L., & Ming, T. S. (2010). A critical discourse analysis of the Malaysian Smart Schools (MSS): Conceptual blueprint and implications to implementation. *The International Journal of Language Society and Culture, 30*, 142-154.

Kompas. (2019). Retrieved February 8, 2019, from https://id.wikipedia.org/wiki/Kompas_(surat_kabar)#Oplah_dan_Pembaca

Lust, E. (Ed.). (2014). *The Middle East.* Los Angeles, USA: Sage & CQ Press.

Mansour, S. (2015). *Report: Stifling the public sphere: Media and civil society in Egypt, Russia, and Vietnam.* Available from https://www.ned.org/stifling-the-public-sphere-media-and-civil-society-in-egypt-russia-and-vietnam/

Mills, S. (1997). *Discourse*. New York, USA: Routledge.

Özkan, M. (2013). Egypt's foreign policy under Mohamed Morsi. *Ortadoğu Analiz, 5*(51), 10-18.

Paniagua, J. M. B., García, G. L., Cremades, P. S., & Alegre, E. S. (2007). New advances in critical discourse analysis of media text. In J. M. B. Paniagua, G. L. García, P. S. Cremades, & E.

S. Alegre (Eds.), *Critical discourse analysis of media text* (pp. 5-16). Aldaia, Spain: Universitat de València Servei de Publicacions.

Patnistik, E. (2013a, July 5). Pendukung Mursi bentrok dengan militer Mesir [Mursi supporters clash with the Egyptian military]. *Kompas.com*. Retrieved March 23, 2019, from https://internasional.kompas.com/read/2013/07/05/1548008/Pendukung.Mursi.Bentrok.dengan.Militer.Mesir

Patnistik, E. (Ed.). (2013b, July 5). Tentara Mesir Izinkan "Protes Damai" [Egyptian Army Allows "Peaceful Protest"]. *Kompas.com*. Retrieved April 11, 2019, from https://internasional.kompas.com/read/2013/07/05/0817410/Tentara.Mesir.Izinkan.Protes.Damai.

Patnistik, E. (Ed.). (2013c, July 8). 16 pendukung Mursi ditembak mati tentara Mesir [16 mursi supporters shot dead by the Egyptian army]. *Kompas.com*. Retrieved April 11, 2019, from https://internasional.kompas.com/read/2013/07/08/1235514/16.Pendukung.Mursi.Ditembak.Mati.Tentara.Mesir

Patnistik, E. (2013d, July 8). Klaim ElBaradei jadi PM Mesir "Tidak Benar" [ElBaradei's claim to be Egyptian prime minister is "not true"]. *Kompas.com*. Retrieved March 12, 2019, from https://internasional.kompas.com/read/2013/07/08/1009033/Klaim.ElBaradei.Jadi.PM.Mesir.Tidak.Benar

Patnistik, E. (2013e, July 8). Militer Mesir: Teroris berusaha serang markas tentara [Egyptian military: Terrorists attempt to attack army headquarters]. *Kompas.com*. Retrieved April 11, 2019, from https://semarang.kompas.com/read/2013/07/08/1459300/Militer.Mesir.Teroris.Berusaha.Serang.Markas.Tentara

Patnistik, E. (2013f, July 9). Presiden sementara Mesir janji segera gelar Pemilu [Egypt's provisional president promises immediate election title]. *Kompas.com*. Retrieved April 13, 2019, from https://internasional.kompas.com/read/2013/07/09/1207051/Presiden.Sementara.Mesir.Janji.Segera.Gelar.Pemilu

Philips, L., & Jørgensen, M. W. (2004). *Discourse analysis as theory and method*. London, England, Thousand Oaks, USA, & New Delhi, India: SAGE Publications.

Pringgandani, R. (2014). Wacana lengsernya Muhammad Mursi dari Jabatan Presiden Mesir dalam surat kabar Republika dan Kompas: Analisis wacana kritis model Theo Van Leeuween [Muhammad Mursi's sleep discourse from Egypt President in Republika And Compass news: Critical discourse analysis of Theo Van Leeuwen's Model]. *Bahtera Sastra: Antologi Bahasa dan Sastra Indonesia*, *1*(2), 182-188.

Rezaei, M. (2015). Egypt and democracy dilemma. *African Journal of Political Sciences and International Relations, 9*(6), 218-220.

Rosman, G. B., & Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, USA: SAGE Publications.

Ruslan, H. (2013, July 29). Din: Kudeta Mesir bentuk ketidaksenangan Barat terhadap kebangkitan Islam [Din: Egyptian coup forms Western happiness against Islamic awakening]. *Republika.co.id*. Retrieved April 21, 2019, from https://www.republika.co.id/berita/internasional/timur-tengah/13/07/29/mqp2nh-din-kudeta-mesir-bentuk-ketidaksenangan-barat-terhadap-kebangkitan-islam

Sadeghi, B., Hassani, M. T., & Jalali, V. (2014). Towards (de-)legitimation discursive strategies in news coverage of Egyptian protest: VOA & Fars news in focus. *Procedia: Social and Behavioral Sciences, 98*, 1580-1589. doi: 10.1016/j.sbspro.2014.03.581

Saudi King backs Egypt's military. (2013, August 8). *Al Jazeera*. Retrieved May 10, 2019, from https://www.aljazeera.com/news/middleeast/2013/08/201381615196784361.html.

Sutanto, M. H. (2015). Propaganda politik calon Presiden Republik Indonesia 2014-2019: Analisis isi berita kampanye pemilihan Presiden tahun 2014 pada harian Kompas edisi 4 Juni sampai 5 Juli 2014 [Political propaganda a candidate of presidential of Republic Indonesia 2014-2019: The analysis of the campaign content of presidential election in 2014 KOMPAS Daily Edition June 4 to July 5, 2014]. *Jurnal Humanity*, *9*(2), 38-46.

Widuna, I. A. (2018). The function of CDA in media discourse studies. *Journal of English Educators Society, 3*(1), 119-128. https://doi.org/10.21070/jees.v3i1.1226

Wodak, R., & Meyer, M. (2001). *Methods of critical discourse analysis*. London, England, Thousand Oaks, USA, & New Delhi, India: SAGE Publications.

APPENDIX

The following are the headlines of reports taken as sources of data (*kompas.com*). By putting the headline in the search box of the website, the report can be obtained.

Lexical Choice

(1) Tentara Mesir Izinkan "Protes Damai"
(2) Hatta: Gejolak Mesir Bisa Pengaruhi Harga Minyak
(3) Hatta: Gejolak Mesir Bisa Pengaruhi Harga Minyak
(4) Hatta: Gejolak Mesir Bisa Pengaruhi Harga Minyak
(5) Pendukung Mursi Bentrok dengan Militer Mesir
(6) 17 Tewas, Bentrok Jumat Malam di Mesir
(7) 17 Tewas, Bentrok Jumat Malam di Mesir
(8) Kekerasan Terus Berlanjut di Mesir, 36 Tewas
(9) Penunjukan Perdana Menteri Interim Picu Krisis Baru di Mesir
(10) Ikhwanul Muslimin Ajak Rakyat Mesir Kobarkan Perlawanan
(11) Turki Kecam Pembantaian Puluhan Pendukung Mursi
(12) Mesir Tutup Markas Besar Sebuah Partai Islam
(13) Rabu, Mesir Masuki Ramadhan
(14) Rabu, Mesir Masuki Ramadhan
(5) Kekerasan Terus Berlanjut di Mesir, 36 Tewas
(6) Presiden Sementara Mesir Janji Segera Gelar Pemilu

Cause and Effect Sentences

(1) Hatta: Gejolak Mesir Bisa Pengaruhi Harga Minyak
(2) Kekerasan Terus Berlanjut di Mesir, 36 Tewas
(3) Klaim ElBaradei Jadi PM Mesir "Tidak Benar"
(4) Pembunuhan Atas Pendukung Mursi Dulang Kecaman Internasional

Direct Quotations of Resource Interviewees

(1) 16 Pendukung Mursi Ditembak Mati Tentara Mesir
(2) Turki Kecam Pembantaian Puluhan Pendukung Mursi
(3) Kekerasan Terus Berlanjut di Mesir, 36 Tewas
(4) PKS: Mursi Dikudeta, Kemunduran Demokrasi Mesir
(5) Hatta: Gejolak Mesir Bisa Pengaruhi Harga Minyak
(6) Klaim ElBaradei Jadi PM Mesir "Tidak Benar"
(7) Militer Mesir: Teroris Berusaha Serang Markas Tentara

Pertanika J. Soc. Sci. & Hum. 28 (2): 1055 - 1064 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Review Article

Academic Stress among Faculty and Students in Higher Institutions

Dickson Adom[1, 2]*, Joshua Chukwuere[3] and Mavis Osei[1]

[1]Department of Educational Innovations in Science and Technology, Kwame Nkrumah;–University of Science and Technology, Kumasi 40080, Ghana
[2]School of Economic Sciences, North-West University, Mafikeng Campus, Mmabatho 2745, South Africa
[3]Department of Information Systems, North-West University, Mafikeng Campus, Mmabatho 2745, South Africa

ABSTRACT

Academic stress refers to all kinds of things that trigger tension, otherwise known as stressors, that can be interpersonal, intrapersonal, social, health-related, environmentally related that impede academic growth in educational institutions. Stress in a mild measure is said to spark the fire of motivation and hard work in individuals. However, excessive academic stress that is beyond the coping resources of students and faculty staff stifles their academic and professional progression and can be detrimental to their health. If not well managed, unbridled academic stress can trigger physiological, mental, emotional and physical consequences. This paper comprehensively presents a review of current studies on academic stress. It thoroughly explains the concept of stress, the common academic stressors, their negative implications and stress coping or management mechanisms. Using the research methods, desk survey and document analysis, a systematic search was carried out. The study contends that academic stress when well managed, can help in promoting academic work, elicit good academic outcomes from students and ensure high professional output from faculty staff in higher institutions.

Keywords: Academic development, academic stress, higher institutions, stressors, stress coping mechanisms, stress management

ARTICLE INFO

Article history:
Received: 16 July 2019
Accepted: 03 December 2019
Published: 26 June 2020

E-mail addresses:
adomdick2@gmail.com (Dickson Adom)
joshchukwuere@gmail.com (Joshua Chukwuere)
adjakoma@yahoo.com (Mavis Osei)
* Corresponding author

INTRODUCTION

Academic stress has been classed as one of the disturbing cankers in higher institutions of learning that decreases the academic output of students and faculty or staff (Kadapatti & Vijayalaxmi, 2012; Wani

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

et al., 2018). Students and faculty are required to adapt to this very demanding educational environment (Ramachandiran & Dhanapal, 2018). The word 'stress' is originally traced to the Latin word 'Stringere' which paints the imagery of pain, hardship or affliction (Dhanalakshmi & Murthy, 2018). Proponents who laid the scientific groundwork for the stress theory such as Canon (1914), Mason (1971), and Selye (1965) based the condition on physiology. However, recent definitions of stress focus largely on the interaction between a situation and an individual (Michie, 2002). Selye (1965) made a clear distinction between beneficial stress (eustress) and harmful stress (distress). Many scholars have admitted that mild stress promotes motivation and assists in achieving successes (Ng et al., 2016; Saqib & Rehman, 2018; Yikealo et al., 2018). On the other hand, excessive stress leads to severe health and mental problems (Azila-Gbettor et al., 2015; Essel & Owusu, 2017; Jain & Singhai, 2018; Reddy et al., 2017). The main objective of the review was to examine extensively the subject of academic stress, common academic stressors, the effects of academic stress and the effective coping mechanisms for academic stress. Thus, the research questions were:

1) What is academic stress?
2) What are the commonplace academic stressors?
3) What are the effects of academic stress?
4) What are the effective ways of managing stress?

Embarking on this review was crucial as it would help in maximizing the academic output of students and the professional performance of faculty in higher institutions.

MATERIALS AND METHODS

The researchers employed document analysis (Bowen, 2009) and desk survey (Travis, 2016) for the comprehensive review of academic stress in peer-reviewed journals, reports, and newspapers (Creswell, 2009). A systematic search was undertaken using the keywords 'academic stress', 'stress', 'stress management', 'academic stressors', 'higher institution stress', and 'stress-coping mechanism' from online databases such as Springer, JSTOR, PubMed, EBSCO, ProQuest and Google Scholar. The empirical studies that were included in the review were from the last two decades though priority was given to recent studies on academic stress published in the last three years from 2015-2019. In all, a total of 59 articles were examined. The articles were carefully reviewed and analyzed to understand the concept of stress, common academic stressors, negative effects of academic stress on academic performance of students and the professional growth of faculty in higher institutions of learning (Denzin & Lincoln, 1994). The key qualities in the interpretive document analysis that guided the review were authenticity, credibility, and representativeness (Hefferman, 2013). The documents were perused severally to understand thoroughly the contents of the papers in relation to the main theme of the paper (Creswell, 2009). The main ideas in

the reviewed materials were summed up and discussed based on the research questions for the study. The new understanding was subjected to verification to validate the claims, assumptions, and theories made by scholars (Peshkin, 1993). Finally, a concise, persuasive discussion on the various themes on academic stress was written.

The Concept of Stress and Academic Stress

Stress has become an issue of research and discussion in the academic world due to its effect on the daily social and academic lives of students and staff (Dimitrov, 2017). The current competitive nature of our world among the young generation increases stresses (Bhargava & Trivedi, 2018). Human development from adolescence to maturity, schooling period and general life journey trigger stress as a result of the demands of the various stages (Lin & Huang, 2014). Fundamentally, stress is associated with mental health distress which triggers physical hypertension, headache, anger, depression, anxiety, stomach upset, stroke and other illnesses (Aafreen et al., 2018; Oduwaiye et al., 2017). Stress can be seen as a health challenge and it is a fundamental problem for students in the 21st century in their everyday life events (Gulzhaina et al., 2018). The researchers further alluded that stress is what happens when an individual faces internal and external pressure and challenge. Stress can be defined as a psychosocial, mental distress, physical and emotional depression (Dimitrov, 2017). Stress is worries that start when the demand is overwhelming and the individual cannot cope (Oduwaiye et al., 2017). This means that stress happens when an individual's coping mechanism is unable to overcome the demands of work often resulting in serious health risks.

Saqib and Rehman (2018) described stress in two ways; the psychological and body. The psychological stress happens when the demand to act is activated and pressure to achieve steps in. The individual body results in "physical stress" which reacts to the fears of outcome/s or perception of danger (Saqib & Rehman, 2018). Stress exists in the social environment but occurs in an individual's head in the form of anxiety, worry, fear, regrets, discouragement, loss of interest, low self-esteem among others (Gulzhaina et al., 2018). Stress can be regarded as 'human body wear and tear' to get acquainted with changes that occur around the environment (Bakhsh & Sayed, 2015). Academic stress is a form of stress that happens within the academic environment on the part of faculty and students in educational institutions.

The academic journey involves individual mental, social, psychological, financial, personal commitments, and hard work and a lot more. The journey also involves emotions. The academic environment is filled with courses and syllabuses whose contents must be covered in a short period (Oduwaiye et al., 2017). Staff and students are expected to perform effectively and deliver desired results. These components can lead to stress if not managed well. In other words, the complexity of the academic environment triggers stress. Stress

affects the mind, spirit, body and social environment of students and staff.

To Saqib and Rehman (2018), academic stress is the fundamental problem of the academic journey as it impacts learning institutions. Bakhsh and Sayed (2015) believed that it was an "emotional imbalance" with many causes. Academic stress can occur as a result of low academic performance. Different researchers have defined academic stress differently. However, for this study, academic stress can be viewed as stress which happens, as a result, of academic work overload of an individual beyond personal capacity (Khan et al., 2013; Kiani et al., 2017). The researchers hold the position that academic stress is relational or transactional and is dependent on an individual's appraisal of the environment (stressor) s/he faces. This psychological stress which hinges on the relationship with the environment (stressors) that a person appraises as significant for his or her wellbeing and in which the demands tax or exceeds his or her coping resources at disposal. However, the researchers conceptualize academic stress as any form of negative stress triggered by all kinds of stressors such as interpersonal, intrapersonal, social, work, institutional and domestic, that impedes the academic output of students as well as the professional performance of faculty in academic institutions (Figure 1).

Academic stress can be associated with one's culture, ethnicity, gender, age, as well as his political inclination and socioeconomic status (Kiani et al., 2017). The stages in academic life trigger stress which can be regarded as academic stress (Prabu, 2015). Academic stress is increasing at an alarming rate (Reddy et al., 2018). According to Saqib and Rehman (2018), academic stress includes educational anxiety, pressure, and stress that is associated with preparing for assessments like exams, tests, quizzes, homework, reading and academic work overload. The academic journey should transit into mental skilfulness but to some, it turns to be a challenge that affects their mental development and illness (Hystad et al., 2009). For many, although schooling is the best memory of their life, this period

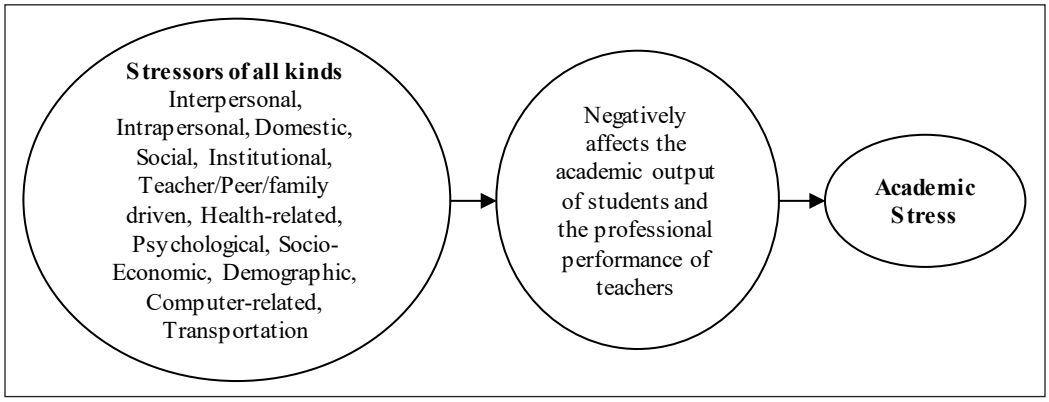


Figure 1. Conceptual framework for academic stress

can be challenged by depression, tensions, anxiety as a result of stress (Aafreen et al., 2018). Stress is necessary for everyday living and there are many stressors in the daily lives of everyone, including students and staff (Nandamuri & Gowthami, 2011).

Causative Agents and Common Academic Stressors

Stress can occur in everyday human life which produces worries and anxiety. Our world is witnessing stressful events but stress is regarded as part of human life (Subramani & Kadhiravan, 2017). According to Khan et al. (2013), stress is part of academic life and common among university students. Academic stressor happens when the internal and external pressure is above the coping capacity of an individual (Aafreen et al., 2018; Bhargava & Trivedi, 2018). Academic stress has increased because of internal and external expectations of students and staff which must be satisfied (Reddy et al., 2018). Academic pressure is thus the fundamental causes of academic stress.

The cause of stress is regarded as a stressor. Academic stressors can be attributed to the high amount of assessments, lack of resources, competition among students and staff alike, poor association and collaboration among students and between lecturers (Bakhsh & Sayed, 2015), adjustments by students to academic demands, university environment and culture, independently living, social life demands, economic challenge (Lin & Huang, 2014; Mason, 2017), time management and balancing academic and social life activities (Nandamuri & Gowthami, 2011). Dimitrov (2017) as well as Bedewy and Gabriel (2015), added that family, financial, learning, school and environmental challenges, socio-cultural, psychological issues can cause stress or academic stress. Gulzhaina et al. (2018) reported that students suggest that academic activities and demands were regarded as their main stressor as indicated by 6 to 10 of them having experienced stress in their study career. Another study showed that students were academically stressed because of curriculum overload, increased assessments to do over a short period, preparing for exams, competition with peers, low grades, no leisure time with friends, disappointment, and language barriers (Bakhsh & Sayed, 2015; Gulzhaina et al., 2018). Bakhsh and Sayed (2015) added that continuous eagerness to excel brought about academic-busyness which in return caused academic stress. From all these authors, as long as academic stress is involved, then mental, social, behavioural, psychological and personal well-being is stressed. This implies that an effort for staff and students to deal with social, academic, economic, personal and political issues can trigger stress (Lin & Huang, 2014).

Furthermore, there are two main kinds of stress: eustress (good or positive stress) and distress. Positive stress is often felt when one is confronted with a challenging situation that one is capable of handling like a job promotion, getting employed, being in a competition and working on new projects and many others while negative

stress can be news of death, entrenchment, and others which mainly have negative implications (Gulzhaina et al., 2018). The most causes of stress are lack of balancing social and academic life activities (Prabu, 2015).Individuals are unable to manage and balance between their families, academic, personal, friends and other life activities hence stress. This lack of balance on the part of faculty and students often leads to academic stress that impedes academic progress.

Effects of Academic Stress

The effects of stress can be both positive and negative (Oduwaiye et al., 2017). However, positive stress does not last long, though it improves an individual's attitude, behaviour and performance, creates excitement, and motivates; negative stress, on the other hand, causes anxiety, lasts long, creates fear, panic, disturbs, reduce one's morale and productivity and many more (Gulzhaina et al., 2018). Stress affects the mental and physical well-being of individuals. Stress, in general, can affect the social, emotional, financial and physical behaviour of an individual (Saqib & Rehman, 2018). Stress has a serious negative effect on the academic journey (Lin & Huang, 2014). Stress can cause serious harm to an individual if not handled and treated well. The effect of stress and academic stress is a serious problem which can cause poor performance and attainment for staff and academic problems for a student, contribute to depression, illness, high level of suicidal intention, exhaustion, anxiety, and other physical and mental illnesses (Gulzhaina et al., 2018; Hystad et al., 2009; Kiani et al., 2017). According to Mason (2017) and Oduwaiye et al. (2017) the negative effect of stress can affect students' academic performance, social and physical well-being, absenteeism from class and school activities. It is noteworthy that the effect of academic stress differs from one individual to the other (staff and students). Female staff and students are more emotionally affected daily both in schools than their male counterparts (Saqib & Rehman, 2018). Since the effects of stress have long-lasting consequences on an individual, it is proper that it should be managed very well.

Managing Academic Stress

The effects of stress depend on how it is handled. Following Bakhsh and Sayed (2015), managing academic-related stress should include but not limited to building a student support system, social support, not procrastinating, and having leisure tasks or hobbies. The management of stress should involve adequate coping mechanisms. Alharbi and Smith (2018) opined that coping mechanisms could be seen as ways individuals handle stressful issues within the internal and external environment while Mason (2017) regarded coping as a "cognitive and behavioural" mechanism to handle over-powering situations beyond personal capacity. The coping strategies are necessary for defending the mental and physical effects of stress. There are different coping mechanisms for stress depending on the stressor/s and geographical

location of an individual. Among the coping mechanisms is self-understanding, building a support system, having mentors or advisors and seeking help (Alharbi & Smith, 2018). Coping is functional in two ways: (1) govern emotion "(emotion-focused coping)", it deals with internal mode by applying avoidance, "wishful thinking" and "minimising" strategies while (2) problem-focused coping adopts strategies by addressing, altering, modifying and managing stress using external means (Mason, 2017). Emotion-focused coping strategies are appropriate in managing stressors that cannot change while problem-focused coping is for changeable stressors, for example activating support systems (Mason, 2017). Both kinds of stress coping mechanisms are necessary for defending the mental and physical effects of academic stress on individuals.

To Saqib and Rehman (2018), managing stress should be a collaborative responsibility between the staff (lecturer), students, parents, and the education institution/s. For example, staff should adopt a teaching methodology that will engage and improve student learning abilities and not overload students with a lot of school tasks. Besides, counselling units must be established in all educational institutions so that students and staff could report eventual stressors to receive counsel and other remedial assistance. Assessment guidelines in educational institutions should be given to the students on time (Saqib & Rehman, 2018) and the consultation time provided. The students should be able to manage their time effectively and work hard to avoid working under-pressure and procrastination (Azila-Gbettor et al., 2015). Parents should provide their children with learning materials and mentor them, monitor, motivate and assist them to balance their other life and school stuff (Ng et al, 2016). Parents should also teach their children self-coping mechanisms (Wani et al., 2018). Similarly, the education institutions should provide workshops, seminars, training and a conducive learning environment for the students (Taraj, 2013).

To curb psychological health challenges, proactive measures should be in place at different levels of learning institutions in the form of trained mental health practitioners' to manage and address stress-related issues (Gulzhaina et al., 2018). Also, staff and students should be trained on soft coping mechanisms to identify and handle academic stress (Dimitrov, 2017). Overall, managing academic stress is very effective when an individual activates a matured mindset by being optimistic against being pessimistic; this allows one to visualize stressors as opportunities for personal growth and development (Mason, 2017). Also, academic stress or stress can be minimised or overcome by disassociation from unnecessary stressing situation/s, accepting situations one cannot control or change and create relaxation and fun time.

CONCLUSION

Stress is a psychosocial, mental and physical condition that has both positive and negative consequences depending on its gravity on an individual and his/her coping resources

available. In higher institutions of learning, excessive academic stress depreciates the progress of academic work and stifles academic development. Students and faculty must identify the academic stressors that are behind their academic stress and apply appropriate stress coping mechanism(s) to deal with the stress. Due to the 'thievery' nature of academic stress in the academic and professional lives of students and faculty, the university administrative team must organize seminars and workshops to sensitize students and faculty on the ever-emerging academic stressors as well as their efficient ways of managing them. Stress management as a course of study can be factored into the university curriculum for all programmes to constantly equip both students and faculty on the high risks of excessive and poorly managed stress.

ACKNOWLEDGEMENTS

The authors would like to thank the Librarians in the main campus libraries of the Kwame Nkrumah University of Science and Technology as well as the Northwest University, South Africa for offering us with the resources for undertaking this review paper.

REFERENCES

Aafreen, M. M., Priya, V. V., & Gayathri, R. (2018). Effects of stress on academic performance of students in different streams. *Drug Intervention Today, 10*(9), 1776-1780.

Alharbi, E. S., & Smith, A. P. (2018). Review of the literature on stress and wellbeing of international students in English-speaking countries. *International Education Studies, 11*(6), 22-44.

Azila-Gbettor, E. M., Atatsi, E. A., Danku, L. S., & Soglo, N. Y. (2015). Stress and academic achievement: Empirical evidence of business students in a Ghanaian Polytechnic. *International Journal of Research in Business Studies and Management, 2*(4), 78-98.

Bakhsh, M. M., & Sayed, S. A. (2015). Sources of academic stress: Stress management among regular and executive MBA students. *International Journal of Endorsing Health Science Research, 3*(1), 17-22.

Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The perception of academic stress scale. *Health Psychology Open, 2*(2), 2055102915596714.

Bhargava, D., & Trivedi, H. (2018). A study of causes of stress and stress management among youth. *IRA-International Journal of Management & Social Sciences, 11*(3), 108-117. doi:http://dx.doi.org/10.21013/jmss.v11.n3.p1

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 45-65.

Canon, W. B. (1914). The interrelations of emotions as suggested by recent physiological researches. *American Journal of Psychology, 25*(2), 256-282.

Creswell, J. W. (2009). *Research design* (3rd ed.). California, USA: SAGE Publications Inc.

Denzin, N. K., & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, USA: SAGE Publications.

Dhanalakshmi, K., & Murty, K. V. S. N. (2018). Relationship between study habits and academic stress of B.Ed. trainees. *Scholarly Research*

Journal for Humanity Science and English Language, 6, 7851-7856.

Dimitrov, B. E. G. (2017). A study on the impact of academic stress among college students in India. *Deal Research, An International Multidisciplinary e-Journal, 2*(4), 21-35.

Essel, G., & Owusu, P. (2017). *Causes of students' stress, its effects on their academic success and stress management by students-case study at Seinajoki University of Applied Sciences, Finland* (Bachelor's thesis), Faculty of Business Administration, Seinajoki, Finland.

Gulzhaina, K. K., Algerim, K. N., Ospan, S. S., Hans, S. J.,& Cox, N. B. C. (2018). Stress management techniques for students. *Advances in Social Science, Education and Humanities Research, 198*(1), 47-56. doi:10.2991/ictppfms-18.2018.10

Hefferman, C. (2013). *Qualitative research approach.* Retrieved August 2, 2016, from http://www.explorable.com

Hystad, S. W., Eid, J., Laberg, J. C., Johnsen, B. H., & Bartone, P. T. (2009). Academic stress and health: Exploring the moderating role of personality hardiness. *Scandinavian Journal of Educational Research, 53*(5), 421-429.

Jain, G., & Singhai, M. (2018). Academic stress among students: A review of literature. *Prestige e-Journal of Management and Research, 4*(2), 58-67.

Kadapatti, M. G., & Vijayalaxmi, A. H. M. (2012). Stressors of academic stress-a study of preuniversity students. *Indian Journal of Science Resources, 3*(1), 171-175.

Khan, M. J., Altaf, S., & Kausar, H. (2013). Effect of perceived academic stress on students' performance. *FWU Journal of Social Sciences, 7*(2), 146-151.

Kiani, Z. S., Latif, R., Bibi, A., Rashid, S., & Tariq, A. (2017). Effect of academic stress on mental health among college and university students. *Proceedings of the 3rd Multi-Disci-plinary Student Research Conference (MDSRC)* (pp. 4-14). Punjab, Pakistan: Wah Engineering College.

Lin, S. H., & Huang, Y. C. (2014). Life stress and academic burnout. *Active Learning in Higher Education, 15*(1), 77-90.

Mason, J. W. (1971). A reevaluation of the concept of 'non-specificity' in stress theory. *Journal of Psychiatric Research, 8*, 323-333.

Mason, H. D. (2017). Stress-management strategies among first-year students at a South African University: A qualitative study. *Journal of Student Affairs in Africa, 5*(2), 131-149.

Michie, S. (2002). Causes and management of stress at work. *Occupational and Environmental Medicine, 59*(1), 67-72.

Nandamuri, P., & Gowthami, C. (2011). Sources of academic stress–A study on management students. *Journal of Management and Science, 1*(2), 31-42.

Ng, K. C., Chiu, W. K., & Fong, B. Y. F. (2016). A review of academic stress among Hong Kong undergraduate students. *Journal of Modern Education Review, 6*(8), 531-540.

Oduwaiye, R. O., Yahaya, L. A., Amadi, E. C., & Tiamiyu, K. A. (2017). Stress level and academic performance of university students in Kwara State, Nigeria. *Makerere Journal of Higher Education, 9*(1), 103-112.

Peshkin, A. (1993). The goodness of qualitative research. *Educational Researcher, 22*(2), 23-29.

Prabu, P. S. (2015). A study on academic stress among higher secondary students. *International Journal of Humanities and Social Science Invention, 4*(10), 63-68.

Ramachandiran, M., & Dhanapal, S. (2018). Academic stress among university students: A quantitative study of generation Y and Z's perception.

Pertanika Journal of Social Sciences and Humanities, 26(3), 2115-2128.

Reddy, K. J., Menon, K., & Thattil, A. (2017). Understanding academic stress among adolescents. *Artha-Journal of Social Sciences, 16*(1), 39-52.

Reddy, K. J., Menon, K. R., & Thattil, A. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal, 11*(1), 531-537.

Saqib, M., & Rehman, K. U. (2018). Impact of stress on students' academic performance at secondary school level at District Vehari. *International Journal of Learning and Development, 8*(1), 84-93. https://doi.org/10.5296/ijld.v8i1.12063

Selye, H. (1965). The stress concept: Past, present, and future. In C. L. Cooper (Ed.), *Stress research: Issues for the eighties.* New York, USA: John Wiley & Sons.

Subramani, C., & Kadhiravan, S. (2017). Academic stress and mental health among high school students. *Indian Journal of Applied Research, 7*(5), 404-406.

Taraj, P. (2013). The relationship between academic stress of students and the factors that affect on it. *Proceedings of the 1st International Conference on Research and Education-Challenges Toward the Future* (pp. 23-34). Shkodër, Albania: Universiteti i Shkodrës Luigj Gurakuqi.

Travis, D. (2016). *Desk research: The what, why and how.* Retrieved February, 4, 2019, from https//:www.userfocus.co.uk

Wani, S. A., Nagar, D., & Buhroo, A. A. (2018). Impact of academic stress on academic achievement: A systematic review of literature. *2nd International Conference on Research Developments in Arts, Social Science and Humanities. Indian Council of Social Science Research (ICSSR)* (pp. 107-114). Chandigarh, India: Panjab University. Retrieved February 12, 2019, from https://www.conferenceworld.in

Yikealo, D., Tareke, W., & Karvinen, I. (2018). Thelevel of stress among college students: A case in the college of education, Eritrea Institute of Technology. *Open Science Journal, 3*(4), 1-18.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1065 - 1081 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Lecturers' Perceptions of English Medium Instruction (EMI) Practice at a University in Indonesia

Nurmala Elmin Simbolon[1]*, Rhonda Oliver[2] and Paul Mercieca[2]

[1]Department of Marine and Fisheries, Politeknik Negeri Pontianak, 78124 Pontianak, Indonesia
[2]School of Education, Curtin University, Perth, 6102, Australia

ABSTRACT

The internationalisation of higher education has contributed to the increasing number of English medium instruction (EMI) implementation in a variety of global teaching contexts, including in Indonesia. One approach used to practice EMI is content and language integrated learning (CLIL). This responsive practice, however, is not without challenges. One main issue is that teachers have limited English language skills to practice EMI. The study reported here investigates lecturers' perceptions of EMI practice in a university in Indonesia. Qualitative research methods, specifically incorporating five focus groups and five individual interviews were used to collect the data. Interview transcripts were then analysed thematically. Findings indicate that the teachers lack a clear understanding of EMI practice in a number of key areas including the selection of learning materials for and ways to conduct students' learning assessment in EMI classrooms. Pedagogical implications include how to approach code-switching and how to incorporate ICT into EMI learning materials. Recommendations for strategies to support future EMI implementation are also outlined.

Keywords: CLIL, code-switching, EMI

ARTICLE INFO

Article history:
Received: 13 April 2018
Accepted: 13 January 2019
Published: 26 June 2020

E-mail addresses:
simbolon73@gmail.com (Nurmala Elmin Simbolon)
rhonda.oliver@curtin.edu.au (Rhonda Oliver)
p.mercieca@exchange.curtin.edu.au (Paul Mercieca)
* Corresponding author

INTRODUCTION

In many global contexts, English Medium Instruction (EMI) is the model used for bilingual teaching (Baker, 2011) where some of the curriculum content is taught through the students' second or foreign language (Aguilar, 2017; Gill & Kirkpatrick, 2013; Zacharias, 2013). However, in other contexts, including this study, content

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

and language integrated learning (CLIL) is used to reference EMI (Aguilar, 2017; Floris, 2014). This is because several EMI practices adopt a CLIL approach, namely various teaching strategies are used so that dual-learning objectives - language and the content – can be achieved (Coyle et al., 2010).

According to Dale and Tanner (2012), CLIL can be categorised into two main types, subject and language-focused courses. Subject courses, or what Massler et al. (2014) termed as 'L2 medium subjects' are presented by the content teachers, whereas in the second CLIL, or 'L2 classes' (Massler et al., 2014) is delivered by language specialists, although in a slightly different way from content-based language teaching (CBLT) where the focus is the development of target language while using the content materials.

Unlike language teachers, content specialists generally use the term EMI to describe CLIL type teaching. Because of the context of the current study (which is an examination of content teachers' perceptions), the term EMI is adopted. Furthermore, as is common practice with EMI language teaching, in the current context English is not commonly spoken in the wider community (Lasagabaster & Sierra, 2010). Even so, although the term EMI is used, it should be noted that in practice many of the strategies that are used manifest as CLIL teaching.

Three models for EMI practice are suggested by Coyle et al. (2010). The first model is "plurilingual education", which means that more than one language is used in EMI programs. The students are expected to be skilled in both the subject matter and the new language(s) skills. Within this model, the students are required to have sufficient proficiency in the vehicular language (for example English). The rationale for this is that students would be expected to code-switch between languages in EMI classrooms. The second model is "language-embedded content courses", in which teaching is presented by content and language teachers. Also, discipline programs are designed with the explicit objective of language focus. The final model is called "adjunct CLIL". This model is a type of EMI where the language and the content teaching are parallel. Accordingly, the teaching of target language uses a content-based instruction (CBI) approach (Stoller, 2008) where the content courses are used as learning materials for the target language learning. This model is the one used in English courses in Indonesian higher education, especially in the target university (Simbolon, 2015).

English Medium Instruction (EMI) in Indonesia

In Indonesia, EMI programs were first introduced into schools by teaching some courses such as Mathematics and Science using English as the language of instruction. It was expected that through these programs the students' English skills would improve (Zacharias, 2013). In particular, it was believed that students would have more opportunities to practise and, therefore, to

develop their English language proficiency (Bax, 2010). Other perceived benefits of EMI include improved English proficiency (Aguilar, 2017; Floris, 2014) and the chance to obtain employment after study (Aguilar, 2017). However, teachers do encounter a number of challenges when using EMI. The most commonly reported issue is the teachers' low level of English proficiency, which in turn contributes to their lack of confidence when using such an approach. It has also been reported that many teachers lack the background and training to scaffold the students' language learning, leading to poor teaching performance and learning outcomes (Bax, 2010). These perceptions were also reflected in Indonesia and as a consequence, this program only ran for a short time and after seven years, especially in most government schools in Indonesia, it was officially abandoned.

In spite of this failure in schools, EMI is increasingly being used in state universities in Indonesia. Global competition between higher education institutions, particularly to attract more international students (Gill & Kirkpatrick, 2013; Nasir, 2015), seems to be the trigger for this practice. For instance, the University of Padjajaran recently advertised a medical degree that is taught fully in the English language (Gill & Kirkpatrick, 2013). Many other big universities, such as Universitas Gadjah Mada and Universitas Indonesia, have followed suit. To achieve this, these universities have used a system of stakeholder management boards. These boards promote autonomy for university administrators, thereby providing government universities with greater flexibility in designing their curricula (including the use of EMI) to meet the different needs of a more diverse student body and as a way to attract international students. Despite the clear reasons for using EMI, whether or not it can be successfully implemented is yet to be empirically tested. Following previous research (Bax, 2010; Zacharias, 2013) the current study focuses on lecturers' perspectives using a case study approach to examine EMI practice at Pondasi University. Further, other factors that may affect EMI instruction are also explored in the current study. In particular, the discourse of faculty members is interrogated to explore the perceptions of those required to implement EMI.

Studies on Teachers' Perspectives on EMI

To date, only a few studies have examined teachers' perspectives on EMI. Of those that have been undertaken, there have been investigations about the terminology used to describe EMI practice and the theoretical and practical approaches applied when implementing an EMI approach. Aguilar's (2017) study, for example, sought to understand the lecturers' views on and their preferences for the terms CLIL and EMI in a university in Spain. Surveys and interviews were used to collect information and she found that the lecturers perceived EMI to be less demanding than CLIL, hence EMI was preferred. In comparison to CLIL, the teachers also considered that language support was unnecessary for students

and CLIL was seen to be more suitable for students who have limited English proficiency. Together these findings suggest that the lecturers' level of understanding and familiarity with methodological skills strongly influence their practices.

Another study was conducted by Dewi (2017) who examined lecturers' perceptions of EMI in several public and private universities in Indonesia. Out of 36 lecturers who completed the questionnaires, six were invited for individual interviews. There were 16 English lecturers and 20 other subject lecturers who participated in the survey and three lecturers from each group participated in the individual interviews. The findings of the study showed that the participants positively viewed the use of the English language at the universities. One of the reasons for this positivity was that the English language facilitates the accessibility and understanding of (English) textbooks. However, some lecturers still opted to use Indonesian as the medium of instruction. The reasons for this preference were complex, although for many of the participants this was strongly related to their own English language skills.

Lecturers' perceptions appear to reflect the complex situation that exists in the broader context. For example, Hung and Lan's (2017) study focused on the challenges faced by 28 content lecturers when implementing EMI at a public university in Vietnam. Their study found that generally, teachers were supportive of the program. In spite of their satisfaction with available teaching resources, they did indicate that they encountered difficulties when explaining terminology and abstract concepts in English in a way that helped the students.

Other studies have focused on teachers' knowledge of EMI approaches. For example, the study by Aguilar (2017) found that lecturers viewed EMI as an approach that simply focused on content with little or no attention given to English language learning, particularly to assessment. Another study conducted by Hu and Li (2017) did indicate lecturers' use of English when assessing students' learning in the EMI classroom, but they suggested that this occurred only in a limited way. Their study was based on the perception of ten professors who used EMI instruction in their classes in two big universities in China. They specifically examined the types of questions used by the lecturers and compared teacher-student interactions in classes where English only, Chinese only, and a mixture of both languages were used. They found that EMI appeared to hinder the students from developing an in-depth mastery of the content. This failure was caused by lecturers' frequent use of questions that encompassed lower-order cognitive processes (as per Bloom's taxonomy), targeting such things as 'remembering' facts and 'understanding' basic concepts. Therefore, the problem with the approach is probably related to the lecturers' limited teaching strategies rather than with the principles of the pedagogy (Hu & Li, 2017).

This was also reflected in another study undertaken by Briggs et al. (2018). They used an online global survey to examine the

perspectives of 167 school and university teaching staff from 27 countries. One of the key findings of their study was that the lecturers found it challenging to prepare their lessons and learning materials when using EMI. Thus it seems that teachers need professional training to support their teaching in EMI classrooms.

In summary, therefore, previous research has found considerable variability in teacher perceptions of EMI practice. This is particularly the case with regards to the terms used for EMI and those issues surrounding the use of EMI in classrooms, such as language use, strategies in assessing students' learning and learning resources and materials.

Accordingly, the study reported here has sought to answer the research questions as follows:

(i) What are lecturers' perceptions of the term 'EMI' in an Indonesian university?

(ii) What are lecturers' perceptions of EMI including what it should be called, what language should be used, the preparation and use of learning materials, and the ways students' learning in EMI classrooms should be assessed?

MATERIALS AND METHODS

This study was undertaken at Pondasi University, a state university in Indonesia. Data were collected by way of focus groups and individual interviews. This qualitative study was intended to seek rich and relevant information about EMI.

Research Context

There were several reasons for selecting Pondasi University as a research setting. First, the researcher has been one of the faculty members of the University for a considerable length of time so it allowed for access to the research context and helped increase the feasibility of the study. In addition, some programs, such as Administration Business, Accounting, Information Technology, at the University have practised EMI as a way to obtaining international recognition and therefore, there is a university imperative underpinning this research.

Participants

Purposive sampling (Bryman, 2008) was used to identify key participants for both the focus group and individual interviews. There were 21 lecturers participating in this study. There were five focus groups with three to six participants in each group. Purposive sampling (Bryman, 2008) was used to identify key participants for both the focus group and individual interviews. There were 21 lecturers participating in this study. There were five focus groups with three to six participants in each group. The formation of the focus groups was based on several criteria such as lecturers' length of teaching experience, English proficiency, and experience of EMI in their teaching. These criteria are believed to contribute to their perception of EMI. Table 1 below illustrates the make-up of these focus groups with the range of length of lecturers' teaching experience. As can be seen, four

groups consisting of three to five lecturers had no or less than one-year experience with EMI practice. The consideration for categorising this particular length of EMI teaching experience was based on observations and informal conversations. A few lecturers in the four groups considered themselves to have EMI teaching experience by using English in their classes in the year the interviews were done. The final group (Group Five) consisted of six lecturers, who had considerable experience with EMI teaching (ranging from two-four years of full-time practice). From these focus groups, five lecturers agreed to participate in further in-depth individual interviews. The invitation for the individual interviews was based on several issues they raised during the focus group interviews. One of the issues which needed further examination was the language used in EMI practice. The participants of the individual interviews were from different faculties. Table 2 provides the profile of the participants in individual interviews.

Data Collection

Instrumentation and Tools. Key questions included those seeking to determine the lecturers' perceptions about the term EMI and the strategies which could be used in EMI classrooms. Further, those key issues emerging from participants' responses in the focus groups were used as the guidelines for the development of questions for individual interviews. Key questions of both interviews are provided in Appendices 1 and 2.

Table 1
Focus groups participants (All mentioned names are pseudonyms)

Group	Number of participants	Faculty	English proficiency* (Higher/ Lower)	Teaching experience**	EMI teaching experience
One (FG1)	4	Mechanical Engineering, Agricultural Technology, Architecture	Higher	14	No
Two (FG2)	4	Mechanical Engineering. Agricultural Technology, Architecture, Marine and Fisheries Science	Higher	8.5	No
Three (FG3)	3	Mechanical Engineering, Business Administration, Accounting	Lower	16.7	No
Four (FG4)	4	Business Administration, Accounting, Architecture, Marine and Fisheries Science	Lower	8.3	No
Five (FG5)	6	Business Administration, Accounting, Agricultural Technology, Electronic Engineering	Higher	9.7	Two-four years

* measured by their 450+ scores on Test of English as a Foreign English (TOEFL)
** the mean value of all participants' length of teaching experience

Table 2
The profile of lecturers in the individual interviews

Name (pseudonyms)	Faculty	Course taught	EMI teaching experience	EMI teaching method training
Dina	Agricultural Technology	Entrepreneurship	Less than one year	Yes
Tari	Electronic Engineering	Programming 1 and 2	Two to four years	No
Satrio	Mechanical Engineering	Mechanics	No	No
Agung	Electronic Engineering	Mathematics	Two to four years	No
Susi	Business Administration	Quality Management Systems (QMS)	Two to four years	Yes

Procedure. After permission was obtained from the University leader, a document review of staff job assignment at Pondasi University was done. Participants were purposively selected and recruited based on the criteria presented in Table 2. After this, several names were obtained and these individuals were called and asked about their willingness to participate in this study. Twenty-one (21) teaching staff agreed to take part in this research. For the individual interviews, participants were selected based on the topic relevance and quality of their responses in the focus group interviews. The duration of the focus group interviews ranged from 30 minutes to 45 minutes. Individual interviews were conducted in about three hours in total with each mostly being of 30 minutes duration.

This researcher (the first author of this article) acted as the moderator and the interviewer in both focus group and individual interviews. Prior to the interviews (both focus group and individual), one of the researchers (Author 1) undertook training related to these research techniques (and garnering knowledge about the theoretical constructs underpinning these) in order that she could interview the participants in an appropriate way.

Data Analysis

The interview data were analysed thematically (Bryman, 2008). This method included the interpretation of the meaning from the content of the texts, i.e. interview transcripts. The review of the literature encapsulated the themes, which were the focus of this study. All the interview data were transcribed and then checked by the participants to ensure the trustworthiness of the transcripts (Silverman, 2001). This process was found to be useful especially to clarify the intent of the participants. To further ensure the trustworthiness of the themes identified from the data, peer debriefing was undertaken with eight university teaching staff (separate to the participants). They were selected to represent a diverse profile and came from a similar range of disciplines to the

interview participants. They examined the transcriptions and identified themes in an iterative way to ensure the veracity of the findings. The profile of each of these lecturers appears in Appendix 3.

RESULTS

Four key issues emerged from the analysis, namely: the lecturer's use of different terms for EMI, practical issues surrounding the use of EMI in classrooms including language use, learning materials, and the assessment of students' learning in EMI.

Terms Used as a Reference to EMI

Lecturer-participants used the terms "bilingual classes" and "international classes" when they were asked about their understanding of EMI. It must be acknowledged that the understanding of this terminology was often co-constructed with the participants, for example with respect to bilingual classes:

> *As far as you have heard, what do you know about the bilingual class or the bilingual teaching at the university level?* (Moderator).
> ….
>
> *The thing which is clear to me is that some of the teachings is in Indonesian, and partly in the foreign language, but if it is a bilingual class with English, partly the teaching is in English. That is what I have learned* (Satrio, a participant in FG1).

And,

> *So, what do you know about bilingual classes?* (Moderator).
> ….
>
> *In my opinion, a bilingual class is a class which uses two languages, Indonesian and the foreign language. The foreign language we introduce here is English.* (Karina, a participant in FG4).

Interestingly, the "international classes" term was used by most of the participants who participated in the focus groups, for examples, a lecturer in FG4 said, "Therefore, it is like this, if there is one student from abroad, in the class it is compulsory to use the international language, English" (Anwar). Another lecturer in FG2 expressed this way "It's a kind of international class, right?" (Dina).

Although the term "international classes" seemed to encapsulate the notion of EMI, it is worth noting that there was also a degree of ambiguity. In this regard, the lack of clarity surrounding the terminology appears to reflect the range of EMI practices that are being used by lecturers at this University. These are the practices described next.

The Use of Language in EMI Classroom

Regarding language use, some lecturers expressed the idea that they practised only partial English instruction. A lecturer in FG2 explained this way "As I teach Basic

Physics, if it is going to be implemented, I might insert some technical terms. …. The English technical terms". Another lecturer in FG5 said "I started to include elements associated with accounting terminology in particular, in the English language. We also presented the exercises in English".

As can be seen, the previous example is very similar to the one above and yet the lecturers were from different groups. Specifically, the lecturer from FG2 was from a group who had no experience in EMI teaching, while the lecturer from FG5 was EMI-experienced. Thus, this finding raises questions about whether EMI teaching experience has any effect on the lecturers' views on the use of English language in the EMI classes (this particular issue is explored further later in this section).

One reason given by the lecturers for mixing L1 and English in their EMI practice was the students' low level of English skills. One lecturer in the individual interview said this way "But when it comes to the very important points of the lesson, besides English, we need to use Indonesian in order that the students won't be mistaken in their understanding" (Dina).

On this basis, some lecturers with experience in EMI teaching suggested that, in order to support students' learning, key learning points in their lessons were delivered in L1. During the individual interview, one lecturer from this group expressed "When the materials get…, like Algorithms, I teach Algorithms, when it gets confusing, it relates to logical thinking, I use Indonesian" (Erni). Her fellow lecturer, who used EMI extensively described a specific way she used L1 in her classes "I explain it in Indonesian, as it might be easier to understand, for example in the lesson on logics, I gave a review of logics, 'for', 'to', 'do', 'For' means this, 'to' this, and 'do' that. When I explain it in Indonesian, the students can actually understand it" (Tari).

Explaining the key technical terms was the main reason for lecturers switching to Indonesian (i.e. the students' L1) during EMI practice. In addition, students' limited English appears to prompt these university teachers to use the students' L1. At the same time, it was not clear if this code-switching practice was affected by lecturers' EMI teaching experience. To explore this further the responses of lecturers from both groups were compared.

It was found that those lecturers who had no EMI teaching experience felt a general need to use both languages in the EMI classrooms. In contrast, all lecturer-participants with experience in EMI teaching reported that the Indonesian language was required only during the delivery of key information. Furthermore, these lecturers gave a more detailed description of the way in which they used English in their teaching practice. Specifically, they described how they used the English language for the student worksheets, which was developed by these lecturers, in examination materials, during question and answer sessions, and in the presentation of PowerPoint slides. For examples, two lecturers in FG5 explained the case "The modules and the worksheets were prepared in English." (Hidayat) and

"So, the rest (of the lesson) such as asking the questions, was in English" (Tari). It is worth noting that what Tari meant by 'asking questions' in English referred to teaching in her EMI classroom where the section of content delivery was in the Indonesian language. Hence, experience in EMI practice did seem to influence the perspectives of several lecturers about the practical use of the two languages when teaching using an EMI approach. In fact, in the individual interview one of the participants from the group with EMI-teaching-experienced group appeared to describe a translation teaching model "If I say something in English, I will follow it in Indonesian…It's always like that" (Agung).

Thus, lecturers' views on both L1 and L2 use in EMI classrooms may suggest two main types of practices, namely functional code-switching and translation practice. However, a few lecturers (Groups One and Four) argued for fuller use of English in instruction. For example Anwar in FG4 said that the instruction should be in English when there was a student from abroad in either a bilingual class or an international class.

It is important to understand that this lecturer's perception of a fully-English instructed practice was linked with the terminology of 'international classes'. His understanding may reflect his previous study experience, specifically that he had a Master degree in a university where there were several international students and English-only was used for instruction purposes.

Learning Resources for EMI Practice

The lecturers described a number of aspects regarding learning resources necessary for EMI practice, such as the nomination of languages used for presenting the materials (English or Indonesian, or both) and the inclusion of multimedia learning resources. Some lecturers described how they used English language textbooks in their classrooms:

> *The newness of knowledge or theory derives from English. As Mr. Karyono mentioned before if we depend on our textbooks, they are old, they were (published in) 1992 or some years like that. So, I want to motivate them that in the future the newness of knowledge, scientific journals will be in English, [for instance] when I teach them a course such as Human Resources, fortunately, I have a collection of e-books* (Syafril, a lecturer in FG3).

Also, it was evident that other lecturer-participants were comfortable using English-presented-learning materials. Another lecturer indicated that as there are already many resources available in English and that these could be used as they can support her students' second language learning. A participant in FG1 expressed this "Therefore, the field of study, particularly our study in Gangga (a type of moss) has much literature which is presented in English" (Joko).

However, others suggested the need to adapt learning materials that are written

in English to be used in the EMI practice: "Some materials, yes, but I do make some adaptation … to the curriculum, especially for the Indonesian curriculum" (Agung). Thus, this lecturer seems to suggest he was concerned with curriculum adaptation for the context of the local curriculum, even when an EMI approach was being used.

Another issue that the participants did consider to be important for practising EMI was the inclusion of multimedia. For instance, one lecturer in the individual interview described this as follows "In Indonesian medium instruction, visual media might not be necessary, but if it's in English the students learn twice, besides the materials, they learn to understand the language. So, using the visual media is a plus" (Satrio).

The Assessment of Students' Learning in EMI Classrooms

A few lecturers supported a clear distinction between content and language in EMI classroom. They specifically focused on assessing students in the content knowledge by expressing this following "For a lecturer like me, it is easier to assess the content than the language because we are not the language lecturers" (Satrio). It is important to note that this particular perception may be caused by his proficiency in English, which appeared to be insufficient to enable him to set the assessment in the target language. This lecturer, along with others, suggested that the assessment of subject matter understanding was most appropriately done in the Indonesian language. Similar comments from other participants were observed in other individual interviews. They said this way: "What I want to see when in evaluating students' learning is if they apply a concept to a given problem" (Satrio), "I would ask the points I have presented, or I ask them to give a summary of the lesson ... They are given freedom, they can use English or Indonesian" (Dina). This particular perception might be due to the lecturers' own limited English proficiency which makes it difficult for them to assess students' English learning.

DISCUSSION

EMI Terms

The main goal of the research was to investigate the lecturers' perceptions of EMI practice in one Indonesian university. The findings show the lecturer-participants used two types of terminology to refer to EMI - "bilingual classes" and "international classes". As the term suggests "bilingual classes" implies the use of two languages concurrently in EMI classrooms. Nevertheless, in the present research "international classes" was also used to refer to an EMI practice where instruction was mainly presented in the English language (in some contexts it also could be done partially). It was the latter term that was the most consistently used by the lecturers as a reference to EMI. This may be due to the fact that a number of local educational institutions used this term (Gill & Kirkpatrick, 2013). These participants' perceptions may also reflect the internationalisation process of global higher

education and trend towards prioritising English language use (Gill & Kirkpatrick, 2013). Therefore, in this study context "international classes" are conflated with the practice of English language instruction in particular disciplines, and especially with catering for international students in the local universities.

In some Indonesian universities, including in the university in this study, one of the reasons for implementing EMI is to improve the students' English skills. This drive is similar to what has been reported in other studies, that is, improving local students' English proficiency in content-based professional expertise (Gill & Kirkpatrick, 2013). In this way, the purpose of using English instruction within "bilingual classes" in the present context seems to have a similar foundational pedagogy to CLIL (Coyle et al., 2010).

Even so, the meaning of EMI does seem to lead to confusion. Some scholars consider that it is an approach of bilingual use, which has a dual focus of content and language learning (Coyle et al., 2010). On the other hand, in responding to the global phenomenon of attracting international students in certain local universities, EMI is considered to involve the practice of English instruction only. This particular understanding is practised without considering a need for assessing students' language learning and hence it is not related to CLIL pedagogy at all. Both of these contrasting results support Dalton-Puffer's (2011) assertion that varieties of bilingual education programs frequently depend as much on the cultural and political frame of reference as on the actual characteristics of the programs. This is highlighted by the way in the current findings to the use of EMI terms contrast considerably to that of Aguilar (2017). In her study, conducted in universities in Spain, the participants in her study made a clear distinction between the terms CLIL and EMI. However, it was worth noting that this study was based in Europe, where EMI had been used for quite some time, so university teaching staff in that context might be more familiar with EMI. In contrast, the lecturers in the present study might not have received sufficient information about EMI and how it practised than have their counterparts in Europe. Even so, similar to Aguilar's participants, some in the present study considered EMI as a way to support students with limited English skills. Even though they may have used the "bilingual classes" term, the focus of lecturers in the present study was mainly to help improve their students limited English. Based on these findings, it does seem that teaching staff need a clear understanding of the reason for adopting a certain term and how the approach should be put into practice. This particular issue is necessary to be clearly understood by the university authorities. Clearer guidance would allow for the commonality of understanding about EMI in the present study context in particular and in Indonesia in general.

Language Use for EMI Classroom

Based on evidence emerging from the interviews, the practice of code-switching

between Indonesian and English was viewed to be essential in EMI practice. The lecturers described two main strategies for the use of code-switching. Firstly, it was through the use of translation, that is, translating each statement from English into Indonesian. The second way was by using both English and Indonesian, but in specific teaching situations. For example, English can be used during the lesson introduction, meanwhile, during the delivery of key lesson content, L1 is suggested to be used. However, such a narrow range of responses suggests that there was a limited understanding of the role of two languages in EMI. This is line with the findings of Hung and Lan's (2017) study where it was evident that the lecturers in their study used less English than Vietnamese and claimed this practice was due to their concerns about students' ability to grasp content when delivered in English. As with the study reported here, the lecturers appeared to need some professional development training about EMI practices, especially in the area of language use in EMI classrooms. Although possible, there is a need for careful consideration in the arrangement of EMI practice regarding code-switching. It may be that policy guidelines need to be provided, such as following Lin's (2015) proposal about L1 and L2 use in different stages and phases of the institution curriculum. If this gradual introduction and practice of English were done at the target university, students' English language development could be supported which would, in turn, help students' learning in both content and language. In this way, the dual-focus (Coyle et al., 2010) within EMI practice could be achieved. However, this particular issue needs further exploration, especially in the context of the present study.

Learning Resources for EMI Practice

The lecturers raised a number of issues regarding which learning materials should be used for EMI practice. Several lecturers indicated that they like to use learning multimodal teaching resources. Perhaps, this view reflects their understanding of the range and complexity of media which may be encountered in an EMI learning environment.

The importance of using multiple sources for learning also corresponds to the findings of Hung and Lan (2017). In their study, the lecturers seemed well-informed about online reference materials even though they also indicated this process was time-consuming. However, many indicated that predominantly only use PowerPoint slides, appearing to lack confidence in using other learning materials for EMI. The early stage of EMI practice in the current context might have contributed to their lack of familiarity with such materials. This limitation was also described by the lecturers in Briggs et al.'s (2018) study. Once again, this finding highlights the need for further professional development training in this area.

The Assessment of Students' Learning in EMI Classrooms

There seemed to be mixed perceptions among the lecturers in the present context

with regard to assessment, and the way to measure their progress in the EMI classrooms. A few of the participants did indicate that assessment should be conducted in L1 due to their limited English. Furthermore, because of this limited English proficiency, the teaching staff described how they only assessed their students' content learning, which in turn reflects the common practice of the target university of dividing language from the content. This type of separation for the purposes of students' learning assessment has also been found in other studies (Aguilar, 2017). In Hu and Li's (2017) study, for instance, the lecturers did assess their students' learning in English but only used questions from Bloom taxonomy's lower-order cognitive process categories which resulted in students' lack of in-depth understanding of the content knowledge. The finding of the current research along other studies (Aguilar, 2017; Hu & Li, 2017) suggests there is a need to support lecturers to be able to assess in ways that reflect the principles of EMI. This may require not only the development of stronger policy guidelines but also professional development for teaching staff so that they may acquire the skills necessary to achieve this end.

CONCLUSIONS

Overall, the lecturers seem to lack sufficient knowledge of EMI and this condition appears to have resulted in their limited understanding of EMI practice and the pedagogical approaches to be used. The most problematic issues in their understanding included the terms used to refer to EMI, the strategy of code-switching practices in the classrooms, and questions about which language to be used for conducting an assessment. When EMI is required by content lecturers, some practical arrangement is necessary so that staff can be supported to use EMI in effective ways. Clear direction was considered to be necessary, especially in the use of two languages for instruction, in conducting an assessment, and in learning materials. In this way the findings of the current support those of previous research showing that the use of EMI by teaching staff requires much further development in Indonesia (Bax, 2010).

From the current study, there are implications for the implementation of EMI, particularly at Pondasi University. To ensure EMI practice at the University is implemented successfully, there is a clear need for revising the curriculum, optimising the number of hours available for the English course, developing appropriate policy guidelines, and providing professional development for teaching staff. However, as the study was based on a small corpus, with input from a small number of content lecturers in a government university, more studies are necessary in order to more confidently make generalisations applicable to other universities in Indonesia, in both private and state institutions.

ACKNOWLEDGEMENT

I would like to express my gratitude to the Indonesian government (The Ministry of Research, Technology, and Higher

Education, which is now called The Ministry of Education and Culture) for granting me a scholarship to complete my Doctoral study at Curtin University, Australia. I also would like to acknowledge that the study reported in this article resulted from one phase of the research of my Doctoral thesis at Curtin University. The complete document of the thesis can be found at Curtin institutional repository.

REFERENCES

Aguilar, M. (2017). Engineering lecturers' views on CLIL and EMI. *International Journal of Bilingual Education and Bilingualism*, *20*(6), 722-735. doi: 10.1080/13670050.2015.1073664

Baker, C. (2011). *Foundations of bilingual education and bilingualism* (5th ed.). Bristol, England: Multilingual Matters.

Bax, S. (2010). *Researching English bilingual education in Thailand, Indonesia and South Korea.* Retrieved February 1, 2015, from https://www.teachingenglish.org.uk/sites/teacheng/files/publication_2_-_researching_english_bilingual_education.pdf

Briggs, J. G., Dearden, J., & Macaro, E. (2018). English medium instruction: Comparing teacher beliefs in secondary and tertiary education. *Studies in Second Language Learning and Teaching*, *8*(3), 673-696.

Bryman, A. (2008). *Social research methods* (3rd ed.). New York, USA: Oxford University Press.

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning*. Cambridge, England: Cambridge University Press.

Dale, L., & Tanner, R. (2012). *CLIL activities: A resource for subject and language teachers*. Cambridge, England: Cambridge University Press.

Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics, 31*, 182-204. doi: 10.1017/S0267190511000092

Dewi, A. (2017). English as a medium of instruction in Indonesian higher education: A study of lecturers' perceptions. In B. Fenton-Smith, H. Pamela, & W. Ian (Eds.), *English medium instruction in higher education in Asia-Pacific* (pp. 241-259). Cham, Switzerland: Springer.

Floris, F. D. (2014). Learning subject matter through English as the medium of instruction: Students' and teachers' perspectives. *Asian Englishes, 16*(1), 47-59. doi: 10.1080/13488678.2014.884879

Gill, S. K., & Kirkpatrick, A. (2013). *English in Asian and European higher education.* Retrieved July 2, 2014, from http://onlinelibrary.wiley.com/store/10.1002/9781405198431/asset/homepages/3_English_in_Asian_and_European_Higher_Education.pdf?v=1&s=4c49dc8642113e36a4e3bf192876688ba8addaa2

Hu, G., & Li, X. (2017). Asking and answering questions in English-medium instruction classrooms: What is the cognitive and syntactic complexity level? In J. Zhao & L. Q. Dixon (Eds.), *English medium instruction in Chinese universities: Perspectives, discourse and evaluation* (pp. 184-203). New York, USA: Routledge.

Hung, D. M., & Lan, L. T. D. (2017). Content lecturers' challenges in EMI classroom. *European Journal of English Language Teaching, 2*(1), 1-21.

Lasagabaster, D., & Sierra, J., M. (2010). Immersion and CLIL in English: More differences than similarities. *ELT Journal*, *64*(4), 367-375. doi: 10.1093/elt/ccp082

Lin, A. M. Y. (2015). Conceptualising the potential role of L1 in CLIL. *Language, Culture and Curriculum*, *28*(1), 74-89. doi: 10.1080/07908318.2014.1000926

Massler, U. Stotz, D., & Queisser, C. (2014). Assessment instruments for primary CLIL: The conceptualisation and evaluation of test tasks. *The Language Learning Journal*, *42*(2), 137-150. doi: 10.1080/09571736.2014.891371

Nasir, M. (2015). *Bilingual curriculum to be compulsory in universities starting from 2016.* Retrieved January 10, 2016, from http://m.thejakartapost.com/news/2015/11/30/bilingual-curriculum-be-compulsory-universities-starting-2016.html

Silverman, D. (2001). *Interpreting qualitative data: Methods for analysing talk, text and interaction* (2nd ed.). London, England: Sage.

Simbolon, N. E. (2015). Using the CBI method in teaching English in an Indonesian university. *Pertanika Journal of Social Sciences and Humanities, 23*(4), 1211-1224.

Stoller, F. L. (2008). Content-based instruction. In N. Van Deusen-Scholl, & N. H. Hornberger (Eds.), *Encyclopedia of language and education* (pp. 59-70). New York, USA: Springer.

Zacharias, N. T. (2013). Navigating through the English-medium-of-instruction policy: Voices from the field. *Current Issues in Language Planning, 14*(1), 93-108. doi: 10.1080/14664208.2013.782797

APPENDIX 1

KEY QUESTIONS OF FOCUS GROUP INTERVIEW

No.	Questions
Groups 1, 2, 3, 4	
1.	What do you know about EMI? (Who practises, the reasons for practising it)
2.	How would EMI practice be like in the classroom?
3.	How are the learning materials for EMI classroom prepared?
4.	What do you think about some ways to assessing the students learning in EMI practice?
Group 5	
1.	How do you teach with EMI?
2.	How do you prepare the learning materials?
3.	How did you assess students' performance/learning? Why?

APPENDIX 2

KEY QUESTIONS OF INDIVIDUAL INTERVIEW

No.	Questions
1.	How would practice EMI in the classroom?
2.	What and how would you assess the students in the EMI classroom?

APPENDIX 3

THE PROFILE OF MEMBERS OF PEER DEBRIEFING

No.	Area of Institution	Course taught
1.	Riau (Sumatera island)	Mechanics
2.	Banten (Java island)	Socio-politics
3.	Riau (Sumatera island)	English
4.	Surabaya (Java island)	Islam
5.	Padang (Sumatera island)	English
6.	Yogjakarta (Java island)	English Literature
7.	Gorontalo (Sulawesi island)	English
8	Pontianak (Borneo island)	Accounting

Pertanika J. Soc. Sci. & Hum. 28 (2): 1083 - 1104 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Educational Researchers in Malaysia – Who They Conduct Their Research for?

Amrita Kaur[1]*, Abdul Hamid Busthami Nur[1], Yoppy Wahyu Purnomo[2], Mohd Zailani Mohd Yusof [1] and Suswandari[3]

[1]School of Education and Modern Languages, Universiti Utara Malaysia, Sintok 06010, Kedah, Malaysia
[2]Faculty of Education, Universitas Negeri Yogyakarta, Yogyakarta, 55281 Indonesia
[3]School of Postgraduate Studies, Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta 12130, Indonesia

ABSTRACT

The urgent need to transfer the impact of educational research into practice is widely reflected in national agendas around the world. However, the gap between research and practice persists in other parts of the world as well as in Malaysia. This study sought to explore the factors that drive educational research in Malaysia. We employed a qualitative case study design to investigate the practices of 14 educational researchers using face to face in-depth interviews and content analysis of their research documents. The findings revealed three major drivers- researching for key performance indicators (KPI's), researching for citation and H-index, and researching for personal development as a researcher, which shaped the research agenda of educational researchers. Higher education policy-related implications are discussed to have educational researchers effectively target their research for teachers' consumption for improved teaching standards.

Keywords: Educational research, evidence-based practice, higher education, Malaysia, teachers

ARTICLE INFO

Article history:
Received: 17 February 2019
Accepted: 20 January 2020
Published: 26 June 2020

E-mail addresses:
amrita@uum.edu.my (Amrita Kaur)
busthami@uum.edu.my (Abdul Hamid Busthami Nur)
yoppy.wahyu@uny.ac.id (Yoppy Wahyu Purnomo)
myzalani@uum.edu.my (Mohd Zailani Mohd Yusof)
suswandari@uhamka.ac.id (Suswandari)
* Corresponding author

INTRODUCTION

A great emphasis is placed on the use of evidence-based or research-driven pedagogy by the school teachers all around the world for it is believed that teachers' knowledge of 'what works' would not only enhance their teaching skills but also student outcomes (Cain & Allan, 2017). Scholars have argued in multiple ways for the relevance and rationale for the use of educational research for policy and practice. For example, Brown

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

(2015) posited that educational research was valuable for teachers in two ways - usability and signifying value. The former explained that educational research was useful for teachers in addressing practical problems related to teaching and learning and the latter suggested that the information obtained through research was of superior quality when compared with other sources of information. Brown (2017) claimed that teachers mainly used educational research to design teaching and learning activities for better learning outcomes, class management, or solving specific problems related to teaching and learning. Educational research also aids teachers in understanding individual differences among students in cognitive, affective, and conative domains to design and implement appropriate curriculum and pedagogy (Awang-Hashim et al., 2019) and often guides the design of specific interventions and guidelines that have been found effective in solving identified issues (Brown, 2017). However, despite these benefits, the question remains as to why educational research is incapable of rendering a direct impact on educational practices at the school level. Studies in the past have focussed on teacher-related factors (eg. Goldacre, 2013; Mortimore, 2000) that prevent teachers from utilising research evidence to inform their pedagogy; nonetheless, it remains widely obscure what drives educational researchers' research agenda. Do they design their investigations with the intention of informing school teachers' pedagogy in practical ways?

Weiss (1979), theorized the use of educational research in three categories namely, instrumental, conceptual, and symbolic. Instrumental use implies the concrete application of research output in the form of interventions and protocols to make decisions or solve problems. Conceptual use refers to the change in thinking, also known as 'enlightenment', that may occur as a result of knowing the research output. Several authors (e.g. Anwaruddin, 2015; Winch et al., 2015) have elaborated this utility using Aristotle's Nicomachean Ethics which highlights teaching as a craft 'techne' that requires practical wisdom 'phronesis' and the research output has the potential to influence both the dimensions. Lastly, symbolic use refers to the use of research evidence as a persuasive tool to support policy-related decisions. The first two of these three are directly concerned with teachers' practices and are also frequently used in discourses pertaining to the use of educational research (e.g. Cain, 2017; Ion & Iucu, 2014). However, those discussions are beyond the scope of this paper. Finally, Cain and Allan (2017) argued that research output was also likely to contribute to organisational learning whereby teachers engaged in discussions and interactions which, in turn, led to collegial sharing, questioning, and critiquing thereby converting tacit knowledge of individuals into explicit knowledge and adding richness to school climate (Brown et al., 2016).

The significance of transferring the impact of educational research into practice is widely reflected in national agendas,

policies, and initiatives around the world which intends to encourage teachers to use evidence-based practices and educational researches to make an impact on practices. In the UK, the government has launched 'What Works Centre for Education', and the 'Evidence for Policy and Practice Information and Coordinating Centre' to measure the impact of educational interventions, (Cain, 2015; Dagenais et al., 2012). In the United States several approaches to disseminate educational research output can be traced through the 'American Institutes for Research', 'the What Works Clearinghouse', 'Doing what works', just to name a few (see, Dagenais et al., 2012). In Malaysia, on the other hand 'Knowledge Transfer Program policy' that encourages collaboration between academia and industry through consultancy, education, training, graduate development, and conferences (Sohail & Daud, 2009).

Despite these efforts, the evidence suggests that the gap between research and practice remains wide owing to several issues surrounding the nature of research methodologies used for educational research, the nature of research outcomes, policy directions, teachers' attitudes, perceptions, and skills required to utilises research, and school leadership practices which can either facilitate or hinder the use of educational research (Brown & Zhang, 2016; Cain, 2015; Levin, 2013). Apart from policy-related initiatives and context-related factors (such as schools, school leadership, and school effectiveness) (Cartwright, 2013; Moss, 2013), it is teachers and educational researchers who are mainly held accountable for the prevailing gap since the two reside in two extremely different worlds (Olivero et al., 2004). A considerable amount of attention is devoted to investigating teachers' perspectives and beliefs in terms of challenges related to the use of educational research. For example, studies have highlighted that teachers lack skills (reading reports and statistics) to use evidence in their practice (Goldacre, 2013; Hargreaves, 2007), as they find the academic language very complex and technical (Mortimore, 2000), and the findings and research methods have little or no relevance to solving practical problems in their classrooms (Bartels, 2003; Gore & Gitlin, 2004; Hoogveld et al., 2005). Access to research-based information and lack of support from school management are also some of the challenges teachers reports as barriers in utilising the educational research (Cain, 2015; McDonough & McDonough, 2014).

Nonetheless, the educational researchers are often accused of treating teachers as the subject and the object of their research (Shkedi, 1998; Smith, 2002), considered outsiders to schools (Zajano & Edelsberg, 1993), who merely perceive schools as data collection sites (Taber, 2002), and do not want to see themselves in any other role except that of researchers (Ekız, 2006). Apparently, the discourses on teacher involvement in research and teachers as researchers (e.g. Bickel & Hattrup, 1995; Diezmann, 2005) whereby teachers' roles are active as researchers and

not limited to being subject or object of educational research are the consequences of researchers' distance from the practical issues surrounding schools.

While there are a number of investigations in the past as well as in recent literature that have focused exclusively on teacher-related factors regarding the use of educational research (e.g., Cain, 2015; Shkedi, 1998), there still remains paucity of investigations that focus on educational researchers to investigate the factors that drive their research agenda which, in turn, limit their direct contribution for teachers' consumption of educational research. The findings may provide an explanation of why the two worlds of educational research and practice are situated so far apart wherein while teachers are encouraged and expected to espouse evidence-based findings, it is unknown whether educational researchers facilitate this aspiration and purposefully direct their investigations towards teachers' consumption. Therefore, the current study is aimed at exploring the factors that drive educational researches in Malaysia. We believe that those drivers determine the nature of their research including the subject, its implications, type of methodology, and the medium to disseminate research findings.

The primary research question that guided the study was -

> What are the drivers that shape educational researchers' intentions for undertaking educational research?

Theoretical Underpinning

To understand the drivers that shape educational researchers' research agenda and how it contributes to the perceived gap between education research and practice, we employ the tenets of the principal-agent theory which originated in the field of economics (Williamson, 1985). The theory is commonly applied in higher education research to explore the relational phenomenon between two parties for example, government and higher education institutes (Lane & Kivisto, 2008), or higher education institutes and its staff (Wan et al., 2017). The three primary assumptions of the theory are, there should be two parties, one is the principal and the other is the agent who is appointed to function on behalf of the principal. Second, a goal conflict between the goal of the principal and the agent must exist. Third, there is a probability of information asymmetry (Waterman & Meier, 1998) between the two. Furthermore, the principal contributes inputs in terms of appropriate funding to warrant the desired outputs from the agent (Lane & Kivisto, 2008).

To translate these assumptions for the current study, we understand that educational researchers (agent) are appointed and funded by the government/academia (principal) under contractual agreement to serve the needs of society by creating and sharing knowledge to raise the educational standards of a nation (Lane & Kivisto, 2008). It is believed that through the application of appropriate incentives (inputs) that may

function as a motivational resource for agents to act in desired ways to accomplish the goals set by the principal. However, Lane and Kivisto (2008) argued that by rule the agent was required to function in the best interest of the principal, but as a result of goal conflict and information asymmetry the goals of both the parties might not coincide and the agent might be prompted to operate by self-interest. All in all, the application of this theory would facilitate us to investigate the goal conflict and information asymmetry that occurs between the educational researchers and the demands of academia and how the incentives may not be well aligned with one of the desired outcomes established by the principal.

Background of the Study

The present study is situated in the Malaysian higher education context that has undergone restructuring to meet the global challenges by establishing academic excellence (Ministry of Education Malaysia, 2015). This is further affirmed by the statistics which suggest that massive amount is been spent in the development and expansion of higher education in Malaysia (Chapman & Chien, 2014). One criterion of the Ministry of Higher Education (MOHE) Malaysia is to establish teaching excellence, especially in the eyes of the international community, by increasing universities ranking through publication in indexed journals for higher citations. This ambition has subsequently exerted pressure on academics to produce greater research and publication output and acquire citations (Wan et al., 2017). Furthermore, research and publication are also one of the criteria for tenure and promotion requirements. In line with this ambition, MOHE, Malaysia allocates a generous amount for research funding in form of a variety of grant schemes across all disciplines (MOHE, 2018) and additionally, 1.3% of GDP is spent on research and development (The World Bank, 2018) to fulfil the ambition. As a result, recent reports from Scopus (Elsevier, 2018) and Clarivate Analytics (Clarivate, 2017) indicate that the Malaysian research output and quality have immensely increased. However, in terms of impact (such as innovation and patents), the information is limited to Engineering, Chemistry and Agricultural Sciences only. Systematic information related to the impact of educational research produced in Malaysia on educational practice is almost non-existent; however, an empirical investigation suggests that the use of research evidence is limited to symbolic utilisation, that too at a surface level. The authors (Sirat & Azman, 2014) "argue that reasons for the lack of uptake of evidence include the long time frame for research, vague or equivocal findings, irrelevant research questions, and analyses that do not fit with the policymaker's assessment of the issue". The authors also conclude that proximity between the researchers and the policymakers is a way forward to have evidence-informed policies and practices in Malaysia.

METHOD

The study employed a qualitative case study design using a constructivist-interpretivist paradigm (Denzin & Lincoln, 2003). Given the exploratory nature of the current investigation, a qualitative methodology was deemed appropriate. Qualitative research is able to provide deeper insights for understanding underlying reasons around the investigation and which can later generate hypotheses for quantitative investigations (Creswell, 1998).

Educational researchers were the 'case' studied for their research practices. The case study methodology was deemed appropriate because it allows in-depth exploration of a particular situation using one or more methods in real-life context and interpretation of findings can be contextualised (Simons, 2009).

Participants and Procedure

The participants comprised 14 educational researchers who were employed as faculty members in Malaysian public universities.

All the thirteen public universities in Malaysia that have education faculty were invited to participate in the study through personal networks. Using purposive sampling, the criteria to recruit participants were that they must be active educational researchers at any public university in Malaysia; they must have five or more years of experience with research in education and must have accomplished at least three educational research projects. In the end, participants from eight public universities, who agreed to participate in the study, were recruited as participants. Table 1 provides information of the particpants.

Table 1
Information on participants

ID	University	Gender	Area	Number of years as a researcher	Number of accomplished research projects
ER1	CU	M	Curriculum and instruction	16	10
ER2	CU	F	Educational management	17	9
ER3	CU	F	Instructional technology	12	6
ER4	RU	F	Instructional technology	30	18
ER5	RU	M	ESL	16	10
ER6	RU	M	ESL	21	13
ER7	CU	F	Education psychology	28	15
ER8	CU	F	Education psychology	8	6
ER9	CU	M	Education management	8	5
ER10	CU	M	Educational Psychology	31	17
ER11	CU	F	Instructional Technology	14	9
ER12	RU	M	Educational Psychology	31	18
ER13	RU	M	Educational Administration	9	7
ER14	CU	F	Educational Philosophy	28	17

Note: CU = Comprehensive University, RU = Research University

Out of eight participating universities, five were research universities and nine were comprehensive universities. In the Malaysian context, the comprehensive universities, with a greater focus on teaching, offer a wide range of courses and different fields of study. On the other hand, the research universities are mainly focussed on intensive research programs and are characterised by competitive entries as well as academic orientation. The number of years of experience as a researcher indicated their position as a senior and junior researcher.

Institutional ethical approval was obtained and an invitation to participate in the study was sent out officially via e-mails to a number of researchers. Participants gave their consent to participate in the study in written form and were promised anonymity of their identity as well as their institutional identity.

Data Collection

The study sought to understand the factors that prevent educational researchers in conducting research for the direct consumption of teachers by investigating the drivers that shape their research agenda. For this purpose data was collected using two source 1) face to face in-depth interviews and 2) content analysis of the research documents obtained from the participants. Background information on participants' name, gender, area of specialisation, number of years as a researcher, and number of accomplished research projects was collected using a questionnaire.

The primary source of data was face to face in-depth interviews conducted using semi-structured, open-ended questions. Face to face in-depth interviews in the qualitative design is considered as an appropriate method to obtain thick and rich data (Creswell, 2007). They also facilitated gathering additional information using follow up questions from the participants for more clarity (Berends, 2006). Interviews were conducted over seven months by the two lead researchers involved in the study using a semi-structured interview protocol (Appendix A.)

The participants were met with an appointment at the place and time of their convenience. Some of the participants were met more than once, however, on an average, each meeting lasted for 60- 80 minutes. The interviews were conducted mainly in the English language; however, some participants choose to speak in Bahasa Malaysia (BM) in between. All the interviews were recorded by obtaining permission from the participants and later translated (those in Bahasa Malaysia) and transcribed by a research assistant.

The secondary source of data comprised research documents such as research reports and/or published articles of the research projects that the participants had accomplished in the last 5 years. We limited our scope to 5 years only due to the enormity of data. These documents were submitted in hard or soft copy form during or after the face to face interviews. A total of 56 research documents were received. However, for a few projects, the participants had worked

jointly, therefore to avoid repetition such projects were eliminated. In the end, we were left with 51 projects to analyse. This source of data provided elaborated information on the nature of educational projects undertaken by the participants. The information is discussed in the result section.

Data Analysis

The study employed a thematic analysis method which "is a method for identifying, analysing, and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail" (Braun & Clarke, 2006) to analyse the data obtained from the in-depth interviews. The analysis was done using three stages proposed by (Saldana, 2011). In the first phase, the three researchers independently read the transcripts and pre-coded the data to overcome the research bias and establish reliability (Yin, 2009). In the second stage, the three researchers collaboratively compared the pre-coded data and developed descriptive codes. In the third phase, the researchers together assigned those codes under major themes.

We employed content analysis on research documents to further explore the focus area of their research projects and to understand their objectives behind undertaking educational research. According to Hsieh and Shannon (2005) content analysis is "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns". Coffelt et al. (2016) stated that while there were several ways to analyse the frequency, the objective of content analysis which was quantification and systematisation remained consistent across all methods. In the current study, the unit of measurement was the research document and pre-determined categories were made to code the documents. The categories and their descriptions are provided in Table 2.

Table 2
Coding category description for research projects

Categories	Description
Type of research	A study that was theoretical in nature, concerned with developing or testing theory was labelled as basic research while the study concerned with solving practical issues was labelled as applied.
Research use/ implication	Study output that provided a concrete application of research output in forms of intervention and protocols to make decisions or solve problems labelled as instrumental. While the study output resulted in a change in thinking or provided conceptual knowledge, and suggestions for teachers were labelled as conceptual. The study output that contributed to the policy decision was labelled as symbolic.
Methodology	For methodology codes like survey, experimental, action research, qualitative (interview and observation), and others were used.
Samples	For sample codes like students, teachers, administrators, and others were used.
Research dissemination	The modes used for disseminating the research output were coded as a published paper, seminar, module, training, and others.

Three of the five researchers among the team went through the documents individually. Later, they collectively created a detailed code log of 35 words/phrases for all the categories as indicated in Table 2. Two independent coders who had previous experience in the content analysis performed the coding using the code log. Both the coders met more than twice to establish intercoder reliability. In the second phase, the frequency of each code was calculated on the basis of its occurrence. Finally, the frequencies were tabulated for discussion purposes. Some research documents were coded for more than one category.

Establishing the trustworthiness of a qualitative study for its rigor is of utmost importance (Lincoln & Guba, 1985). To ensure the credibility of the study, data triangulation was conducted between the interview data and content analysis data. Additionally, to ensure the validity of data the member check technique was carried out to ensure if participants' responses were understood accurately (Lincoln & Guba, 1985). Finally, the study design and procedures are reported meticulously to enable replication of this study for future investigations which, in turn, supported the audibility of the study (Chiovitti & Piran, 2003).

RESULTS

Research Documents Results

We begin by presenting the results of the content analysis which will further support the findings of face to face interviews. Table 3 presents the frequency for each category coded for the research documents.

Intercoder reliability for all the categories except research use/implication was found to be very strong which ranged from r=0.78 to r=0.85 whereas for research use/implication it was r=0.68. The analysis of coding categories in rank order indicates that most educational researchers undertook basic research; the highest numbers of implications were focussed on conceptual use, the method employed predominantly

Table 3
Frequency of coding category for research projects

Categories	Sub-categories	n
Type of research	Basic	39
	Applied	12
Research use/ implication	Instrumental	8
	Conceptual	19
	Symbolic	28
Methodology	Survey	22
	Experimental	5
	Action research	4
	Qualitative	17
	other	3
Samples	Students	35
	Teachers	17
	Administrators	0
	Others	4
Research dissemination	Published paper	38
	Seminar	17
	Module	4
	Training	5
	Other	0

Note: The number of research dissemination outlets exceeds the number of research projects since some research projects were disseminated in more than one way. Similarly, some studies had multiple implications.

were surveyed, with students as participants majorly. Finally, the dissemination mode was primarily publishing an empirical article followed by seminar presentations.

Interview Data Results

The interview data suggested three major drivers, researching for key performance indicators (KPI's), researching for citation and H-index, and researching for personal development as a researcher that shaped educational researchers' intentions to undertake educational research. However, each driver revealed separate subcategories which are presented in Table 4 with their frequency occurrence per participant and example of illustrative comments.

Researching for KPI and Ranking

Malaysia's quest to place its university in international ranking has reinforced competitive and categorical KPI's for the faculty members across public universities. According to which, at the end of the year, the faculty members are required to report details of all the academic activities for performance appraisal. Out of which, the most significant ones are the acquisition

Table 4
Classification of drivers of educational research

Drivers		Subcategories	f	Illustrative comments
Researching for KPI and ranking				
	Funding	Researching for policy agenda	14	"An impactful investigation is not feasible without sufficient funding" (E4).
				"Of course, our credibility rests in providing evidence for policy-related matters"(E9).
	Publication	No. of publications	8	" My research should help me produce a good number of articles each year to be published in indexed journals" (ER8)
		Publication mode	14	" Of course our first choice is publishing in journals that are reputable because that is appropriate for us" (ER14)
		Language & methodology	10	"For indexed journal publication, quality of write up cannot be compromised"(ER2)
Citation and H index		Dissemination source/audience	9	" a groundbreaking theory or major contribution can get me attention from the scholarly community " (ER13)
Researching for self-development as a researcher				
		Focus on specialisation	11	" I need to go vertical in my area of expertise to gain specialisation in my field" (E5)
		Self-development	8	" …of course, the investigations that will enhance my skills as a researcher will be my priority"(ER9).

of grants and the number of publications in indexed journals. These indicators are crucial since they shape faculty promotion-related decisions and as well as contribute to international ranking criterion (Wan et al., 2017).

Funding. The findings across all the participants, irrespective of the university type or seniority level of the researchers, suggested that the availability of funding, either at international, national, or university level, heavily influenced their research agenda and overlooked their personal interest. For example, E13 stated, "…I don't really have the liberty to pick and choose the issues that I would like to investigate because I need financial support to conduct my inquiry? Similarly, E10 suggested that "even we are not a research university; our grant-related KPI can be heavy. I am willing to generate data from other sources but there will be a complaint about no funding. We need to align our investigations that are supported at the national level". Further probing into how KPI related to grant has shaped their research priority, E14 described the state in the following way-

> *I must admit that years ago there was not much research culture. But since the KPI on the grant is linked to position and competition to try hard to get a research grant, I see this has made people interested. But the question is- are we doing research for the sake of fulfilling KPI or doing research for the sake of solving a real problem? For many, it is to fulfil the KPI and get a promotion. I think it is not genuine research in that sense. That is the negative thing about the new trend.*

Further probing suggested that the availability of grants was determined by the national agenda which mainly focused on policy-related matters. ER1 stated that "when you receive a large amount of money, your study must contribute at a larger level such as helping form new policies or recommendations for higher-level decisions". ER6 stated that "successful acquisition of grant means we do what they want, not the other way round. It difficult to serve all the stakeholders at one go, we expect through policy-related contribution we contribute to other stakeholders".

Furthermore, the researchers' also admitted that their expertise must be utilised for investigating policy-related matters and it is at the government's onus to drive practical guidelines to solve practical problems. ER10 stated that "Our contribution through education research is mainly to send the message, our recommendation to the government, then for several areas, it's their task to bring those recommendations to practical guidelines".

Here a distinct connection between qualitative findings and quantitative findings of content analysis is revealed. For example, the document analysis suggested that the basic research, which is mainly supported by national fundamental research grant scheme (FRGS), was reported as highest in number.

Additionally, the research implications of research documents also suggested that the educational researchers focused on informing policy or providing conceptual tools as their research output.

Publication. Similar to the funding acquisition requirement, publications in indexed journals are another most significant requirement for public universities to meet the international ranking requirements. Not only this, the quality and quantity of publications are central to the faculty's performance appraisal for promotion and tenure. Hence, generating quality publications out of the research was a key driver for the participants to undertake educational research. For example, ER3 said that "this is important to us, we are very concerned about high ranking in the world, if we did not contribute enough publications we will be affected and the university's initiative will be affected". Another one stated, "Publication of articles in quality journals is compulsory for academic excellence, we must ensure that we have enough rich data to help us fulfil our publication requirement" (ER4).

This was one reason that has a university place a higher emphasis on publication in journals than other forms of publication, ER5 described that-

> *Two years ago, I tried publishing my findings in a book form, but unfortunately, when you do this, you have to spend your own money. The university does not help you. So to publish one book, it took me more than 2 years. And by the time they publish a lot of things have changed.*

ER 13, shared the similar details, "publishing in journals not only have technical advantages but the incentive schemes are better than it is for other forms of publication, at the same time, journal article contributes more towards university ranking".

The participants also shared the acute necessity to use academic and technical language and robust methodology for successful publication "to be able to meet reputed journal requirements, our work cannot be disseminated in pointers; it has to written in technical and scientific language". ER1, explained that " if we wish to choose to publish in journals with high impact, it is important that not only the subject matter is communicated technically, but the methodology used to investigate the topic has to be in-depth and rigorous. ER 10 clarified this further "in the field of educational psychology, I can't rely on action research or qualitative interviews very often, I need to gather a large amount of survey data to get into journals with high impact factor".

Researching for Citation and H-index

The number of citations and H-index were among the performance indicators for university ranking methodology (for example, Times Higher Education, 2017). However, citation number and

H-index requirement have yet to become a standard for performance appraisal at public universities in Malaysia, yet, most participants, especially the junior faculty, expressed concern over this issue and cited this as one of the factors that shaped their research agenda. As ER12, "I try to take on projects that are novel and able to get attention from researchers in my area, maybe I can propose a framework or a theory that would become the basis of future studies and credited to me". ER 8 put it this way-

> *I need high citations so I can move up faster. I think most of the academics are like that. If you talk about young lecturers today, their concern is actually to get seniority in their profession. So I guess it's quite true. Some of us, including me, are writing just to get citations for promotion. We are not writing for the public, no, we aren't.*

This objective compelled the educational researchers to carefully target the audiences and publication outlets that would facilitate them in increasing their citation, thus H-index. ER2 stated that "I need to be strategic in making my work visible to those who would use and cite it". The similar idea is to share by ER11 as following-

> *...well I have been toying with this idea to write in the newspaper to reach the general audience and to make a practical impact but that would not increase my citation neither do I get any benefit in terms of incentive or KPI so I have to think carefully about myself too.*

It is important for the researchers to increase their visibility in their academic context as one explained, "For us to be considered influential, we need to establish ourselves and increase our credibility and visibility in the academic context in our community and then in the outer circle" (ER7).

Researching for Self-development and Expertise

Besides ranking and performance indicators, other drivers that shaped participants' research priorities were researchers undertaking research for self-development and seeking expertise in their area of specialisation. ER7 shared that "Investigation in my own area keeps me current, or it keeps me updated about the area of my specialisation, it lets me know what I need to do more to move forward". Participants stated several reasons for adhering to their area of specialisation such as-

> *I feel optimistic when I do research under my area of specialization because I feel that I am contributing to knowledge in the area of my specialization and it makes me a scholar and a good teacher. That knowledge supports my teaching in my classroom.* [ER14]

ER9 further added that "I get to work with like-minded individuals and this establishes long term friendship and collaboration. You need this intellectual spark and network to thrive in academics".

An intrinsic need to develop themselves as a competent researcher and scholar also powered their research. For example, E4 stated that "I need to do research to improve myself, to develop my skills and deepen my understanding and knowledge". E11 added further reasons for undertaking educational research, "…Firstly, I do it for self-development and satisfaction – I think doing research is fun – basically, I do this for my own mental health! Secondly, the educational research provides opportunities to reconsider different critical perspectives to view concerns in my classroom".

DISCUSSION

The discussion surrounding teachers' use of educational research and the gap between educational research and practice still remains unresolved (Cain, 2015; Cain & Allan, 2017). The current study employed principal-agent theory to assess if there exists a goal conflict and information asymmetry, especially on the part of an agent (educational researchers) towards filling the said gap. The data analysis was not informed by the theory, however, the theory facilitated the interpretation of the findings. The findings suggest a clear misalignment between the principal and the agent which may have prompted the agent to operate in self-interest or in another direction. The findings indicate the current incentive system (financial and recognition), is directed towards the goals such as tenure, promotion, and university ranking aspiration and is not appropriate towards addressing the said gap thus limiting educational researchers' ability in becoming directly useful to the schools as community and teachers as stakeholders.

As the findings indicate that the incentives provided by the principal are directed towards those actions that may not be appropriate towards addressing the gap, prohibiting the educational researchers in conducting researches for the direct consumption of teachers. The current incentive system (financial and recognition), appraisal criteria for tenure and promotion, and university ranking aspiration are directed towards the goal other than being directly useful to the schools as community and teachers as stakeholders.

The results suggest that the participants, irrespective of their seniority or university type, shared similar intentions towards undertaking educational research. The three main drivers that shaped their research undertaking were researching for their own KPI (promotion, tenure, and appraisal) and university ranking, researching for citation and H-index, and researching for personal development as a researcher. The efforts towards achieving these criteria limit educational researchers' willingness and capabilities to directly connect with the teachers to establish a meaningful dialogue and advance their teaching practices. The educational research instead, as Cain and Allan (2017) described it "discovers

problems with practice, persuades influential stakeholders of the nature and importance of these problems, helps to create conceptual and practical tools for addressing these problems, and occasionally, evaluates the extent to which the problems have been addressed". For instance, in the current study, the major driver to undertake research was to acquire grants that primarily focus on issues that can contribute to higher-level decision making and policy-related issues. It is unlikely that teachers will have access or interest to read those policy agendas. Additionally, the implementation of those findings becomes the prerogative of individuals in power positions. The knowledge mobilisation of research to the classroom becomes dependent on the aid of intermediaries (Carlile, 2004). Therefore, the stakeholders driving the research agenda are mainly the top officials, not the schools or teachers. To this Cain and Allan (2017) stated that, "Impact reaches practice, therefore, at the level of decision making but without informing teacher thinking or organisational learning".

Another major driver to undertake research was to conform to the publication requirement in reputed journals. In this case, the effort was directed towards the standards established by the journals to sustain scientific credibility and depth of inquiry such as the use of appropriate academic terminology, robust research methodology, and concepts and findings that are grounded in theory or scientific principles. As suggested by the content analysis results, this was the reason for several participants to undertake large-scale quantitative investigation and ignoring emphasis on classroom-based investigations. While undoubtedly those practices may well contribute towards scientific convention, but practical uses of those studies remain elusive for teachers as it requires specialist skills from teachers to decode and understand the technicalities of an empirical article (Dagenais et al., 2012). Furthermore, the methodology used by the researchers is also questioned by teachers for contextual, practical and accessibility issues (Gore & Gitlin, 2004).

Among the other drivers, it was noticed that the research direction is also determined by citation agenda, especially for the junior researchers who have a long way ahead to their academic success. In this case, the research of the participants was targeted towards the scholarly and scientific community, not teachers. The research is primarily conducted to carve a niche within the scholarly community and for the scholars as intended users who would boost the citation index. This objective further contributes to the production of studies that are in-depth and complex and has the potential to inspire change or originate new theory to facilitate citation. As McIntyre (2005) calls research generated knowledge is, "generalised, propositional knowledge; abstract, and theoretical; evaluated for its clarity, coherence, and validity; it is narrowly focused and generated by rigorous and rational thinking". Thus, drifting teachers further apart from using education research since as the evidence suggests that

teachers are likely to use only those findings that match their context and personal (Hemsley-Brown & Sharp, 2003; Nutley et al., 2003).

Finally, self-development and focus on expertise was another driver that determined participants' research direction. This approach was regulated both by intrinsic and extrinsic motives. For example, becoming an expert would earn them authority in subject matters that will satisfy self-esteem needs as well as acquired expertise will enrich their teaching experiences. This indicated that participants strived to flourish as researchers primarily and to establish academic credibility as their central objective before they began 'advocacy for an outer circle like teachers' (ER 3).

According to principal-agent theory, it appears that higher education institutes' (principal) expectations from the researchers (agent) are multifaceted that have caused information asymmetry and goal conflict. The key drivers revealed through the findings explain to us the reasons that limit educational researchers' ability to contribute explicitly. We understand that primarily the agents (educational researchers) were appointed to produce a body of knowledge that would be practically relevant to raise the standards of teaching and overall education by directly involving themselves with schools and teachers. However, on the contrary, the educational researchers' efforts are now directed towards generating, theory, or novel ideas or policy-related decisions, or to be noticed by other scientific community for impactful publications and citations. In summary, only teachers and educational researchers cannot be held accountable for the persisting gap between the research and practice, this change is subjected to centralised transformation through policies at the national level for higher education. Furthermore, it should also be noted that not all institutes of higher education are operating on the performance agenda. Teacher-training institutes and teaching-focused universities might be contributing in different ways.

Knowledge Implications

The role of educational researchers and the drivers that shape their research needs to be taken into account in bridging the research-practice gap, or else, merely pushing teachers towards addressing this issue will leave it a lopsided effort. The findings suggest that educational researchers are primarily concerned with contributing to decision making, policy, resources, and theory building as a result of the incentives that are directed towards these preferences. The knowledge transfer remains contingent on the intermediaries Furthermore; the investigations are primarily deliberated towards influencing reviewers or scholars, teachers as direct consumers are overlooked.

To mobilise the knowledge transfer and have research-informed educational practices, phenomenal efforts have been made at the international level by providing open access policy for research paper and easy access for seminars and conferences for teachers (Levin, 2013). However, no matter how well-meant these efforts are, they may

not render desirable results if the research output is not principally directed towards teaching practices.

All in all, as much as teachers are encouraged to use evidence for their teaching practices, educational researchers should as well target their efforts in the direction of teachers. The role of high education is central to this initiative by directing appropriate incentives. Since the responsibilities of academicians are multifaceted, academia must ensure an equitable incentive structure, so that the academicians' attention can be brought to bridge this gap.

Practical Implications

Sincere efforts to close this gap, it is important for higher education institutes, especially in Malaysia, to calibrate the policies concerning incentive plan to direct educational researchers' efforts towards producing studies that have instrumental value and have the potential to contribute towards teaching practice directly without having to depend on mediators. For example, allocating grants which exclusively focuses on innovating educational intervention that have practical implications for teachers. A similar effort is seen in the UK whereby £135 million over a 10-year period was awarded to What Works Network www.gov.uk/whatworks-network) for educational interventions (Cain, 2015).

Along with the incentive to undertake teacher practice focused inquiry, educational researchers must formally familiarise themselves with the understanding of how teachers would use research generated knowledge for what researchers produce and what teachers need are 'sharply contrasting kinds of knowledge' (McIntyre, 2005). Investigations that focus on the production of pedagogical knowledge which is "practical, specific and personal, with a broad focus (Cain, 2015), must be encouraged and duly acknowledged by the higher education institutes. This initiative can be further strengthened by providing opportunities for teachers to partner with educational researchers in undertaking teaching and learning inquires through school and university partnerships. These collaborations will facilitate teachers in interpreting the outcomes in relation to their own experiences. This way teachers' role in educational research will be more active and meaningful.

Another significant way to promote education researchers for educational practice is to establish a mechanism that facilitates research impact beyond academia for schools and teaching practices. Similar to the citation H-index, the practical impact should contribute to researchers' appraisal. One such example is the Research Excellence Framework (Martin, 2011) established in the UK which aims to gauge the research impact of studies conducted in the UK (Kelly, 2016). Despite its criticism (Sivertsen, 2017), the component that promotes accountability among the educational researchers for research impact for the benefit of public investment is of great significance in the Malaysian context. Furthermore, through appropriate

incentives, educational researchers should be hold accountable for disseminating the research findings in a teacher-friendly way and those outlets must carry the same repute as publishing in indexed journals does.

Limitations and Future Recommendations

Despite insightful findings, we believe that by employing a more diverse selection of participants would have enriched the outcomes of this study. For example, the current study recruited participants only from research and comprehensive universities. Additionally, for generalisability and validity purposes, such investigations in the future can incorporate larger data from other relevant sources.

ACKNOWLEDGEMENT

We would like to acknowledge the support of Research and Innovation Management Centre (RIMC). Universiti Utara Malaysia and Universitas Muhammadiyah Prof. Dr. Hamka, Indonesia for this matching Grant (SO code-13950).

REFERENCES

Anwaruddin, S. M. (2015). Teachers' engagement with educational research: Toward a conceptual framework for locally-based interpretive communities. *Education Policy Analysis Archives*, *23*(40), 1-25. https://doi.org/10.14507/epaa.v23.1776

Awang-Hashim, R., Kaur, A., & Valdez, P. N. (2019). Strategizing inclusivity in teaching diverse learners in higher education. *Malaysian Journal of Learning and Instruction*, *16*(1), 105-128.

Bartels, N. (2003). How teachers and researchers read academic articles. *Teaching and Teacher Education*, *19*(7), 737-753.

Berends, M. (2006). Survey methods in educational research. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (p. 623-640). New Jersey, USA: Lawrence Erlbaum Associates Publishers.

Bickel, W. E., & Hattrup, R. A. (1995). Teachers and researchers in collaboration: Reflections on the process. *American Educational Research Journal*, *32*(1), 35-62.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Brown, C. (2015). *Evidence-informed policy and practice in education: A sociological grounding*. London, England: Bloomsbury Publishing.

Brown, C. (2017). *Achieving evidence informed policy and practice in education: Evidenced*. Bingley, England: Emerald Publishing Limited.

Brown, C., Daly, A., & Liou, Y.-H. (2016). Improving trust, improving schools: Findings from a social network analysis of 43 primary schools in England. *Journal of Professional Capital and Community*, *1*(1), 69-91.

Brown, C., & Zhang, D. (2016). Is engaging in evidence-informed practice in education rational? What accounts for discrepancies in teachers' attitudes towards evidence use and actual instances of evidence use in schools? *British Educational Research Journal*, *42*(5), 780-801.

Cain, T. (2015). Teachers' engagement with research texts: Beyond instrumental, conceptual or strategic use. *Journal of Education for Teaching*, *41*(5), 478-492.

Cain, T. (2017). Denial, opposition, rejection or dissent: Why do teachers contest research

evidence? *Research Papers in Education*, *32*(5), 611-625.

Cain, T., & Allan, D. (2017). The invisible impact of educational research. *Oxford Review of Education*, *43*(6), 718-732.

Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, *15*(5), 555-568.

Cartwright, N. (2013). Knowing what we are talking about: Why evidence doesn't always travel. *Evidence & Policy: A Journal of Research, Debate and Practice*, *9*(1), 97-112.

Chapman, D. W., & Chien, C.-L. (2014). Graduate Education in Malaysia and Thailand. In D. W. Chapman & C.-L. Chien (Eds.), *Higher education in East and South Asia: Expand out, expanding up* (pp. 33-44). Montreal, Canada: UNESCO Institute for Statistics.

Chiovitti, R. F., & Piran, N. (2003). Rigour and grounded theory research. *Journal of Advanced Nursing*, *44*(4), 427-435.

Clarivate. (2017). *Recognizing the Malaysian research stars.* Retrieved October 18, 2017, from https://clarivate.com/blog/recognizing-malaysian-research-stars-2017/

Coffelt, T. A., Baker, M. J., & Corey, R. C. (2016). Business communication practices from employers' perspectives. *Business and Professional Communication Quarterly*, *79*(3), 300-316.

Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five tradition. Thousand Oaks, USA: Sage.

Creswell, J. W. (2007). Five qualitative approaches to inquiry. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*, *2*, 53-80.

Dagenais, C., Lysenko, L., Abrami, P. C., Bernard, R. M., Ramde, J., & Janosz, M. (2012). Use of research-based information by school practitioners and determinants of use: A review of empirical research. *Evidence & Policy: A Journal of Research, Debate and Practice*, *8*(3), 285-309.

Denzin, N. K., & Lincoln, Y. S. (2003). Introduction: The discipline and practice of qualitative research. In *Handbook of qualitative research* (pp. 1-28). Thousand Oaks, USA: Sage Publications.

Diezmann, C. M. (2005). Growing scholarly teachers and educational researchers: A curriculum for a Research Pathway in pre-service teacher education. *Asia-Pacific Journal of Teacher Education*, *33*(2), 18-193.

Ekız, D. (2006). Primary school teachers' attitudes towards educational research. *Educational Sciences: Theory & Practice*, *6*(2), 373-402.

Elsevier. (2018). *Research excellence and beyond.* Retrieved October 18, 2017, from https://www.elsevier.com/research-intelligence/campaigns/malaysia-research-excellence-and-beyond

Goldacre, B. (2013). *Building evidence into education.* Retrieved March 27, 2020, from http://media.education.gov.uk/assets/files/pdf/b/ben goldacre paper.pdf

Gore, J. M., & Gitlin, A. D. (2004). [Re]Visioning the academic–teacher divide: Power and knowledge in the educational community. *Teachers and Teaching*, *10*(1), 35-58.

Hargreaves, D. (2007). Teaching as a research-based profession: Possibilities and prospects (The Teacher Training Agency Lecture 1996). *Educational Research and Evidence-Based Practice*, 3-17.

Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A systematic review of the literature. *Oxford Review of Education*, *29*(4), 449-471.

Hoogveld, A. W. M., Paas, F., & Jochems, W. M. G. (2005). Training higher education teachers for instructional design of competency-based education: Product-oriented versus process-oriented worked examples. *Teaching and Teacher Education*, *21*(3), 287-297.

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277-1288.

Ion, G., & Iucu, R. (2014). Professionals' perceptions about the use of research in educational practice. *European Journal of Higher Education*, *4*(4), 334-347.

Kelly, A. (2016). Funding in English Universities and its relationship to the Research Excellence Framework. *British Educational Research Journal*, *42*(4), 665-681.

Lane J. E., & Kivisto, J. A. (2008) Interests, information, and incentives in higher education: Principal-agent theory and its potential applications to the study of higher education governance. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 23). Dordrecht, Netherland: Springer.

Levin, B. (2013). To know is not enough: Research knowledge and its use. *Review of Education*, *1*(1), 2-31.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). Thousand Oaks, USA: Sage Publications.

Martin, B. R. (2011). The Research Excellence Framework and the "impact agenda": Are we creating a Frankenstein monster? *Research Evaluation*, *20*(3), 247-254.

McDonough, J., & McDonough, S. (2014). *Research methods for English language teachers*. New York, USA: Routledge.

McIntyre, D. (2005). Bridging the gap between research and practice. *Cambridge Journal of Education*, *35*(3), 357-382.

Ministry of Education Malaysia. (2015). *Blueprint 2015-2025 (Higher Education).* Putrajaya: Author.

Ministry of Higher Education. (2018). *Research grants information.* Retrieved October 18, 2017, from http://www.mohe.gov.my/en/initiatives-2/187-program-utama/penyelidikan/548-research-grants-information.

Mortimore, P. (2000). Does educational research matter? *British Educational Research Journal*, *26*(1), 5-24.

Moss, G. (2013). Research, policy and knowledge flows in education: What counts in knowledge mobilisation? *Contemporary Social Science*, *8*(3), 237-248.

Nutley, S., Walter, I., & Davies, H. T. O. (2003). From knowing to doing: A framework for understanding the evidence-into-practice agenda. *Evaluation*, *9*(2), 125-148.

Olivero, F., John, P., & Sutherland, R. (2004). Seeing is believing: Using videopapers to transform teachers' professional knowledge and practice. *Cambridge Journal of Education*, *34*(2), 179-191.

Saldana, J. (2011). *Fundamentals of qualitative research*. New York, USA: Oxford University Press.

Shkedi, A. (1998). Teachers' attitudes towards research: A challenge for qualitative researchers. *International Journal of Qualitative Studies in Education*, *11*(4), 559-577.

Simons, H. (2009). *Case study research in practice*. London, England: SAGE publications.

Sirat, M., & Azman, N. (2014). Malaysia's National Higher Education Research Institute (IPPTN): Narrowing the research-policy gap in a dynamic higher education system. *Studies in Higher Education*, *39*(8), 1451-1462.

Sivertsen, G. (2017). Unique, but still best practice? The Research Excellence Framework (REF)

from an international perspective. *Palgrave Communication, 3,* 17078. http://dx.doi.org/10.1057/palcomms.2017.78

Smith, C. A. (2002). Supporting teacher and school development: Learning and teaching policies, shared living theories and teacher-researcher partnerships. *Teacher Development*, *6*(2), 157-179.

Sohail, M. S., & Daud, S. (2009). Knowledge sharing in higher education institutions: Perspectives from Malaysia. *Vine*, *39*(2), 125-142.

The World Bank. (2018). *Research and development expenditure (% of GDP).* Retrieved April 3, 2020, from https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?end=2015&start=2014

Taber, K. S. (2002). 'Intense, but its all worth it in the end': The colearner's experience of the research process. *British Educational Research Journal*, *28*(3), 435-457.

Times Higher Education. (2017). *World university rankings 2018 methodology.* Retrieved October 18, 2017, from https://www.timeshighereducation.com/world-university-rankings/methodology-world-university-rankings-2018

Wan, C. D., Chapman, D., Hutcheson, S., Lee, M., Austin, A., & Md. Zain, A. N. (2017). Changing higher education practice in Malaysia: The conundrum of incentives. *Studies in Higher Education*, *42*(11), 2134-2152.

Waterman, R. W., & Meier, K. J. (1998). Principal-agent models: An expansion? *Journal of Public Administration Research and Theory*, *8*(2), 173-202.

Weiss, C. H. (1979). The many meanings of research utilization. *Public Administration Review*, *39*(5), 426-431.

Williamson, O. E. (1985). *The economic institutions of capitalism: Firms, markets, relational Contracting*. New York, USA: Free Press.

Winch, C., Oancea, A., & Orchard, J. (2015). The contribution of educational research to teachers' professional learning: Philosophical understandings. *Oxford Review of Education*, *41*(2), 202-216.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, USA: Sage Publications.

Zajano, N. C., & Edelsberg, C. M. (1993). Living and writing the researcher-researched relationship. *Internation Journal of Qualitative Studies in Education*, *6*(2), 143-157.

APPENDIX

Interview Protocol

Educational researchers in Malaysia – Who they conduct their research for?

Note to the interviewer- Introduce yourself and seek participants' general introduction. Establish a rapport with the interviewee before beginning the investigation.

Script prior to interview for the interviewer-

I would like to thank you for taking the time out and participating in this study. In this investigation, we are primarily interested in exploring the factors that drive educational researchers' research agenda. In that connection, I will ask you a set of open-ended questions. There are no right and wrong answers, please answer honestly. You can choose to speak English or BM.

The interview will last around 1 to 1.5 hours. Please, feel free to ask if you have any questions. Your responses will be kept confidential.

1. May I know about your institution and its research focus?
2. Can you elaborate on your area of research?
3. What inspires you to undertake education research?
4. How do you determine your research topics?
5. How often do you realign your research area? And what factors influence you to do so?
6. Can you talk about a few types of educational researches that you have undertaken and what was the motivation behind each project?
7. What are the main objectives/intentions behind involving yourself in educational research?

Closing remarks for the interviewees

Once again, thank you for participating in the study. Should you have any questions, feel free to contact us.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1105 - 1123 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Mathematics Pre-service Teachers' Learning Experiences of International Teaching Practicum in Indonesia

Chew Cheng Meng[1]*, Wun Thiam Yew[1], Nahlia Rakhmawati[2] and Puput Suriyah[3]

[1]School of Educational Studies, Universiti Sains Malaysia, Penang, 11800, Malaysia
[2]Mathematics Education Department, STKIP PGRI Jombang, Jombang, 61418, Indonesia
[3]Mathematics Education Department, IKIP PGRI Bojonegoro, Bojonegoro, 62114, Indonesia

ABSTRACT

This study aimed to examine the pre-service teachers' (PSTs) learning experiences of international teaching practicum (ITP) in Indonesia. The researchers employed a case study research design and the participants comprised three female PSTs majoring in Mathematics from a Malaysian public university who undertook the ITP in a public junior high school in Indonesia for eight weeks. The data were collected from the PSTs' reflective journals and face-to-face interviews which were analysed using the Interpretative Phenomenological Analysis. The findings revealed four major themes of their learning experiences of ITP, namely mathematics lesson planning, mathematics teaching and learning, guidance from mentor teacher and contributions to the school. The study indicates that ITP could be an alternative platform for PSTs to gain positive learning experiences and prepare them for the challenging teaching environment in the times of globalization.

Keywords: Indonesia, international teaching practicum, mathematics, pre-service teachers

ARTICLE INFO

Article history:
Received: 09 May 2019
Accepted: 26 February 2020
Published: 26 June 2020

E-mail addresses:
cmchew@usm.my (Chew Cheng Meng)
tywun@usm.my (Wun Thiam Yew)
rakhmanahlia.stkipjb@gmail.com (Nahlia Rakhmawati)
puput.suriyah@ikippgribojonegoro.ac.id (Puput Suriyah)
* Corresponding author

INTRODUCTION

Teaching practice or teaching practicum, as argued by Barton et al. (2015), is an extremely important phase for PSTs where they get to apply and practise all the content knowledge, pedagogical knowledge, and didactical knowledge that they have learned in their teacher education programmes in the actual school context. Although teaching practicum varies in intent and approach, it has always been integral to

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

teacher education programmes at tertiary educational institutions (Vick, 2006) because it provides opportunities for PSTs to integrate theory and practice in the real school environment (Allen & Wright, 2014). In addition, teaching practicum represents the time during which PSTs are ideally provided with the opportunities to grow professionally and personally in a transition process from a student to a teacher, culminating in the development of their self-image as a teacher with their own professional identity (Sutherland et al., 2010).

Conventionally, PSTs undertake their teaching practicum in schools that are located in their home country. Nevertheless, in view of preparing PSTs to face the challenges of the 21st century and the push for globalization (Kabilan, 2013; Kabilan et al., 2017; Larsen, 2016; Mwebi & Bringham, 2009) as well as borderless education (Middlehurst, 2006), several tertiary educational institutions are beginning to initiate an ITP with tertiary educational institutions from other countries to provide opportunities for their PSTs to experience cross-cultural teaching and learning in foreign schools (Cushner & Mahon, 2002; Kabilan et al., 2017). As a result, a number of ITP projects has been initiated in several countries around the world (Velliaris & Coleman-George, 2016), such as in Turkey (Sahin, 2008), Hong Kong (Lee, 2009), Malaysia (Kabilan, 2013; Kabilan et al., 2017), Philippines (Anar et al., 2017), Korea (Kim & Choi, 2018), Australia (Jin et al., 2019) and China (Zhu et al., 2019).

Sahin (2008) investigated Turkish PSTs' learning experiences during a two-month ITP in the United States of America using questionnaires and reflective journals. The findings revealed that the ITP strengthened the PSTs' beliefs about their educational system. As a result, they became more optimistic and positive about their educational system which helped them to develop professionally and personally. Lee's (2009) study involved Hong Kong PSTs who participated in a six-week language immersion programme in Auckland, New Zealand. The study found that the PSTs had a deep understanding of various pedagogical skills, a greater sense of independence and confidence, and gained a higher level of appreciating cultural differences. Kim and Choi (2018) investigated the perceptions and experiences of Korean social studies PSTs who participated in an ITP in the United States of America. Although the PSTs faced difficulties in speaking a foreign language and adjusting to a different culture, they also gained confidence and self-efficacy by negotiating and actively participating in the teaching and learning process. It also helped them to understand multiculturalism and the different perspectives of the teachers' roles, teaching pedagogies, and local education systems. Using a case study design, Jin et al. (2019) investigated how the PSTs from Australia and China perceived the benefits and challenges associated with their ITP in Anshan, China. Although the findings revealed that the ITP was a mutually beneficial and valuable experience for all participants, there were challenges

and tensions in terms of the meeting of Australian and Chinese educational systems because of their very different social and cultural contexts.

Apart from the ITP studies that focused on foreign language, Anar et al. (2017) explored the learning experiences of Filipino PSTs in the Science, Technology, Engineering and Mathematics Program in Thailand through interviews and focus group discussions. The findings revealed five major themes of the PSTs' learning experiences: pedagogical learning, personal and professional learning, social and multicultural learning, technological learning, and travel exposures.

Zhu et al. (2019) reviewed the current research on ITPs associated with teachers' professional development and they found that: (a) most of the studies were conducted in English-speaking countries (e.g., Cushner, 2007; Cushner & Mahon, 2002) in which the researchers typically examined how the English native speaking PSTs developed their educational beliefs, knowledge, and professional identities; (b) the main aims of the studies were varied such as to improve language proficiency (e.g., Nguyen, 2017), promote heightened intercultural awareness (e.g., Lang et al., 2017), experience various educational philosophies (e.g., Trent, 2011), shape new perceptions on self-identities (e.g., Malewski & Phillion, 2009) and facilitate the development of teachers' affective domain (e.g., Lee, 2009); (c) the studies adopted different theoretical frameworks such as cross-cultural psychology (e.g., Deardorff, 2006), consonance, critical dissonance, and collaborative consonance (e.g., Roger et al., 2009), professional identity reconciliation (e.g., Fox, 2017) and transformative learning theory (e.g., Trilokekar & Kukar, 2011); and (d) the studies used different methods of data collection such as semi-structured interviews (e.g., Spooner-Lane et al., 2009), narrative inquiry (e.g., Craig et al., 2017), reflective journal writing (e.g., Craig et al., 2015), and pre- and post-questionnaires (e.g., Willard-Holt, 2001) to examine the multiple influence of ITP on PSTs' professional development.

In Malaysia, Kabilan (2013) investigated six PSTs' experience of professional development during their ITP in the Maldives for six weeks. The participants comprised four female and two male PSTs specialising in Teaching English to Speakers of Other languages (TESOL). The data were collected from an open-ended questionnaire, reflective journals and face-to-face interviews and were analyzed using the Interpretative Phenomenological Analysis (IPA). The study found that the PSTs experienced beneficial and meaningful professional development in terms of gaining confidence in speaking and using the English language to communicate, enhancing their skills and confidence level in teaching, developing useful interpersonal skills, and garnering the understanding and the ability to adapt to new working cultures and the different approaches to teaching and learning that are used in the Maldivian school. In a subsequent study, Kabilan et al. (2017) examined two PSTs' experience of

professional development during their ITP in Bangladesh for six weeks. The participants comprised two female PSTs specialising in TESOL. The data were collected from the PST's observations, reflective journals and face-to-face interviews and were analyzed using IPA. The findings indicated that the PSTs had enhanced specific and related teaching skills, gained confidence in teaching and using the English language, developed useful interpersonal skills, and experienced and internalized new perspectives on education and culture.

In general, previous research has shown that the ITP studies are on the rise due to the increase of collaborations and networking initiated by the tertiary educational institutions globally (Azizah, 2016) which enabled PSTs to experience the diversity of culture in a foreign setting and facilitated them to gain invaluable insights of the host country, its educational system as well as the people and surrounding communities (Dunn et al., 2014; Grierson & Denton, 2013; Kabilan, 2013; Kabilan et al., 2017). Despite the growing interest and importance of PSTs' cross-cultural experiences, to date there is no documented research on the ITP learning experiences of Malaysian mathematics PSTs. Hence, the present study attempted to fill the gap by examining Malaysian mathematics PSTs' learning experiences of ITP in Indonesia. It is hoped that the findings of this study will contribute to developing a body of research and scholarship on ITPs from Malaysian contexts that have, to date, been largely underexplored.

METHOD

The participants comprised 3 Malay female PSTs, aged 23 years old and majoring in Mathematics who had completed seven weeks of local teaching practicum in Malaysia. They were in their final year of the four-year Bachelor of Science with Education programme in a Malaysian public university and they volunteered for the ITP in Indonesia. After the teaching practicum, the three PSTs went for their ITP in Indonesia for eight weeks. During the ITP, they taught mathematics in junior high school (Grade 8) classes. Each class had seven Mathematics periods per week and each period consisted of 30 minutes. Besides teaching mathematics, they were also involved in extra-curricular activities such as club activities and sports. The participants were also assigned a mentor teacher who guided, advised and facilitated their learning and adjustment to teaching in the school. The mentor teachers also supervised and monitored the participants' lessons through observations. Apart from the mentor teachers, a mathematics education lecturer from the Indonesian university and a mathematics education lecturer from the Malaysian university was assigned to supervise and observe the participants' lesson at least once during the ITP. The Malaysian university lecturer held a discussion and meeting with the participants and the mentor teachers at the end of the visitation to acquire detailed information on the participants' overall performance and learning experiences throughout the ITP.

Methods of Data Collection and Analysis

The data were collected through reflective journals (RJs) that were written by the participants on a daily basis about their learning experiences of ITP in Indonesia and an interview session with the participants that focused on their learning experiences of ITP in Indonesia. For the purposes of identification and data analysis, the first participant is referred to as A while the second and third participants are referred to as B and C, respectively. The RJs of A, B, and C were labelled as RJA, RJB, and RJC, respectively. For the interview, the responses of A, B, and C were labelled as IA, IB, and IC, respectively.

Prior to the ITP, the participants were given a briefing on how to write their RJs. They were encouraged to make as many entries as possible on their learning experiences of ITP in Indonesia. After the ITP, an individual interview session was carried out with each of the participants in the Malaysian university. Each interview session took approximately one hour and the participants were asked to respond to their learning experiences during the ITP in Indonesia with further explanations and examples. The interviews helped to provide a sufficient amount of information in supporting the data from the participants' RJs. The data from the RJs and interviews were analysed using IPA to ensure the accuracy, reliability and trustworthiness of the information obtained from both the sources of data of the study (Kabilan et al., 2017).

According to Pietkiewicz and Smith (2014), IPA draws upon the fundamental principles of phenomenology, hermeneutics and idiography to investigate how individuals make sense of their experiences through in-depth analysis of single cases and examining individual perspectives of study participants in their unique contexts. IPA comprises three main stages of analysis: (1) multiple reading and making notes; (2) transforming notes into emergent themes; and (3) seeking relationships and clustering themes. The initial stage involved a close reading of the participants' RJs and interview transcripts several times and making notes. The next stage involved transforming the notes into emergent themes. The final stage involved seeking relationships between emergent themes, grouping them according to conceptual similarities and providing each cluster with a descriptive label. An example of the analysis for the Mathematics Lesson Planning theme is shown in Appendix 1.

FINDINGS

Based on IPA, four major themes of the mathematics PSTs' learning experiences of ITP in Indonesia emerged: mathematics lesson planning, mathematics teaching, and learning, guidance from mentor teacher and contributions to the school.

Mathematics Lesson Planning

A wrote in her reflective journal that the learning objectives of the lesson plans in the Indonesian school were quite similar to those in the Malaysian school because the two syllabi were quite similar. But in the

interview, she clarified that the two syllabi differed in terms of the topic arrangement. B and C, noted that the Indonesian learning objectives were more focused on the noble values (Core Competencies) as compared to the Malaysian learning objectives and they were being emphasized throughout the teaching process. B explained in the interview that there were four types of Core Competencies:

> *The objectives used in the lesson plans in Indonesia are not much different from Malaysia because the syllabus used is almost the same, only the topic arrangement is different (RJA). For example, the topic of Function in Mathematics in Indonesia is the fourth topic but in Malaysia it is the first topic (IA). The objectives are more on noble values which are applied throughout the process of teaching which is labelled as Core Competencies (RJB). They are divided into 4 types; K1, K2, K3 and K4. K1 relates to religion, K2 relates to noble values concerning self which is applied through group work, while K3 relates to students' own attitudes and efforts about knowledge, and lastly K4 relates to students' ability to apply in school and out-of-school learning (IB). Appreciate the teachings of religion, honesty, discipline, responsibility, caring, tolerance, and mutual cooperation. Be polite, and confident in interacting effectively with the social and natural environment (RJC).*

Both A and B wrote that the steps and activities of the lesson plans in the Indonesian school were still teacher-centred and the teachers were still less exposed to the 21st-century learning environment as compared to the Malaysian school. A explained that the teachers mainly teach mathematics in the classroom based on the textbooks provided by the school. In addition, C noted that the steps and activities comprised five parts and she provided an example for each of the parts - observation, asking questions, gathering information, reasoning, and communication:

> *The steps and activities used in the classroom in Indonesia are still 'teacher-centred' which focused only on teachers. Teachers are still less exposed to the 21st Century Learning used in Malaysia (RJA). In the classroom, teachers mainly teach based on the textbooks given by the school (IA). The steps and activities used in the classroom in Indonesia are still more teacher-centered (RJB). In the lesson plans, the steps and activities are divided into five parts: 1. Observation - students observe the picture of the net of a cylinder shown on the LCD. Students write down their observations. 2. Asking questions - students are encouraged to ask questions based on their observations. E.g., What is the formula of the surface area of the cylinder? 3. Gathering information - students discuss the formula of the surface area of the cylinder and write down their discussion in the worksheet. 4. Reasoning – students deduce the formula of the surface area of the cylinder. 5. Communication – students*

present the results of group discussion and reasoning (RJC).

Both A and B mentioned that Mathematics textbooks and exercise books were common sources of teaching aids for Indonesian teachers. Additionally, the teachers also prepared worksheets for students to work on in the classroom. B also highlighted that the Mathematics Laboratory was also used by the teachers and C gave examples of ICT being the other source of teaching aids in the interview:

Teaching aids used mostly are Mathematics textbooks and exercise books. Teachers also prepare student worksheets that have questions for students to do in the classroom (RJA). Teaching aids used are Mathematics textbooks and exercise books. Teachers also create their own questions for use in the classroom labeled as student worksheets. Another source of teaching aids is the Mathematics lab (RJB). The teaching aids are Mathematics textbooks, exercise books, computers, laptops, and Internet (IC).

Mathematics Teaching and Learning

A explained that the induction set used by the Indonesian teachers focused on the religious aspects and the importance of learning a mathematical topic by relating it with everyday life so that students could understand what they were learning. B added that the set induction comprised six steps but C gave a different and more detailed example of the induction set used by the teachers which also comprised six steps as evidenced in the excerpts:

Teachers begin their lesson with a focus on aspects of religion and also the importance of learning the topic. Teachers also relate the topic to be learned with everyday life so students are more clear about what they are learning (RJA). The induction set consists of 6 steps: 1. Students respond to teacher's greeting; 2. The students pray before the study (increase religious values); 3. The teacher checks student attendance; 4. The teacher reviews the previous topic and relates to today's topic; 5. The teacher introduces the learning outcomes that should be achieved at the end of the lesson; 6. The teacher motivates students by relating the topic to everyday life (RJB). Example of set induction which consists of 6 steps: 1. The teacher greets the students and asks one of the students to lead the singing of the Indonesia Raya song by standing up. Then they were invited to sit down and pray. Next, the teacher checks the attendance and ask about students' health; 2. The teacher asks students to take out their books, tools and materials to take part in fun learning; 3. The teacher revises the previous lesson; 4. Students listen to the teacher's explanation about the benefits of learning the surface area of the cylinder in everyday life; 5. Students write down the teacher's explanation of the learning activities that will be carried out by forming groups of 4-5

students; 6. Students write down the teacher's explanation of the assessment techniques that will be used in the lesson (RJC).

B noted that time management is particularly emphasized where teachers had to efficiently adhere to the allocation of time for the teaching and learning activities so that students could learn effectively. C and A elaborated that time management was very effective because the students could understand the lesson well and thus students could practise more questions:

Time management is particularly emphasized in an Indonesian school, where teachers have to adhere to time during teaching. When the bell rings the teacher should immediately enter the class and continue the teaching and learning session and have to wait until the bell rings then the teacher is allowed to leave the class. The time division for the activities is reasonable with the efficient use of time (RJB). Time management is very effective because students can understand the topics learned and save time for the teacher (IC). The activities provided also correspond to the time given by the teacher. The students usually get the questions given quickly, so the teacher can give the students more questions as practice (IA).

Both B and A mentioned that the teachers delivered lessons in a clear and organized manner that were integrated with effective teaching and learning activities according to the syllabus stipulated in the 2013 Mathematics Curriculum. Interestingly, C explained that the teachers delivered the lessons using the 5M technique:

Teachers deliver the lesson in a clear and organized way with teaching and learning activities that focus on the learning topics (RJB). The contents of the lesson are also clearly presented by the teachers according to the syllabus that was set out in the 2013 Curriculum (RJA). The teaching of the contents of the lesson is by using the 5M Technique: Mengamati (Observing), Menanya (Asking), Mengumpulkan maklumat (Collecting Information), Menalar (Reasoning) and Mengkomunikasikan (Communicating) (IC).

A wrote that the teaching techniques used were more teacher-centred that was the teachers only taught in front of the class while the students listened and took notes of important contents. After the teaching, students were provided with a worksheet to assess their understanding of the lesson. For B, the selection and effective implementation of traditional teaching techniques were aligned with the lesson objectives. Notably, C highlighted that cooperative learning based on the constructivist theory was sometimes used by the teachers to facilitate students' learning and solved problems together:

Techniques used are more teacher-centered. The teachers only teach in front and students listen and record important contents. Once the contents

of the lesson are completed, students are provided with a worksheet to test their understanding of the topic (RJA). The selection and application of the technique are in line with the objectives of the lesson and the effective implementation of traditional techniques (IB). Sometimes, teachers use cooperative learning based on constructivism to allow students to work together in the form of groups to solve problems. In the constructivist approach the teacher is only as a mentor and facilitator in learning activities (IC).

All the participants highlighted that the teachers used existing educational resources such as textbooks and exercise books efficiently to enhance their teaching and students' learning. They also provided questions from reference and exercise books for the students to practise:

Teachers use existing educational resources such as textbooks and exercise books. Teachers also provide questions from reference books and exercise books for practice (RJA). Teachers use educational resources efficiently which can strengthen the contents of the lesson (RJB). Teachers use educational resources as much as possible to ensure that students can master the topics (RJC).

In terms of classroom climate, both A and B wrote that it was less conducive for learning when the teaching process was teacher-centered with one-way communication between the teacher and students. Nevertheless, C suggested that the classroom climate could be improved during the teaching and learning process by questioning students or asking students to give their opinions:

The classroom climate is less active when the teacher uses teacher-centered approach because only one-way communication occurs during class (RJA). The classroom climate is not so active because the teacher did not use the student-centered learning approach as a whole (RJB). The classroom climate can be improved by involving students during the teaching process by asking questions or asking students to give their opinions (IC).

A explained that the teachers assessed their students' understanding of each topic by giving them a test at the end of the topic. They also gave exercises to the students for them to practise at the end of each topic. As a result the students were proficient in mathematics because they had done a lot of exercises that further enhanced their understanding of the topic. Additionally, B mentioned that the students were required to answer questions in front of the classroom or to do the exercises given in the exercise books and then followed by whole-class discussion. C noted that the teachers usually held quizzes at the end of the lesson to assess students' understanding of the lesson:

Teachers assess students by giving a test after each topic ends. This is to test students' understanding of the topic. Teachers also give exercises after the

teaching of the topic. So students are proficient in mathematics because they have done a lot of exercises that reinforce their understanding of the topic (RJA). Students are required to answer questions in front of the classroom or to answer the exercises given in the exercise books and discussions are made afterward (IB). Teachers usually give quizzes at the end of the lesson to test students' understanding of the topic (RJC).

A highlighted that the teachers could easily manage their classes because the students were very well-disciplined, very well-mannered and very respectful of teachers. B further explained that the students paid full attention to the lesson without interrupting the teacher's teaching. C emphasised that the teachers were very much concerned with classroom management and thus the classroom management was very organized so that it was conducive for students to learn:

Teachers here can easily manage classes because their students have high discipline. They also have good manners and very respect their teachers (RJA). Pupils focus completely without any interruption given to teachers during teaching (RJB). Very organized class management and teachers are very much concerned with class management so students can learn in a very comfortable and calm situation (RJC).

Lastly, A mentioned that at the end of the lesson the teachers usually explained the importance of the topic taught and the students were also guided to summarize what they had learned about the topic. B noted that the teachers wrote several important things at the closure in their lesson plan and implemented them during classroom teaching and learning, such as guiding students to summarize the lesson, informing students about the next topic, and ending the lesson with greetings and prayers. C specifically explained that at closure she guided the students to summarize the lesson on the topic of the surface area of the cylinder, conducted a quiz to assess the students' understanding of the lesson, informed the students about the next lesson on the volume of a cylinder, and gave homework to the students to reinforce their understanding of the lesson:

Teachers usually at the end of teaching tell the importance of the topic so that the students are more clear about the topic. Students are also guided to summarize the lesson (RJA). There are some important things that should be written in the lesson plan and implemented in the class: Teachers help students summarize the lesson, Teachers tell about the next learning topic, and Teachers end the learning with greetings and prayers (RJB).

The teacher helps students to summarize the contents of the lesson that is about the surface area of the cylinder. Next, the teacher gives a quiz to test students' knowledge of the topic. Then, the teacher tells students about the upcoming topic is about the volume of the cylinder and the teacher gives homework (RJC).

Guidance from Mentor Teacher

Both A and B described that their mentor teacher was very helpful both inside and outside of the school. For example, the mentor teacher provided guidance on how to write the lesson plans, what teaching techniques to use, and how to select questioning techniques that were appropriate to the students' ability in the Indonesian classroom. The mentor teacher also kept in touch with them outside the school. According to C, her mentor teacher was a very committed teacher and her students liked her very much. As depicted in one of her reflective journals she learnt a lot from her mentor teacher in terms of how to write the daily lesson plans, how to communicate with students, how to manage and teach mathematics in the classroom, and how to ask questions that were suitable for the students' level of achievement. She also helped her to understand the Indonesian mathematics syllabus and mathematical terms, school timetable and semester system:

> *The mentor teacher is very helpful in various matters whether in school or outside of school. She gives guidance on how to write lesson plans in Indonesia and the teaching techniques used here. She also keeps in touch with us outside the school (RJA). The Mentor teacher is very helpful in a lot of affairs in and out of school. She guides me to write lesson plans in Indonesia, and use suitable teaching and questioning techniques according to the level of students (RJB). I learned a lot with the mentor teacher as she is very committed and very much liked by her students. She helps me to write daily lesson plans in Indonesian, helped me in communication with Indonesian students, helped me in mathematical teaching while in the classroom, helped me in asking questions that are well suited to the level of student achievement, and helped me in organizing the class. She also helps me understand the mathematics syllabus, mathematics terms, school timetable and semester system (RJC).*

Contributions to the School

The three participants elaborated that they had contributed to the school by organizing a community engagement project called the Race Challenge which involved two schools namely SMP Negeri 5 and SMA Negeri 9 as well as students and lecturers of the Indonesian university. This project provided new opportunities for the students to explore and learn more about mathematics and science outside the classroom. Since the project was new and exciting to the students, the school planned to have it again next year:

> *We contributed to the school by having a community engagement project called Race Challenge. This project involves two schools, our own SMP Negeri 5 and SMA Negeri 9, students from UNIKAMA and USM trainee teachers (RJA). My contribution is we organized a community project of Race Challenge which involves students and lecturers of UNIKAMA and students of two schools in Indonesia. For them in Indonesia,*

such a project is very exciting and new and they will be having such a project again next year (RJB). Our contribution to the school is we have organized a community engagement project called Race Challenge which involves students of our school and students from another school in Malang and students and lecturers of UNIKAMA. This outdoor project is new and very interesting so the school will organise it again next year (RJC).

DISCUSSION

The findings of this study generally concur with Sahin's (2008) findings that the PSTs expanded their knowledge of a new culture and adapted to a new working environment through cross-cultural exchanges with their mentor teachers along with other students as a result of the learning experiences during the ITP. It also strengthened the PSTs' beliefs about their educational system and became more optimistic and positive about their educational system. In addition, it helped the PSTs develop professionally and personally. The findings of this study are also in agreement with Lee's (2009) findings that the PSTs had gained a higher level of appreciating cultural differences, a greater sense of independence and confidence, and a deep understanding of various pedagogical skills. The findings of this study also support the findings of Anar et al. (2017) that revealed five major themes of the PSTs' learning experiences: travel exposures, pedagogical learning, social and multicultural learning, personal and professional learning, and technological learning. More importantly, the findings of this study provide another perspective of PSTs' learning experiences during their ITP in a foreign country which generally supports the meaningful and beneficial professional development experiences as reported by Kabilan (2013) and Kabilan et al. (2017).

However, the findings of this study seem to disagree with the findings of some studies in the literature. For example, Mahan and Stachowski (1990) found that the US teachers placed in the United Kingdom were not well prepared in many aspects, and thus did not perform well enough during the ITP. Sahin's (2008) findings revealed how Turkish student teachers faced organizational problems whereby they shouldered many responsibilities, and their mentor teachers lacked commitment and did not have a clear expectation of the entire ITP programme. Pence and Macgillivray's (2008) study reported unnecessary parental pressure at school, and PSTs' negative perceptions of the curriculum of the host school. Willard-Holt (2001) found that PSTs' excess enthusiasm and idealism might lead to a negative understanding of local culture. Malewski and Phillion (2009) reported that the culture of the host community and the worldviews of the pre-service teachers might influence and pressure each other negatively.

CONCLUSION

ITP is often seen as a means to broaden the world views and enhance the personal and professional development of future teachers (Kabilan et al., 2017). ITP in different countries will offer different kinds of learning experiences and challenges, where teachers and learners will get to learn from and about each other (Walters et al., 2009) and facilitates PSTs to learn new things and gain new experiences (Kabilan, 2013). Even though there are a growing interest and benefits of PSTs' learning experiences of ITP in another country, to date there is no documented research on the ITP learning experiences of Malaysian mathematics PSTs. Therefore, the findings of this study contribute to developing a body of research and scholarship on ITPs from Malaysian contexts that have yet to be explored fully. The findings of this study will also enrich the literature on ITPs and assist tertiary educational institutions in planning a successful and meaningful ITP for their PSTs. More importantly, the findings of this study provide insights to administrators, lecturers and mentor teachers to increase the opportunities of PSTs to be exposed to a multicultural classroom and become globally competent. This will provide avenues to forge stronger collaboration and partnerships with stakeholders in the country and abroad.

ACKNOWLEDGEMENT

This study is made possible with funding from the School of Educational Studies, Universiti Sains Malaysia. The authors would like to thank all the mathematics pre-service teachers who voluntarily participated in this study.

REFERENCES

Allen, J. M., & Wright, S. E. (2014). Integrating theory and practice in the pre-service teacher education practicum. *Teachers and Teaching*, *20*(2), 136-151. https://doi.org/10.1080/13540602.2013.848568

Anar, L. E., Peterson, R. J., & Villanca, A. A. (2017). The learning experiences of Filipino pre-service teachers in the Science, Technology, Engineering and Mathematics (STEM) program of a Thai elementary school. *Asia Pacific Journal of Social and Behavioral Sciences,* 27-44.

Azizah, N. (2016). International teaching practicum. *Prosiding ICTTE FKIP UNS, 1*(1) 706-709.

Barton, G. M., Hartwig, K. A., & Cain, M. (2015). International students' experience of practicum in teacher education: An exploration through internationalisation and professional socialisation. *Australian Journal of Teacher Education, 40*(8), 149-163. http://dx.doi.org/10.14221/ajte.2015v40n8.9

Craig, C. J., Zou, Y., & Poimbeauf, R. (2015). Journal writing as a way to know culture: Insights from a travel study abroad program. *Teachers and Teaching, 21*(4), 472-489.

Craig, C. J., Zou, Y., & Curtis, G. (2017). The developing knowledge and identity of an Asian-American teacher: The influence of a China study abroad experience. *Learning, Culture and Social Interaction*, *17*, 1-20.

Cushner, K. (2007). The role of experience in the making of internationally-minded teachers. *Teacher Education Quarterly, 34*(1), 27-39.

Cushner, K., & Mahon, J. (2002). Overseas student teaching: Affecting personal, professional, and global competencies in an age of globalization.

Journal of Studies in International Education, 6, 44-58.

Deardorff, K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education, 10*(3), 241-266.

Dunn, A., Dotson, E., Cross, S., Kesner, J., & Lundahl, B. (2014). Reconsidering the local after a transformative global experience: A comparison of two study abroad programs for preservice teachers. *Action in Teacher Education*, *36*(4), 283-304.

Fox, M. (2017). The international field placement: A reconciliation of identity. *Social Work Education, 36*(5), 495-507.

Grierson, A., & Denton, R. (2013). Preparing Canadian teachers for diversity: The impact of an international practicum in rural Kenya. What is Canadian about teacher education in Canada? In L. Thomas (Ed.), *Multiple perspectives on Canadian teacher education in the twenty-first century* (pp. 187-210). Toronto, Canada: Canadian Association for Teacher Educators.

Jin, A., Parr, G., & Cooley, D. (2020). An Australian international teaching practicum in China: Exploring multiple perspectives. *The Australian Educational Researcher, 47*(2), 263-281. https://doi.org/10.1007/s13384-019-00343-1

Kabilan, M. K. (2013). A phenomenological study of an international teaching practicum: Pre-service teachers' experiences of professional development. *Teaching and Teacher Education, 36*, 198-209.

Kabilan, M. K., Hussin, H., Zul-Qarna, N., Abdullah, A. C., Osman, S., Ismail, H. N., ... & Zinnah, M. A. (2017). International teaching practicum in Bangladesh: An investigation of TESOL pre-service teachers' professional development experiences. *Malaysian Journal of Learning and Instruction, Special issue on Graduate Students Research on Education*, 117-140.

Kim, Y., & Choi, M. (2018) Out of the book and into the classroom: The experiences of Korean social studies pre-service teachers in an international teaching practicum in the United States. *Asia-Pacific Journal of Teacher Education*. doi:10.1080/1359866X.2018.1444142

Lang, C., Cacciattolo, M., & Kidman, G. (2017). The global education practicum: Perspectives from accompanying academics. *Asia-Pacific Journal of Teacher Education, 45*(2), 145-161.

Larsen, M. A. (2016). Globalisation and internationalisation of teacher education: A comparative case study of Canada and Greater China. *Teaching Education*, *27*(4), 396-409.

Lee, J. (2009). ESL student teachers' perceptions of a short-term overseas immersion programme. *Teaching and Teacher Education, 25*(8), 1095-1104.

Mahan, J., & Stachowski, L. (1990). New Horizons: Student teaching abroad to enrich understanding of diversity. *Action in Teacher Education, XII*(3), 13-21.

Malewski, E., & Phillion, J. (2009). International field experiences: The impact of class, gender and race on the perceptions and experiences of preservice teachers. *Teaching and Teacher Education, 25*(1), 52-60.

Middlehurst, R. (2006). A world of borderless higher education: Impact and implications. *In* S. d'Antoni (Ed.), *The virtual university: Models and messages-lessons from case studies (*pp. 71-88). Paris, France: UNESCO.

Mwebi, B. M., & Brigham, S. M. (2009). Preparing North American preservice teachers for global perspectives: An international teaching practicum experience in Africa. *Alberta Journal of Educational Research*, *55*(3), 414-427.

Nguyen, H. (2017). Negotiating contradictions in developing teacher identity during the EAL practicum in Australia. *Asia-Pacific Journal of Teacher Education, 45*(4), 399-415.

Pence, H., & Macgillivray, I. (2008). The impact of an international field experience on preservice teachers. *Teaching and Teacher Education, 24*, 14-25.

Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology. *Psychological Journal, 20*(1), 7-14.

Roger, B., Quinn, S., & Morton, M. L. (2009). Consonance and dissonance in a study abroad program as a catalyst for professional development of pre-service teachers. *Teaching and Teacher Education, 25*(3), 525–532.

Sahin, M. (2008). Cross-cultural experience in preservice teacher education. *Teaching and Teacher Education, 24*(7), 1777-1790.

Spooner-Lane, R., Tangen, D., & Campbell, M. (2009). The complexities of supporting Asian international preservice teachers as they undertake practicum. *Asia-Pacific Journal of Teacher Education, 37*(1), 79-94.

Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education*, *26*(3), 455-465.

Trent, J. (2011). Learning, teaching, and constructing identities: ESL pre-service teacher experiences during a short-term international experience programme. *Asia Pacific Journal of Education, 31*(2), 177-194. doi:10.1080/02188791.2011.566997

Trilokekar, D., & Kukar, P. (2011). Disorienting experiences during study abroad: Reflections of pre-service teacher candidates. *Teaching and Teacher Education, 27*(7), 1141-1150.

Velliaris, D., & Coleman-George, D. (2016). *Handbook of research on study abroad programs and outbound mobility*. Hershey, USA: IGI Global.

Vick, M. (2006). It's a difficult matter: Historical perspectives on the enduring problem of the practicum in teacher preparation. *Asia-Pacific Journal of Teacher Education*, *34*(2), 181-198.

Walters, L. M., Garii, B., & Walters, T. (2009). Learning globally, teaching locally: Incorporating international exchange and intercultural learning into pre-service teacher training. *Intercultural Education, 20*(sup1), S151-S158.

Willard-Holt, C. (2001). The impact of a short-term international experience for preservice teachers. *Teaching and Teacher Education, 17*(4), 505-517.

Zhu, G., Peng, Z., Wandix-White, D., Walters, L., & Deng, L. (2019). *A systematic literature review on international teaching practicums: Current status and future directions.* Paper presented at the American Educational Research Association Annual Meeting, Toronto, Canada.

APPENDIX 1

IPA based on Pietkiewicz and Smith (2014): An Example for Mathematics Lesson Planning

Theme

Multiple reading and making notes

PST	Reflective Journal and Interview Transcript	Notes
A	RJ*: The objectives used in the lesson plans in Indonesia are not much different from Malaysia because the syllabus used is almost the same, only the topic arrangement is different.*	Identify the similarities and differences of the lesson objectives written in the lesson plans of Indonesia and Malaysia.
	Interviewer: Can you explain further what you have written in your reflective journal? A: *For example, the topic of Function in Mathematics in Indonesia is the fourth topic but in Malaysia it is the first topic.*	Explain the difference in the arrangement of topics between Indonesia and Malaysia syllabi.
	RJ*: The steps and activities used in the classroom in Indonesia are still 'teacher-centred' which focused only on teachers. Teachers are still less exposed to the 21st Century Learning used in Malaysia.*	Compare the teaching steps and activities written in the lesson plans between Indonesia and Malaysia.
	Interviewer: Can you explain further what you have written in your reflective journal? A: *In the classroom, teachers mainly teach based on the textbooks given by the school.*	Explain the meaning of teacher-centred approach in the Indonesian school.
	RJ*: Teaching aids used mostly are Mathematics textbooks and exercise books. Teachers also prepare student worksheets that have questions for students to do in the classroom.*	Identify the teaching aids usually written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain further what you have written in your reflective journal? A: *Mathematics textbooks, exercise books and student worksheets.*	Repeat the teaching aids usually written in the lesson plans of the Indonesian school.
B	RJ*: The objectives are more on noble values which are applied throughout the process of teaching which is labelled as Core Competencies.*	Identify the lesson objectives written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain further what you have written in your reflective journal? B: *They are divided into 4 types; K1, K2, K3 and K4. K1 relates to religion, K2 relates to noble values concerning self which is applied through group work, while K3 relates to students' own attitudes and efforts about knowledge, and lastly K4 relates to students' ability to apply in school and out-of-school learning.*	Explain the Core Competencies written in the lesson plans of the Indonesian school.
	RJ*: The steps and activities used in the classroom in Indonesia are still more teacher-centered.*	Identify the teaching steps and activities written in the lesson plans of the Indonesian school.

	Interviewer: Can you explain further what you have written in your reflective journal? B: *The steps and activities are more teacher-centered.*	Repeat the teacher-centred teaching steps and activities written in the lesson plans of the Indonesian school.
	RJ*: Teaching aids used are Mathematics textbooks and exercise books. Teachers also create their own questions for use in the classroom labeled as student worksheets. Other source of teaching aids is the Mathematics lab.*	Identify the teaching aids usually written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain further what you have written in your reflective journal? B: *Teaching aids used are Mathematics textbooks, exercise books, student worksheets and the Mathematics lab.*	Repeat the teaching aids usually written in the lesson plans of the Indonesian school.
C	RJ*: Appreciate the teachings of the religion, honesty, discipline, responsibility, caring, tolerance, and mutual cooperation. Be polite, and confident in interacting effectively with the social and natural environment.*	Explain the lesson objectives written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain further what you have written in your reflective journal? C: *Same as in my journal.*	Referring to the same explanation in the reflective journal.
	RJ*: In the lesson plans, the steps and activities are divided into five parts: 1. Observation - students observe the picture of the net of a cylinder shown on the LCD. Students write down their observation. 2. Asking questions - students are encouraged to ask questions based on their observations. For e.g., What is the formula of the surface area of the cylinder? 3. Gathering information - students discuss about the formula of the surface area of the cylinder and write down their discussion in the worksheet. 4. Reasoning – students deduce the formula of the surface area of the cylinder. 5. Communication – students present the results of group discussion and reasoning.*	Explain the teaching steps and activities written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain further what you have written in your reflective journal? C: *Same as in my journal.*	Referring to the same explanation in the reflective journal.
	RJ*: -*	Did not identify the teaching aids written in the lesson plans of the Indonesian school.
	Interviewer: Can you explain why you did not write in your reflective journal? C: *The teaching aids are Mathematics textbooks, exercise books, computer, laptop, and Internet.*	Explain the teaching aids usually written in the lesson plans of the Indonesian school.

1. Transforming notes into emergent themes

PST	Notes	Emergent themes
A	RJ: Identify the similarities and differences of the lesson objectives written in the lesson plans of Indonesia and Malaysia. I: Explain the difference in the arrangement of topics between Indonesia and Malaysia syllabi.	Understand and write the learning objectives of the Indonesian school lesson plans.
	RJ: Compare the teaching steps and activities written in the lesson plans between Indonesia and Malaysia. I: Explain the meaning of teacher-centred approach in the Indonesian school.	Understand and write the steps and activities of the Indonesian school lesson plans.
	RJ: Identify the teaching aids usually written in the lesson plans of the Indonesian school. I: Repeat the teaching aids usually written in the lesson plans of the Indonesian school.	Understand and write the teaching aids of the Indonesian school lesson plans.
B	RJ: Identify the lesson objectives written in the lesson plans of the Indonesian school. I: Explain the Core Competencies written in the lesson plans of the Indonesian school.	Understand and write the learning objectives of the Indonesian school lesson plans.
	RJ: Identify the teaching steps and activities written in the lesson plans of the Indonesian school. I: Repeat the teacher-centred teaching steps and activities written in the lesson plans of the Indonesian school.	Understand and write the steps and activities of the Indonesian school lesson plans.
	RJ: Identify the teaching aids usually written in the lesson plans of the Indonesian school. I: Repeat the teaching aids usually written in the lesson plans of the Indonesian school.	Understand and write the teaching aids of the Indonesian school lesson plans.
C	RJ: Explain the lesson objectives written in the lesson plans of the Indonesian school. I: Referring to the same explanation in the reflective journal.	Understand and write the learning objectives of the Indonesian school lesson plans.
	RJ: Explain the teaching steps and activities written in the lesson plans of the Indonesian school. I: Referring to the same explanation in the reflective journal.	Understand and write the steps and activities of the Indonesian school lesson plans.
	RJ: Did not identify the teaching aids written in the lesson plans of the Indonesian school. I: Explain the teaching aids usually written in the lesson plans of the Indonesian school.	Understand and write the teaching aids of the Indonesian school lesson plans.

2. Seeking relationships and clustering themes

PST	Emergent themes	Clustered theme
A	Understand and write the learning objectives of the Indonesian school lesson plans. Understand and write the steps and activities of the Indonesian school lesson plans. Understand and write the teaching aids of the Indonesian school lesson plans.	Mathematics lesson planning
B	Understand and write the learning objectives of the Indonesian school lesson plans. Understand and write the steps and activities of the Indonesian school lesson plans. Understand and write the teaching aids of the Indonesian school lesson plans.	Mathematics lesson planning
C	Understand and write the learning objectives of the Indonesian school lesson plans. Understand and write the steps and activities of the Indonesian school lesson plans. Understand and write the teaching aids of the Indonesian school lesson plans.	Mathematics lesson planning

Pertanika J. Soc. Sci. & Hum. 28 (2): 1125 - 1141 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Developing Intercultural Communicative Competence through Telecollaborative Modules Integrated in Foreign Language and Intercultural Communication University Courses

Agnes Loch* and Agnes Pal

Institute of Foreign Languages and Communication, Budapest Business School, University of Applied Sciences, Budapest 1054, Hungary

ABSTRACT

In the framework of the Intercultural Communicative Competence - a Competitive Advantage for Global Employability project 14 modules targeting the development of students' intercultural communicative competence were developed by international teams of educators, piloted and implemented in 13 higher educational institutions across Europe, involving 66 educators and more than 800 students, who were the direct beneficiaries of the project. The impact of the project is felt by stakeholders, researchers, decision makers, and potential global employers, who have the benefit of a better trained and skilled workforce who can meet the demands of international business. The dissemination of the project results included a collection of 30 case studies on the implementation of the modules, providing valuable feedback by the participating educators. In addition to giving an overview of the project, the paper presents a pilot study of implementing a module including telecollaborative exchanges into teaching intercultural communication for business students. Findings from the pilot study show how (tele)collaboration provided students an opportunity to work in international teams, how it contributed to foreign language skills development and how it increased intercultural awareness and sensitivity.

Keywords: ICCAGE project, intercultural competence, intercultural communication, telecollaboration

ARTICLE INFO

Article history:
Received: 25 October 2018
Accepted: 26 February 2020
Published: 26 June 2020

E-mail addresses:
kovatsneloch.agnes@uni-bge.hu (Agnes Loch)
pal.agnes@uni-bge.hu (Agnes Pal)
*Corresponding author

INTRODUCTION

Culture and Intercultural Communication

The development of extensive and intensive international relations in economy, politics and cultural life casts light on the importance

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

of cultural differences in communication and behaviour, which may significantly influence success and failure in any kind of cooperation and collaboration between partners of different cultural backgrounds. The demand to clarify which cultural differences may lead to a breakdown in communication and how it is possible to overcome these difficulties first appeared in the world of business, where communicational failure can directly result in measurable financial losses. Therefore, it was international companies that first initiated and financed research in this area decades ago (Hofstede, 1997). They aimed to explore the nature of culture, identify the characteristics or dimensions of cultures that distinguished them, find reasons for the differences and help business communities overcome the difficulties that might occur when doing business abroad. Many definitions were created to explain what culture was (Hidasi, 2005; Hofstede, 1997; Trompenaars & Hampden-Turner, 2007). The most famous one is Hofstede's (1997), who said culture was the software of the mind based on a value system which was typical for a particular group of people, and as such it directed thinking, behaving, decision-making and judging.

The term intercultural communication was first used by Hall (1973) referring to communication between partners who did not belong to the same national, ethnic, or religious group. Actors of business still seem to use the term in this meaning (Loch, 2017). They agree with the essentialist view of culture (Hofstede, 1997; Hofstede et al., 2010), which claims that group characteristics dominate thinking, behaviour, and communication. However, due to globalization and multiculturalism, the interpretation of the term intercultural communication has been broadened lately. In multicultural societies, several cultures and hybrid cultures exist in parallel where there might be no typical behaviour any more (Dah, 2014; Kramsch, 2008), which has led to a new approach to interculturality. According to the new non-essentialist approach (Holliday et al., 2004; Verdooren, 2014), the individual as an actor and a constructor of his/her own culture in the actual context has a much larger role in cultural reactions than the group they belong to. Thus, now the term intercultural communication refers more aptly to the interaction between individuals who do not necessarily represent any particular national, ethnic, or religious group culture. The non-essentialist approach of intercultural communication is reflected in the definition of global competence, as proposed by the Organisation for Economic Cooperation and Development (OECD),

"Global competence is the capacity to examine local, global and intercultural issues, to understand and appreciate the perspectives and world views of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development." (Organisation for Economic Cooperation and Development [OECD], 2018).

Both the essentialist and non-essentialist views of culture define intercultural competence as the complexity of skills and attitudes that enable an individual to suspend one's own beliefs about cultures (both own and other) in order to establish and maintain human relationships cross-culturally and to communicate and cooperate efficiently to accomplish tasks successfully (Dooly, 2006).

The ICCAGE Project

Education has the responsibility to prepare the future generation for successfully handling the challenges in their lives. In today's heterogeneous societies and economically globalized world, developing students' intercultural competence is an important and relevant objective at all levels of education. Recognizing this important development led to an international university project called Intercultural Communicative Competence – A Competitive Advantage in Global Employability (ICCAGE) between 2015 and 2017. In the framework of the project, 14 teaching and learning modules targeting the development of students' intercultural communicative competence were developed by international teams of educators from the Czech Republic (Technical University of Prague), Portugal (Polytechnic Institute of Castelo Branco), Spain (University of Leon), and Hungary (Budapest Business School). The modules were piloted and implemented in 13 institutions of higher education (HE) across Europe; involving 66 educators and more than 800 students, who were the direct beneficiaries of the project.

In the project, open educational resources (modules) were compiled in English and Spanish (both regarded as lingua franca). As for the content of the modules, broad professional areas were defined such as business, management, and tourism. Foreign language courses, languages for specific purposes courses, and intercultural communication (IC) courses were identified as relevant subjects for implementing the new modules into the curricula. In order to provide an intercultural learning environment, the modules were designed to include telecollaborative exchanges which students can accomplish in cooperation with other student groups in partner institutions abroad by using information technology (IT) tools for communication. "Telecollaboration, or 'online intercultural exchange' refers to the application of online communication tools to bring together classes of language learners in geographically distant locations to develop their foreign language skills and intercultural competence through collaborative tasks and project work" (O'Dowd, 2015). On the basis of O'Dowd and Ware's (2009) task type categories, each unit includes three telecollaborative exchanges: and Information Exchange task, a Comparison and Analysis task, and a Collaborative Product task. The Information Exchange task serves the purposes of breaking the ice and getting to know each other. The Comparison and Analysis task requires the participants to collect information and data from their partners, analyse and compare them with

data from their home culture, interpret similarities and differences and summarize their findings in a presentation or a report. The Collaborative Product task requires learners to work together to produce something together, which includes a strong element of interdependence (Müller-Hartmann & O'Dowd, 2017; O'Dowd & Lewis, 2016).

Intercultural Skills

The most intricate decision was to define the skills targeted for development. In the project, a Council of Europe's (2016) publication on the competences for democratic cultures and the results of a survey carried out in the scope of the project with HE educators and employers (Morgado et al., 2016) were considered to make a well-informed decision about the skills to be developed. The conceptual model of the Council of Europe consists of four categories: values, attitude, knowledge, and skills that need to be acquired by learners if they are to participate effectively and live peacefully together with others in culturally diverse societies (Council of Europe, 2016).

In the framework of the ICCAGE project, a survey was conducted to base the material development on real needs. In the countries participating, 28 interviews were conducted with employers, and 72 with educators in higher education. In the Hungarian survey (Loch, 2017), employers agreed that the most important skills and attitude elements that might guarantee success in an inter- or multicultural environment included foreign language communication skills, ability and willingness to study, adaptability, openness and friendliness, tolerance and tact, ethical thinking and assertive behaviour. Many of the factors identified by the respondents clearly corresponded to items in the competence model of the Council of Europe (Table 1).

Table 1

Employers' success factors and the model of the Council of Europe (2016)

Council of Europe categories	Content of categories in the model	Employers' views on keys to success
Values	Valuing: human dignity and human rights, cultural diversity, democracy, justice, fairness, equality and the rule of law	Ethical thinking
Attitudes	Openness to cultural otherness and to other beliefs, world views, and practices, respect, civic-mindedness, responsibility, self-efficacy, tolerance of ambiguity	Openness and friendliness, friendliness, tolerance and tact

Table 1 *(Contineud)*

Council of Europe categories	Content of categories in the model	Employers' views on keys to success
Skills	Autonomous learning skills, analytical and critical thinking skills, skills of listening and observing, empathy, flexibility, and adaptability, linguistic, communicative and plurilingual skills, co-operation skills, conflict-resolution skills	Foreign language communication skills, ability and willingness to study, adaptability
Knowledge and critical understanding	Knowledge and critical understanding: of the self, of language and communication, and of the world: politics, law, human rights, cultures, religions, history, media, economies, environment	Assertive behaviour, foreign language knowledge

The educators in the survey usually elaborated on the questions more extensively. The skills they listed could be categorized as general skills, work-related skills, mobility skills, and skills related to personal growth (Table 2). Educators and employers were also asked about what content they recommended including in an IC course, which served as a basis for material development in the project.

Table 2

Categories of skills according to educators (based on Loch, 2017)

Categories	Examples for categories
General skills	Acceptance, ability to study, empathy, tolerance, creativity
Work-related skills	Business communication, competitiveness, teamwork skills
Mobility skills	Openness, curiosity, adaptability, cooperativeness
Skills of personal growth	Self-reflection, revising knowledge and experience

The modules consist of a series of activities and tasks to be done either individually or in small groups autonomously, partly in class time and partly outside the classroom. The activities all have the potential to develop several skills and subskills, but each module has a few well-definable skills or attitudinal elements to focus on (Table 3).

Table 3

Targeted skills in the modules of the ICCAGE-project

Theme of module	Knowledge acquired	Skills/attitude targeted in particular	Skills to be developed in all modules
Moving abroad	facts about other cultures, acculturation process	adaptation, tolerance and tact, acceptance of otherness	foreign language skills (listening, speaking, reading), communication skills (such as informing, asking, agreeing, disagreeing, persuading, declining, turn-taking), active listening, autonomous learning skills, critical thinking, discipline and punctuality in work, IT skills, organizational skills, responsiveness and self-reflection, teamwork skills
Living with global and local identity	knowledge about partner countries	awareness of identity, curiosity, respect	
Working in multinational teams	team roles, event organisation	cooperation skills, negotiating, making compromises	
Mediating between cultures	cultural diversity, organising a meeting	ability to think ethically, handling conflicts	
Working with international customers	products of home and destination countries, marketing issues	business communication skills	
Dealing with time and space	time concepts, Hall's concept of context	willingness to learn, awareness of diversity	
Using English as Lingua Franca	marketing and advertising	problem solving, customer-friendly attitude	
Communicating and collaborating online	the use of IT tools, e-communication	assertiveness, active listening, IT-skills	
Launching a business abroad	launching a business, market research, marketing policy	data collection and interpretation skills, responsibility	
Planning an international holiday package	information about touring and attractions in destination countries	openness and friendliness, empathy, creativity	

The aim of developing and compiling innovative teaching material was to enhance students' intercultural awareness and communicative competence. The module activities were also expected to result in more knowledge about culture, a change in attitude towards the diversity of cultures and a growing sense of responsibility. Therefore, it was important to explore whether the implementation of a module in an existing course did or did not contribute to improvements in these areas. The study was intended to answer the following research questions:

- What kind of knowledge do the participants accumulate (if any) during the activities?
- Do the participants experience any shift in their attitude towards other cultures due to the course?
- How does collaboration work in different teaching contexts?
- How do the activities contribute to participants' communication skills?

To measure and assess the development of competences is a great challenge in education, and it is even more so in the case of intercultural communicative competence. Some items of efficient communication might be relatively easy to measure (e.g. the use of certain linguistic forms in negotiation), whilst others, and especially changes in attitude are very difficult to objectively track and assess, especially in the scope of a one-semester university course. However, feedback from teachers and learners may provide valuable information about changes in motivation, foreign language development and the success or failure of teamwork in the teaching/learning process.

In order to explore the benefits and pitfalls of collaborative exchanges in competence development, a pilot study was conducted using an English module developed in the framework of the ICCAGE project. The study describes and summarizes the experience accumulated when implementing the relevant parts of the module titled 'Dealing with Time'. The module was piloted in three different contexts: (1) with three international groups of students without partners from abroad, (2) with an international group with partners from Norway, and (3) with a linguistically homogeneous group with partners from Portugal. The module was added to Business English and Intercultural communication courses.

MATERIALS AND METHODS

The Teaching Material

Dealing with time is a relevant topic both in Business English and IC courses. In previous years courses included lectures on time concepts, Hall's theory on different time approaches and how they influence and modify information processing in communication (Hall, 1973). In this case, the topic of dealing with time in different cultures was taught and learnt through a series of activities provided in the module. The module includes six activities, each consisting of 3-5 tasks. The first activities contain reading and discussion tasks on the different approaches to time, and on how this

may influence communication styles. The second part contains three telecollaborative exchanges (the last of which – due to time constraints – was not used in any of the courses) which are the following:

- Information Exchange: An interview between students of the home institution and the partner institution abroad to get acquainted with each other.
- Comparison and Analysis: Preparing a short video film on how people organize their lives in terms of time in one's country; exchanging the videos between countries; comparing and analysing information and reporting the results back to their own class.
- Collaborative Product: Preparing a joint calendar of the two partner countries including the descriptions of holidays and special events in the next year.

Regarding the topic, Exchange 2 (Comparison and Analysis) was the core exchange. The tasks in the exchange activities had to be slightly modified in all the courses because of the different contexts. In the case of the first course, the groups had no partner groups from any universities abroad. However, thanks to the cultural diversity of the students in the groups, it was possible to implement most of the activities. In the case of the second course, the groups in Hungary and Norway were of very different sizes (25 vs. 7 students), which made it necessary to change the scope. In the third course, besides differences in group size, the very different scheduling of the academic year led to changes.

Participants

The participants were students of business, marketing or tourism at a university of applied sciences in Budapest, Hungary (Table 4), both Hungarians, and non-Hungarians who studied at the university either as full-time students or on a one-semester scholarship.

Table 4

The participants in the pilot study

	Course 1 (3 groups)	Course 2 (1 group)	Course 3 (1 group)
Number of students	105	25	16
Hungarian	58	18	16
Non-Hungarian	47 (from 11 countries)	7 (from 5 countries)	-
Non-Hungarians' country of origin	Azerbaijan, Belgium, the Netherlands, Finland, France, Germany, Laos, Tunisia, Nigeria, Vietnam, China		-

Table 4 *(Continued)*

	Course 1 (3 groups)	Course 2 (1 group)	Course 3 (1 group)
Partner country	-	Norway	Portugal
Number of students in the partner country		7	24
Number of videos prepared in Hungary	29	5	4
Topics of videos	Student life, Working life, Holidays, Leisure time activities, Forms of nonverbal communication		
Methods of data collection	Teacher's diary, Case description, Students' feedback	Teacher's course evaluation, Students' feedback	Teacher's evaluation, Group interview with students

Note: Ethnic or national background may differ from citizenship.

Data Collection

The method of collecting data about the experiment included a teacher's diary, course descriptions and evaluations prepared by the teacher and students' feedback which was collected via questionnaires and a group interview at the end of the courses. The data from the questionnaire survey were processed statistically, but qualitative data from the teacher and the group interview were just as valuable as statistics.

RESULTS AND DISCUSSION

Course 1

Three groups of students (altogether 105 students from Hungary and eleven other countries) did an IC course which included the new, innovative module on dealing with time. A teacher's diary was used in the case of all the three groups to track and describe how the activities worked. The activities seemed to work well: they inspired the students to think, understand and interact. Creativity was a strong motivator in preparing their videos on the topic of time and watching fellow students' videos proved to be eye-opening. The groups were multicultural themselves, which ensured that the topic was elaborated on extensively, involving many cultures from Europe, Asia, and Africa. The cultural diversity of the groups made group formation and work organization more difficult than expected but resulted in more factual knowledge and deeper understanding according to

the teacher. In total, 29 video films of 3-5 minutes were prepared in which students recorded themselves and/or their friends talking about a time-related topic (student life, daily routine at work, leisure time, holidays) in their own cultures/countries.

Challenges faced included mainly technical problems: there was not enough storage space in the university's learning platform for storing 29 videos, which meant it was not possible to make students watch and analyse videos of their choice outside class time. It was the teacher who selected a few videos for watching in the classroom. Comparative tables were provided for the students to record information from the videos and compare facts. Watching fellow students' videos generated genuine interest and led to enthusiastic discussions. Using English as a lingua franca was authentic thanks to the multicultural nature of the groups.

The teacher made a list of benefits in her diary, which included genuine interest and noticeable motivation, more willingness to communicate, an increase in the percentage of students' talk, aha-experience, clear signs of recognition and revelation and preparedness to share work in group activities (practically no students stood back when they worked on their collaboration activity).

A questionnaire was compiled to collect feedback from students at the end of the course. They were provided statements and asked to indicate on a 1-5 Likert scale to what extent they agreed with them. Table 5 shows the relevant items in the questionnaire and the mathematical average of the responses on the Likert-scale where 5 stands for I completely agree, and 1 stands for I completely disagree.

Results show that 76 % of the students agreed or completely agreed that they could

Table 5

The students' feedback on the IC course (n=29)

Statements in the questionnaire	Average of responses on a Likert-scale
I understand more about how other cultures see the world.	3.97
I understand more about how my own culture affects the way I look at the world.	4.1
I have learned how to cooperate with people from other cultures.	4.06
I understand I need to adapt my language and way of communicating to others' needs.	4.06
I realise that cultural diversity in business environments is something I need to study more about.	4
I realise that I need to study more about how other cultures work and communicate in business contexts.	4

Table 5 *(Continued)*

Statements in the questionnaire	Average of responses on a Likert-scale
I understand that although cultures influence people, not all people from the same culture act the same way.	4.28
I have learned how to use online tools to communicate and collaborate with people from other cultures.	3.45

understand their own cultures and others' too, more than before, they had learned how to cooperate with people from other cultures and they understood that they needed to study more about how other cultures work and communicate in business contexts. They also understood that people even from the same culture might be different (83%). The lowest percentage (66%) refers to learning how to use online communication tools, which, as written comments indicate, shows that most students were already familiar with the IT tools they used in the activities.

At the end of the questionnaire, the participants were offered the opportunity to write about what they had learned during the activities. Comments were varied and basically very positive. Most of the comments fell into two categories. They either focused on communication skills or referred to cultural learning, for example as follows,

> "I think I have learned the way how to cooperate people if they are foreigners. Firstly, I was afraid a little bit because of the language difference but then gave me lots of confidence."
>
> "I think I learned a lot about myself and others also, the way we behave and why we behave like that. I think this course was very useful for me because I'm sure that can use this knowledge in the future."
>
> "I learned that when there is a conflict it is most of the time because of cultural differences and not because people actually mean to hurt others. In order to deal with those conflicts, it is really important to learn about other cultures and to understand them. Just because something is different it does not mean it is not right."

Course 2

Course 2 was attended by 25 students from Hungary and five other countries all studying in the home institution. The group had a partner group of seven students from a university in Norway. In order to match the curricula in the two universities and to handle the difference in group size, the original activities were modified. However, the telecollaborative exchange of preparing a video and conducting an interview via Skype remained the core activity of the course. A common online platform was set up by the Norwegian partner teacher where students uploaded their videos and the records of

their interviews via Skype. The online platform worked very well and technical challenges were related to skyping mainly. Another challenge for the students was to arrange interviews between one person at one end, and 3-5 students at the other end of the line. Also, some of the students from Norway were more mature students, which first surprised and embarrassed Hungarian students (a cultural issue). Although the activities were accomplished, the benefits of telecollaboration could hardly compensate for the difficulties that the teacher reported on. Difficulties included the difference in group size, which did not allow all the students to participate in either the video-making or the Skype interview to the same extent. Some students stood back from active participation in teamwork, either because they did not want to work hard, or because there were too many contributors, which led to the loss of motivation. Some other students had serious difficulties with the Skype interview, either technically or it was too difficult for them to arrange an interview date that was convenient for all the members of the group. As the telecollaboration activity was part of the course requirements, students who had difficulties were asked to find an interview partner even outside the project, which meant much extra work for the student and the teacher alike.

At the end of the course, the students were asked to give feedback on teamwork and their own contribution to it. Twenty-one students responded to the questions and their responses strongly supported the teacher's evaluation of the course. More than half of the respondents explicitly stated that they were satisfied with their groups (some even said they became friends). Quite a few students mentioned that though they worked together with enthusiasm, time management and leadership skills were still to be learnt. However, 9 out of the 21 respondents (40%) said that the work was not equally distributed in their teams and some students practically did not contribute to the project at all, some were even impossible to contact outside the class. Three students indicated that they did not like teamwork because they felt more comfortable when they were allowed to work individually. With a few exceptions, the students found both tasks (video film-making and interview with a partner abroad) very interesting, unusual, and therefore inspiring and useful. However, they also mentioned difficulties that they were or were not able to overcome such as finding time slots convenient for everybody, organizing themselves, communication within the group, punctuality, keeping deadlines, and technical problems. Table 6 contains samples of students' feedback on aspects of their collaboration tasks that are relevant to the present research.

The teacher admitted that she had expected telecollaboration with students from a university abroad to be even more promising in terms of efficiency, independent learning, learning by sharing, and personal growth than working with an international group within the home institution. However, this expectation was fulfilled for only some of the students. The difficulties they faced

often resulted in frustration, and loss of motivation.

Table 6

Sample responses from students' feedback

Research areas	Sample answers
Culture knowledge	"It was a great feeling getting to know nice people from different cultures."
	"I like the interview more than the film because it was a big thing for me to get to know foreign people in front of the screen."
Collaboration	"I loved my team. We managed to make ourselves understood really easily. Every member of the group participated in the tasks and working with them was something unforgettable."
	"Next time I would like that everyone has his/her own part and not one or two people do everything alone and the others not so much or nothing."
	"Only 2 or max. 3 people in one group, no more!!! For 5-6 people it's too difficult to find free time for the same days."
Team roles in collaboration	"Next time I would take the role of a leader and coordinate the tasks so we can finish everything faster or earlier."
	"I could help a lot when we had to collect information for being able to prepare the video ... My weakness during the video was that I didn't want to act so I just gave my voice to the video, maybe once I will be more brave."
	"There's a girl who organised the work and tells us what we need to do."

Table 6 *(Continued)*

Research areas	Sample answers
Communication skills	"We could communicate politely and have been kind."
	"My strength was that I looked around for many information, though I could have had a better practice in English."
	"Sometimes it was hard for me to make myself understood."
	"I made the running of the interview ... it was a good practice."
	(in the interview) "We talked a lot for almost more than 40 minutes, which I think is a lot for an interview."
	"I think I did well my job, but also have something I'm not satisfied. In the interview part, I joined but just talked a little bit."
	"Next time I would participate even more."
	"The interview would have been better if we have done it one-to to one."
IT literacy	"I was supposed to record the interview, which I'm sad about because the software was not compatible with Skype, so we couldn't record the whole group with video."

Note: The students' responses are quoted in their original form.

Course 3

Parts of the same module on dealing with time were introduced into a Business English course the syllabus of which does not include intercultural communication topics explicitly. However, teaching and learning a foreign language always include cultural and intercultural elements, which may become particularly significant in the context of business English. Time related issues such as punctuality and keeping to deadlines are important aspects of efficient business communication and cooperation. Therefore, dealing with time was a relevant topic for business students. The course was attended by 16 Hungarian students, who worked in groups of four throughout the course. Each group was assigned one of the topics in the module to prepare a video film on it for their partner groups in Portugal. The partner students in Portugal worked on the same topics. The activity (agreed on by the teachers in Hungary and Portugal respectively) was intended to include the following steps: making videos, contacting partners, exchanging videos, comparing facts, and preparing a comparative presentation.

The activities were not fully completed mainly due to differences in scheduling, but telecollaboration did take place and provided lessons to learn. On the basis of a teacher's evaluation sheet and a group interview, findings from the previous two case descriptions were confirmed both in terms of benefits (enhanced motivation, more intense communication, increased awareness of cultural diversity) and in terms of difficulties (time management problems and technical difficulties). The only essential difference was that in the third case, linguistically homogeneous students worked together in both institutions, and therefore, the communication in English was not guaranteed while working on the product (the video film) in and outside the classroom.

There were three questions asked across the different courses (n=47). The responses show that the large majority of the students (96%) enjoyed and appreciated the opportunity to work together with students from other countries. 72% of the students agreed that they gained confidence in communication during the courses, and more than half of the students (64%) reported that they felt more open to other people than before learning about intercultural communication, which might be interpreted as a shift in attitude to cultural differences.

CONCLUSIONS

The reason behind developing and implementing this module was the intention to raise intercultural awareness and enhance skills development through an intercultural learning context in which (1) students can discover, share and accumulate knowledge on cultural differences and similarities; (2) students can develop their communication and IT skills in meaningful interactions; and (3) students can develop their general working skills such as time management, organizing teamwork and collaboration.

The module activities fulfilled the expectations. Students' feedback gave evidence of accumulating knowledge (both factual and conceptual), growing cultural awareness, experiencing teamwork positively and intensive communication practice, which led to language skills development.

The benefits of introducing similar innovative modules into higher education courses and supporting internationalization either transnationally or within the institution, include an increased level of students' motivation and independence in the learning process, the efficiency of experience-based learning and the advantages of sharing knowledge and learning by doing. It seems crucial to provide an inter/multicultural environment to achieve these goals, however, the difficulties and pitfalls of telecollaboration transnationally cannot be overlooked. The most important problems identified in the present study include the following: differences in curricula and course requirements, the different scheduling of the academic year, group size, cooperation between teachers transnationally and technical difficulties. Working with international groups of students within the same institution, however, seems to be an ideal solution to most of these problems.

ACKNOWLEDGEMENTS

The study is based on an international project entitled Intercultural Communicative Competence − a Competitive Advantage for Global Employability. The project was funded by the European Commission and received institutional support from the Budapest Business School in Hungary. The authors would like to thank the reviewers and the editors for their valuable comments and recommendations to improve the article.

REFERENCES

Council of Europe. (2016). *Competences for democratic cultures: Living together as equals in culturally diverse democratic societies.* Retrieved June 1, 2016, from https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016806ccc07

Dah, Ø. (2014). Is culture something we have or something we do? From descriptive essentialist to dynamic intercultural constructivist communication. *Journal of Intercultural Communication, 36,* 1-15. Retrieved January 15, 2018, from http://immi.se/intercultural/nr36/dahl.html

Dooly, M. (2006). Integrating intercultural competence and citizenship education into teacher training: A pilot project. *Citizenship Teaching and Learning, 2*(1),18-30.

Hall, E. T. (1973). *The silent language.* New York, USA: Anchor.

Hidasi, J. (2005). *Intercultural communication: An outline.* Tokyo, Japan: Sangensha.

Hofstede, G. (1997). *Cultures and organizations: Software of the mind* (1st ed.). London, England: McGraw-Hill.

Hofstede, G., Hofstede, J. G., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). New York, USA: McGraw-Hill.

Holliday, A., Hyde, M., & Kullman, J. (2004). *Intercultural communication: An advanced resource book.* New York, USA: Routledge.

Kramsch, C. (2008). Ecological perspectives on foreign language education. *Language Teaching, 41*(3), 389-408. https://doi.org/10.1017/S0261444808005065

Loch, A. (2017). Interkulturális kompetencia a munkaerőpiac és az oktatás szemszögéből. [Intercultural competence requirements of education and the labour market]. *Porta Lingua - 2017,* 33-45.

Morgado, M., Gomes, L., & Ribeiro, M. C. A. (2016). The survey of ICC best practice: Transnational report. *Intercultural Communicative Competence: An Advantage for Global Employability* (ICCAGE) (Project nº. 2015-1-CZ01-KA203-013992 [output 01]). Available from https://iccageproject.wixsite.com/presentation/survey

Müller-Hartmann, A., & O'Dowd, R. (2017). *A training manual on telecollaboration for teacher trainers.* Retrieved June 25, 2017, from https://www.evaluateproject.eu/evlt-data/uploads/2017/09/Training-Manual_EVALUATE.pdf

O'Dowd, R. (2015). The competences of the telecollaborative teacher. *The Language Learning Journal, 43*(2), 194-207.

O'Dowd, R., & Lewis, T. (2016). Online intercultural exchange in foreign language learning. A systematic review. In R. O'Dowd, & T. Lewis (Eds.), *Online intercultural exchange: Policy, pedagogy, practice* (pp. 21-66). New York, USA, & London, England: Routledge.

O'Dowd, R., & Ware, P. (2009). Critical issues in telecollaborative task design. *Computer-Assisted Language Learning, 22*(2), 173-188.

Organisation for Economic Cooperation and Development. (2018). *Preparing our youth for inclusive and sustainable world. The OECD PISA global competence framework.* Paris, France: Author. Retrieved January 20, 2018, from https://www.oecd.org/education/Global-competency-for-an-inclusive-world.pdf

Trompenaars, F., & Hampden-Turner, C. (2007). *Riding the waves of culture: Understanding diversity in global business* (2nd ed.). London, England: Nicholas Brealey Publishing.

Verdooren, A. (2014). Taking multiplicity seriously: Towards new approaches for intercultural practitioners. *Interculture Journal, 13*(23), 11-24. Retrieved January 15, 2018, from http://www.interculture-journal.com/index.php/icj/article/view/242/334

Pertanika J. Soc. Sci. & Hum. 28 (2): 1143 - 1161 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Foreign Trade and Economic Growth in sub-Saharan African Countries: Dynamic Common Correlated Effects Estimator (CS-ARDL)

Shuaibu Sidi Safiyanu* and Soo Yean Chua

Economics Programme, School of Social Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia

ABSTRACT

This paper investigates the short-run and long-run dynamics between foreign trade and economic growth in 40 sub-Saharan African countries over the period of 1992-2018. It utilized Cross-sectional Augmented Autoregressive Distributed Lag (CS-ARDL) panel data estimations to handle cross-sectional dependency and dynamic heterogeneity of the countries under investigation. The empirical result shows that foreign trade significantly increased the economic growth of sub-Saharan African countries in the short-run but had a significant negative effect on economic growth in the long-run. The results also confirm that total trade, imports, exports, and trade balance Granger caused economic growth in sub-Saharan African countries. For sub-Saharan Africa trade to have a larger effect on economic growth, countries need to modify their structures of a trade by diverting from exports of raw materials to high value-added goods. Moreover, trade policy measures should be directed towards the promotion of investments in capital intensive sectors and human capital development that can absorb technological improvement from advanced countries.

Keywords: Economic growth, foreign trade, panel data, sub-Saharan Africa

ARTICLE INFO

Article history:
Received: 30 September 2019
Accepted: 26 February 2020
Published: 26 June 2020

E-mail addresses:
sssafiyanu78@gmail.com (Shuaibu Sidi Safiyanu)
sychua@usm.my (Soo Yean Chua)
*Corresponding author

INTRODUCTION

The achievement of sustainable economic growth is the most significant priority of any country, especially in developing countries. Many of these countries have struggled to attain rapid economic growth. Recently foreign trade has been recognized as a vital factor that determines growth in the world. The contribution of trade in the economic

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

growth of developing and advanced countries cannot be overemphasized. Institutions like the World Trade Organization (WTO) and International Monetary Fund (IMF) are consistently encouraging countries particularly developing nations to accelerate growth processes through trade liberalization in order to acquire a desire growth rate (Tahir & Norulazidah, 2013).

Foreign trade is an important component of the gross domestic product (GDP) particularly in developed and emerging countries, which increases the economic growth of a country. Foreign trade has gained considerable recognition in the literature because trade propels nations and the world economy as a whole. Theory of foreign trade suggests that trade openness contributes positively to the economic growth of a country through gains from economies of scale especially in small countries (Helpman & Krugman, 1985); encouraged competition through efficiency (Balassa, 1978); and stimulating the transfer of knowledge (Grossman & Helpman, 1991). Therefore, GDP and export relationship are bi-directional as argued by Islam (1998) and Love and Chandra (2004).

African economies are dependent on foreign trade and this reliance has significantly increased in the last few decades. Foreign trade is an essential source of foreign exchange required for the importation of intermediate goods needed for domestic productions. Foreign trade also provides access to new technology, provides varieties of consumer goods, and the capacity to increase productivity, employment, and economic growth. African countries dependence on trade increases nowadays because of the following factors: Improvement in information and communication technology; reduction in tariffs and other non-tariffs barriers; shift in the world paradigm from protectionism to liberalization as a strategy of development to trade as an engine of growth; and the significant roles of developing economies in the world economy. Improvement of trade balance in Africa as a result of the commodity price boom over the past few decades boosted African capacity to export and import (United Nation Conference of Trade and Development [UNCTAD], 2016).

In spite of the importance of trade to the economic growth of a country, African trade in relation to other continents of the world is not impressive. World merchandise exports increased in 2014 after the world financial crisis, but it was reversed the following year and Africa's economies encountered slowdown compared to other continents. In 2015 and 2016 Africa's exports fell by 29.6% and 11.5% respectively, compared to 12 % and 4.5 % in Asia, 10.9% and 3.7% in America, and 14% and 1.3% in Europe. This unprecedented decline is mostly triggered by the 2014–2015 collapse of the world commodity prices, particularly oil prices. Comparatively to the world exports Africa's percentage decline in 2014 from 2.9% to 2.2% in 2016 (United Nations, 2017).

Africa's merchandise imports fell also (though not as much compared to a decrease in the trade deficit), attributed to a fall in commodity-related incomes,

domestic currencies depreciation, and low investment capacity. This situation accounts for a fall in merchandise imports in Africa from US$642.2 billion to USD$500.8 billion in 2014 and 2016 respectively. However, the export volume fell significantly much more than imports, which contributed significantly to Africa's trade deficit. The trade balance in Africa shifted from a surplus of US$24.0 billion in 2012, to a deficit of US$86.9 billion in 2014 and US$154.9 billion in 2016 (United Nations, 2017). Generally, import portrays the country's weakness in attaining self-sufficiency and reliant on other countries to survive. Unlike exports, too much importation worsens the country's foreign exchange and trade balance, which translates to lower economic growth. However, in some circumstances, the import is regarded as a growth-enhancing factor, particularly the importation of capital goods that aid productivity.

Foreign trade enables goods, services, and factors of production to move across international boundaries and became a substantial driver of economic growth and development of countries (UNCTAD, 2014). Given the importance of foreign trade in accelerating the growth of countries, the majority of academicians and policymakers maintained that openness to trade is superior to autarky as openness is crucial to lowering poverty and inflation. It also has the capacity to enhance employment opportunities; quality health care system and good education (Wynne & Kersting, 2007). A significant number of theoretical and empirical literature such as Chen (2009), Wacziarg and Welch (2008), and Were (2015) has supported the assertion that foreign trade impacts positively on economic growth and development of nations. However, the dilemma is that not all nations gain sufficiently from the benefits of trade.

It is notable to highlight from this point whether a nation benefits from foreign trade depends on the country's individual characteristics. Some of these characteristics are lack of export diversification, deficient institutional quality, and inappropriate execution of policies. Although these features contributing to low growth rate, UNCTAD (2005) ascribed a lack of focus by decision-makers as a notable factor responsible for low gains from trade, particularly, sub-Saharan African countries. Consequently, unless good policies are implemented to enable a favorable atmosphere for these features to work effectively, the gains of trade will still be insignificant. Given this assertion, most of the African countries over the years have lagged in achieving high growth through foreign trade.

This paper evaluates the dynamics between foreign trade and economic growth in selected 40 sub-Saharan African countries using recent panel data techniques.[1] We also used multiple trade dimensions (export, import, total trade, and trade balance) to examine the impact of trade on growth. The results uncover a positive significant impact of trade on economic growth in the short-run. However, in the case of the long-

1 See Appendix 1 for the list of selected 40 sub-Saharan countries

run, the effect is negative. The remaining sections of the paper are presented as follows: section two briefly reviews the literature and section three discusses the data, theoretical framework, and model specifications. Section four highlights the results and analysis, and conclusions are presented in the last section.

LITERATURE REVIEW

There is a common belief that foreign trade contributes to economic growth positively. This can be found in several literatures on the growth-trade relationship, as well as the growth episodes experienced across different countries in the globe for the past decades. From the early studies, Michaely (1977) utilized simple correlation techniques in the study of 41 developing economies and found a strong positive relationship between foreign trade and economic growth. He concluded that the protectionist import substitution industrialization policies had negative effects on growth. In another study, Balassa (1978) used regression techniques and found a positive correlation relationship between foreign trade and economic growth for a sample of 10 countries. Yanikkaya (2003) studied the effect of trade openness on the economic growth of 120 countries from 1970 to 1997 using trade restriction on foreign exchange and volume of trade as a share of GDP (exports + imports) as indicators of trade openness. The empirical findings show that both trade indicators have a positive impact through the improvement in total factor productivity on economic growth.

Recent empirical studies have reported mixed findings, some reports a positive relationship between foreign trade and economic growth (Jouini, 2015; Kim, 2011), others empirical findings documented no relationship or even a negative relationship (Musila & Yiheyis, 2015; Ulaşan, 2015). Several studies carried out in sub-Saharan Africa have found evidence of mixed results as well. Asfaw (2014) investigated the effect of trade liberalization on the economic growth of 47 sub-Saharan African countries. He found that openness to trade stimulated economic growth and investment within the period under study. Moreover, trade policy variables such as real effective exchange rate and average weighted tariff rate affected economic performance through trade. Furthermore, in a study of 41 sub-Saharan African countries Brueckner and Lederman (2015) used instrumental variables in panel estimations. They observed that trade openness influenced economic growth positively in the short-run and long-run.

Contrary to the previous literature, Gries et al. (2009) examined 16 selected sub-Saharan African countries and found insignificant relationships among the variables in the long-run. Furthermore, their result showed that economic growth propeled openness to trade in Gabon, Senegal, Mauritius, Ethiopia, Togo, Kenya, and Sierra Leone while bi-directional causation was evinced in Cameroon, Cote d'Ivoire, Rwanda, and Nigeria. Finally, there was no causality between trade and growth in South Africa, Ghana, Gambia, Burundi, and Madagascar. A similar study

conducted by Vlastou (2010) using 34 selected African countries confirmed that trade openness exerted a negative effect on economic growth. He further identified a causality running from trade to economic growth. Likewise, Tekin (2012) investigated 27 least developed countries in Africa. He reported no significant causation running from foreign aid, trade openness, and real GDP per capita. Furthermore, Lawal et al. (2016) study the trade-growth relationship in Nigeria using ARDL estimation techniques. They reported a short-run positive impact of openness on growth, but a long-run negative impact was identified.

Employing instrumental variable threshold regression model, Kim and Lin (2009) used cross-country data of 61 countries from 1960 to 2005 and initial real per capita income as the threshold variable, they found significant threshold effects on trade-growth relationship. A high degree of trade openness has positive impacts on economic growth for high-income countries while a negative impact on the economic growth of low-income countries. The beneficial impact of trade liberalization seems to increase as the economy of such a country improves, confirming the arguments about the adoptive capacity of a country in the diffusion of knowledge and technology advancement. Similarly, a panel data of 66 developing economies had been utilized by Eris and Ulasan (2013) to examine the effects of trade openness on long-run economic growth from 1960 to 2000. The study employed the Bayesian model averaging technique to take consideration of model uncertainty. The results confirmed no evidence of a positive correlation between openness and long-run economic growth. The findings further show that macroeconomic uncertainties and economic institutions are correlated to inflation and long-run economic growth is determined by government expenditure in the countries selected.

Using panel data estimations, Kilic and Beser (2017) examined the causal relationship between trade-growth nexus in five Eurasian countries spinning from 1992-2015. The result of the cross-sectional dependency test revealed that there was a presence of cross-section dependency. The Konya (2006) causality test result shows feedback causation between GDP growth to exports and one-way causation between GDP growths to imports.[2] A similar study conducted by Dinç et al. (2017) examined the impact of foreign trade on economic growth in seven developing countries including Iran and Turkey utilizing panel data technique. The result showed that foreign trade, physical resources, and energy consumption had a significant positive impact on economic growth. Likewise, Idris et al. (2016) examined trade openness and economic growth in 87 Organization for Economic Co-operation and Development (OECD) and developing countries over a period of 1977-2011 using a dynamic panel estimation method. The results revealed a bidirectional causal relationship for both OECD and developing countries. The finding is also consistent with the

2 See Konya (2006) for the discussion on Konya bootstrap panel Granger causality.

endogenous model that an increase in trade openness will increase economic growth. Furthermore, Mputu (2016) investigated the link between terms of trade, trade openness, and economic growth in 13 sub-Saharan African countries using the popular fixed and random effects model for the period 1980-2011. The findings revealed a positive and statistically significant relationship between terms of trade and GDP. This means that for every unit of goods exported, it can purchase more units of imports from its trading partners. However, the coefficient of trade openness is negatively related to GDP and it is harming the region instead of benefiting it.

Zahonogo (2017) used the recent pooled mean group estimation technique to examine trade and economic growth in 42 sub-Saharan African countries from 1980-2012. The findings revealed that trade openness was the main driver of growth over a long period of time. In a recent study, using ordinary least square techniques, Roquez-Diaz and Escot (2017) examined the impact of trade openness on economic growth in 18 Latin American countries using causality tests in heterogeneous panel spinning from 1990 to 2013. The study utilized second generation panel data estimation techniques such as cross-section dependence, panel unit root test, panel cointegration test, and Dumitrescu and Hurlin (2012) causality test.[3] The empirical results rejected the hypothesis of general, unidirectional, and the homogeneous association between openness and growth using aggregated data. The evidence of causal relation from trade liberalization to economic growth in Peru, Chile, Uruguay, and Nicaragua was found while bidirectional causality in Honduras and Mexico. Causality runs from growth to trade liberalization in Costa Rica, Colombia, Dominican Republic, and Guatemala.

Most recently, Manwa et al. (2019) investigated trade liberalization and economic growth of five Southern African Customs Union (SACU) economies using panel data from 1980 to 2013. The SACU countries are Namibia, Swaziland, South Africa, Botswana, and Lesotho. The study used four trade liberalization indicators; trade ratios, REER, adjusted trade ratios, and tariffs. The fixed effect regression results revealed a weak indication that trade liberalization had a little positive impact on SACU growth.

This study plans to fill the gap in the literature by examining the impact of foreign trade on economic growth in 40 sub-Saharan African countries using dynamic common correlated effect estimator which solves the problem of cross-section dependence which is a major problem of estimation of macro panel data (panels with a large number of observations across time and cross-section units). We also utilized four dimensions of trade as dependent variables for a better understanding of the relationship between trade and growth. The use of heterogeneous dimensions provides clear direction for policy measures and the robustness of the findings. Furthermore, the lack of consensus in the literature on the impact of trade on growth motivated us to carry the research in

3 See Dumitrescu and Hurlin (2012) for the discussion on the DH causality test.

this region using recent data and estimation techniques.

MATERIALS AND METHODS

Descriptions and Source of Data

The descriptions of the variables and source of data for the selected 40 sub-Saharan African countries over the period 1992-2018 are given in Table 1.

Table 1

Data description and sources

Variables	Descriptions	Sources
GDP growth	GDP growth rate	WDI
Trbl	Goods, value of trade balance (USD)	IMF
Reer	Real effective exchange rate index	WDI
Gcfm	Gross capital formation (USD)	WDI
Hcap	Human capital: Secondary school enrolment rate	WDI
Labf	Labor force participation rate	WDI
Totd	Total trade: Summation of export & import (USD)	WDI
Export	Exports of goods & services (USD)	WDI
Import	Imports of goods & services (USD)	WDI

Notes: WDI refers to World Development Indicators (2018)

Theoretical Framework and Empirical Model Specification

The starting point of the theoretical framework on economic growth is the neoclassical theory propounded by Solow (1956) and Swan (1956) which comprises a series of equations depicting the relationship between capital goods, labor-time, output, and investment. The divergence in capital formations explains the differences in economic growth across countries. Traditional neoclassical trade theories believed that trade as an engine of economic growth. The new growth theory (endogenous) emphasizes human capital development in forms of education, training, and technological advancement for the world market, and this account for its continued relevance. Empirical researches have attempted to study economic growth within the neoclassical framework. A production function is represented as output (Y) as a function of capital (K) and labor (L).

$$Y = A\,F\,(K, L) \ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

This growth model was later extended by Mankiw et al. (1992) to include human capital. The growth model appears in the general form as:

$$Y_t = A_t K_t + H_t + L_t + e_t \ldots\ldots\ldots\ldots \quad (2)$$

where Y_t is the aggregate output, A_t is the productive factor, K_t is the physical capital stock, L_t is the labor force employed, H_t is the human capital stock, e_t is the error term while t is the time period.

$$GDP\ growth_{it} = \beta_0 + \beta' X_{it} + \lambda_i + \varepsilon_t + \mu_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3)$$

The GDP growth denotes the growth rate of country *i* at year *t*; β_0 is the constant parameter; X_{it} denotes the vector of explanatory variables; λ_i is the unobservable country effect; ε_t is the unobservable time effect; and μ_{it} is the disturbance term. The econometric models that investigate the impact of foreign trade on economic growth for sub-Saharan Africa using multiple trade dimension are presented below:

Model 1

$$GDP\ growth_{it} = \beta_0 + \beta_1 Imp_{it} + \beta_2 Reer_{it} + \beta_3 Gcfm_{it} + \beta_4 Hcap + \beta_5 Labf_{it} + \mu_{it} \quad (4)$$

Model 2

$$GDP\ growth_{it} = \beta_0 + \beta_1 Exp_{it} + \beta_2 Reer_{it} + \beta_3 Gcfm_{it} + \beta_4 Hcap + \beta_5 Labf_{it} + \mu_{it} \quad (5)$$

Model 3

$$GDP\ growth_{it} = \beta_0 + \beta_1 Trbl_{it} + \beta_2 Reer_{it} + \beta_3 Gcfm_{it} + \beta_4 Hcap + \beta_5 Labf_{it} + \mu_{it} \quad (6)$$

Model 4

$$GDP\ growth_{it} = \beta_0 + \beta_1 Totd_{it} + \beta_2 Reer_{it} + \beta_3 Gcfm_{it} + \beta_4 Hcap + \beta_5 Labf_{it} + \mu_{it} \quad (7)$$

In equation (4,5,6 and 7), cross-sections are donated by subscript *i* (where *i*=1,2,3,4,…,N) and time period by subscript *t* (where *t*=1,2,3,4,…,T), μ is the stochastic random disturbance, β_0 is the constant parameter and β_S are coefficients to be estimated. The specifications comprise GDP growth as a dependent variable and five independent variables. Real effective exchange rate (Reer), Gross capital fixed formation (Gcfm), Human capital (Hcap), Labour force (Labf), and one of the four trade dimensions (i.e. import, export, trade balance, and total trade) are used as explanatory variables. The variables selected for the model are based on the growth theory and extant literature.

Estimation Strategy

Cross-sectional Dependency Test. A significant body of literature in the panel analysis concluded that cross-section dependencies are likely to be overlooked in panel data which may occur as a result of common shocks and unobservable components such as oil price fluctuations and global financial crises that become part of the error term. The Pesaran and Chudik (2015) test for weak cross-sectional dependency was used in this study. Its statistic is given as;

$$\widetilde{PN} = \frac{2}{N(N-1)} \sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \breve{p}_{ij} \quad \ldots\ldots\ldots\ldots\ldots\ldots (8)$$

The null and alternative hypotheses of the test are;

$$H_0 : \mathcal{P}_{ij} = 0 \text{ for } i \neq j$$

$$H_1 : \mathcal{P}_{ij} \neq 0 \text{ for } i \neq j$$

Panel Unit Root. The unit root is the test for data stationarity. It checks the characteristic properties of the variables of interest to avoid the problem of spurious regression estimations associated with non-stationary of the series. In the context of panel data set, units or countries have different dynamics as a result of heterogeneity. The issue of heterogeneity has become a central point in panel data econometric analysis (Pesaran & Smith, 1995). Apart from this development towards the heterogeneous specification, the second generation panel unit root test is

developed to capture the influence of cross-section dependence in the panel. The first-generation panel unit roots are modeled on cross-sectional independent hypothesis and its regression model is univariate:

$$\Delta y_{it} = \rho_i y_{it-1} + z'_{it}\gamma + u_{it} \quad \text{.....(9)}$$

However, the second generation panel unit root by Pesaran (2007) is able to address the flaw of the first generation panel unit root test because it captures the cross-sectional dependency by augmenting the standard augmented Dickey Fuller (ADF) test with the cross-sectional average of lagged levels and first differences of the cross-section. Its major strength is the ability to capture cross-section dependence and produce a robust estimate for both micro and macro panels (T>N and N>T). The model is specified as follows;

$\Delta y_{it} = \alpha_i + \beta_i y_{t-1} + y_i F_t + \varepsilon_{it}$ .....(*10*)

$H_0 : \beta_i = 0$ for all i

$H_1 : \beta_i < 0$ for all i

F_t *and* ε_{it} are unobserved common effects and individual-specific (idiosyncratic) error.

Westerlund Error Correction Model Panel Cointegration Test. This study investigates the presence of a long-run association between integrated series that possess time *(T)* and cross-section *(N)* dimension. Cointegration analysis has received large concern in literature because most financial hypotheses and economic theories are long-run induced, their relationship hardly identified in the short-run. Furthermore, most researches that examine cointegration have failed to reject the null hypothesis of no long-run equilibrium against the theoretical postulation of cointegration. The main argument behind the above assertion is that panel data and time series analyses require that the variables must be in the same order of integration. This imperfection was rectified by Westerlund and Edgerton (2007), who took into consideration the cross-section dependence among the series and proposed four cointegration estimators to give more robust and reliable estimations. The first two tests statistics is called Group Mean Statistics (Ga and Gt) to check the alternative hypothesis of the whole panel is cointegrated, while the other two statistics is called Panel Statistics (Pa and Pt) are used to check the alternative hypothesis of least one unit of the panel is cointegrated. The advantage of this test over others is that there are no factor restrictions. Consider the error correction term (ECT) models in equations (11), (12) and (13) below:

$$\Delta A_{i,t} = \alpha_i^A + \lambda^A \left(A_{i,t-1} - \beta_i^A B_{i,t-1} - \gamma_i^A C_{i,t-1} \right) + \sum_{j=1}^{n} \emptyset A_{i,j} \Delta A_{i,t-j} + \sum_{j=1}^{p} \emptyset A_{i,j} \Delta C_{i,t-j} + \sum_{j=1}^{m} \delta A_{i,j} \Delta B_{i,t-j} + \mu_{i,t} \quad \text{.....(11)}$$

$$\Delta B_{i,t} = \alpha_i^B + \lambda^B \left(B_{i,t-1} - \beta_i^B A_{i,t-1} - \gamma_i^B C_{i,t-1} \right) + \sum_{j=1}^{n} \delta B_{i,j} \Delta B_{i,t-j} + \sum_{j=1}^{m} \theta B_{i,j} \Delta A_{i,t-j} + \sum_{j=1}^{p} \theta B_{i,j} \Delta C_{i,t-j} + \varepsilon_{i,t} \quad \text{.....(12)}$$

$$\Delta C_{i,t} = \alpha_i^C + \lambda^C \left(C_{i,t-1} - \beta_i^C B_{i,t-1} - \gamma_i^C A_{i,t-1} \right) + \sum_{j=1}^{p} \emptyset C_{i,j} \Delta C_{i,t-j} + \sum_{j=1}^{m} \delta C_{i,j} \Delta B_{i,t-j} + \sum_{j=1}^{n} \theta C_{i,j} \Delta A_{i,t-j} + e_{i,t} \quad \text{.....(13)}$$

The parameters λ_i^k, $K \in (A,B,C)$ are the coefficients of ECT and it shows the speed of adjustment towards equilibrium. This paper focuses on variable A in relation to B and C; thus, equation (11) is the equation of interest.

Pesaran and Chudik (2015) Dynamic Common Correlated Effects Estimator-(CS-ARDL). Dynamic Common Correlated Effect Estimator developed by Pesaran and Chudik (2015) was utilized in this study. This method of estimation allows for cross-sectional dependence and controls for endogenous regressors, robustness, correction of small sample biases, and supports both balanced and unbalanced panels (Ditzen, 2016). The model becomes most appropriate in this study because of the heterogeneous nature of the countries considered in this study, it also allows for the estimations of both short-run and long-run effects. The equation for the model is expressed as;

$$\gamma_{it} = \alpha_{it} + \varphi_i \gamma_{i,t-1} + \beta_0 x_{it} + \beta_1 x_{i,t-1} + \sum_{l=0}^{\rho T} \delta_i' \acute{Z}_{t-1} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots (14)$$

where;

$\bar{Z}_t = (\bar{y}_t, \bar{y}_{t-1}, \bar{x}_t)$, cross sectional means (i.e variables in $\bar{Z}_t$)

ρT = number of lags of cross-sectional averages, γ_{it} = dependent variable,

x_{it} = independent variables

RESULTS AND DISCUSSIONS

Cross-sectional Dependency Test Result

Using Pesaran (2015) test for weak cross-sectional dependence, the results in Table 2 show the presence of cross-sectional dependence in all the variables. This is evidenced by the fact that all the probability values of CD statistics are significant at the 1% in all the variables under investigation. This means that a shock in any of the countries selected in sub-Saharan Africa tends to be transmitted to other countries within the panel. Based on this reason, the

Table 2

Pesaran (2015) test for weak cross sectional dependence

Variables	CD Statistics	P-value	Decisions
GDP growth	68.268	0.000	Cross-sectional dependency
Gcfm	16.138	0.000	Cross-sectional dependency
Hcap	77.949	0.000	Cross-sectional dependency
Labf	137.742	0.000	Cross-sectional dependency
Reer	21.053	0.000	Cross-sectional dependency
Export	118.344	0.000	Cross-sectional dependency
Import	120.221	0.000	Cross-sectional dependency
Trbl	24.732	0.000	Cross-sectional dependency
Totd	121.214	0.000	Cross-sectional dependency

stationarity of the data was tested using the cross-sectional augmented Dickey Fuller (CADF) test that took into account cross-sectional dependence into consideration. We, therefore, based our analysis on CS-ARDL specifications.

Table 3 presents the result of Pesaran (2007) CADF panel unit root tests. The result suggests that GDP growth, gross capital formation, and real effective exchange rate are stationary at levels but secondary school enrolment rate, labor force participation rate, exports, imports, trade balance and total trade are stationary at the first difference as depicted in Table 3. The variables are not integrated in the same order, GDP growth, gross capital formation and real effective exchange rate are I(0) but secondary school enrolment rate, labor force participation rate, exports, imports, trade balance, and total trade are I(1). In order to test the long-run relationship between variables in a heterogeneous panel of sub-Saharan African countries, the second-generation panel cointegration test developed by Westerlund and Edgerton (2007) was adopted and the result is presented in Table 4.

The results of Westerlund and Edgerton (2007) ECM cointegration test are presented in Table 4 for all the trade variables (trade balance, exports, imports, and total trade). The probability values of all the equations revealed a presence of cointegration among the series; thus, it is required to estimate the long-term equilibrium relationships among the variables.

Table 3

Pesaran (2007) CADF unit root test

	Levels			First Difference			Order of Integration
Variables	T-bar	Z[T-bar]	P-value	T-bar	Z[T-bar]	P-value	
GDP growth	-3.553	-8.452	0.000	-5.298	-20.318	0.000	I(0)
Gcfm	-3.370	-7.211	0.000	-4.785	-16.833	0.000	I(0)
Hcap	-2.378	-0.463	0.322	-3.991	-11.432	0.000	I(1)
Labf	-2.357	-0.320	0.375	-2.580	-1.814	0.035	I(1)
Reer	-4.147	-7.902	0.000	-4.939	-11.309	0.000	I(0)
Export	-2.352	-0.284	0.388	-3.573	-8.586	0.000	I(1)
Import	-2.357	-0.320	0.375	-3.409	-7.476	0.000	I(1)
Trbl	-1.900	2.786	0.997	-3.517	-8.209	0.000	I(1)
Totd	-2.392	-0.557	0.289	-3.422	-7.565	0.000	I(1)

Note: 10% (cv10), 5% (cv5) and 1% (cv5) critical values are -2.540, -2.610 and -2.730 respectively

Table 4

Westerlund ECM panel cointegration tests

Statistics	Value	Z-value	P-value
Equation with trade balance			
Gt	-2.503	1.891	0.029
Ga	-6.309	4.460	1.000
Pt	-18.773	5.624	0.000
Pa	-13.649	4.468	0.000
Equation with exports			
Gt	-2.472	-1.700	0.045
Ga	-6.413	4.375	1.000
Pt	-20.836	-7.312	0.000
Pa	-14.421	-5.081	0.000
Equation with imports			
Gt	-2.544	-2.146	0.016
Ga	-5.980	4.731	1.000
Pt	-20.675	-7.181	0.000
Pa	-13.875	-4.647	0.000
Equation with total trade			
Gt	-2.513	-1.953	0.025
Ga	-6.097	4.635	1.000
Pt	-21.065	-7.500	0.000
Pa	-14.673	-5.282	0.000

The results of the Dumitrescu and Hurlin (2012) Granger non-causality test are presented in Table 5. The Z-bar statistics are statistically significant at 1% for all the hypotheses. The Z-bar tilde statistics are also significant. Hence, the null hypothesis can be rejected. Therefore, the results imply that total trade, imports, exports, and trade balance all granger cause economic growth in sub-Saharan African countries.

The results of Dynamic Common Correlated Effects are contained in Table 6.[4] In the short-run, the results evince a negative relationship between the exchange rate, secondary school enrolment, and labor force, and economic growth. On the other hand, gross capital formation, imports, exports, trade balance, and total trade are

4 We have also estimated the coefficients of the common dynamic process using the Augmented Mean Group. The coefficients for all the equations are significant, which implies that the dynamics of economic growth in the region are driven by some common factors such as geographical factors, global financial crisis, oil price shocks, and institutional quality.

Table 5

Dumitrescu and Hurlin (2012) Granger non-causality test results

Hypotheses	Z-bar	P-value	Z-bar tilde	P-value
Totd does not Granger-cause GDP growth	4.0598	0.0000	3.0880	0.0020
Export does not Granger-cause GDP growth	2.5805	0.0099	1.8328	0.0668
Import does not Granger-cause GDP growth	5.1497	0.0000	4.0127	0.0001
Trbl does not Granger-cause GDP growth	3.6566	0.0003	2.8741	0.0041

Table 6

Dynamic common correlated effects estimator (CS-ARDL

	Dependent variable: GDP growth			
Independent Variables	(1)	(2)	(3)	(4)
Short-run estimates				
Reer	-0.0408	-0.0441	-0.0427	-0.0430
	(0.0271)	(0.0295)	(0.0279)	(0.0289)
Gcfm	0.0456***	0.0493***	0.0211**	0.0457***
	(0.0105)	(0.0113)	(0.0103)	(0.0105)
Hcap	-0.0341	-0.0270	-0.0163	-0.0307
	(0.0349)	(0.0361)	(0.0307)	(0.0355)
Labf	-2.185*	-2.329*	-1.256**	-2.191*
	(1.266)	(1.207)	(0.559)	(1.228)
Import	0.0573**			
	(0.0250)			
Export		0.0876**		
		(0.0342)		
Trbl			5.21e-10	
			(1.10e-09)	
Totd				0.0410**
				(0.0178)
Long-run estimates				
Reer	-0.0570	-0.0522	-0.0427	-0.0481
	(0.0402)	(0.0360)	(0.0279)	(0.0328)
Gcfm	0.0472***	0.0534***	0.0211**	0.0464***
	(0.0112)	(0.0115)	(0.0103)	(0.0104)

Table 6 *(Continued)*

	Dependent variable: GDP growth			
Independent Variables	(1)	(2)	(3)	(4)
Long-run estimates				
Hcap	-0.0517	-0.0323	-0.0163	-0.0357
	(0.0482)	(0.0429)	(0.0307)	(0.0393)
Labf	-2.525*	-2.612*	-1.256**	-2.311*
	(1.422)	(1.341)	(0.559)	(1.296)
Import	-0.943***			
	(0.0250)			
Export		-0.912***		
		(0.0342)		
Trbl			-1.000***	
			(1.10e-09)	
Totd				-0.959***
				(0.0178)
Observations	1,080	1,080	1,080	1,080
R-squared	0.450	0.451	0.324	0.455
Number of Countries	40	40	40	40
Diagnostic statistics				
F-statistics	2.87	2.87	1.68	2.92
P-value of F-statistics	0.0000	0.0000	0.0000	0.0000
CD test statistics	5.22	3.61	7.84	4.57
P-value of CD statistics	0.0000	0.0003	0.0000	0.0000

Note: Standard errors in parentheses, ***, ** and * denotes 1%, 5% and 10% level of significance respectively

positively related to economic growth. The results concur with the findings of Kim and Lin (2009), Lawal et al. (2016), and Ulaşan (2015) who reported a short-run positive impact of trade on economic growth. However, the result indicates that the real exchange rate, school enrollment, and trade balance are statistically insignificant. This shows that when the dynamic component of the relationship between economic growth and its determinants are considered, these variables are insignificant in determining the rate of economic growth in the short run. Meanwhile, capital formation remains highly significant with greater impact (0.0493) when the export is included in the model than when other components and aggregate trade is considered in the model. Similarly, imports, exports, and total trade are statistically significant at 5% level. This affirms the theoretical proposition that trade is an engine of growth. For instance,

Grossman and Helpman (1991) trade model posits that trade leads to endogenous growth through the diffusion of technology and knowledge. The findings also relate to the conclusion of the neoclassical models which show that trade leads to welfare gains, increase income, and ensure economic growth.

In the long-run, while the sign and significance of the other variables remain the same, the coefficients of exports, imports, trade balance, and total trade becomes negative and highly significant at 1% level. This reveals that trade has a significant negative effect on economic growth in the long-run. The finding is also consistent with the results of Lawal et al. (2016) who reported a long-run negative impact of trade on growth. Similarly, Vlastou (2010) confirmed a negative impact of trade openness on the economic growth of 34 selected African countries. In the long-run, rise in imports might lead to the overdependence of the African countries on foreign goods and services and the destruction of domestic industries. This is because most of the domestic industries cannot compete with their counterparts across the globe and importation ruins the domestic industries. Similarly, sub-Saharan African countries mostly export primary products and it is a major source of foreign exchange for the countries. Therefore, an increase in exports will generally lead to higher income which encourages more imports. Eventually, import-competing industries will fail, and the current account deteriorates. The F-statistic shows that all the models have overall significance while the cross-sectional dependency test shows the presence of cross-sectional dependence. Therefore, the technique is appropriate, and the results are valid for policy inferences.

CONCLUSIONS

This study explores the relationship between foreign trade and economic growth using data of 40 sub-Saharan African countries over the period of 1992-2018. Due to the presence of cross-section dependence in the series, we applied Pesaran (2007) cross-sectional augmented Dickey Fuller (CADF) panel unit root test of stationarity to identify the integrating order of the variables. Westerlund and Edgerton (2007) ECM panel cointegration test was estimated to investigate the long-run equilibrium. To examine the direction of causality between variables, the Dumitrescu and Hurlin (2012) Granger non-causality test was utilized. The effect of foreign trade on economic growth was estimated using Dynamic Common Correlated Effects Estimator (CS-ARDL).

The empirical findings evince different order of integration I(0) and I(1) among the variables confirmed by CADF panel unit root test. The Dumitrescu and Hurlin (2012) Granger non-causality test results imply that total trade, imports, exports, and trade balance all Granger cause economic growth in sub-Saharan Africa. The imports, exports, trade balance, and total trade measures were used as trade variables. However, the findings from the dynamic common correlation effect estimations reveal varying results. In the short-run, the results evince a

negative relationship between the exchange rate, secondary school enrolment, and labor force, and economic growth. On the other hand, gross capital formation, imports, exports, trade balance, and total trade are all positively related to economic growth. In the long-run, while the sign and significance of the other variables remain the same, the coefficients of exports, imports, trade balance, and total trade becomes negative and highly significant at 1% level. This reveals that trade has a significant negative effect on economic growth in the long-run.

We conclude that foreign trade significantly increases the economic growth of sub-Saharan Africa countries in the short-run. In order to achieve a long-run relationship between foreign trade and economic growth in sub-Saharan Africa, the policies of export diversification and import substitution industrialization need to be vigorously implemented. This is because exports of sub-Saharan African countries are mainly primary commodities, which prices are very unstable and determined on the foreign market. For outward-oriented strategy in sub-Saharan Africa to have a larger effect on growth, the countries need to modify the structures of a trade by diverting from exports of raw materials to high value-added goods. Moreover, trade policy measures should be directed towards the promotion of investments in capital intensive sectors and human capital development that can absorb technological advancement from advanced countries.

ACKNOWLEDGMENT

The authors would like to thank the Tertiary Education Trust Fund (TetFund) Nigeria for their financial support.

REFERENCES

Asfaw, H. A. (2014). Trade policy and economic growth in sub-Saharan Africa: A panel data approach. *American Journal of Trade and Policy, 1*(1), 94-101.

Balassa, B. (1978). Exports and economic growth: Further evidence. *Journal of Development Economics, 5*(2), 181-189.

Brueckner, M., & Lederman, D. (2015). Trade openness and economic growth: Panel data evidence from sub-Saharan Africa. *Economica, 82*(1), 1302-1323. https://doi.org/10.1111/ecca.12160

Chen, H. (2009). A literature review on the relationship between foreign trade and economic growth. *International Journal of Economics and Finance, 1*(1), 127-130.

Dinç, D., Gökmen, A., Nakip, M., & Azari, N. (2017). The impact of foreign trade issues on economic growth in some developing countries including Iran and Turkey. *Journal of Transnational Management, 22*(3), 171-202.

Ditzen, J. (2016). *Xtdcce: Estimating dynamic common correlated effects in Stata* (SEEC Discussion Papers, 1601). Edinburgh, England: Spatial Economics and Econometrics Centre, Heriot Watt University.

Dumitrescu, E., & Hurlin, C. (2012). Testing for Granger non-causality in heterogeneous panels. *Economic Modeling, 29*(4), 1450-1460.

Eris, M. N., & Ulasan, B. (2013). Trade openness and economic growth: Bayesian model averaging estimate of cross-country growth regressions. *Economic Modelling, 33*(1), 867-883.

Gries, T., Kraft, M., & Meierrieks, D. (2009). Linkages between financial deepening, trade openness, and economic development: Causality evidence from sub-Saharan Africa. *World Development, 37*(1), 1849- 1860. https://doi.org/10.1016/j.worlddev.2009.05.008

Grossman, G. M., & Helpman, E. (1991). *Innovation and growth in the global economy.* Cambridge, USA: MITPress.

Helpman, E., & Krugman, P. (1985). *Market structure and foreign trade.* Cambridge, USA: MIT Press.

Idris, J., Yusop, Z., & Habibullah, M. S. (2016). Trade openness and economic growth: A causality test in panel perspective. *International Journal of Business and Society, 17*(2), 281-290.

Islam, M. N. (1998). Export expansion and economic growth: Testing for cointegration and causality. *Applied Economics, 30*(1), 415-425.

Jouini, J. (2015). Linkage between international trade and economic growth in GCC countries: Empirical evidence from PMG estimation approach. *Journal of International Trade and Economic Development, 24*(3), 341-372.

Kilic, N. Ö., & Beser, M. (2017). Relationship of foreign trade and economic growth in Eurasian economy: Panel data analysis. *International Journal of Economics and Finance, 9*(9), 1-7.

Kim, D.-H. (2011). Trade growth and income. *Journal of International Trade and Economic Development, 20*(5), 677-709.

Kim, D.-H., & Lin, S.-C. (2009). Trade and growth at different stages of economic development. *Journal of Development Studies, 45*(8), 1211-1224. https://doi.org/10.1080/00220380902862937

Konya, L. (2006). Exports and growth: Granger causality analysis on OECD countries with a panel data approach. *Economic Modeling, 23*(6), 978- 992.

Lawal, A. I., Nwanji, T. I., Asaleye, A., & Ahmed, V. (2016). Economic growth, financial development and trade openness in Nigeria: An application of the ARDL bound testing approach. *Cogent Economics and Finance, 4*(1), 1-15.

Love, J., & Chandra, R. (2004). Testing export-led growth in India, Pakistan and Sri Lanka using a multivariate framework. *The Manchester School, 72*(4), 483-496.

Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics, 107*(2), 407-437.

Manwa, F., Wijeweera, A., & Kortt, M. A. (2019). Trade and growth in SACU countries: A panel data analysis. *Economic Analysis and Policies, 63*(1), 107-118.

Michaely, M. (1977). Exports and growth: An empirical investigation. *Journal of Development Economics, 4*(1), 49-53.

Mputu, C. L. (2016). *Terms of trade, trade openness and economic growth in sub-Saharan Africa* (Culminating Projects in Economics, 3). Retrieved July 25, 2018, from https://repository.stcloudstate.edu/econ_etds/3

Musila, J. W., & Yiheyis, Z. (2015). The impact of trade openness on growth: The case of Kenya. *Journal of Policy Model, 37*(1), 342-354. https://doi.org/10.1016/j.jpolmod.2014.12.001

Pesaran, M. H. (2007). A simple panel unit root test in the presence of cross-section dependence. *Journal of Applied Econometrics, 22*(1), 265-312.

Pesaran, M. H. (2015). Testing weak cross-sectional dependence in large panels. *Econometric Reviews, 34*(6-10), 1089-1117.

Pesaran, M. H., & Chudik, A. (2015). Common correlated effects estimation of heterogeneous dynamic panel data models with weakly exogenous regressors. *Journal of Econometrics, 188*(1), 393-420.

Pesaran, M. H., & Smith, R. P. (1995). Estimating long-run relationships from dynamic heterogeneous panels. *Journal of Econometrics, 68*(1), 79-113.

Roquez-Diaz, A., & Escot, L. (2017). Relationship between trade openness and economic growth in Latin America: A causality analysis with heterogeneous panel data. *Review of Development Economics, 22*(1), 658-684.

Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics, 70*(1), 65-74.

Swan, T. W. (1956). Economic growth and capital accumulation. *Economic Record, 32*(2), 334-361.

Tahir, M., & Norulazidah, D. (2013). The relationship between trade and income: The case of developed countries. *International Research Journal of Finance and Economics, 1*(111) 138-145.

Tekin, R. B. (2012). Development aid, openness to trade and economic growth in least developed countries: Bootstrap panel granger causality analysis. *Procedia-Social and Behavioral Sciences, 62*(1), 716-721. https://doi.org/10.1016/j.sbspro.2012.09.121

Ulaşan, B. (2015). Trade openness and economic growth: Panel evidence. *Applied Economics Letter*, *22*(2), 163-167. https://doi.org/10.1080/13504851.2014.931914

United Nation Conference of Trade and Development. (2005). *Developing countries in international trade: Trade and development index.* New York, USA: United Nations Publication.

United Nation Conference of Trade and Development. (2014). *The role of international trade in the post-2015 development agenda.* Geneva, Switzerland: United Nations Publication.

United Nation Conference of Trade and Development. (2016). *Trade and current account balances in sub-Saharan Africa: Stylized fact and implications for poverty.* Trade and Poverty Paper (Series No. 1). Geneva, Switzerland: Author.

United Nations. (2017). *Overview of recent economic and social development in Africa.* Department of economic and social affairs. New York, USA: United Nations Publication.

Vlastou, I. (2010). Forcing Africa to open up to trade: Is it worth it? *The Journal of Developing Areas, 44*(1), 25-39. https://doi.org/10.1353/jda.0.0086

Wacziarg, R., & Welch, K. (2008). Trade liberalization and growth: New evidence. *The World Bank Economic Review, 22*(1), 187-231.

Were, M. (2015). Differential effects of trade on economic growth and investment: A cross-country empirical investigation. *Journal of African Trade, 2*(1), 71-85. doi:10.1016/j.joat.2015.08.002

Westerlund, J., & Edgerton, D. (2007). Simple tests for cointegration in dependent panels with structural breaks. *Oxford Bulletin of Economics and Statistics, 70*(5), 665-704.

World Development Indicators. (2018). *World development indicators.* Washinton, USA: The World Bank.

Wynne, M., & Kersting, E. (2007). *Openness and inflation* (Staff Papers No. 2). Dallas, USA: Federal Reserve Bank of Dallas.

Yanikkaya, H. (2003). Trade openness and economic growth: A cross-country empirical investigation. *Journal of Development Economics, 72*(1), 57-89.

Zahonogo, P. (2017). Trade and economic growth in developing countries: Evidence from sub-Saharan Africa. *Journal of African Trade, 3*(1), 41-56. http://dx.doi.org/10.1016/j.joat.2017.02.001

APPENDIX

Appendix 1

List of 40 sub-Saharan African countries selected

Angola	Congo, Dem. Rep.	Kenya	Nigeria
Benin	Congo, Rep.	Lesotho	Rwanda
Botswana	Equatorial Guinea	Liberia	Sao Tome and Principe
Burkina Faso	Eritrea	Madagascar	Senegal
Burundi	Ethiopia	Malawi	Seychelles
Cabo Verde	Gabon	Mali	Sierra Leone
Cameroon	Gambia, The	Mauritania	South Africa
Central African Republic	Ghana	Mauritius	Togo
Chad	Guinea	Namibia	Uganda
Comoros	Guinea-Bissau	Niger	Zambia

Pertanika J. Soc. Sci. & Hum. 28 (2): 1163 - 1178 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Household Indebtedness: Economic Determinants of the Malaysian Residential Properties Nonperforming Loans

May Jin Theong[1], Ahmad Farid Osman[2]* and Su Fei Yap[3]

[1]Department of Applied Statistics, Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia
[2]Ungku Aziz Centre for Development Studies, Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia
[3]Department of Economics, Faculty of Economics and Administration, University of Malaya, 50603 Kuala Lumpur, Malaysia

ABSTRACT

As of December 2017, the Malaysian household debt relative to gross domestic product stood at nearly 85%, of which half of them were the residential housing loans. When the level of household indebtedness reaches high, it posts a negative impact on both households and financial institutions in the event of adverse external shock. Hence, there is a need for a deeper understanding of the default risk factors for residential properties. This paper unveiled the determinants of the Malaysian banks' residential properties nonperforming loans (NPLs) using the Autoregressive Distributed Modelling (ARDL) framework. In the sample period of 2006 to 2017, households bore inflation risk whereby a reduction in the household income adjusted for inflation affected their debt repayment obligation. Besides that, households were found vulnerable during the period of unemployment therefore would be more likely to default when they lost their future income. Further, a negative global crude oil shock and a higher overnight policy rate worsened the level of purchase of residential properties NPLs. Finally, the global financial stress index showed no significant impact, indicating the Malaysian households were less affected by external financial shock in the given context.

ARTICLE INFO

Article history:
Received: 23 November 2017
Accepted: 13 January 2020
Published: 26 June 2020

Keywords: Autoregressive distributed lags, macroeconomic determinants, long run, Malaysia, residential properties nonperforming loans

E-mail addresses:
mmay_f22@hotmail.com (May Jin Theong)
faridosman@um.edu.my (Ahmad Farid Osman)
gy2ss@um.edu.my (Su Fei Yap)
*Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

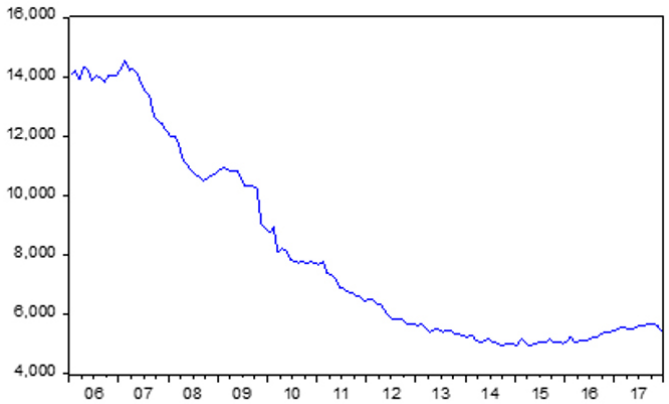
INTRODUCTION

The purchase of residential properties loan forms the lion's share of approximately 52% of total household debts, as of 2017. Being the third main reason for bankruptcy, mortgage debt defaults remain the largest component of household Non-Performing Loans (NPLs). Many Malaysians believe that owning or investing in properties is an important financial goal. Most of the banks offer 80%-90% house financing and the new maximum home loan period is 35 years instead of 45 years. In the case of a mortgage, banks require some sort of collateral that the borrower is obliged to pay back with a predetermined payment (principal as well as interest imposed).

Household debt default is a problem that should not be ignored as it hinders economic growth in the long run (Lombardi et al., 2017). Thus, this study attempted to determine the potential determinants of the main component of the Malaysian household nonperforming loans (NPLs), i.e. NPL for the purchase of residential properties. According to the latest classification of Nonperforming Loans (NPLs) for substandard, bad and doubtful debts published by Bank Negara Malaysia (BNM) in 2015, a loan is considered as impaired *"where the principal or interest/ profit or both of the loan/financing is past due for more than 90 days or 3 months"*.

Figure 1 shows the purchase of residential properties NPLs (RM million) from 2006 to the end of 2017 is trending downward with few hikes during 2008 and 2015. In Malaysia, the median annual household income is almost five times lower than the median house price, renders increasing in borrowings. To facilitate homeownership due to alarming mispriced house and household affordability, Malaysian banks are given flexibility in assessing borrowers' eligibility on their financial circumstances by determining their income source and debt service ratio level[1](Tan, 2018) despite that the defaults are moderate. Thus, this raises the concern of the rise in banks' NPLs.

1 The usual debt service ratio is capped at 60%.



Source: Monthly Statistical Bulletin, BNM (2018)

Figure 1. NPL for the purchase of residential properties (RM million), January 2006-December 2017

Review of Literature

Adverse macro shocks like abrupt changes in income flow, cost of living, cost of borrowing, unemployment, and other unforeseen external occasions are expected to interrupt the households in maintaining their debts at the same level. Specifically, households with thinner financial margin are more vulnerable (Nordin et al., 2018) and subsequently put the banks at threat for formations of more bad loans.

Suggested in the past literature, unemployment has predictive power on household NPLs where the relationship between these variables is positive. Households with debts are more likely to face illiquidity during unemployment as it tightens households' financial constraints, therefore, expected to increase the risk of NPLs (See Beck et al., 2015; Castro, 2013; Messai & Jouni, 2013).

Identified by previous studies, income is a proxy variable to determine borrowers' wealth and ability of debt repayment (Alfaro & Gallardo, 2012; Bonilla, 2012; Dinh & Kleimeier, 2007). Nominal debt repayment value remains the same but the real debt value is greater if borrowers' income doesn't rise with the living cost (Klein, 2013; Nkusu, 2011; Skarica, 2013), leveraging in higher NPLs level. Therefore, the expectation of greater real income improves the availability of cash flow, in turn, reduces the probability of default.

Banks' income and profitability are generated through interest via the lending function at the same time they bear credit risk since households' indebtedness are sensitive to the fluctuation of the cost of borrowing, especially for loan types with variable interest rates (Louzis et al., 2012; Zaman & Meunier, 2017), e.g. housing loans. Positive changes in interest rate deteriorate borrowers' repayment capacity leads to accumulations of bad loans (Adebola et al., 2011; Beck et al., 2015).

A dim global outlook and commodity price shock had attributed hard times to the emerging economies. Negative commodity price shocks impede the commodity exporters' revenue thereby constraint the consumption of households and firms which can lead to default. Idris and Nayan (2016) indicated crude oil price appreciates tended to improve the wealth position of borrowers and lower the chances of default. There are more closing down of business units as a result of the reduced fiscal revenue due to lower consumption of unemployed economic units, at the same time this leads to low availability of cash flows of hence leading to default. As supported by Callen et al. (2015), Hesse and Poghosyan (2009), Miyajima (2016), and Lopez-Murphy and Villafuerte (2010), commodity (oil) price shocks are procyclical and provide a feedback loop on the banks' balance sheet. The outbreak of global financial uncertainties exacerbates external demand in turn lower real economic activity in the export-dependent countries. This impact depresses the firms followed by the domestic market condition, giving rise to the household indebtedness cycle (Debelle, 2004).

In Malaysia, there were several studies conducted on credit risk. The evidence of Adebola et al. (2011) pointed out NPLs in Malaysia Islamic banking system response to any change in lending rate, industrial production, and inflation rate, especially in the long run. Janvisloo and Muhammad (2013) explained that credit risk in Malaysia's commercial banking system was affected by GDP growth and domestic credit growth in a negative direction and while the lending rate and inflation rate positively affecting the NPL ratio. Similarly, Waemustafa and Sukri (2015) found inflation rate was significant to credit risk for Malaysian conventional banks.

This study contributes to enhancing the available literature on Malaysian credit risk factors. Particularly, the study draws close monitoring of the factors of home financing impairment as this loan type is by far the largest cause of household indebtedness. Also, this study features joint implications of the macroeconomic distress and incorporating the microeconomics variable, i.e. household income adjusted for inflation, as one of the leading indicators for credit risk of the banking system. On the other hand, as Malaysia is one of the oil-producing countries and trade-dependent, the study assesses the impact of crude oil price and global risk (stress index) on the NPLs. Practically, to maintain asset quality of the banking system and household resilience, banks may view these available risk strategies and their respective impacts in policymaking. For instance in setting loan loss provision, this study reveals valuable quantitative econometric relations, particularly by placing greater emphasis on certain macro inefficiency.

The structure of this paper is designed as follows. Section 2 provides data descriptions and research methodology. Section 3 presents and discusses empirical results while this paper concludes the empirical findings in Section 4.

MATERIALS AND METHOD

Data and Sample

This study analysed the macro determinants of Malaysian residential housing nonperforming loans (NPLs) using the Autoregressive Distributed Lags approach (ARDL) in the period of 2006 to 2017 by monthly observations, covering the period of Global Financial Crises occurred in 2008-2009, commodity (oil) price shock in 2015. NPLs (in RM million) on the purchase of residential properties ("PRNPL") servjng as an endogenous variable was examined corresponding to the chosen exogenous determinants that were global crude oil price, global financial stress index, household income adjusted for inflation, overnight policy rate and unemployment rate. All these variables were expressed in natural logarithm (LN) except for global financial stress index are shown in Figure 1. The hypothesised coefficient signs are tabulated in Table 1.

Research Model

The presence of a cointegrating relationship between the variables can be determined using the ARDL bound testing approach

Table 1

The expected relationship between explanatory variables and the purchase of residential properties NPLs

Explanatory Variables	Type of Indicators /Source	Description/Unit	Expected Relationship with NPLs
Crude Oil Price (OIL)	Global commodity price/ *International Monetary Fund*	Crude Oil (petroleum), simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh/ RM per Barrel	Negative
Median Household Income Adjusted for Inflation (INC)	Domestic Microeconomic/ *The central Bank of Malaysia (BNM) Monthly Statistical Bulletin, Department of Statistics Malaysia*	Total income received (accrued) by members of the household, both in cash or in kinds which occurs repeatedly within the reference period/ Interpolated, RM	Negative
Overnight Policy Rate (OPR)	Monetary Policy/ *The central Bank of Malaysia (BNM) Monthly Statistical Bulletin*	Target rate for the day-to-day liquidity operations of the BNM. An interest rate at which a depository institution lends immediately available funds (balances within the central bank) to another depository institution overnight/ %	Positive
Unemployment Rate (UNE)	Domestic Macroeconomic/ *Department of Statistics Malaysia*	Total labour force that is unemployed but actively seeking employment and willing to work/Seasonally Adjusted %	Positive
Global Financial Stress Index (GFSI)	Global financial shock/ *Louis Federal Reserve Banks*	The degree of financial stress in the markets and is constructed from 18 weekly data series: seven interest rate series, six yield spreads and five other indicators/ Index	Positive

Source: BNM Monthly Statistical Bulletin, St. Louis Federal Reserve Banks, Department of Statistics Malaysia (2018)

to cointegration (Pesaran & Pesaran, 1997; Pesaran et al., 2001). This approach offers advantages that don't require the same integrated order in all the variables under study, free from autocorrelation when it is augmented by the appropriate lag structure in both the dependent and independent variables and robust in small sample size. Unlike the conventional Johansen approach, the restrictions on the number of lags can be applied to each variable separately in an ARDL method (Pesaran & Shin, 1999; Pesaran et al., 2001). Once a cointegrating relationship is found established in the model, an error correction model can be derived to reveal the short-run impact of the given variables with a long-run equilibrium using an error correction term without dropping long-run information (Pesaran & Shin, 1999).

To this end, this study considered an ARDL (p,q_1,…,q_k) model

$$Y_t = \beta_0 + \sum_{i=1}^{p} \beta_i Y_{t-i} + \sum_{j=1}^{k} \sum_{l_j=0}^{q_j} a_{j,l_j} X_{j,t-l_j} + \varepsilon_t \quad [1]$$

Where Y_t is the dependent variable, p is the number of lags of the dependent variable Y_t, q is the number of lags of the k explanatory variable X_1, X_2…, X_k , β_0, β_i and $a_{j,lj}$), and are the constant term, coefficients associated with lags of Y_t and coefficients associated with the lags of k explanatory variable $X_{j,t}$ for j=1,2,…,k, respectively, and is a random disturbance term.

Applying ARDL bound testing cointegration approach, construct a conditional error correction form of Equation [1]

$$\Delta Y_t = \beta_0^* + \rho Y_{t-1} + \sum_{j=1}^{k} \pi_j X_{j,t-1} + \sum_{i=1}^{p-1} \gamma_i \Delta Y_{t-i} + \sum_{j=1}^{k} \sum_{l_j=0}^{q_j-1} \theta_{j,l_j} \Delta X_{j,t-l_j} + \varepsilon_t \quad [2]$$

where Δ denotes the first difference operator and ε_t is the white noise residuals. To investigate the presence of a level (or long run) relationship between the variables in the model, it is hypothesised as H_0: $\rho=\pi_1=\pi_2=\pi_3=...=\pi_k=0$ (No cointegration) against the existence of long run cointegration. Two sets of critical values are computed by Pesaran et al. (2001) for a given significance level. The null hypothesis is rejected if the calculated F statistics exceeds the upper bound critical values. The null hypothesis is not rejected if the calculated F statistic is below the lower bound critical value. If the F-statistic falls in between the lower and upper bounds then the test becomes inconclusive.

If the long run relationship is found, by rewriting equation [2], the cointegrating regression form of an ARDL model is

$$\Delta Y_t = \sum_{i=1}^{p-1} \gamma_i \Delta Y_{t-i} + \sum_{j=1}^{k} \sum_{l_j=0}^{q_j-1} \theta_{j,l_j} \Delta X_{j,t-l_j} + \lambda ECT_{t-1} + \epsilon_t \quad [3]$$

where $ECT_t = Y_t - \frac{\beta_0^*}{\rho} - \sum_{j=1}^{k} \frac{\pi_j}{\rho} X_{j,t}$. The coefficient λ reveals the speed of Y adjust to equilibrium after a shock in X. The significant negative sign of error correction term ECT, shows that the model moves towards the stable position in the long run. Based on the context, the conditional error correction and cointegration regression form of ARDL (p, q_1, q_2,…, q_5) representation to

examine the relationships between the NPLs for purchase of residential properties and the determinants is specified as

$$\Delta LNPRNPL_t = \beta_0^* + \rho LNPRNPL_{t-1} + \pi_1 GFSI_{t-1} + \pi_2 LNINC_{t-1} + \pi_3 LNOIL_{t-1} + \pi_4 LNOPR_{t-1} + \pi_5 LNUNE_{t-1} + \sum_{i=1}^{p-1} \gamma_i \Delta LNPRNPL_{t-i} + \sum_{l_1=0}^{q_1-1} \theta_{1,l_1} \Delta GFSI_{t-l_1} + \sum_{l_2=0}^{q_2-1} \theta_{2,l_2} \Delta LNINC_{t-l_2} + \sum_{l_3=0}^{q_3-1} \theta_{3,l_3} \Delta LNOIL_{t-l_3} + \sum_{l_4=0}^{q_4-1} \theta_{4,l_4} \Delta LNOPR_{t-l_4} + \sum_{l_5=0}^{q_5-1} \theta_{5,l_5} \Delta LNUNE_{t-l_5} + \varepsilon_t \quad [4]$$

Rewriting this equation as

$$\Delta LNPRNPL_t = \sum_{i=1}^{p-1} \gamma_i \Delta LNPRNPL_{t-i} + \sum_{l_1=0}^{q_1-1} \theta_{1,l_1} \Delta GFSI_{t-l_1} + \sum_{l_2=0}^{q_2-1} \theta_{2,l_2} \Delta LNINC_{t-l_2} + \sum_{l_3=0}^{q_3-1} \theta_{3,l_3} \Delta LNOIL_{t-l_3} + \sum_{l_4=0}^{q_4-1} \theta_{4,l_4} \Delta LNOPR_{t-l_4} \sum_{l_5=0}^{q_5-1} \theta_{5,l_5} \Delta LNUNE_{t-l_5} + \lambda ECT_t + \varepsilon_t \quad [5]$$

where,

$$ECT_t = LNPRNPL_t - \left(\frac{\pi_1}{\rho} GFSI_t + \frac{\pi_2}{\rho} LNINC_t + \frac{\pi_3}{\rho} LNOIL_t + \frac{\pi_4}{\rho} LNOPR_t + \frac{\pi_5}{\rho} LNUNE_t + \frac{\beta_0^*}{\rho}\right)$$

the cointegrating relationship when PRNPL and its determinants are cointegrated.

PRNPL: NPLs for Purchase of residential properties

GFSI: Global financial stress index

INC: Household income adjusted for inflation

OIL: Crude oil price

OPR: Overnight policy rate

UNE: Unemployment rate

RESULTS AND DISCUSSION

Figure 2 shows the trend of these variables of interest. Concerning the explanatory variables, global crude oil prices wandered up and down and hit the highest at RM430.78 per barrel in July 2008 while the lowest in January 2016. Household income adjusted for inflation increased gradually throughout the sample period, with few occasional slumps due to the impact of high price costs. The overnight policy rate (OPR) which could affect the lending rates had been adjusted several times in order to cushion the uncertainties in the global and domestic market conditions. As seen, the highest OPR marked 3.5% in April 2006 while the lowest OPR recorded 2.00% in 2009 February and remained for 12 months. The global financial stress index which reflects the overview of the global economic condition experienced a contraction in late 2008. Unemployment fluctuated in little variation between 2.8% -lowest in 2014 Q3 and 3.8%-highest in 2009Q3, in the post-global financial crisis period.

The unit root test was performed on the variables in the level and first differenced form, using the standard Augmented Dickey Fuller (ADF) tested with the trend and without trend term. For comparison purposes, Philip Perron (PP) test was conducted and similar findings were concluded.

Table 2 reports that, at all significance levels (1%, 5%, and 10%), the null hypothesis of the differenced series contains unit root is rejected and concludes that none of the tested variables is I(2). In this regard, the ARDL model is a valid methodology in analysing the variables.

The optimal lag structure of the ARDL model was chosen based on AIC focus on

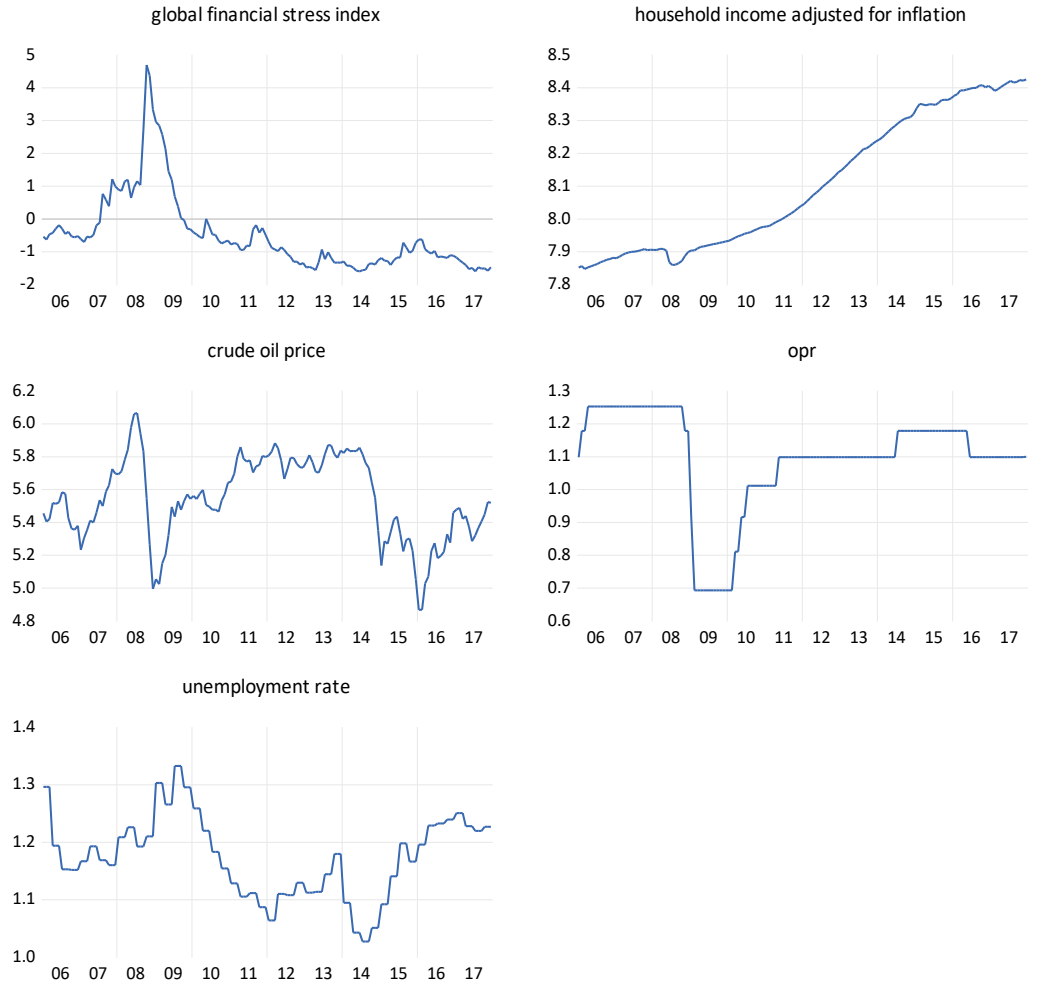


Figure 2. The Malaysian NPLs for purchase of residential properties and its determinants

the best order of lags without underfitting the model. Derived from an ARDL specification, the equilibrating relationship was further extracted using ARDL bound to cointegration approach (Pesaran & Shin, 1999; Pesaran et al., 2001) and speed for adjustment was estimated if cointegration exists.

A key assumption for ARDL bound to cointegration approach is the residuals from the model are free from autocorrelation and heteroscedasticity. As per Table 3, residuals of each ARDL model were found to be serially uncorrelated and homoscedastic at 5% significance level. The coefficients of the specified ARDL model was shown stable and no presence of structural breaks over the sample period, according to the CUSUM plot as per Figure 3. The final specified model is ARDL (3, 0, 0, 0, 5, 7).

Table 2
Unit Root Tests

	ADF without trend		ADF with Trend		PP without trend		PP with trend	
	Level	First	Level	First	Level	First	Level	First
GFSI	-2.040	-8.7680***	-2.866	-8.7488***	-1.767	-9.1678***	-2.412	-9.2549***
LNINC	-0.592	-6.9668***	-1.922	-7.0532***	-0.685	-7.0079***	-1.824	-7.1014***
LNOIL	-3.0044**	-8.1301***	-3.097	-8.1052***	-2.629	-8.2040***	-2.692	-8.1799***
LNOPR	-2.003	-8.7778***	-1.992	-8.7509***	-2.045	-8.9300***	-2.041	-8.8990***
LNUNE	-2.193	-11.8386***	-2.003	-11.9131***	-2.362	-11.8471***	-2.173	-11.9261***
PRNPL	-1.926	-12.7809***	-0.304	-13.2854***	-1.763	-13.0822***	-0.127	-13.2730***

Note: Asterisks ***,**,* indicated statistically significant at 1%, 5% and 10%. Critical value based on MacKinnon (1996) for ADF test and PP test.

Table 3

Diagnostics Tests

	p-values
Serial Correlation: Breusch-Godfrey LM Test	0.986
Heteroskedasticity :White Test:	0.103

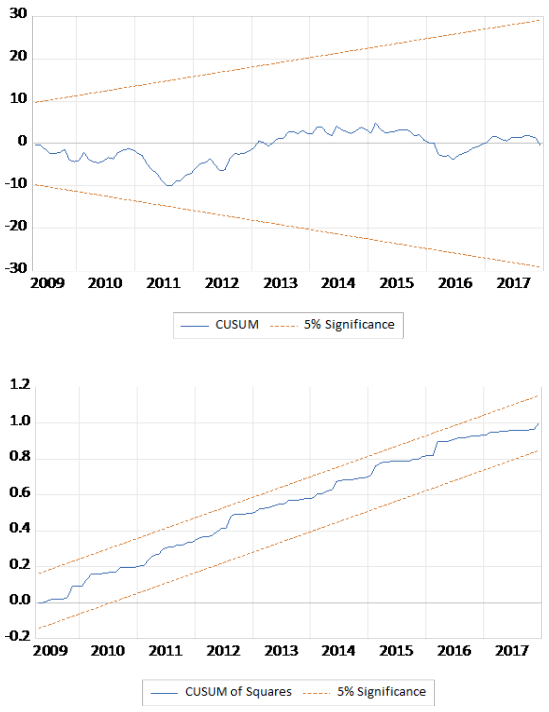


Figure 3. CUSUM plots

Next, to test the presence of cointegration, bound test for cointegration was performed under the null hypothesis of H_0: $\rho = \pi_1 = \pi_2 = \pi_3 = \pi_4 = \pi_5 = 0$ (no long-run relationship between the levels of variables) against the existence of long run cointegration. F-statistics (see Table 4) exceeds the upper bound critical values; therefore, the null hypothesis is rejected at a 1% significance level. This provides evidence of long run relationships exists between this NPL category

and the selected indicators, i.e. global stress index, household income adjusted for inflation, crude oil price, overnight policy rate, and unemployment rate.

Table 4
ARDL Cointegration bound test

Null Hypothesis: No levels relationship			
F-statistic	Significance level	I(0)	I(1)
8.322169	10%	2.08	3
	5%	2.39	3.38
	2.50%	2.7	3.73
	1%	3.06	4.15

Table 5 indicates the estimation of restricted error correction model and the coefficients of the lagged error correction term, ECT(-1) is negatively and statistically significant at 1%, hence, confirming the presence of long run relationship among the variables. The speed of adjustment to long run equilibrium specified that about 5% of the disequilibrium in *t-1* period was corrected monthly by the changes of NPLs. Focussing on the long run dynamics reported in the panel I of Table 5, note that ceteris paribus, for a 1% increase in household income adjusted for inflation and crude oil price led to negative changes in NPLs for purchase of properties level by 1.10% and 0.63%, respectively. Similarly, positive coefficients of overnight policy rate and unemployment rate were estimated and suggested 1% increase in overnight policy rate increased the mortgage NPLs level by 1.58% whereas a percentage increase in unemployment rate resulted in a rise in the level of purchase of property debt default by 2.03%, all else were being equal. There is significant evidence of long run impact of all indicators except for the global financial stress index on the mortgage NPLs.

Panel II discussed the short run impact. To test for the short run causality, a joint F-test was used to test the sum of lagged coefficients of each independent variable. There's a short run causality that ran from the OPR to the changes NPLs for the purchase of residential properties. Similarly, short term shock on unemployment was transmitted to the changes in mortgage NPLs. The short term change of lagged NPLs on current NPLs was expected to be negative as NPLs tended to decrease when it increased in the previous month, due to write-off (Sorge & Virolainen, 2006). In the short term, higher interest rates reduced NPLs since higher interest rates usually discourage d lending (Žiković et al., 2015). On the other hand, Philip curves explain Low unemployment often leads to a higher inflation rate, reducing the real income of unprotected borrowers thus leading to an increase of the credit risk ratio in the short-run. The short term impact of these indicators on the residential housing NPLs is relatively small.

Notably, global financial illiquidity does not significantly impact Malaysian households' resilience in both the short

and long run when taking other domestic economic factors and monetary policy into account. The effect of global crisis like the one that happened in 2008 was not as bad as the 1997-98 Asian Financial Crises as the first-mentioned was emanated externally while the latter had severely affected the regional economies internally.

Table 5

ARDL modelling: Long run and cointegrating relationship

Selected Model : ARDL (3,0,0,0,5,7)			
Panel I: Long Run Coefficients			
GFSI	-0.0577	(0.1354)	
LNINC	-1.1033	(0.0080)	***
LNOIL	-0.6305	(0.0211)	**
LNOPR	1.5797	(0.0000)	***
LNUNE	2.0308	(0.0041)	***
C	17.0005	(0.0000)	***
Panel II: Cointegrating Relationship			
ΔPRNPL(-1)	-0.30707	(0.0008)	***
ΔPRNPL(-2)	-0.13617	(0.1353)	
ΔGFSI	-0.00284	(0.8547)	
ΔLNINC	-0.05376	(0.9019)	
ΔLNOIL	-0.03098	(0.5949)	
ΔLNOPR	-0.09023	(0.0782)	*
ΔLNOPR(-1)	-0.06576	(0.2593)	
ΔLNOPR(-2)	-0.00609	(0.9107)	
ΔLNOPR(-3)	-0.15109	(0.0063)	***
ΔLNOPR(-4)	-0.105	(0.0523)	*
ΔLNUNE	-0.02515	(0.7792)	
ΔLNUNE(-1)	-0.04917	(0.581)	
ΔLNUNE(-2)	0.05608	(0.5158)	
ΔLNUNE(-3)	-0.14602	(0.0955)	*
ΔLNUNE(-4)	-0.30112	(0.0004)	***
ΔLNUNE(-5)	-0.11905	(0.1706)	
ΔLNUNE(-6)	-0.1469	(0.0469)	**
ECT(-1)	-0.04918	(0.0000)	***

Note: p-values are in parentheses

A simple rule of thumb of Okuns' Law suggests that unemployment is negatively associated with economic growth. This study validated that the economic cycle posted a significant effect on household capability in paying off their debt. The household sector was facing greater financial sustainability to maintain mortgage payment due to slowdown in economic activities, therefore more impaired loans were formed.

The deterioration of this macroeconomic indicator was proxied by the business cycle indicator, unemployment rate. In line with past studies, the rise in the unemployment rate was found to increase the probability of default (Agarwal & Liu, 2003; Beck et al., 2015; Bellotti & Crook, 2009; Castro, 2013; Messai & Jouni, 2013).

One factor that explains the rise of the residential housing NPLs is the overnight policy rate. A rise in the lending rates is the effort of rein in excessive consumptions and demands. Borrowers who had accumulated debts before the policy adjustment bore increased debt burden subsequently triggering default in the long run if there was a positive shock in borrowing cost. In addition, households that hold a mortgage with a variable interest rate are more sensitive to a change in policy rate compared to those with a fixed mortgage rate (Campbell & Cocco, 2015). With higher interest rates, interest payments on the loan will be more expensive, therefore affecting repayment capacity, which is similar to the existing findings (Collins & Wanjau, 2011; Dash & Kabra, 2010; Ghani, 2010).

Supported by Alfaro and Gallardo (2012), Campbell and Cocco (2015), and Rinaldi and Sanchis-Arellano (2006), income growth is related to the probability of default. Banks generally restrict loan eligibility based on debt to income ratio. This implies that the low nominal income itself will not lead to household default, but unexpected macroeconomic implication amplifies the effect of low income. In the study, household income adjusted for inflation was significant in explaining mortgage default. While more than half of the income was used for serving debt, greater current real income enabled the household to meet repayment obligation thus reducing the formation of impaired loans. Instead, household default rises if the nominal household income is squeezed by high living costs (Nkusu, 2011) as the borrowers have no sufficient discretionary income, resulting in higher levels of NPLs.

Crude oil price provides additional information to the economic condition of the oil export-dependent countries. Weak prices of a key export commodity lower the country's fiscal position, firms' revenue, and in turn causes a negative chain effect to the domestic market. Hence, as expected, the crude oil price was negatively affecting the NPLs. These findings are in line with the study conducted by International Monetary Fund [IMF] (2015), Idris and Nayan (2016), and Kinda et al. (2016).

In principle, the financial accelerator mechanism (Bernanke et al., 1998) amplifies the macroeconomic implications of the credit market. High level of household indebtedness is often led by fuelled economic conditions and low-interest-rate environments. In turn, this leads to stronger aggregate demand and favourable labour market. However, over time, high household indebtedness warns the higher fragility of the household (Jappelli et al., 2013), as such, households are prone to default even for a mild shock. Given that all the borrowers have similar repayment ability, that is having no more than 60% debt to

income ratio, a negative shock, however, has a pro-cyclical effect on the repayment capacity. The external shock, particularly oil price slump, put the Malaysian economy skidding. This deteriorates the domestic business sentiment and further transmits the negative impact to households via unemployment and slow income growth. While income is significantly related to the housing NPLs, when price growth outpaced the income growth, households with reduced real income may find difficulties in serving debt. For collateral lending like houses that appreciate values in the long run, household debt repayment expects sufficient current and future real income to sustain a longer tenure of housing loan, which is congruent with Post Keynesian Theory of Consumption. Moreover, a tightened monetary policy to fight inflationary pressure like adjustment in the policy rate will make household difficulties more acute.

CONCLUSION

Despite the fact that the level of Malaysian nonperforming loans (NPLs) for purchase of residential properties decreases gradually, however, the default in this loan category remains the largest share of the household loan default. In times of household unsustainability (due to micro/ macroeconomic factors, the banks are at risk of nonprofitable foreclosure and will have a contagion effect on the economy. This study investigated the explanatory powers of macro determinants of Malaysian nonperforming loans (NPLs) for purchase of residential properties using Autoregressive Distributed Lags (ARDL), in the period of January 2006 to December 2017. ARDL bound test revealed cointegration existed between the NPLs for the purchase of residential properties and the variables chosen. The CUSUM tests indicated the stability of the estimated parameters.

The study explained NPLs for purchase of residential properties was significantly affected by the external factor which was the crude oil price volatility while attributed by the domestic macroeconomic factors of NPLs, those are household income adjusted for inflation, monetary policy, and unemployment rates. As such, in the area of policy implications, the central bank needs to consistently conduct of both micro and macro-stress tests of loans against the suggested determinants in order to reduce the risk of credit vulnerability. Besides reviewing borrowers' net disposable income, this study suggests banks to closely monitor these macroeconomic positions with respect to their quantitative impact for mortgage underwriting. For future research, the analysis can determine whether there is a bi-directional feedback effect between NPLs and the economic determinants. Further, this work can be extended to explore NPLs and macroeconomic linkage in an asymmetry framework.

ACKNOWLEDGEMENT

We are grateful to the financial support provided by Ungku Aziz Centre for Development Studies via its research grant (Grant Number: PD004-2017).

REFERENCES

Adebola, S. S., Yusoff, W., & Dahalan, J. (2011). An ARDL approach to the determinants of nonperforming loans in Islamic banking system in Malaysia. *Kuwait Chapter of Arabian Journal of Business and Management Review*, *33*(830), 1-11.

Alfaro, R., & Gallardo, N. (2012). *The determinants of household debt default.* Retrieved March 22, 2017, from http://repositorio.uahurtado.cl/bitstream/handle/11242/2009/353-1168-1-PB.pdf?sequence=1&isAllowed=y

Agarwal, S., & Liu, C. (2003). Determinants of credit card delinquency and bankruptcy: Macroeconomic factors. *Journal of Economics and Finance, 27*(1), 75-84. doi:10.1007/BF02751591

Bank Negara Malaysia. (2018). *Monthly statistical bulletin.* Retrieved January 1, 2018, from http://www.bnm.gov.my/index.php?ch=en_publication&en&pub=msbarc

Beck, R., Jakubik, P., & Piloiu, A. (2015). Key determinants of non-performing loans: New evidence from a global sample. *Open Economies Review*, *26*(3), 525-550. https://doi.org/10.1007/s11079-015-9358-8

Bellotti, T., & Crook, J. (2009). *Loss given default models for UK retail credit cards* (CRC working paper 09/1). Edinburgh, Scotland: Credit Research Centre University of Edinburgh Business School.

Bernanke, B., Gertler, M., & Gilchrist, S. (1998). The financial accelerator in a quantitative business cycle framework. In J. B. Taylor & M. Woodford (Eds.), *Handbook of macroeconomics*. Amsterdam, Netherland: Elsevier Science.

Bonilla, C. A. O. (2012). *Macroeconomic determinants of the non-performing loans in Spain and Italy* (Unpublished Doctoral dissertation), University of Leicester, England.

Callen, T., Khandelwal, P., Miyajima, K., & Santos, A. (2015). Oil prices, financial stability, and the use of countercyclical macroprudential policies in the GCC. In *Prepared for the annual meeting of ministers of finance and central bank governors*. Retrieved May 28, 2017, from https://www.imf.org/external/pubs/ft/wp/2016/wp16161.pdf

Campbell, J. Y., & Cocco, J. F. (2015). A model of mortgage default. *The Journal of Finance*, *70*(4), 1495-1554.

Castro, V. (2013). Macroeconomic determinants of the credit risk in the banking system: The case of the GIPSI. *Economic Modeling, 31*(C), 672-683.

Collins, N., & Wanjau, K. (2011), The effects of interest rate spread on the level of nonperforming assets: A case of commercial banks in Kenya. *International Journal of Business and Public Management, 1*, 58-65.

Dash, M. K., & Kabra, G. (2010). The determinants of non-performing assets in Indian commercial bank: An econometric study. *Middle Eastern Finance and Economics*, *7*(2), 94-106.

Debelle, G. (2004). *Macroeconomic implications of rising household debt* (BIS Working Paper No. 153). http://dx.doi.org/10.2139/ssrn.786385

Department of Statistics Malaysia. (2018). *Key statistics of labour force in Malaysia*. Putrajaya, Malaysia: Author.

Dinh, T. H. T., & Kleimeier, S. (2007). A credit scoring model for Vietnam's retail banking market. *International Review of Financial Analysis*, *16*(5), 471-495.

Ghani, N. A. (2010). Household indebtedness and its implications for financial stability in Malaysia. In D. Nokarnthab (Ed.), *Household indebtedness and its impact for financial stability* (pp. 67-88). Kuala Lumpur, Malaysia: The South East Asian Central Banks (SEACEN) Research and Training Center. Retrieved September 8, 2017, from https://core.ac.uk/download/pdf/6281321.pdf#page=81

Idris, I. T., & Nayan, S. (2016). The joint effects of oil price volatility and environmental risks on non-performing loans: Evidence from panel data of organization of the petroleum exporting countries. *International Journal of Energy Economics and Policy, 6*(3), 522-528.

International Monetary Fund. (2015). Oil prices, financial stability, and the use of countercyclical macroprudential policies in the GCC. In *Annual meeting of ministers of finance and central bank governors,* Doha, Qatar. Retrieved January 10, 2017, from https://www.imf.org/external/np/pp/eng/2015/111015a.pdf

Hesse, H., & Poghosyan, T. (2009). *Oil prices and bank profitability: Evidence from major oil-exporting countries in the Middle East and North Africa* (No. 9-220). International Monetary Fund. Retrieved September 8, 2017, from https://www.researchgate.net/profile/Otaviano_Canuto/publication/305309119_Financial_Deepening_and_Post-Crisis_Development_in_Emerging_Markets_Current_Perils_and_Future_Dawns/links/5a3c24380f7e9b10e23bba9b/Financial-Deepening-and-Post-Crisis-Development-in-Emerging-Markets-Current-Perils-and-Future-Dawns.pdf#page=258

Jappelli, T., Pagano, M., & Di Maggio, M. (2013). Households' indebtedness and financial fragility. *Journal of Financial Management, Markets and Institutions*, *1*(1), 23-46. doi:10.12831/73631

Janvisloo, M. J., & Muhammad, J. (2013). Non-performing loans sensitivity to macro variables: Panel evidence from Malaysian commercial banks. *American Journal of Economics*, *3*(5c), 16-21. doi:10.5923/c.economics.201301.04

Kinda, T., Mlachila, M., & Ouedraogo, R. (2016). *Commodity price shocks and financial sector fragility* (IMF Working Paper, 16(12)). doi: 10.5089/9781498328722.001

Klein, N. (2013). *Non-performing loans in CESEE: Determinants and impact on macroeconomic performance* (International Monetary Fund Working paper 13/72). doi: 10.5089/9781484318522.00

Lombardi, M. J., Mohanty, M. S., & Shim, I. (2017). *The real effects of household debt in the short and long run* (BIS Working Papers No 607). Retrieved June 25, 2018, from https://www.bis.org/publ/work607.pdf

Lopez-Murphy, P., & Villafuerte, M. (2010). *Fiscal policy in oil producing countries during the recent oil price cycle* (IMF Working Papers). Retrieved February 10, 2017, from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.173.2705&rep=rep1&type=pdf

Louzis, D. P., Vouldis, A. T., & Metaxas, V. L. (2012). Macroeconomic and bank-specific determinants of non-performing loans in Greece: A comparative study of mortgage, business and consumer loan portfolios. *Journal of Banking & Finance*, *36*(4), 1012-1027.

MacKinnon, J. G. (1996). Numerical distribution functions for unit root and cointegration tests. *Journal of applied econometrics*, *11*(6), 601-618.

Messai, A. S., & Jouini, F. (2013). Micro and macro determinants of non-performing loans. *International Journal of Economics and Financial Issues*, *3*(4), 852-860. Retrieved July 10, 2017, from http://econjournals.com/index.php/ijefi/article/view/517/pdf

Miyajima, K. (2016). *An empirical investigation of oil-macro-financial linkages in Saudi Arabia* (IMF Working Paper). Retrieved August 9, 2017, from https://www.imf.org/en/Publications/WP/Issues/2016/12/31/An-Empirical-Investigation-of-Oil-Macro-Financial-Linkages-in-Saudi-Arabia-43702

Nkusu, M. (2011). *Nonperforming loans and macrofinancial vulnerabilities in advanced economies* (No.11/161). International Monetary Fund. Retrieved May 7, 201,

from https://EconPapers.repec.org/RePEc:imf:imfwpa:11/161

Nordin, S. H. B., Ling, L. S., & Abd Aziz, M. K. M. (2018). *Indebted to debt: An assessment of debt levels and financial buffers of households.* Kuala Lumpur, Malaysia: Financial Surveillance Department, Bank Negara Malaysia. Retrieved January 13, 2019, from https://www.bnm.gov.my/files/publication/fsps/en/2017/cp01_001_box.pdf

Pesaran, M. H., & Pesaran, B. (1997). *Working with Microfit 4.0: Interactive econometric analysis.* Oxford, England: Oxford University Press, Inc.

Pesaran, M., & Shin, Y. (1999). An autoregressive distributed lag modeling approach to cointegration analysis. In S. Strom (Ed.), *Econometrics and economic theory in the 20th century*. *The Ragnar Frisch centennial Symposium.* (No. 31). Cambridge, England: Cambridge University Press.

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, *16*(3), 289-326.

Rinaldi, L., & Sanchis-Arellano, A. (2006). *Household debt sustainability: What explains household non-performing loans? An empirical analysis.* Retrieved September 16, 2017, from https://www.econstor.eu/bitstream/10419/153004/1/ecbwp0570.pdf

Skarica, B. (2013). Determinants of non-performing loans in Central and Eastern European Countries. *Financial Theory and Practice, 38*(1), 37-59.

Sorge, M., & Virolainen, K. (2006). A comparative analysis of macro stress-testing methodologies with application to Finland. *Journal of Financial Stability*, *2*(2), 113-151. doi:10.1016/j.jfs.2005.07.002

Tan,X.Y (2018, June 20). No cap on civil servants' debt service ratio for mortgages — Bank Negara. *The Edge Financial Daily.* Retrieved August 26, 2018, from https://www.theedgemarkets.com/article/no-cap-civil-servants-debt-service-ratio-mortgages-%E2%80%94-bank-negara

Žiković, I. T, Žiković, S., & Blecich, A. A. (2015). The drivers behind household and corporate non-performing loans ratio: The case of Croatia. *Privredna Kretanja I Ekonomska Politika*, *24*(2 (137)), 7-35.

Waemustafa, W., & Sukri, S. (2015). Bank specific and macroeconomics dynamic determinants of credit risk in Islamic banks and conventional banks. *International Journal of Economics and Financial Issues*, *5*(2), 476-481.

Zaman, C., & Meunier, B. (2017). A decade of EU membership: Evolution of competitiveness in Romania. *European Research Studies*, *20*(2A), 224-236.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1179 - 1197 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Determinants of Natural Rubber Price Instability for Four Major Producing Countries

Yi Chiun Fong*, Aye Aye Khin and Chee Seong Lim

Department of Economics, Faculty of Accountancy and Management (FAM), Universiti Tunku Abdul Rahman (UTAR), 43000 Kajang, Selangor Malaysia

ABSTRACT

Recently, price instability of natural rubber (NR) in the world market has affected the NR economy severely. It is believed that NR price can no longer be explained solely by the fundamental factors supply-demand, but it is largely driven by external factors. Therefore, this study aimed to explore the determinants of NR prices in 4 major NR producing countries namely Thailand, Indonesia, Malaysia and Vietnam. Annual data from 2008 to 2017 was collected and panel data analysis was performed. Results of Hausman Test suggested that Fixed Effect Model (FEM) was preferable than Random Effect Model (REM) in the study. Results indicated that NR production, consumption, Shanghai NR price, crude oil price and synthetic rubber (SR) price were statistically significant. This study could contribute to government policy implementation in NR producing countries to ensure the stability of NR production and price which will benefit the smallholders and countries' economic growth.

Keywords: Fixed effect model, Hausman test, natural rubber, panel data, panel cointegration, panel granger causality, panel unit root, price

INTRODUCTION

Being one of the most significant agricultural commodities in the world, natural rubber (NR) is acting as a crucial economic indicator especially in the NR producing countries. NR market has been acting as one of the major contributions to one country's economic growth, especially in South-East Asia (SEA) countries. It is produced from latex that is tapped from a certain species of plant namely the *Hevea Brasiliensis*. In SEA countries, there are optimal conditions and environments for the plantation and cultivation for *Hevea* trees as compared to its origin country, Brazil. Without any specific tapping seasons, plantation and production

ARTICLE INFO

Article history:
Received: 07 October 2019
Accepted: 14 February 2020
Published: 26 June 2020

E-mail addresses:
ycyichiun@1utar.my (Yi Chiun Fong)
ayekhin@utar.edu.my (Aye Aye Khin)
cslim@utar.edu.my (Chee Seong Lim)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

of NR in SEA countries are bound to have a better performance than other western and European NR producing countries. Although more than 90% of rubber supply is coming from SEA countries, still, there is NR plantation in Europe countries as in the seeds of the plantation was introduced from Brazil (Khin & Thambiah, 2015). However, European countries are mainly NR importer due to the unfavourable condition for the plantation of *Hevea* trees as compared to SEA countries.

According to Department of Statistics of Malaysia (DOSM, 2019), in Malaysia, agriculture sector had contributed around 7.3% which is approximately RM 99.5 billion to the Gross Domestic Product (GDP) in 2018. In the total contribution from the agriculture sector, NR itself contributed 2.8%. Although the contribution is far behind the percentage of palm oil (37.9%), but NR is still identified as one of the important agricultural crops in Malaysia. From 2010 onwards, NR, along with oil palm, had been recognised as a special focus sector under the National Key Economics Areas (NKEA). For instance, rubber gloves and latex goods had contributed significantly to the total exports of NR products in Malaysia (Matade, 2016). According to Khin et al. (2008), NR economy is indeed playing a vital role in terms of socio-economics aspect in most of the NR producing countries who at the same time are also developing countries such as Thailand, Indonesia, Malaysia and Vietnam. Most of the plantation areas of *Hevea* trees are managed by private individual smallholders and farmers which indicates that the NR economy will ultimately affect their livelihood in rural areas.

In recent years, NR economy has been hit by the price instability as well as the imbalance of supply-demand situation in the world market where the NR world consumption has far exceeded its production. It is also believed that the factors behind the world NR price can no longer be explained solely by its fundamental factors (normal market supply-demand forces). However, it is actually largely affected by many non-fundamental or outside factors such as the real exchange rate, crude oil price, synthetic rubber (SR) price as well as the flow of speculative funds in the NR future exchange markets (Jacob, 2017; Khin & Thambiah, 2015). Besides, the volatility of NR price has also hit the production of NR. Much et al. (2011) mentioned that NR was a perennial agricultural crop which the plantation areas and average yield would decide on the future production of NR. When the world NR price is favourable to the cultivators and smallholders, they are encouraged to increase the NR production by either expanding existing plantation/ replantation areas or growing rubber yields. On the other hand, if the price becomes weaker, they tend to lower down the tapping and production or even switch to other agricultural crops that have better price such as palm oil, cocoa or wheat.

According to Jacob (2017), among several important future exchange markets such as Singapore Commodity Exchange

(SICOM), Tokyo Commodity Exchange (TOCOM) and Agricultural Future Exchange of Thailand (AFET), Shanghai Future Exchange Market (SHFE) is now becoming one of the most important future exchange in NR market. In major NR producing countries such as the International Tripartite Rubber Council (ITRC) which includes Thailand, Indonesia and Malaysia, the NR exports are mostly going to China. Therefore, being the top NR consumer in the world market, the rapid rising of the China Economy in recent years will definitely has an impact on the NR economy. On top of that, Global Rubber Market (GRM) supposes that even though it might be difficult to predict the NR economy in the near future, but it will absolutely be influenced by China's economic indicators.

IRSG indicates that the top 4 major NR producing countries as of 2017 are Thailand, Indonesia, Malaysia and Vietnam. Table 1 demonstrates the production and consumption of NR of the aforementioned producing countries in the world market from 2008 to 2017. Overall, in the recent 10 years, production of NR increases with slight fluctuation in most of the producing countries; while the consumption increases gradually over the years. NR production is not only dependent on its price but also highly dependent on the weather and seasonal conditions. For example, heavy rain season and flooding have severely affected NR production, especially in SEA countries in recent years. Unseasonal downpours have stopped the farmers from going to the plantation to tap for latex for the production of rubber. According to Association of Natural Rubber Producing Countries (ANRPC, 2018), unfavourable weather condition and the low NR price have caused the downfall of NR production in Malaysia, Vietnam, India and Sri Lanka in 2018. Besides, there was the outbreak of leaf diseases especially in Vietnam and India which further hit the NR production in the countries. Despite the raining and flooding, other NR producers saw an increase in production in 2018: Thailand's NR production increased by approximately

Table 1
NR production and consumption in major producing countries ('000 tonnes)

	Thailand		Indonesia		Malaysia		Vietnam	
	Pro	Con	Pro	Con	Pro	Con	Pro	Con
2008	3089.90	397.60	2751.00	412.30	1072.40	469.00	660.00	100.00
2009	3164.40	399.40	2440.00	352.00	857.00	469.80	711.30	120.00
2010	3252.10	458.70	2736.00	421.30	939.00	457.80	751.70	140.00
2011	3569.00	487.00	2990.00	460.20	996.20	402.20	789.30	145.00
2012	4778.00	505.00	3012.00	464.50	922.80	441.40	877.10	150.00
2013	4170.00	521.00	3237.00	508.90	826.50	434.10	949.10	154.00
2014	4324.00	541.00	3153.20	539.60	668.10	447.30	953.70	159.60
2015	4473.25	600.60	3145.40	509.40	721.55	474.70	1012.70	172.00
2016	4519.00	649.90	3208.10	583.30	673.55	486.20	1032.10	194.00
2017	4755.00	701.50	3409.00	610.50	738.80	488.60	1086.00	215.90

10 percent and Indonesia's by around 6.3 percent. It was mainly due to the expansion of planted areas as well as the maturity of *Hevea* trees which increase the production.

Table 2 represents the average annual NR prices in the 4 major NR producing countries from 2008 to 2017. Note that the prices above are different grades of rubber in different countries based on data availability. For Thailand, Standard Thai Rubber 20 (STR20) price is collected; for Indonesia, Standard Indonesia Rubber 20 (SIR20) is collected; for Malaysia, Standard Malaysia Rubber 20 (SMR20) is collected; and lastly for Vietnam, Technically Specified Rubber 20 (TSR20) is collected. On average, NR prices fluctuate over the years. Ever since the subprime crisis occurred during 2008, not only the commodity market was hurt but the global economy had collapsed. Thus, the NR price dropped during 2008-09 as the spill-over effect of the global economic crisis. After that, it increased to the peak of the recent 10 years in 2011 and then continued to drop again until 2016. This could be explained by the low output from the main NR producers due to the unseasonal downpours. At the same time, the falling of crude oil price also hit the NR market. The low crude oil price has made SR more competitive than NR which further lower the NR price. Fortunately, during 2017-18, there was an increase in the world crude oil price which indirectly revive the NR price.

Figures 1 to 4 illustrate the trends between NR SMR20 price with Synthetic Rubber (SR) price, Shanghai NR price, exchange rate and crude oil price from the year 2008 to 2017 respectively. Note that in this section, NR SMR20 price is taken to represent the world NR price for comparison and graph illustration. Overall, from Figure 1, 3 and 4, it shows that NR price is having positive relationship with SR price, Shanghai NR price as well as the crude oil price; while Figure 3 shows that NR price is negatively related to exchange rate. Firstly, SR is considered as the substitute product of NR in the market. Therefore, performance in the SR market will definitely have an impact, directly or

Table 2
NR prices in major producing countries (USD/ton)

Countries	Thailand	Indonesia	Malaysia	Vietnam
2008	2627.91	2789.95	2484.47	2535.00
2009	1931.82	1870.60	1805.80	1407.90
2010	3646.69	3418.20	3286.49	3176.30
2011	4863.89	4363.80	4429.28	5332.00
2012	3422.32	3250.40	3071.23	3513.36
2013	2792.06	2521.20	2470.98	3042.46
2014	1967.36	1714.70	1695.72	2129.57
2015	1581.10	1379.10	1332.99	1427.14
2016	1645.00	1387.00	1368.53	1087.33
2017	2038.89	1661.60	1653.37	1090.00

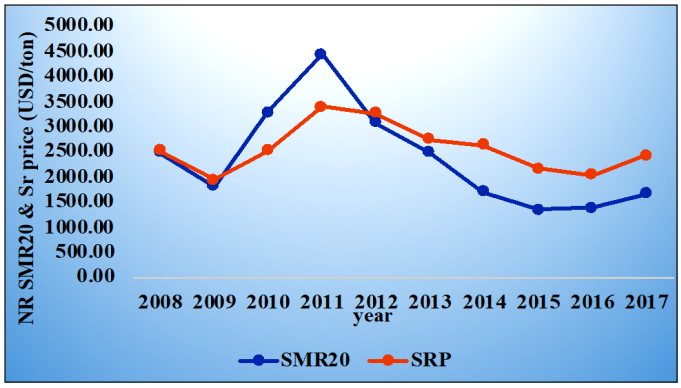


Figure 1. NR SMR20 and SR prices

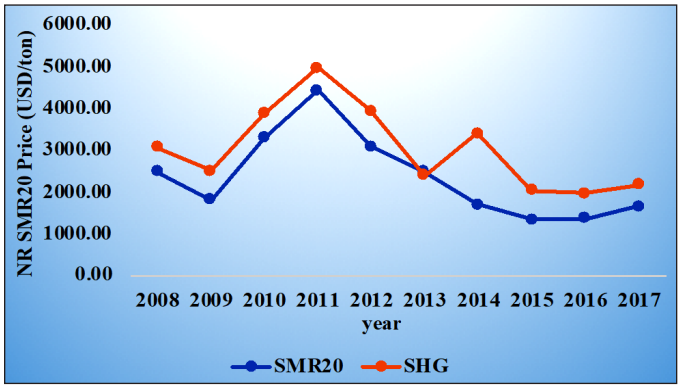


Figure 2. NR SMR20 and Shanghai NR price

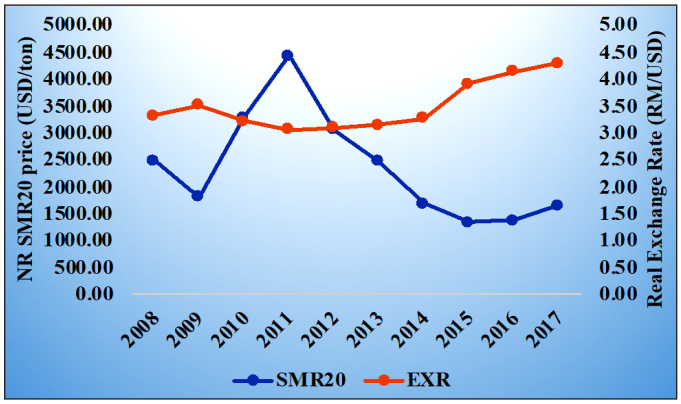


Figure 3. NR SMR20 price and exchange rate

indirectly to the NR market itself (Meutia & Putra, 2017). Since they are both substitute product to each other, they are having a positive relationship where both of the prices move together in the same direction as shown in figure 1. For instance, when SR becomes more expensive than before, the demand for NR will increase and NR is

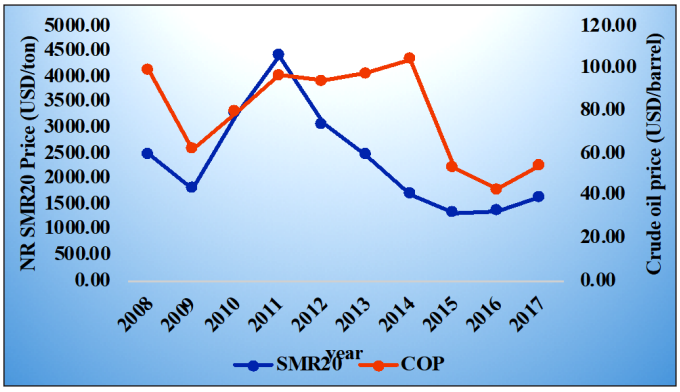


Figure 4. NR SMR20 and crude oil price

derived naturally from latex obtained from the plantation, while SR is a petroleum-based type of rubber. NR or latex are mostly used in the automobile industry such as the production of vehicle tires as well as medical products such as surgical gloves; SR is mostly used in the consumer and industrial application.

The price relationship between these 2 types of rubber can be more complex than it seems (Harder, 2018). Although they are both substitutable by each other to a certain degree, there are still many rubber products that actually require both types of rubbers. Technically, SR is not a perfect substitute for NR because various types or grades of SR often fail to meet certain essential properties of NR. For example, vehicle tires of passenger cars, buses as well as trucks tires which require both NR and SR to perform their specific function in the combination. Such technical consideration is the limiting factor for the substitution between the 2 types of rubber. However, a limited extent of substitution is still possible without sacrificing the quality and expected performance of manufactured end products. Apart from that, since SR is petroleum-based, it will be also affected by the world crude oil trend. Crude oil is one of the main raw material in the production of SR. Any fluctuation in the oil price will definitely reflect on the SR market, and by extension, the NR market too (Khin et al., 2012). Therefore, in Figure 4, it indicates that the NR price is moving together with the crude oil price on average. When crude oil price increases, the production cost of SR will rise and so does its end product. Therefore, consumers could switch their preferences to NR provided that the rubber goods tolerate the substitution between these 2 types of rubber. Eventually, the increase in demand will stimulate the price to rise.

As mentioned above, SHFE is one of the most important future exchange market in the commodity markets including NR. As the biggest consumer of NR in the world market, Shanghai NR price would become the crucial factor of the world price (Jacob, 2017). Speculative fund investors will consider NR and SR to be substitutable by each other in the rubber futures market. Crude oil price will influence Shanghai

rubber futures as the investors will bet on possible substitution between NR and SR based on the oil trend. They tend to invest in NR futures when crude oil price increases and they would switch over from NR futures when the crude oil price falls. Generally, the Shanghai future markets and the physical market of NR track the directional trends in the crude oil market. Therefore, as in Figure 2, SHFE and NR SMR20 are moving together in the same way with a positive relationship.

Figure 3 shows the trend between NR SMR20 price and exchange rate (RM/USD). It reveals that they are having a negative relationship with each other. Most of the agricultural commodities including NR are traded internationally in terms of USD. Therefore, any fluctuation in the currency exchange rate would have an impact on the market (Burger et al., 2002). In the case of Malaysia, as refer to Figure 3, when the exchange rate increases over the years, it indicates that the Malaysia Ringgit depreciates against USD. In the event of local currency devalues against USD, as an NR exporter, it means that there will be more export earning when converts back to Ringgit Malaysia. It prompts exporter to offer NR at a reduced price (quoted in USD) to attract buyers. When all exporters tend to adopt the same strategy to increase competitiveness, the NR price is expected to fall in terms of USD. Ultimately, a depreciating currency or in other word, an increase of exchange rate, it will depress NR price in terms of USD.

LITERATURE REVIEW

Previous researches had been done to investigate the factors affecting the NR price. (Khin et al., 2011) employed Vector Error Correction Model (VECM) and Multivariate Autoregressive Moving Average (MARMA) model to determine the inter-relationship between the production, consumption and price of the NR. Standard Malaysia Rubber Grade 20 (SMR20) NR price was included in the models. In the single equation NR price model, results showed that the NR price has a strong positive relationship with its production and a strong negative relationship with its consumption. Besides, the result of the cointegration equation of the SMR20 model also proved the existence of a long-run cointegrated relationship between NR price and its production and consumption. The results can be supported by the study by Arunwarakorn et al. (2019) and Kannan (2013).

Kannan (2013) investigated the NR market in India and found out that NR price had a direct positive impact on NR production which was statistical significance at 0.05 level. While Arunwarakorn et al. (2019) also revealed that the increase or decline of NR production could be due to the volatility of NR price. It also proved that there was a negative relationship between NR price and consumption. Besides, Khin and Thambiah (2015) also found out that NR price was having a negative relationship with its consumption at 0.05 level. It was also proven that they were having a long run cointegrated relationship between these 2 variables.

In (2012) conducted a study to forecast the short run SMR20 price by using univariate and multivariate econometric models. Results indicated that the NR price and crude oil price were having a positive relationship. When there was a 1% increase in crude oil price, it would positively impact the NR price by increasing 2.67% at 0.01 level. This result was supported by Khin et al. (2017) and Vijayakumar (2019) who also suggested the same results. When crude oil price increases, it will incur a higher cost in the production of SR which will eventually drive up the SR price. Therefore, consumers will switch their preference to NR since it becomes cheaper compared to SR.

As mentioned, NR is international trading in terms of USD. Therefore, the NR market is bound to be sensitive to currencies of exporting countries (Burger & Smit, 2002). Another finding by In (2012) was that there was a negative relationship between exchange rate and NR price. Mdludin et al. (2016), Soares et al. (2013), and Vijayakumar (2019) obtained similar results as In (2012). In (2012) mentioned that if the currencies of the rubber-producing countries appreciated against the USD, the rubber would be undervalued. According to Khin et al. (2011), in the case of Malaysia, when the Malaysian Ringgit (RM) depreciates against USD, which means that consumers need to pay more amount of RM for 1 USD, thus the NR price would be decreased. Therefore, the real exchange rate is one of the crucial factors that affect the NR price in the market.

In short, many of the previous researches tended to focus only on one country while investigating the NR market. For instance, they studied the NR market in Thailand, Malaysia or India which only within the country itself. Besides, many of them were using only time-series data for data analysis and result interpretation for the study. Methodologies such as VECM, univariate and multivariate analysis, forecasting were used. As such, it becomes the motivation of the study to employ panel data analysis which there is less literature using this methodology to investigate the NR market in several countries in a certain period.

METHODS

Conceptual Framework and Model Specification

Figure 5 illustrates the conceptual framework of the NR price factors in 4 Major NR producing countries namely Thailand,

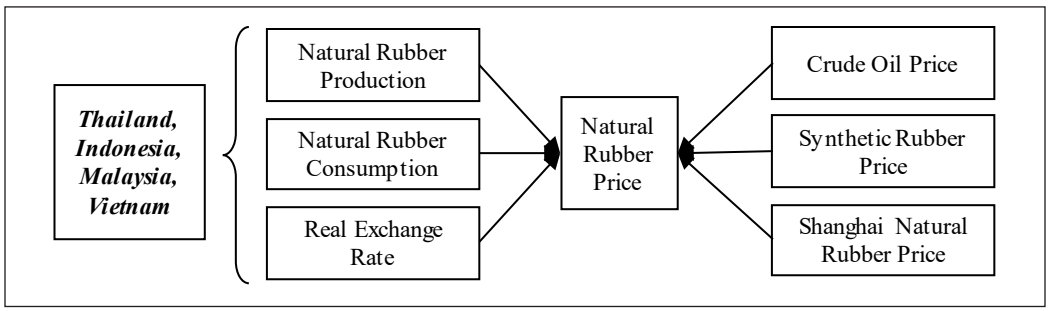


Figure 5. Conceptual framework of the determinants of NR price in 4 major NR producing countries

Indonesia, Malaysia and Vietnam. Variables such as NR production, NR consumption and real exchange rate act as explanatory variables in the model while crude oil price, Shanghai NR price and SR price act as control variables. In Figure 5, NR price, production, consumption and real exchange rate indicate the domestic data and the remaining control variables are similar for all countries.

$$price_{it} = \beta_0 + \beta_1 pro_{it} + \beta_2 con_{it} + \beta_3 exr_{it} + \beta_4 cop_{it} + \beta_5 shg_{it} + \beta_6 srp_{it} + \beta_7 e_{it}$$

Where,

$price_{it}$ = NR Prices (USD/ton) in Thailand, Indonesia, Malaysia and Vietnam

pro_{it} = NR Production ('000 tonnes) in Thailand, Indonesia, Malaysia and Vietnam

con_{it} = NR Consumption ('000 tonnes) in Thailand, Indonesia, Malaysia and Vietnam

exr_{it} = Real Exchange Rate (local currencies/USD)

cop_{it} = World Crude Oil Price (USD/barrel)

shg_{it} = Shanghai NR Price (USD/ton)

srp_{it} = SR Price (USD/ton)

e_{it} = Error term

β_0 = Intercept

$\beta_1 ... \beta_7$ = Coefficients

Annual data from 2008 to 2017 were collected from the International Rubber Study Group (IRSG) for the econometric analysis. In the model, there are 4 countries involved in the data analysis and the data was from 2008 to 2017 means that there was a short-balanced panel with N=4 and T=10.

Hypothesis Development

H_{01}: There is no significant relationship between NR production and NR price.

H_{A1}: There is a significant relationship between NR production and NR price.

H_{02}: There is no significant relationship between NR consumption and NR price.

H_{A2}: There is a significant relationship between NR consumption and NR price.

H_{03}: There is no significant relationship between real exchange rate and NR price.

H_{A3}: There is a significant relationship between real exchange rate and NR price.

H_{04}: There is no significant relationship between world crude oil price and NR price.

H_{A4}: There is a significant relationship between world crude oil price and NR price.

H_{05}: There is no significant relationship between Shanghai NR price and NR price.

H_{A5}: There is a significant relationship between Shanghai NR price and NR price.

H_{06}: There is no significant relationship between world SR price and NR price.

H_{A6}: There is a significant relationship between world SR price and NR price.

Methods

Panel Data Analysis. Panel data combines both cross-sectional (N) and time (T) dimensions and it is also known as longitudinal data. Panel data becomes popular in econometric research due to several advantages that it provides as compared to either cross-sectional or time-series data. Firstly, by combining both N and T dimensions, panel data, therefore, provides more informative data with more variability. There is also less collinearity among the variables in the model and more degree of freedoms, thus, it provides more accurate inference of model parameters by improving the efficiency of econometric estimates (Hsiao, 2007). Moreover, panel data analysis tolerates the heterogeneity issue in the model since a panel data model normally relates to individuals or firms, or in this case, it relates to countries over time which bound to suffer from heterogeneity problem (Gujarati & Porter, 2009). Besides, panel data can control the impact of omitted variables in a model because it contains the information on both intertemporal dynamics and the individuality of the entities which can control the impact of unobserved variables.

Panel Unit Root Tests. The unit root is known as a stochastic trend or a random walk with drift in a series which will provide an unpredictable systematic pattern. Unit root test is meant to test on the stationarity of the variables. A non-stationary series may cause serious issue such as providing a spurious regression where the R-squared value is too high even if the data is not correlated. If unit-roots exist in a series, a series of successive differences can transform the series to become stationary. It can be denoted by I(d) where d indicates the order of integration. If the data are stationary at level data, it is denoted as I(0); when the data only become stationary after first differencing, it can be denoted by I(1). In this study, the typical panel unit root test was being employed namely the Levin et al. (2002) test. The hypothesis testing of the panel unit root tests is as below:

H_0 : each time series contains a unit roots ($\rho = 0$)
$H_{A.}$: each time series is stationary ($\rho < 0$)

Table 3 represents the panel unit root tests results for all the variables in the model. The Levin et al. (2002) panel unit root test was carried out. Results showed that at level data, all variables are stationary except for NR production and consumption; at ln data, only NR consumption is not stationary. After the first differencing, the null hypothesis was rejected. Therefore, all variables become stationary and the series can be denoted as I(1).

Panel Cointegration Test. Panel cointegration tests are meant to test on the cointegration between variables in the model. Kao (1999) and Pedroni (2004) extended the Engle-Granger framework to tests involving panel data. Kao (1999) tested for cointegration in a homogeneous panel and the test statistic were calculated by

Table 3
Panel unit root tests of NR price model

Variables	Levin Lin & Chu		
	Level	Ln	1st diff
Price	-1.6364**	-1.2946*	-4.5232***
Pro	-0.7294	-1.5640*	-5.9041***
Con	2.2654	1.0307	-4.8575***
Exr	-2.7418***	-3.7107***	-2.8518***
Cop	-2.3426***	-2.1599**	-5.2771***
Shg	-1.9913**	-2.0726**	-5.5824***
Srp	-6.5470***	-6.6735***	-5.3522***

Note: * indicates statistically significant at $\alpha = 0.10$ level
** indicates statistically significant at $\alpha = 0.05$ level
***indicates statistically significant at $\alpha = 0.01$ level

pooling all the residuals of all cross-sections in the panel. It was assumed that all the cointegrating vectors in every cross-section were identical. Pedroni (2004) proposed several tests for cointegration which allowed considerable heterogeneity. Seven different cointegration statistics were proposed which could be classified into 2 categories to capture within and between effects.

Table 4 demonstrates the panel cointegration tests results of Pedroni (2004) and Kao (1999). Pedroni test results indicate that, out of the seven statistics, there are four statistics that are statistically significant at $\alpha = 0.01$ level namely the panel PP-statistics, panel ADF-statistics, group PP-statistics and group ADF-statistics. Kao test result also suggests that the null hypothesis can be rejected at $\alpha = 0.01$ level. Therefore, there is sufficient evidence of the presence of cointegration relationship between variables in the model.

Panel Models Selection. Generally, there are 3 types of panel models namely Pooled Ordinary Least Square (POLS), Fixed Effect Model (FEM) and Random Effect Model (REM). Basically, a POLS pool all the

Table 4
Panel cointegration tests of NR price model

Pedroni Test		Kao Test	
Panel v-Statistic	-1.4419	ADF	**-6.7188** ***
Panel rho-Statistic	1.8048		
Panel PP-Statistic	**-10.4818*** **		
Panel ADF-Statistic	**-6.7157*** **		
Group rho-Statistic	2.8237		
Group PP-Statistic	**-13.4902*** **		
Group ADF-Statistic	**-6.4928*** **		

Note: ***indicates statistically significant at $\alpha = 0.01$ level

observations and provide a simple general regression. OLS would provide efficient and consistent results if it is assumed that individual effect does not exist. On the other hand, for the presence of individual effects, it can be either FEM or REM. In a FEM, although the intercepts may differ across the subject, each entity's intercept does not vary over time which is also known as time-invariant. Since an individual effect is time-invariant and considered a part of the intercept, the individual effect is allowed to be correlated with other regressors. Moreover, a REM explores the differences in error variance components across individual or time periods. REM assumes individual effects (heterogeneity) are not correlated with any regressors and estimate error variance specific to groups. The intercepts and slopes of regressors are the same across individuals in REM. the difference among individual lies in their individual specific error instead of their intercepts (Gujarati & Porter, 2009).

To determine whether which model was best for the analysis, there were several tests to be carried out to select one of the models. Firstly, to determine whether to use a POLS or FEM, a Redundant Fixed Effect Test was used. In a regression of FEM, the null hypothesis was that all dummy parameters, except for the one that had been dropped, were all zero. The alternative hypothesis was that at least one dummy parameter was not zero and this hypothesis was tested with an F test based on loss of goodness-of-fit. If the null hypothesis is rejected, it can be concluded that there is a significant fixed effect or a significant increase in goodness-of-fit in the FEM. Therefore, FEM is preferable than POLS. Next, the Breusch-Pagan Lagrange Multiplier (BPLM) test provides a test of the REM against the POLS. Null hypothesis indicates that the individual effects do not exist and OLS is applicable. If it is to be rejected, it means that REM is preferable than a POLS. Finally, the Hausman Test was used to select whether to use a FEM or REM. It compares directly the random effect estimator and fixed effect estimator. In the presence of correlation between the individual effects and the regressors, the OLS fixed effects results are consistent. However, if there is no correlation between fixed effects and the regressors, both estimators are consistent, but the OLS fixed effects estimator is inefficient. In short, the null hypothesis is that REM is preferable and the alternative is that FEM is preferable.

Table 5 shows the tests for panel model selection. First and foremost, redundant fixed effect test was used to select between POLS and FEM. P-value was equal to 0.000 which is smaller than 0.05, which meant that the null hypothesis could be rejected, thus, FEM is preferable than POLS. Next, BPLM test was to determine whether a POLS or REM was suitable for analysis. P-value obtained from the test was equal to 0.0000 which was also smaller than 0.05, thus, the null hypothesis could also be rejected and REM was preferable than POLS. Lastly, the Hausman test result shows that p-value was smaller than 0.05 level. The null hypothesis was rejected and the final decision was that a FEM was preferable in this case.

Table 5
Panel model selection

Tests	Hypothesis	P-value	Conclusion
Redundant Fixed Effect Test	H_0= POLS is preferred H_A= FEM is preferred	**0.0000** < α = 0.05	Reject H_0, FEM is preferred.
Breusch-Pagan LM Test	H_0= POLS is preferred H_A= REM is preferred	**0.0000** < α = 0.05	Reject H_0, REM is preferred.
Hausman Test	H_0= REM is preferred H_A= FEM is preferred	**0.0000** < α = 0.05	**Reject H_0, FEM is preferred.**

RESULTS AND DISCUSSION

FEM of NR Price Model

Equation 1 shows the FEM of the NR price model. R^2 is equal to 0.9092 which means that almost 91 percent of the variation is well-explained by the independent variables in the model. The equation also indicates that the most important variables in the model are NR production, NR consumption, COP, Shanghai NR price and SR price.

$$\begin{aligned} &\textit{Ln}\ \mathbf{price}_{it} = -7.9442 + 0.0645\ \textit{Ln}\ \mathbf{pro}_{it} \\ &\textbf{t-stat:} \qquad\qquad [2.9106^{***}] \\ &- 0.0839\ \textit{Ln}\ \mathbf{con}_{it} - 0.0081\ \textit{Ln}\ \mathbf{exr}_{it} \\ &\quad [-2.4596^{**}] \qquad [-1.6618] \\ &+ 0.3181\ \textit{Ln}\ \mathbf{cop}_{it} + 0.4368\ \textit{Ln}\ \mathbf{shg}_{it} \\ &\quad [10.0206^{***}] \qquad [8.6201^{***}] \\ &+ 1.3895\ \textit{Ln}\ \mathbf{srp}_{it} + 0.0590\ \mathbf{e}_{it} \qquad [1] \\ &\quad [16.0901^{***}] \end{aligned}$$

$R^2 = 0.9092$ adj $R^2 = 0.8926$

Every one-unit increase in NR production, on average, it will have a positive effect on increasing 0.0645 unit of NR price at = 0.01 level; every one unit increase in NR consumption, on average, it will have a negative effect on decreasing 0.0839 unit of NR price at α = 0.05 level; every one unit increase in COP, on average, it will have a positive effect on increasing 0.3181 unit of NR price at = 0.01 level; every one unit increase in Shanghai NR price, on average, it will have a positive effect on increasing 0.4368 unit of NR price at α = 0.01 level; every one unit increase in SR price, on average, it will have a positive effect on increasing 1.3895 unit of NR price at α = 0.01 level. In short, NR production, COP, Shanghai NR price and SR price are positively related to NR price while NR consumption is negatively related to NR price in 4 of the major NR producing countries.

Panel Granger Causality Test

Granger causality test is a test proposed by Granger (1969) used to detect the directional causal relationship among variables in a model. If the variables are cointegrated, it would be expected that causal relationships running between variables in at least one direction. Instead of investigating a cause and effect relationship, a causality test is more on examining if a particular variable comes before another in a time series (Gujarati & Porter, 2009; Studenmund,

2014). Granger Causality test hypothesis is as below:

H_0: X does not Granger Cause Y
H_A: X Granger Causes Y

Table 6 shows the Granger Causality test results of the model. Results indicate that there was two bi-directional causal relationships running between (1) NR price and Shanghai NR price as well as (2) SR price and NR Price. On the other hand, there were three unidirectional causal relationships running from (1) NR price to COP; (2) NR production to NR consumption and (3) NR production to the real exchange rate.

Model Evaluation

Figure 6 illustrates the model evaluation of the NR price model. The estimation of price model evaluation criteria are Root Mean Squared Error (RMSE), Mean Absolute Error (MAE), Mean Absolute Percentage Error (MAPE) and Theil's U statistic. Therefore, in Figure 6, it indicates a lower value of the statistics which suggests that the model is better fit and accurate as well as having a satisfactory and valid forecasting performance.

Hypothesis Testing

Table 7 presents the hypothesis testing for the NR price model. It shows that all alternative hypothesis are supported except H_{A3}. For

Table 6
Granger causality tests of NR price model

Alternative Hypothesis (H_A)	Obs	F-Statistic	Prob.	Conclusion
Pro Granger Cause ***Price***	32	0.13728	0.8723	Rejected
Price Granger Cause ***Pro***		0.09887	0.9062	Rejected
Con Granger Cause ***Price***	32	0.47107	0.6294	Rejected
Price Granger Cause ***Con***		1.16258	0.3278	Rejected
Exr Granger Cause ***Price***	32	0.20403	0.8167	Rejected
Price Granger Cause ***Exr***		0.34475	0.7115	Rejected
Cop Granger Cause ***Price***	32	0.81006	0.4553	Rejected
Price Granger Cause ***Cop***		5.52958	**0.0097*** **	**Supported**
Shg Granger Cause ***Price***	32	5.27545	**0.0116***	**Supported**
Price Granger Cause ***Shg***		6.17435	**0.0062*** **	**Supported**
Srp Granger Cause ***Price***	32	13.4789	**9.E-05*** **	**Supported**
Price Granger Cause ***Srp***		12.9370	**0.0001*** **	**Supported**
Con Granger Cause ***Pro***	32	1.10261	0.3465	Rejected
Pro Granger Cause ***Con***		7.40815	**0.0027*** **	**Supported**
Exr Granger Cause ***Pro***	32	1.65409	0.2101	Rejected
Pro Granger Cause ***Exr***		3.00021	**0.0666***	**Supported**

Note: * indicates statistically significant at $\alpha = 0.10$ level
***indicates statistically significant at $\alpha = 0.01$ level

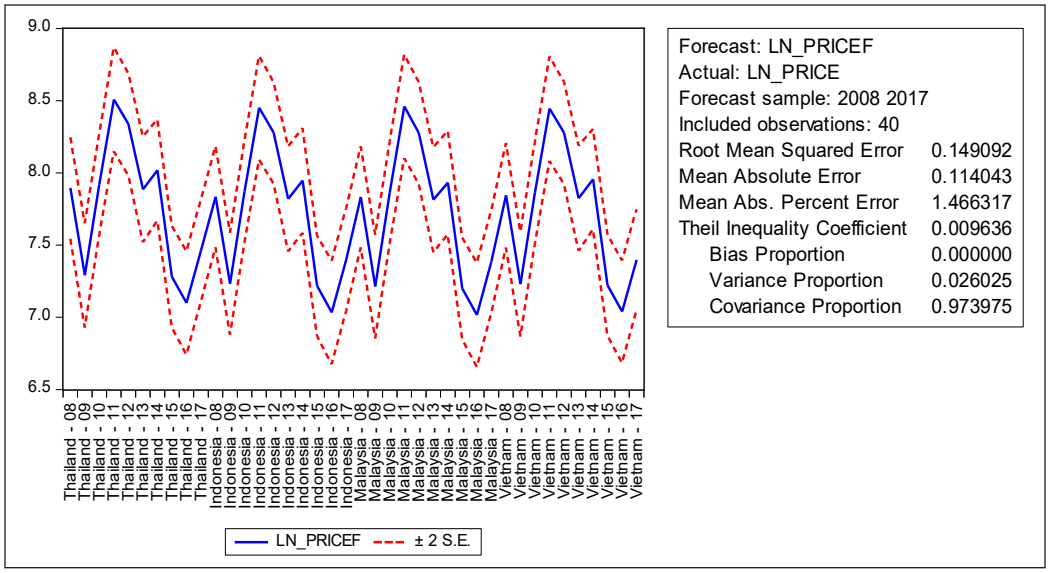


Figure 6. Model evaluation of the NR price model

Table 7
Hypothesis testing for NR price model

Alternative hypotheses	Conclusion
H_{A1}: There is a significant positive relationship between NR production and NR price.	Supported
H_{A2}: There is a significant negative relationship between NR consumption and NR price.	Supported
H_{A3}: There is a significant negative relationship between real exchange rate and NR price.	Rejected
H_{A4}: There is a significant positive relationship between world crude oil price and NR price.	Supported
H_{A5}: There is a significant positive relationship between Shanghai NR price and NR price.	Supported
H_{A6}: There is a significant positive relationship between world SR price and NR price.	Supported

H_{A1} and H_{A2}, there is a significant positive relationship between NR production and price and a significant negative relationship between NR consumption and price. The result could be supported by most of the studies in the related field such as Arunwarakorn et al. (2019), Karunakaran (2017), Khin and Thambiah (2015), and Vijayakumar (2019). In fact, production and consumption are the fundamental factors of NR price, thus, it should be significant in the model. Moreover, H_{A4} indicates the significance of a positive relationship between crude oil and NR price. This can be supported by In (2012) and Khin et al. (2012, 2017).

In the NR market, NR price usually follows the trend of crude oil price. As mentioned above, the crude oil price is the crucial material of SR production. When SR is considered as the substitute product of SR, fluctuation in SR price will impact on NR price too. In the case of falling crude oil price, the production cost of SR will

drop and so as its final pricing. To ensure competitiveness, NR price eventually will fall according to the market. By this, it could also explain the significance of H_{A6} which indicates a significant positive relationship between NR and SR price. It can be supported by the studies of Yusof (1988), Khin et al. (2012), and Pindyck and Rubinfeld (1998) who mentioned that price of substitute goods were positively related. H_{A5} suggests that there is a significant relationship between Shanghai NR price and NR price. This can be considered as a new variable in the related studies, thus, there is limited literature to support the finding. However, as the China economy is rising rapidly in the recent years, it is bound to impact on the commodity market as China is the top consumer of NR who consumes almost one-third of the NR in the world. Besides, referring to the statistics (Figure 2), Shanghai NR price and world NR price are actually moving in the same direction which already explain the positive relationship between them. Therefore, the finding in this study can also contribute to the literature on this variable.

Lastly, H_{A3} has failed to be supported in this study. It means that the relationship between real exchange rate and NR price is insignificant. This could be explained by the sampling period of this study, which is captured from the year 2008 to 2017. During this period, the global financial crises ever since the year 2008 has had a spill-over effect on the commodity market including NR. The exchange rate was extremely unstable and volatile during the period and commodity price would be vulnerable to the exchange rate as it is traded in USD worldwide. For example, the previous study by Khin et al. (2011) had proven that the real exchange rate and NR price were negatively related and significant. The sampling period of the study was captured from the year 1990 to 2008 (monthly data). Thus, a longer sampling period and a difference in the types of data provide different findings. Although the variable of the real exchange rate is insignificant in this study, the sampling period can better represent and explain the recent 10 years of the current situation in the NR market. High volatility of exchange rate has affected the typical relationship between itself and the NR price and become more complicated. Perhaps when the global economy becomes more stable than before, the variable will eventually become significant, as previous studies.

CONCLUSION

Overall, this study provides findings on the development of the NR price model in 4 major NR producing countries in the world. In short, NR price is not only determined by the normal market force such as supply and demand, but it is largely driven by external factors i.e. world crude oil price, real exchange rate, SR price and Shanghai Future Exchange Market. Moreover, this study also provides an insight of the NR market from the year 2008 to 2017 to better represent the recent 10 years instead of studying too much historical data which can no longer capture the current situation. On the other hand, there is a recommendation

for future studies where future researchers could extend sampling period (based on data availability) to increase the N and T dimensions in the panel model, thus, a dynamic panel model instead of the static model could be studied. By using longer N and T dimensions, future researchers could employ other methodologies such as panel time series and panel Generalized Method of Moment (GMM). The results of the study could contribute to the policymakers and policy implementation especially in NR producing countries. As NR is an important agricultural commodity to them, the government should ensure the stability and sustainability of NR production which will ultimately benefit the farmers and smallholder. Eventually, it will contribute to economic growth as well.

ACKNOWLEDGEMENTS

The authors are particularly thankful to the Universiti Tunku Abdul Rahman (UTAR)'s Internal Research Fund (UTARRF 2017 Cycle 1) that has offered to fund this research.

REFERENCES

ANRPC. (2018). *Quarterly rubber market overview, association of natural rubber producing countries.* Retrieved August 1, 2019, from http://www.anrpc.org

Arunwarakorn, S., Suthiwartnarueput, K., & Pornchaiwiseskul, P. (2019). Forecasting equilibrium quantity and price on the world natural rubber market. *Kasetsart Journal of Social Sciences, 40*(1), 8-16. https://doi.org/10.1016/j.kjss.2017.07.013

Burger, K., & Smit, H. P. (2002). *Exchange rates and natural rubber prices, the effect of the Asian crisis.* Amsterdam, the Netherlands: Department of Econometrics, Economic and Social Institute, Vrije University.

Department of Statistics of Malaysia. (2019). *Selected agricultural indicators, Malaysia, 2019.* Retrieved January 19, 2020, from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=72&bul_id=SEUxMEE3VFdBcDJhdUhPZVUxa2pKdz09&menu_id=Z0VTZGU1UHBUT1VJMFlpaXRRR0xpdz09

Granger, C. W. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica: Journal of the Econometric Society*, *37*(3), 424-438.

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics*. Boston, USA: McGraw-Hill.

Harder, M. (2018). *Natural rubber vs synthetic rubber – The price relationship and demand switchability.* Retrieved July 12, 2019, from https://www.halcyonagri.com/natural-rubber-vs-synthetic-rubber-the-price-relationship-and-demand-switchability/

Hsiao, C. (2007). Panel data analysis — Advantages and challenges. *Test*, *16*(1), 1-22.

In, S. (2012). *Forecasting the price of natural rubber in Malaysia* (Master's thesis, California State University, Sacramento, USA). Retrieved July 16, 2019, from http://csus-dspace.calstate.edu/bitstream/handle/10211.9/1784/Thesis.pdf?sequence=3

Jacob, J. (2017). *Global rubber market: What's in store for 2017?* Retrieved July 16, 2019, from https://rubberasia.com/2017/01/23/global-rubber-market-whats-store-2017/

Kannan, M. (2013). The determinants of production and export of natural rubber in India. *IOSR Journal of Economics and Finance*, *1*(5), 41-45.

Kao, C. (1999). Spurious regression and residual-based tests for cointegration in panel data. *Journal of Econometrics*, *90*(1), 1-44.

Karunakaran, N. (2017). Volatility in price of rubber crop in Kerala. *Indian Journal of Krishi Vigyan*, *5*(2), 160-163.

Khin, A. A., & Thambiah, S. (2015). Natural rubber prices forecasting using simultaneous supply-demand and price system equation and VECM model: Between theory and reality. *Proceeding of the 2nd International Conference on Agriculture and Forestry, ICOAF-2015*, Colombo, Sri Lanka. Retrieved July 16, 2019, from https://www.researchgate.net/publication/283043796_Natural_Rubber_Price_Forecasting_Models_of_Malaysian_Natural_Rubber_Market_Between_Theory_and_Reality

Khin, A. A., Chong, E. C., Shamsudin, M. N., & Mohamed, Z. A. (2008). Natural rubber price forecasting in the world market. *Proceeding of the Agriculture Sustainability through Participative Global Extension AGREX08,* Putrajaya, Malaysia. Retrieved July 16, 2019, from https://www.researchgate.net/publication/282783451_NATURAL_RUBBER_PRICE_FORECASTING_IN_THE_WORLD_MARKET

Khin, A. A., Fong, Y. C., Chan, K. C., Lee, Y. Q., & Wong, M. Y. (2017). Vector error correction models for major agricultural and mining commodities' prices and crude oil price changes in the world market. *Journal of Humanitites, Language, Culture and Business*, *1*(3), 121-130.

Khin, A. A., Mohamed, Z., & Hameed, A. (2012). The impact of the changes of the world crude oil prices on the natural rubber industry in Malaysia. *World Applied Sciences Journal*, *20*(5), 730-737.

Khin, A. A., Zainalabidin, M., Nasir, S. M., Chong, E. C. F., & Mohamed, A. F. (2011). Estimation methodology of short-term natural rubber price forecasting models. *Journal of Environmental Science and Engineering*, *5*(4), 460-474.

Levin, A., Lin, C. F., & Chu, C. S. J. (2002). Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics*, *108*(1), 1-24.

Matade, S. P. (2016). *Rubber a high-priority area for Malaysia: Mazlan Harun*. Retrieved July 12, 2019, from https://rubberasia.com/2016/03/09/rubber-a-high-priority-area-for-malaysia-mazlan-harun/

MdLudin, N., Applanaidu, S., & Abdullah, H. (2016). An econometric analysis of natural rubber market in Malaysia. *International Journal of Environmental & Agriculture Research*, *2*(6), 2454-1850.

Meutia, I., & Putra, B. C. (2017). Narrative accounting practices in Indonesia companies. *Binus Business Review*, *8*(1), 77-83.

Much, S., Tongpan, S., & Sirisupluxana, P. (2011). An analysis of supply response for natural rubber in Cambodia. *Applied Economics Journal*, *18*(1), 31-43.

Pedroni, P. (2004). Panel cointegration: Asymptotic and finite sample properties of pooled time series tests with an application to the PPP hypothesis. *Econometric theory*, *20*(3), 597-625.

Pindyck, R. S., & Rubinfeld, D. L. (1998). *Econometric models and economic forecasts* (Vol. 4). Boston, USA: Irwin/McGraw-Hill.

Soares, N. S., da Silva, M. L., & Rossmann, H. (2013). Influence of exchange rate and dollar over the Brazilian natural rubber price. *Revista Árvore*, *37*(2), 339-346.

Studenmund, A. H. (2014). *Using econometrics: A practical guide* (6th ed.)._New Jersey, USA: Prentice Hall.

Vijayakumar, A. N. (2019). International determinants on Indian rubber prices. *SJCC Management Research Review*, *9*(1), 1-13.

Yusof, M. (1988). Malaysian natural rubber market model. *Pertanika*, *11*(3), 441–449.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1199 - 1214 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Harmonization of Law in the Application of Legal Metrology

Muldri Pudamo James Pasaribu* and Ningrum Natasya Sirait

Law Program, Graduate School, University of Sumatera Utara, 20222 Medan, Indonesia

ABSTRACT

Indonesia is one of the members of the World Trade Organization that took part in ratifying the World Trade Organization Agreement on Technical Barrier to Trade (WTO-TBT) through Law Number 7 of 1994 on Agreement of Establishing the World Trade Organization (PWTO Law). In accordance with PWTO Law, Indonesia is required to implement the trade regulations, including technical infrastructures such as metrology. The objective of this study is to examine the harmonization of law in the field of metrology as a consequence of the WTO-TBT Agreement. This research applied a juridical normative and descriptive analysis method. The data were obtained by conducting a literature review. The study showed that the legal consequence of WTO-TBT on the metrology regulation had discovered the need to harmonize the Law Number 2 of 1981 on Metrology with various regulations. Many regulations and international organizations are involved since the establishment of WTO-TBT concerning accurate measurements in the field of metrology. In conclusion, the cooperation of various countries under the framework of the WTO obliges Indonesia to harmonize its trade and metrology law. Such harmonization should also cover the rules at a regional level.

Keywords: Harmonization, legal metrology, legal system, metrology law, international trade

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
muldripasaribu73@gmail.com (Muldri Pudamo James Pasaribu)
ningrum.sirait@gmail.com (Ningrum Natasya Sirait)
* Corresponding author

INTRODUCTION

International trade is a cross-border buying and selling transaction, involving two parties from different countries who are both subject to different legal systems. The differences in the legal system can cause problems or difficulties in the transaction implementation. Different contents of the national laws applicable in the two countries have resulted in legal uncertainties and

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

difficulties among various business actors (Lopez-Rodriquez, 2002; Mandala, 2016).

Other problems often occurring in international trade include the addition of production costs. This is due to redundant testing and/or redundant certification for different national markets. Additional transportation costs can result from a product's failure to meet the requirements of importers. Furthermore, extensive and expensive inspection by an importing country may cause time and administration delay.

These problems show the importance of various trade agreements between countries in the world such as the World Trade Organization (WTO), the North American Free Trade Agreement (NAFTA), the ASEAN Free Trade Area (AFTA), the Asia-Pacific Economic Cooperation (APEC) and the European Union (EU).

The establishment of the ASEAN Economic Community (AEC) at the end of December 2015 was an important development in ASEAN. Earlier, in October 2003, the leaders of the ASEAN member countries agreed to endorse the ASEAN Economic Community towards the aspiration of "Many Countries, One Economy" by broadening the integration of regional economic. The main aim of the AEC was to accelerate action taken by AFTA to enlarge and more in depth the trade liberalization. It began with the implementation of "Preferential Trading Arrangement" that foster intraregional trade and broadened the economic field. Furthermore, it is to improve economic relation with ASEAN's surroundings such as China, Japan, South Korea, and India by bilateral and collective free trade agreements (Habibullah et al., 2017)

Every country wants its national products, both goods or services, to be an international commodity that can move freely and is accepted throughout the world. On the contrary, every country also wants its domestic market not to be flooded with goods or services that could harm its national interests. World Trade Organization Agreement on Technical Barrier to Trade (WTO-TBT) is an agreement of all WTO member countries with the aim of maintaining a fair international market. Therefore, under the framework of WTO-TBT, each country is authorized to establish technical regulations to protect its domestic market. This regulation shall be transparent to all member countries and must be in accordance with international standards established by international standardization organizations.

The Indonesian Government has ratified the Agreement on Establishing the World Trade Organization (WTO) through Law Number 7 of 1994. As a result, the Indonesian Government is obligated to accept all international agreements within the framework of the WTO. One of the agreements is an agreement relating to the World Trade Organization Agreement on Technical Barrier to Trade (WTO-TBT).

Based on such regulations, countries intending to sell their products and services to other countries may undertake various necessary efforts to comply

with the technical regulations of their export destination. Compliance with the requirements of international standards adopted by the country's technical regulation will only be accepted if the declaration of conformity is provided by a competent assessment agency. In this case, a common reference measure is required between the transacting parties to create confidence in the conformity assessment results. The basic infrastructure to ensure the accuracy, reliability and traceability of measurement results in the International System of Units (*Système International d'Unités* or SI) which is internationally known as metrology infrastructure.[1]

Metrology encompasses every conceptual and implementation factors of measurement. According to the International Vocabulary of Basic and General Terms in Metrology (Vocabulaire International de Metrologie/VIM), metrology is an activity that encompasses all the activities necessary to perform correct, traceable and truthful measurements at national, regional and international levels. Ultimately, it will be able to create mutual trust among those who do or have an interest in the measurement (Joint Committee for Guides in Metrology [JCGM], 2012).

Metrology is classified into three main categories with varying degrees of complexity and accuracy (Howarth & Redgrave, 2005):

(i) Scientific Metrology: Dealing with the arrangement and development of its measurement and maintenance standards (highest level);
(ii) Industrial Metrology: Aiming at ensuring that measurement systems and measuring instruments in the industry function with sufficient accuracy, both in their preparation, production and testing processes;
(iii) Legal Metrology: Relating to measurements that impact economic, health, and safety transactions.

Legal metrology is set forth in Law Number 2 of 1981 concerning on Legal Metrology (*Undang-Undang tentang Metrologi Legal* [UUML]). This regulation is aimed at ensuring the correctness and legal certainty of measurement in the activities related to transaction justice, public health, environmental protection and safety (Badan Pembinaan Hukum Nasional [BPHN], 2013).

Almost all aspects of international trade are influenced by standards or regulations. However, such standards or regulations can become a technical barrier to trade (TBT), which can cause increased costs, hamper free goods flow, or require repeated testing, if there is no good measurement system. In facing the free market, Indonesia must be able to meet production and product quality requirements for international trade in accordance with international agreements and regulations. The role of metrology in national economic development, especially related to the trade sector, is through the harmonization of standards and technical

[1] Seven basic units: kelvin (temperature), second (time), meter (length), kilogram (mass), candela (light intensity), mol (amount of substance) and ampere (electric current), see Article 3 of UUML

requirements at the regional, bilateral, and international levels. Such harmonization will form the conditions of "One Standard-One Test-Accepted Everywhere", because of which the flow of movement of goods and services in international trade will become easier and is expected to increase the confidence of the international community in Indonesia's domestic products as well as increase the competitiveness of domestic products in the international market.

Legal metrology is an effective tool for market surveillance and should be used as a focus for strategies aimed at establishing fair trade (Ardianto, 2012).

Metrology is considered necessary because the current metrology system has become an internationally harmonized system. Furthermore, it serves as a basic infrastructure to facilitate global trade within the framework of the WTO-TBT. Indonesia has the TBT Agreement through Law Number 7 of 1994. This agreement promotes the establishment of mutual recognition of inter-state conformity assessment results.[2] The TBT Agreement acts to minimize technical barriers to trade related to technical regulations, standards and conformity assessment procedures.[3] These three categories in metrology regulate the harmonization of free trade by using international standards in regulating symbols, packing, tagging or labelling applied to a product ensuring that domestic policies would not impede the ability of exporters to access local markets.

[2] Article 6 and Article 9 of WTO-TBT Agreement
[3] Preambule of TBT Agreement

The present study was undertaken with the objectives to understand the legal consequences of the WTO-TBT Agreement on the Indonesian regulation especially in the field of metrology, and to know the harmonization of various regulations on legal metrology.

Formulation of the Problem

The problems of this study are defined to find out the legal consequence of the WTO-TBT Agreement on the regulation in the field of metrology, as well as how the law in the field of metrology is harmonized through the unification of the legal system.

Literature Review

Plato, in The Timaeus, spoke about the need for the good and the rationale to overcome "discordant and unordered motion," thereby bringing about harmony. Yet in the theory of music, harmony has been understood as a simple "reconciliation of opposites, a fitting together of disparate elements," and harmony is rather, here, a process of discovery, based on the "inevitable" order of notes and the place of music in the "cosmic pattern." There are therefore different concepts of harmony in the world although, given different degrees and modalities of human intervention, there can be no clear line between them (Glenn, 2003).

The different concepts of harmony in law have been developed in different places and different circumstances, and it is important to place each of them in their historical contexts.

Harmonization in law includes the adjustment of laws and regulations, government decisions, judges' decisions, legal systems and legal principles with the aim of enhancing legal unity, legal certainty, justice and equality, the usefulness and clarity of the law, without obscuring and sacrificing legal pluralism (Gandhi, 1995).

As countries are becoming more connected, harmonization, mutual confidence, and recognition are becoming more necessary to facilitate trade (Ponce et al., 2006). Achieving international harmonization for legal metrology is the main objective of the OIML (International Organization of Legal Metrology). It can be partially achieved by exchanges of technical expertise, close collaboration with other international and regional bodies working in related fields, and international recommendations on related issues (Barker, 2005). OIML and the International Organization for Standardization are also considered as standardizing bodies in the sense of the Technical Barrier to Trade Agreement of the World Trade Organization (Just, 2009). The harmonization of international standards and procedures is an effective tool for reducing asymmetries in international trade scenarios (Ticona & Frota, 2008).

The harmonization of the international legal system is harmonizing the plurality of the legal system in the international legal system, to establish uniformity in the legal system that can be accepted by all countries carrying out international trade transactions. They are formulated in two steps: adjustment of the national legal system into a global legal system to harmonize law, and the adjustment of certain legal norms into a unity of global norm which can later be used as means of dispute resolution, to harmonize and uniform judges global decisions.

The international harmonization of regulations may be a great issue to facilitate the growth of the global market, and initiatives like the Mutual Acceptance Arrangement are tracing a way to move past technical barriers. Once international trade is related to government politics and not metrological issues, however, the developments in international trade metrology may include partnerships between OIML and the World Trade Organization (Rodrigues Filho & Gonçalves, 2015).

MATERIALS AND METHODS

This research applied a juridical normative and descriptive analysis method. The data were obtained by conducting a literature review, whose data sources were secondary data, consisting of primary legal materials, secondary legal materials, and tertiary legal materials (Amiruddin & Asikin, 2004). The method used was a holistic normative legal method (Soekanto & Mamuji, 2004). The data was analyzed using a comparative approach by conducting a comparative law study focused on legal theory approach. It compared legal systems to find similarities and differences (Soeroso, 2005). The degree of comparability of the object may vary depending on legal aspects, legal structure, legal function or legal consequences.

RESULTS AND DISCUSSIONS

Legal Consequences of WTO-TBT Agreement against Metrology Regulation

The endorsement of establishing the World Trade Organization (WTO) is the culmination point of a series of previous negotiations, which were also intended to include some existing agreements during the Uruguay Round. According to Trebilcock, the Uruguay Round produced two new agreements as the elaboration of the Standards Code of the 1979 Tokyo Round (Trebilcock & Howse, 1999), namely The Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) and The Technical Barriers to Trade Agreement (TBT Agreement). Both agreements are unified and complementary. While the SPS Agreement is designed to provide protection for ecological and environmental life, the TBT Agreement accommodates technical standard provisions which are not regulated in the SPS Agreement. The TBT Agreement provisions work through three concepts that are not contained in the SPS Agreement, namely technical regulations, standards, and conformity assessment procedures applicable to all products.

TBT Agreement applies to all products, including industrial and agricultural products, but does not include SPS measures. It covers technical regulations, standards and conformity assessment procedures, as defined in Annex 1 of the Agreement (Trebilcock & Howse, 1999).

However, the requirements mentioned above cannot be implemented in synergy with the Legal Metrology Law (*Undang-Undang tentang Metrologi Legal* [UUML]). The long-time span between UUML Law (issued in 1981) and PWTO Law (issued in 1994) is one of the causes. As a matter of fact, the ratification of the TBT Agreement has affected the external and internal law of Indonesia. The effect on the external law is that through such action, Indonesia has accepted all the obligations imposed by the intended international agreement. Meanwhile, the effect on the internal law is the obligation for Indonesia to amend its domestic law in accordance with the provisions of the intended international agreement (Brotosusilo, 1996).

As a legal consequence of being a member of the World Trade Organization (WTO), Indonesia has adopted the norms of international standardization since the issuance of Government Regulation Number 102 of 2000 on National Standardization which was reaffirmed in Law Number 7 of 2014 on Trade. Allocation of norms, rules, processes and institutional standardization, technical regulation and conformity assessment according to the Agreement on Technical Barrier to Trade have been transformed into a national trade regulation. Legal transformation is a key element in the process of globalization that occurs directly from the existence of a network of local globalization and global localization.[4]

According to Annex 3 of TBT Agreement, standards are addressed by the TBT Agreement in a separate Code of Good Practice for the preparation, adoption and

[4] Article 59 of UUP

application of standards. The implication on formulating law and policy in Indonesia is the national standard shall be harmonious with the international standards.

The next period in the trade regulation development is the enactment of Law Number 7 of 2014 on Trade (*Undang-Undang tentang Perdagangan* [UUP]) and Law Number 20 of 2014 on Standardization and Conformity Assessment (*Undang-Undang Standarisasi Penilaian dan Kesesuaian* [UU] SPK). Both of the laws regulate Standardization and Conformity Assessment, which means that the regulation of standardization and conformity assessment sourced from the TBT Agreement has been incorporated into the regulation which is the result of legislation decisions in Indonesia (Chandrawulan, 2011).

In addition to the WTO requirements on the equivalence of the inter-state conformity assessment system, OIML[5] requires acceptance of the conformity assessment system as stated in the OIML B 10-1 document: 2004 International Organization of Legal Metrology-Mutual Acceptance Arrangement (OIML - MAA).[6] From the requirements stated in Article 6 and 9 of the TBT Agreement and the requirements stated in OIML B 10-1 above, Indonesia meets the mutual acceptance requirements of the accreditation system. This is coordinated regionally by APLAC (Asia-Pacific Laboratory Accreditation Cooperation) and internationally by ILAC (International Laboratory Accreditation Cooperation).[7]

The international requirements mentioned above indicate that one of the important conditions in the TBT Agreement is the acceptability of the conformity assessment system based on the agreed criteria in regional and international accreditation cooperation organizations. The essential requirement to achieve the acceptability of the conformity assessment system is the measurement traceability to a national metrology institution (LMN: National Metrology Institute). This institution meets the requirements set forth by BIPM through the CIPM MRA scheme (International Committee for Weights and Measures).

Furthermore, although the Indonesian government has not been able to amend the UUML immediately, it must keep on trying to harmonize with various regulations and international rules in the field of legal metrology. Thus, trading activities are not hampered and still conducted properly.

Harmonization of Law in the Field of Metrology through the Unification of the Law System

When legal systems interact with each other as legal resources, there is a high probability of changing circumstances in which laws and cases are used in equal measure and

[5] International Organization of Legal Metrology, French: *Organisation Internationale de Métrologie Légale*

[6] 4.6.1...Declaration of Mutual Confidence as, for example, participation in the ILAC MRA ("InternationalLaboratory Accreditation Cooperation-MutualRecognition Arrangement").

[7] APLAC MRA (Mutual Recognition Arrangement): Asia-Pacific cooperation in the field of laboratory accreditation; ILAC MRA: International cooperation in the field of laboratory accreditation

are even seen as equally authoritative (De Cruz, 2016). There is as yet little discussion about how globalization relates to legal theory and understandings of law. In common parlance, the term creates assumptions about the desirability of increased efficiency in processes of global communication. Immediately, things come to authors' mind, which are easier travel, homogenization of trade laws and harmonization or integration of all kinds of rules, easing communication processes by recourse to one language, one pattern of doing business, and so on. This is matched by the tempting assumption that there would be less conflict if only all humans thought alike, followed uniform moral standards and respected universal human rights (Menski, 2006).

Legal concepts of convergence, harmonization and unification have become increasingly evolving concepts especially in comparative studies of law. Such legal concepts can be generally understood as contained in Table 1.

Globalization leads to the convergence of the legal order or the legal system. Legal and economic experts have predicted that the implications of globalization will force the legal order to converge in order to achieve economic efficiency. This is because the relevant regulatory order of a legal order will make a single legal system unlikely to provide optimal solutions to emerging problems (Budhijanto, 2011; Ogus, 1999).

Although convergence in some respects is possible, striking differences in ideology, political attitudes, social and economic policies must first be reconciled with one another. Massive integration is certainly not a prospect that can be predicted to happen in the future. However, a preliminary effort in the alignment of elements of different systems has begun in the European Union context (De Cruz, 2016).

Along with the globalization in the field of trade, various unification and harmonization efforts of international trade law have taken place. Many international organizations facilitate this process formally and informally. The method or approach used to realize the unification and harmonization of trade law have been diverse or pluralist (Mandala, 2016).

Goode (2010) mentioned several methods of harmonizing the law in more detail. Such methods include, for example, multi-lateral conventions that do not intend

Table 1
The legal concept of comparison

Legal Concept	General Understanding
Convergence	Used as an effort to unify legal systems, conceptions, principles, or norms
Harmonization	Used as an attempt to prepare a national law or state law that has regulatory linkages based on laws, regulations and administrative measures
Unification	Used as an effort to extremely harmonize both the difference and flexibility in the regulation and does not give space to other provisions

Source: Garoupa and Ogus (2006)

to create legal uniformity; international convention intended for the purpose of legal uniformity; bilateral agreements; directive (form of regulation for European Union) model law; codification of customary law; international trade rules established by non-governmental international organizations; contract model; and restatement of the principles of law by scholars and experts.

Various models of legal harmonization approach and various actors involved in legal harmonization today are extremely different from the conditions at the beginning of harmonization of law a century ago. The development in law harmonization efforts is not only about the increasingly diverse approach model but also the involvement of a number of organizations, both governmental and non-governmental organizations (Faria, 2009).

At the international level, legal metrology activities are coordinated by OIML. This coordination serves to improve the harmonization of global legal metrology requirements with the aim of developing a worldwide technical structure. Achieving the harmonization of the global measurement system can be illustrated in Figure 1.

Refer to Figure 1, to obtain one global measurement standard requires the following conditions:

(i) The WTO and the OIML are responsible for harmonized legal regulations;
(ii) ISO and IEC for harmonized standards;
(iii) The CIPM for traceability to the SI; and
(iv) ILAC and IAF for the competence of test laboratories and certification bodies.

The international agencies dealing with the elements shown above together with the national-level agencies in Indonesia can be described in Table 2.

Based on the figure and description above, the involvement of various global organizations achieves a global measurement system. Such organizations do not come from the countries with a similar legal system which, therefore, require absolute harmonization in the field of metrology and measurement. There is a harmonization of national regulation in the field of legal metrology; a harmonious standard in non-regulatory metrology;

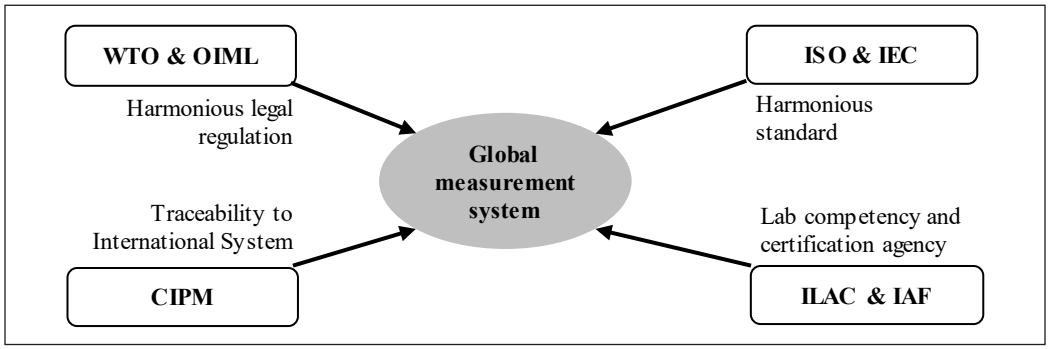


Figure 1. Global Measurement System

Table 2
Measurement system elements

Elements	International	National	Asia
Harmonious regulation	WTO/OIML	Directorate of Metrology-Ministry of Commerce	APLMF
Harmonious standard	ISO & IEC	BSN	
Traceability/ Recognition of measurement results	CIPM	KIM-LIPI Research Center	APMP
Lab Competency	ILAC/IAF	KAN	APLAC

Source: Badan Pembinaan Hukum Nasional (2013)

international recognition of traceability of measurement results to SI; and, international harmonization for required competencies of laboratory and certification agencies.[8]

TBT Agreement indirectly requires national technical regulations in the field of metrology to be transparent and non-discriminatory for all parties involved in commercial transactions. This can be realized only if the trade agreement is based on the harmonized standards or, if possible, the same standards. These standards can be used by certification agencies and testing laboratories to issue conformity certificates. ISO and IEC are international organizations that issue such standards. OIML, for about 50 years since its establishment, has also contributed to the harmonization of requirements and testing procedures in the field of legal metrology.

Until today, Indonesia has not made any change to achieve a harmonization of law that ensures legal certainty in the field of metrology. The factors inhibiting such harmonization include a National Metrology Institute which has not yet been formed, the limited scope of UUML, inadequate technology, lack of qualified human resources and government's low response to the urgency of harmonizing this regulation.

As the realization of legal metrology implementation, each OIML member state should have a national metrology institute whose duties include realization, maintenance, and dissemination of international recognition of National Standards of Measures (SNSU). In Indonesia, however, this task is currently carried out simultaneously by three institutions, i.e. the Directorate of Metrology (DM), the National Standardization Agency (BSN), and the Research Center for Calibration, Instrumentation, and Metrology of Indonesian Institute of Sciences (KIM-LIPI), resulting in tug of war among them. The Directorate of Metrology operates under the Ministry of Trade, while BSN and KIM-LIPI are institutionally under the Ministry of Research and Technology. Each institution has the task of drafting

[8] List of abbreviations in the table: APMP: Asia Pacific Metrology Program; BSN: National Standardization Body; IEC: International Electrical Commission; KIM-LIPI: Research Center for Calibration, Instrumentation, Metrology; KAN: National Accreditation Committee; ISO: International Organization for Standardization; APLMF: Asia Pacific Legal Metrology Forum; IAF: International Accreditation Forum

and formulating national policies. The absence of a specific agency managing these measurement standards makes it difficult for Indonesia to participate in the cooperation framework of CIPM-MRA (Mutual Recognition Arrangement of the International Committee of Weight and Measures). According to Section 1.4, CIPM-MRA stated, "Each signatory to this arrangement is the national metrology institute designated by the appropriate national governmental or other official authority of the Member State of the Metre Convention as being responsible for national measurement standards. For any state that has more than one such designated institute, the arrangement is signed by one institute on behalf of all, the names of the other institutes being attached to the document." This means that the signing can only be done by one institution.

Substantially, the scope of the Legal Metrology Regulation focuses more on legal metrology from the trade sector only. Meanwhile, the protection of public interests related to measurement does not only become a fundamental requirement in trade practices, but it also includes aspects related to health, safety, security, and environment (HSSE). The implication of this condition (where the regulation applies only to legal metrology) indicates that Indonesia's involvement in various international organizations is only limited to APLMF and OIML. In other words, Indonesia's involvement in such metrological forums as APMP (Asia Pacific Metrology Programme) and BIPM (*Bureau International des Poids et Mesures* or International Bureau of Weights and Measures) has no legal umbrella. Although in practice, Indonesia is represented by KIM-LIPI in the APMP and BIPM forums, the existing laws and regulations do not underlie Indonesia's participation.

Outdated and insufficient instruments to serve all existing measurement outfits clearly describes the condition of the facilities nationally in Indonesia, including buildings, equipment, operational vehicles, and size standards. Each provincial technical implementation units (PTIU) requires at least three sets of size standards for minimum calibration services that are well tracked. In addition, limited human resources also become obstacles to the administration of legal metrology. Nationally, 3,444 calibration officers are needed; meanwhile, currently, the number of calibration officers is only 787 people (22.9% of the ideal number of calibration officers). The obstacle in increasing the number of calibration officers is due to the difficulty of obtaining qualified human resources who hold legal metrology qualifications (Bachelor of Engineering).

Within a year, the PTIU can only provide services between 32-48 days for all districts/cities. The range of calibration/recalibration services is only 46.28% of the estimated population of measuring instruments. With the service range of only around 46.28%, a market can only be served once every three years. This condition occurs due to a lack of budget and planning for service procedures, especially in traditional markets.

In a regional context, the ASEAN Economic Community, established in 2015, encourages its member states to continue improving metrological provisions at the regional level. ASEAN is currently conducting capacity building cooperation for legal metrology authorities in each ASEAN member state through training activities in the field of legal metrology and laboratory intercomparison among the ASEAN member states. The cooperation contained in the ASEAN Consultative Committee for Standards and Quality (ACCSQ) Working Group on Legal Metrology (WG3) aims at harmonizing legal metrology in ASEAN to support the ASEAN Free Trade Area (AFTA) and to ensure that the modernization of legislation in the field of legal metrology by ASEAN member states does not result in new technical barriers to trade. In the previous ACCSQ meetings, ASEAN countries were recommended to consider the improvement of their national law and its derivatives. Some ASEAN countries have already implemented good regulations up to the international level, but some need intensive improvement and must be harmonized temporarily (Kochsiek, 2015).

In its latest development, the ACCSQ WG3 held a meeting in Yogyakarta, Indonesia on Thursday, October 25, 2018, attended by 24 delegates from Indonesia, Thailand, Malaysia, Cambodia, Laos, Vietnam, Singapore, the Philippines, the ASEAN Secretariat, and the Physikalisch-Technische Bundesanstalt (PTB) of Germany. The meeting discussed the need for harmonization of policies in the field of legal metrology among ASEAN countries. Harmonization includes the development of technical legal metrology policies implemented in the ASEAN region, the development program in the field of legal metrology, and the exchange of information among ASEAN countries. This effort is expected to be able to bridge the differences in the legal system applicable in the ASEAN countries. Thus, technical barriers to trade are no longer a problem. Indonesia with its civil law system, for example, will eventually be able to easily conduct trade relations with Singapore or Malaysia which applies a common law system.

The need for harmonization of measurement standards arises as a result of the adoption of the results of the 1875 Meter Convention. All these Organizations had for objective to set up (by consensus) mechanisms for regulation in fields in which countries previously acted individually: international relations (UNO), health (WHO), alimentation (FAO), development (UNDP, OECD), finance (IMF), trade (GATT then WTO), etc. The OIML's objective is to contribute to setting up a Global Measurement System.

Everything could have continued to progress within the OIML, as in other Organizations, in a steady and foreseeable way. Based on the legitimacy of states and on their competence, the OIML developed model regulations on the basis of which the Member States would voluntarily harmonize their national regulations and recognize each other's measuring

instruments and measurement results. In this way, the dialogue between states would have been a simple way to provide the intended regulations. In the future, it will be necessary to improve the implementation of the obligations specified in the OIML Convention, and to make sure that these obligations are taken into account by the Regional Organizations as well as by the local authorities.

An example of relations between regional structures and Intergovernmental Organizations must be noted. In the World Trade Organization, the members are states. However, the members of the European Union decided to delegate their powers in negotiations as well as their votes, to the European Commission. This is a very efficient way to better involve a Regional Organization in international work, and benefits at the same time the Regional Organization, its Members and the International Organization. This shows that establishing links between an International Organization and a regional structure is not only the task of the International Organization but also that of the participating states. The development of relations between the OIML and Regional Organizations will not be done against the Member States' will, but in harmony with them (Magaña, 2002).

Therefore, an in-depth study on economic loss is needed because if it is not immediately conducted, the harmonization problem will impact the Indonesian economy. Harmonization can be proposed through the Ministry of Commerce which should be responsible for this case.

In such a perspective, the steps to achieve harmonization in the law of legal metrology can be done in two formulation steps: they are harmonization of formulation policy (regulatory system), and material harmonization (substance). The first point refers to the step of formulating the harmonization of its legal system, and the second point refers to the step of formulating the harmonization of norms (legal matter).

The ideal step taken in the harmonization of the legal system is necessary to make adjustments to the elements of the legal order applicable within the framework of the national legal system which includes the legal substance, along with its legal structure and legal culture component (Friedman, 1975).

CONCLUSIONS

In the field of legal metrology, many organizations from different countries must agree on global measurement standards to achieve cooperation in the field of trade. As a country taking a part in the ratification of the WTO-TBT, Indonesia accepts all liabilities charged and is also obligated to amend its domestic law in accordance with the provisions contained in that agreement. Open international trade demands uniformity between the rules applicable at the international level and the rules made at the national level. The uniformity of this rule is commonly referred to as harmony between international rules and national rules. In the harmonization of law, the most important point is the meeting point of the fundamental principles between the two,

thus avoiding the occurrence of conflict of law. Disharmonized of the legal system will bring up a situation that cannot ensure a legal certainty which can cause disruption in the social life, disorder the sense of vulnerability. In such a perspective the problem of legal certainty will be perceived as a need which can only be realized through the harmonization of the legal system. The challenge for OIML as it is an outstanding challenge for all standardization bodies are new information technologies will be widely used and new working methods will have to be implemented. It is necessary to raise the awareness of political decision-makers in all countries, as well as the awareness of development agencies so that they seriously take metrology into account in their programs. The findings suggest the government of Indonesia to amend Law No. 2 of 1981 concerning Legal Metrology immediately. This improvement is expected to accommodate and simultaneously provide solutions to the problems of international trade barriers. It is also necessary to raise the awareness of the public as to the role of metrology and legal metrology. Furthermore, the legal certainty on legal metrology will be able to encourage economic activities and become an effort to improve the welfare of the people of Indonesia.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Amiruddin, & Asikin, Z. (2004). *Pengantar metode penelitian hukum* [Introduction to legal research methods]. Jakarta, Indonesia: Raja Grafindo Persada.

Ardianto, R. (2012). A way to stimulate public awareness. *OIML Bulletin*, *LIII*(2), 33-38.

Badan Pembinaan Hukum Nasional. (2013). *Academic manuscript of amendment of law number 2 of 1981 on legal metrology.* Jakarta, Indonesia: Pusat Perencanaan Pembangunan Hukum Nasional BPHN.

Barker, J. (2005). The OIML and the purpose of international recommendations. *Accreditation and Quality Assurance*, *10*(3), 123-124.

Brotosusilo, A. (1996). Dampak yuridis, pertimbangan ekonomis dan cakrawala sosiologis, ratifikasi "Agreement establishing the world trade organization/WTO" oleh Indonesia [Juridical impact, economic considerations and sociological horizons, ratification "Agreement establishing the world trade organization/ WTO" by Indonesia] . *Jurnal Hukum dan Pembangunan*, *XXVI*(2), 97 – 124.

Budhijanto, D. (2011). Pembentukan hukum yang antisipatif terhadap perkembangan zaman dalam dimensi konvergensi teknologi informasi dan komunikasi [The formation of laws that are anticipatory to the times in the dimension of convergence of information and communication technology]. *Jurnal Ilmu Hukum*, *14*(2), 225-255.

Chandrawulan, A. A. (2011). *Hukum perusahaan multinasional, liberalisasi hukum perdagangan internasional dan hukum penanaman modal* [Multinational company law, liberalization of international trade law and investment law]. Bandung, Indonesia: Alumni.

De Cruz, P. (2016). *Perbandingan sistem hukum* [Comparison of law system]: *Common law, civil law, and socialist law*. 5th Edition. Bandung, Indonesia: Nusa Media.

Faria, J. A. E. (2009). Future directions of legal harmonisation and law reform: Stormy seas or prosperous voyage? *Revue de Droit Uniforme, 5*(5), 5 – 34.

Friedman, L. M. (1975). *The legal system: A social science perspective*. New York, USA: Russell Sage Foundation.

Gandhi, L. M. (1995). *Harmonisasi hukum menuju hukum yang responsif. Makalah, yang disampaikan pada pidato pengukuhan guru besar tetap FH-UI* [Harmonization of law towards responsive law. A paper, delivered at the inauguration speech of the permanent FH-UI professor].

Garoupa, N., & Ogus, A. (2006). A strategic interpertation of legal transplants. *The Journal of Legal Studies, 35*(2), 339-363.

Glenn, H. P. (2002). North America as a medieval legal construction. *Global Jurist Advances*, *1*(1), 49 – 60.

Glenn, H. P. (2003). Harmony of laws in the Americas. *University of Miami Inter-American Law Review*, *34*(2), 223.

Goode, R. (2010). *Commercial law* (4th ed.). London, England: Penguin.

Habibullah, M. S., Chong, C. Y., & Din, B. H. (2017). Developing and developed ASEAN-10 economies: Converge or diverge? *International Journal of Economics and Management, 11*(S3), 623-640.

Howarth, P., & Redgrave, F. (2005). *Metrology in short* (2nd ed.). Denmark: MKom Aps.

Joint Committee for Guides in Metrology. (2012). *Basic and general concepts and associated terms* (VIM) (3rd ed.). Sèvres, France: JCGM-BIPM.

Just, S. (2009). The memorandum of understanding between ISO and the OIML. *OIML Bull*etin, *L*(2), 40-41.

Kochsiek, M. (2015). Legal metrology prepared for the ASEAN economic community. *OIML Bulletin, LVI* (2), 36-38.

Lopez-Rodriquez, A. M. (2002). Lex mercatoria [The law merchant]. *Retzvidenskabeligt Tidskrit*, *2*(2), 46-56.

Magaña, J. F. (2002). How will the development of regional authorities and local authorities affect intergovernmental organizations such as the OIML? In *Proceeding OIML Seminar* (pp. 21 – 28). Espace Olano Saint-Jean-de-Luz, France: International Organization of Legal Metrology.

Mandala, S. (2016). Harmonisasi hukum perdagangan internasional: Sejarah, latar belakang dan model pendekatannya [Harmonization of international trade law: History, background and model of approach]. *Jurnal Bina Mulia Hukum*, *1*(1), 53 – 61.

Menski, W. (2006). *Comparative law in a global context: The legal systems of Asia and Africa* (2nd ed.). New York, USA: Cambridge University Press.

Ogus, A. (1999). Competition between national legal systems: A contribution of economic analysis to comparative law. *International and Comparative Law Quarterly, 48*(2), 405-418.

Ponce, J., Hebert, M., Schmid, C., & Zisserman, A. (2006). Toward category-level object recognition. Retrieved 25 July 2017, from https://www.researchgate.net/publication/238720169_Toward_Category-Level_Object_Recognition

Rodrigues Filho, B. A., & Gonçalves, R. F. (2015). Legal metrology, the economy and society: A systematic literature review. *Measurement 69*: 155–163.

Soekanto, S., & Mamuji, S. (2005). *Penelitian hukum normatif* [Normative legal research]. Jakarta, Indonesia: Raja Grafindo Persada.

Soeroso. (2005). *Perbandingan hukum perdata* [Comparison of civil law]. Jakarta, Indonesia: Grafika.

Ticona, J. M., & Frota, M. N. (2008). Assessment of the economic impact of product certification: A significant area of application of measurement, *Measurement 41*(1), 88-104.

Trebilcock, M. J., & Howse, R.(1999). *The regulation of international trade* (2nd ed.). London, England: Routledge.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1215 - 1231 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Legal Protection of the Constitutional Rights of the Indigenous Faith Believers in Indonesia

Muhammad Yusrizal Adi Syaputra* and Mirza Nasution

Law Program, Graduate School, University of Sumatera Utara, Jalan Abdul Hakim No. 4, Medan 20222, Indonesia

ASTRACT

The State has a responsibility for preventing the violation of the indigenous faith believers. Violations occur in the form of discrimination and coercion such as the forced embracing of a particular religion, there is no religious column in the identity card, lack of public, law, health and education services. Indigenous faith believers fight against the discrimination by filling a petition to the constitutional court based on the principles of freedom of religion. The Constitutional Court granted this petition through Decision Number 97/PUU-XIV/2016. However, the Constitutional Court Decision has faced obstacles in its implementation. The government responses to the Constitutional Court Decision by enacting the Regulation of the Minister of Home Affairs Number 118 of 2017 concerning Family Card Forms, Registers, and Civil Registration Deeds. This regulation allows indigenous faith believers to get their religious status in the ID card, marriage certificates, health insurances, poverty certificates, and registration as voters for the general election. This research aims to investigate the State Position in the fulfillment of the Constitutional Rights of the indigenous faith believers and how the decision is being implemented and the obstacle in implementing the decision. Based on constitutional theory analysis, this research argues that the constitutional court decision has a fundamental role to fulfil the legal status of indigenous faith believers as the Indonesian citizen, while the implementation of the decision has been taking slow progress.

Keywords: Constitutional rights, Indigenous faith believers, legal protection

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
yusrizal.adi@gmail.com (Muhammad Yusrizal Adi Syaputra)
mirzanasution@ymail.com (Mirza Nasution)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

The protection of the entire Indonesian people and the whole Indonesian citizens is clearly stated in the Indonesian Constitution (Hager, 2000). The Constitution / the 1945 Constitution serves as guidelines for the implementation of the state because of its nature as the basic law in Indonesia (Soemantri, 2006).

The Constitutional Rights which include human rights and citizen rights are expressly stipulated in the 1945 Constitution. The State protects every citizen before the law and government to worship and practice their respective religions and beliefs (Rahardjo, 2000). The state recognition of the rights to religion and worship according to the 1945 Constitution is regulated in Article 29 Paragraph (2) and Article 28E Paragraph (1) of the 1945 Constitution (Abdullah, 1984).

The values contained in Article 28A to Article 28J of the 1945 Constitution, in addition to norms, also include rights and obligations in the relationship between the state and citizens, and the principles of human values (Rohidin, 2011). The basic principle says that every person living within the territory of the Unitary State of the Republic of Indonesia must be protected by the State in terms of their human rights and obligations (Asshiddiqie, 2015).

The implementation of Article 28 E and Article 29 of the 1945 Constitution can not be separated from the current principle of majority democracy (Syafi'ie & Umiyati, 2012). The majority is based on religious beliefs, economics, ethnicity, or regionalism. As long as the integrity of the State and society administration is well-maintained, there will be no conflict in the community (Arianingtyas et al., 2009).

The implementation of the majority democracy in Indonesia can be seen in the formation of legal products in the form of laws formulated by the House of Representatives together with the President (Susanti et al., 2000). Every proposed draft of the law which only listens to takes input from and attaches importance to the interests of the power group will only produce a legal product influenced by the wishes of a particular group (Anggono, 2014). For example in the formation of Law Number 24 of 2013 on Amendment to Law Number 23 of 2006 concerning Civil Administration.

There is a controversial provision relating to the civil administration in the Identity Card about filling the religious column for the local belief community (Risdiarto, 2017). While people who confess faith in the majority religions such as Islam, Christian (Catholic and Protestant), Hinduism, Buddhism, and Confucianism have no problem, people who still adhere to local religions and beliefs face difficulties.

Based on the fact in the community that there has been discrimination against the community of genuine believers including:

1. Believers of indigenous beliefs are forced to choose one religion so that it can be recognized administratively in government
2. Discrimination in population administration records. This resulted in limited access to various population products. They often find it difficult to get a National

Identity Card, Family Card, Birth Certificate, and Marriage Certificate. Thus, the people who believe that the original believers have made a customary marriage are not recognized by the state.

3. Difficulties are also experienced in terms of employment. This is a result of not including their trust in the identity card. They often cannot get jobs unless they want to convert. Weddings also often appear on job vacancies on the internet. Many application forms do not include the flow of belief in religious choices on the form.
4. Communities of genuine believers have difficulty in the wage process to gain bank access. Banks often need government confirmation in advance to provide access to adherents of trust. As a result, not only are difficulties in the wage process, they are also often difficult to get venture capital assistance.
5. Discrimination also occurs in terms of education. In some cases, children who hold certain beliefs cannot advance to class even though they are classified as smart in school. This is because they do not take religious studies. Many schools argue that only lessons from six government-recognized religions exist in the curriculum. This makes believers believe that they refuse to attend religious studies at school because they do not comply with their beliefs. As a result, the value of religion in the report card was empty.

The provision in the civil administration law has violated their rights as citizens and human beings. Such government action can be categorized as unconstitutional.

The provision in the Civil Administration Law is deemed incapable of guaranteeing the protection and fulfilment of the same rights to the believers as a citizen (Budijanto, 2016). The judicial review of Law Number 24 of 2006 was conducted by a group of local faith believers to examine the constitutionality of Article 61 Paragraph (1) and (2), and Article 64 Paragraph (1) and (5) governing the inclusion of religion column in ID cards (Rahman, 2017).

The Constitutional Court granted the judicial review petition of Article 61 Paragraph (1) and (2), and Article 64 Paragraph (1) and (5) of Law Number 23 of 2006 regarding Civil Administration juncto Law Number 24 of 2013. The Constitutional Court Decision, case Number 97/PUU-XIV/2016, has principally provided legal certainty for the indigenous belief groups in terms of civil administration. However, the current social and political realities and laws have not provided openness and acceptance to these groups.

Although the Constitutional Court Decision Number 97/PUU-XIV/2016 has provided a room for the administrative needs of the faithful believers, it has still created social and legal conflicts. The Government and the House of Representatives have not formulated the latest regulation from

Article 61 Paragraph (1) and (2), Article 64 Paragraph (1) and (5) of Law Number 23 of 2006 regarding Civil Administration juncto Law Number 24 of 2013 regarding Civil Administration. As such, there is no legal certainty for the belief groups in implementing the Decision of the Constitutional Court.

Central questions in this article include How is the State Position in the Fulfillment of the Constitutional Rights of the indigenous faith believers?. How is the decision being implemented and what is the obstacle in implementing the decision?

Literature Review

Constitution and Constitutional Theory. The Constitution or Constitution (Latin: *Constitutio*) in the State is a political and legal system of norms, which are on the Government usually codified as a written document. The provisions of the law/ rules were not set things that detail but layout principles that became the basis for other regulations. In the case of a State, the Constitution contains the rules and principles of the political and legal entity, the term refers specifically to establish the national Constitution as the basic principles of politics, the basic principles of law are included in the build the structure, procedures, authority and responsibilities of the Government of the country in general, the Constitution generally refers to the granting of rights to the citizens of the community. The term Constitution can be applied to all the laws which define the functions of the Government.

The Constitution is used to refer to a set of fundamental principles of government, only beginning to be used when the United States declared its constitution in 1787 (Wheare, 1975). Wolhoff (1955) states that the Constitution or Constitution is the highest law in the country, which contains the foundations of the entire legal system within the country (Wolhoff, 1955).

According to A. A. H. Struycken, the Constitution (*Groundwet*) as a written constitution is a formal document containing (Tutik, 2014):

(1) The result of the nation's political struggle in the past
(2) The highest levels of national development of the nation
(3) The views of the nation's figures to be realized now and in the future
(4) A desire by which the development of national state life will be led

Based on conceptual three main characters of a constitution is (Harahap, 2004):

(1) A constitution is a supreme law of the land
(2) A constitution is a framework for government
(3) A constitution is a legitimate way to grant and limit powers of government officials
(4) The Constitution serves as a vehicle that accommodates the international order in national law

The Constitution is essential to be regarded as a form of a social contract to underpin the social order of a society. A form of a collective agreement between the

government and the governed, between the ruler and the people, with the understanding that the rule of power must be sourced and joined on the consent of the people (Diponolo, 1975).

According to Djahiri (1971), the essence of the constitution must be oriented to the early days of the process of the state is the beginning of the *formal constitution*, *pactum objectionis* and *pactum subjectionis* which regulates the establishment of the state and the guarantee of the fundamentalist leges of man and state. Based on that, the nature of the constitution leads to the formal *human zekerheids* in life against others as well as the organizations in which he lives and the security of the right of state authority and framing. In other words, the nature of the constitution is the arrangement of human rights guarantees in its life as homosociality as well as the regulation of the state of affairs (*frame of government*).

The Constitution of a country should contain and regulatory matters relating to the subject of humanity living together in a state container. In the union of the Unitary State of the Republic of Indonesia based on Pancasila and the 1945 Constitution, who live together and collect or collect themselves in common life are also human beings, ie humans in nature, and humans in a culture called Indonesia. Indonesian man, on the one hand, is none other than a human who lives together in a cultural environment that formes and forms itself in a social environment with humans themselves (Zuchron, 2017).

The concept of a plural modern state constitution always contains noble values that are universal-perennial and basic things that can be mutually agreed upon by all components of the citizenry, with different religious, cultural, and cultural backgrounds (Mas'udi, 2011). That is why there is no one country, let alone a multi-layered or diverse modern state, whose constitution directly, literally and unambiguously refers to the sound of certain religious scriptures despite being embraced by the vast majority of the people of the country concerned. This is by no means a denial of scripture, but rather putting the holy book on the proper, eternal and divine maqam (Mas'udi, 2011).

In democratic countries, constitutional structures concern the competition between the collective goals of the community and ideas of individual equality and freedom. The constitutional law makes it possible for us to act collectively by coordinating the interests of many individuals, for example by voting mechanisms or judicial decisions. It also protects individuals against abuses by those to whom we entrust power it being a sad feature of human nature that those who seek power may be unfit to exercise it. (Alder, 2002).

The political system of which the constitution is a skeleton can, of course, be anything that the dominant groups in the community manage to impose on the people by appeals to morality or self-interest or using violence, charismatic leadership, or reliance upon apathy. A constitution provides safeguards which at the very least facilitate peaceful change (or in some

versions of democracy provides a means of legitimating forcible change according to a majority opinion) (Alder, 2002). Constitutional Theory is used for the basis of think in analyzing the Law Reconstruction of Constitutional Rights of the believer in the rule of law in Indonesia. Constitutional Theory is also used to see the state's position in fulfilling the constitutional rights of minority groups (believer believers) in the State of Law of Indonesia in the legislation.

Indigenous Faith Believers. Indigenous faith believers are the belief of the local Indonesian people who believe in God outside the majority religion of the people of Indonesia. Or the followers of the faith are also called all belief systems that are not or have not been officially recognized religion based on tradition. This method follows the religious ways of ancestors, ancestors, or people from the previous generation. Adherents to traditional religious methods are generally strong in religion, find it difficult to accept religious matters that are new or renewable, and are not interested in exchanging religions. List of local beliefs of native Indonesian people are Hindu Bali (Hindu Dharma), Aluk Todolo (Tana Toraja), Sunda Wiwitan (Kanekes, Banten), Agama Djawa Sunda (Kuningan, West Java), Buhun (West Java), Kejawen/Kebatinan (central java dan East Java), Parmalim (North Sumatera), Pemena, Kaharingan (Kalimantan), Tonaas Walian (Minahasa, North Sulawesi), Tolotang (South Sulawesi), Wetu Telu (Lombok, West Nusa Tenggara), Naurus (Seram Island, Maluku), Aliran Mulajadi Nabolon (North Sumatra), Marapu (Sumba), Purwoduksino, Budi Luhur, Pahkampetan, Bolim, Basora, Sirnagalih, Koda kirin (Adonara Island, East Nusa Tenggara), Buda Tengger, and Buda Jawi Wisnu.

Local beliefs of indigenous Indonesians are administratively registered in several groups. Based on data in the Directorate General of Culture, Ministry of Education and Culture, Indonesia, there are 187 groups of trust supporters in Indonesia. Most of the group of believers are in Central Java with 53 groups and others are found throughout Indonesia.

MATERIALS AND METHODS

This research was a study on Constitutional Court Decisions relating to the protection of the constitutional rights of the indigenous faith believers in Indonesia. In this research, the authors did see that the state must be held accountable under the constitution to protect Indonesian citizens without discrimination of constitutional rights in the law and its implementation. Researchers analyzed the decision by using the theory of the constitution and analyzed how the government's response to the Constitutional Court's decision and its implementation to the indigenous faith believers. To see how the implementation is done, the researchers interviewed two people of Parlamim belief in Pematangsiantar City. The results of these interviews are then used as primary data to analyze the implementation of constitutional court decisions at the local level.

RESULTS AND DISCUSSIONS

The State Position in the Fulfillment of the Constitutional Rights of the Indigenous Faith Believers

The state is the basic institution of political power (Budiardjo, 2003). Therefore, the state is a law, a territory, a constitution (Wheare, 1975), a society, and a purpose. The state is not a concrete thing, but an abstract concept of political and power attitudes contained in it (Zulkarnaen & Saebani, 2012).

The concept of people in the preamble to the 1945 Constitution of the second paragraph is mentioned as follows: *"And the struggle for the independence movement of Indonesia has safely come to a happy moment which leads the Indonesian people to the front gate of the independence of the State of Indonesia"*. In the fourth paragraph, it is also mentioned that: *"Then the Indonesian independence was formulated in an Indonesian Constitution, which was formed in a composition of the Republic of Indonesia based on sovereignty*". Sovereignty is mentioned explicitly in Article 1 Paragraph (2) of the 1945 Constitution: "*Sovereignty is in the hands of the people and carried out according to the Constitution"* (Zuchron, 2017).

Following the first principle of *Pancasila*, the State of Indonesia is based on the principle of Belief in One Supreme God. This is affirmed in Article 29 Paragraph (1) of the 1945 Constitution which reads "*The State is based on Belief in One Supreme God".*

Based on the philosophical foundation of the State of Indonesia, the legal system and ideals of Indonesia are based on the One Supreme God (Budiyono, 2014). This is in line with Indonesia's recognition of the omnipotence of the One and Only God as reflected in the opening sentence of the third paragraph of the Preamble to the 1945 Constitution.

The 1945 Constitution as a written constitution does not apply perfectly (Rudy, 2013), because one of the chapters is no longer executed (Hoesein, 2009). The prevailing Constitution is not enforced because of the interests of a personal or governing group, in addition to the fact that the provisions of the constitution are run not following the articles contained therein (Indra, 1990).

There are three sovereignty doctrines adopted by the 1945 Constitution simultaneously, namely*: First,* People's Sovereignty Doctrine in the fourth paragraph of the Preamble of the 1945 Constitution and Article 1 Paragraph (2) of the Constitution (Harahap, 2004). *Second,* Legal Sovereignty Doctrine (nomocracy) in Article 1 Paragraph (3) of the Constitution. *Third,* Divine Sovereignty Doctrine or Omnipotence as reflected in the third and fourth paragraphs of the Preamble of the Constitution and Article 29 Paragraph (1) of the Constitution (Asshiddiqie, 2010a).

The state should accommodate the needs and guarantee protection for its people (Munawar & Rachman, 2011). These needs include spiritual needs and assurance to be able to perform worship according to their religion and belief without fear

(Handayani, 2009). It is generally known that there are six recognized religions in Indonesia namely Islam, Protestantism, Catholicism, Hinduism, Buddhism, and Confucianism (Harsono, 2016). There is no regulation which explicitly states that these six religions are the official religions recognized in Indonesia (Sulaiman, 2016).

The recognition status of the six religions is derived from the explanation of Article 1 of the Presidential Decision of the Republic of Indonesia Number 1/ PNPS of 1965 on Prevention of Religious Abuse and/or Blasphemy, which reads "The religions professed by the Indonesian people are Islam, Protestantism, Catholicism, Buddhism, Hinduism and Confucianism".

This can be proven in the history of the development of religions in Indonesia. These six religions are embraced by almost all the people of Indonesia. Therefore, religious communities are guaranteed as stipulated in Article 29 Paragraph 2 of the 1945 Constitution and they must also get help and protection.

Concerning the local beliefs and teachings, based on the Presidential Decree of the Republic of Indonesia Number 1/ PNPS of 1965 on Prevention of Religious Abuse and/or Blasphemy. The government seeks to channel it towards a healthy view and the One Godhead. This is per the Stipulation of the People's Consultative Assembly No. II/MPRS/1960, Appendix A. Section I, Number 6. The word "religious activities" means any kind of religious activities, such as calling a belief as Religion, using terminology in carrying out or practising beliefs or worship and so on (Nainggolan et al., 2009). The points of religious teachings can be figured out by the Ministry of Religious Affairs which has tools/means to investigate them.

In principle, the existence of the local belief groups as minority groups has its own legal culture. Based on the data obtained from the Ministry of Education and Culture, there are 187 organizations of indigenous faith in 13 provinces. The local beliefs held by the followers do not harass any religion and this indicates that the group has its own legal culture which is the identity of the believers' group that should be protected by the Indonesian government.

Menski (2016) argued that as long as the legal culture was preserved, a basic legal postulate for the cultural identity of persons in law, which would be called as the postulate for the identity of legal culture, should be assumed to be functioning. It guided people in choosing ways of reformulating their entire legal structure, including combining original law and transplanted law, so that they could still accommodate the changing circumstances (Menski, 2016).

The local belief groups obey the entry of the national legal system in their rights, although the principle is contrary to the conscience. The Indonesian Constitution as the supreme law in the Republic of Indonesia accommodates that the State guarantees the rights of each community to be protected (Kusnardi & Saragih, 2000). The protection of Indonesian citizens is a goal of the State in the social, economic, legal and cultural environment (Zuchron, 2017).

The existence of the believers in daily life becomes undetectable because by being sociologically and religiously forced, the majority of the community imposes religious values on the group but is fundamentally contrary to the beliefs held by these belief groups.

The marginalization of minority communities because the state comes with the power of its commands through the sovereign laws that are presented during society, which then forces the groups of believers to accept with the coercion of the religious values of the majority of Indonesian people. Today's social reality, most people assume that the flow of belief that exists in the community of belief groups is a religious value that is misguided and needs to be returned to the religious context of Indonesian society, the majority of which adhere to Islam, Catholicism, Protestantism, Hinduism, Buddhism and Confucianism.

The position of a faithful believer, such as *ugamo malim* (*Malim* religion) in social reality already existed and developed in the community of the archipelago before Indonesia's independence. The existence of local trust groups is experiencing a decrease in the number of followers of the faith. The entry of religious teachings into the archipelago is a factor in the exclusion of people who have local beliefs.

In Jambi, there are also minority ethnic groups known as the jungle people or camps/tribal children within. People in the camp or tribal children are ethnic minorities who still have a local religion. The existence of a jungle tribe or a tribe of children is classified as a social group of people who have weak power so that they are unable to influence the social system of the community in their area (Suparlan, 1982). As a minority tribe in Jambi, jungle tribes experience different treatment compared to other tribes. Jungle tribes are victims of collective discrimination by the wider community and government. This is proven by the increasingly marginalized presence of jungle tribes in the Jambi forest with the existence of plantation lands and forest concessions by private and national companies.

The formation of minority groups in the social structure of society is not always based on the total population of the community group, but rather on the marginal status of the group against other dominant community groups. The weak position of a community group will affect the existence of the group in obtaining their rights as citizens. Constitutional rights as Indonesian citizens who should be accommodated through statutory regulations are ignored. The improvement of citizens' rights is due to the marginalized group of citizens having no political power in the government.

The existence of the Indonesian State at this time has not been able to provide a totalitarian realization of the ideals of the nation's founders. The embodiment to protect all Indonesian people and all Indonesian blood has yet to be realized at all as a whole. This is evidenced by the occurrence of discrimination against several national entities that are part of the entire Indonesian nation and an inseparable part of the entire Indonesian blood spill.

The discrimination that occurs directly or indirectly is the responsibility of the state because the state is present and gives birth to a discriminatory state. Discriminatory conditions against certain entities can be tangible in law (legislation), as well as discriminatory from the behaviour/actions of the government of the state apparatus. This is contrary to the purpose of the birth of the Republic of Indonesia to create a welfare state, a state that protects the entire Indonesian nation and the whole of Indonesia's bloodbath based on unity by realizing social justice for all Indonesian people.

Reality shows that groups of citizens who are marginalized based on the distinction of religious beliefs that are not the same as the majority religion are violations of the constitutional rights of these groups as part of Indonesian citizens.

Undang–Undang Dasar 1945 (Fundamental Law 1945) as the Indonesian Constitution contains a lot of basic values, the content of moral and ethical values, and even the provisions regarding human rights that occupy the most material portion after the Reformation. The values contained in articles on human rights, not only contain norms of rights and obligations in the relationship between the state and citizens but also contain principles about human values regardless of the status of people as citizens or not. Anyone who is within the jurisdiction of the unitary state of the Republic of Indonesia must be humanized as a human being who has all of his or her human rights and obligations.

The existence of community groups can be used as an icon for the central government or local government to bring investment through local tourism. The existence of local belief groups as the identity of local communities can be a religious tourism object. The tourists can see directly the local religious practice of the community. It is hoped that with the existence and existence of local believer protected communities, the Government can improve the living standard of the community, through the tourism sector. This can be seen from tourism objects in Mount Bromo, Bali and Toraja. The same can also be developed in North Sumatra.

The Position of the Constitutional Court Decision Number 97/PUU-XIV/2016

The Decision of the Constitutional Court to cancel the emptying of religious columns in Family Cards and Identity Cards for the indigenous faith believers is considered as democratic progress by a group of people.

However, the Decision does not reflect the wishes of the six religion followers generally recognized in Indonesia especially Muslims. The local beliefs referred to in the Decision of the Constitutional Court is the indigenous beliefs that exist in Indonesia such as *Kebatinan, Parmalim*, and *Sunda Wiwitan*. While other religions and beliefs such as Judaism, Zarasustrian, Shinto, Taoism are excluded.

The Decision of the Constitutional Court of Indonesia cannot be separated from the implementation of the legal system in Indonesia (Asshiddiqie, 2010b). According to the legal system, the court's first task is

to ensure the provision of certain laws. This task usually requires the deciphering of the meaning of the key terms. The civil law and common law judges will usually have the task of strictly enforcing certain legislative laws if the meaning of the law is clearly defined (de Cruz, 2010).

The concept of judicial review in Indonesia is a result of the modern development of a democratic Indonesian governmental system. Judicial review is based on the ideas of the rule of law (Hoesein, 2009) the principle of separation of power, as well as the protection and promotion of human rights (the protection of fundamental rights). Judicial review is conducted in a country that embraces the supremacy of law and not the supremacy of parliament. In a country which adopts the system of parliamentary supremacy, the legal product cannot be contested because parliament is a form of representation of the sovereignty of the people (Darmadi, 2015).

The Implementation of legal interpretation by the Constitutional Court is conducted through the interpretive approach applicable to civil law (Gilissen & Gorle, 2007). The Constitutional Court's interpretation of the civil administration law confronted with the Indonesian Constitution resulted in the fact that the existence of the civil administration law, especially Article 61 Paragraph (1) and Article 64 Paragraph (5), is contradictory to the 1945 Constitution.

Radbruch argued that legal sense could be categorized into three aspects (Huijbers, 1982). *The first* is justice in its narrow sense. This justice means equal rights for everyone before the court. Thus, the local faith believers have fought for constitutional rights through the Constitutional Court.

The second is the goal of justice or finality. This aspect determines the content of the law because the content of the law is following the objectives to be achieved. In this case, the existing laws and regulations, such as the civil administration laws, educational laws, health laws, and election laws in Indonesia have not reflected the substance that accommodates the interests of all Indonesians.

The third is legal certainty or legality. This aspect ensures that the law can serve as a rule to be obeyed (Huijbers, 1982; Tanya, 2013). The legal certainty contains a good value which is called by Radbruch as an ethical value. And so it is because this value gets its shape in the attitude of a man who acts according to his duty for the good of life (Huijbers, 1982; Aquinas, 2002). Legal certainty relates to the effectiveness of the law (Huijbers, 1982). Legal certainty is only guaranteed if the government has sufficient means to ensure the existing regulations.

The Constitutional Court Decision Number 97/PUU-XIV/2016 is only able to provide legal certainty for the local faith believers at the constitutional level. In terms of implementation, the government has not established technical and applicative rules. The Decision of the Constitutional Court Number 97/PUU-XIV/2016, viewed from the perspective of justice and benefits, has not been able to provide justice and benefits in the social reality of the community.

The Decision of the Constitutional Court Number 97/PUU-XIV/2016 comes under the category of a conditional unconstitutional rule. An unconstitutional decision is a verdict made through negative interpretation, meaning that law is instantaneously unconstitutional when interpreted as the formulation/interpretation of the Constitutional Court (Wibowo, 2015).

The Constitutional Court Decision does not directly alter the way a group of people view the indigenous belief followers. The majority of Indonesian people still degrade and treat the local faith groups discriminatively (Kurnia, 2015). The discrimination is also done by both government and private agencies, among others, in the installation of electricity, the opening of a bank account, making of passports and inheritance certificates from the court.

The Government of Indonesia's response to the Constitutional Court Decision Number 97/PUU-XIV/2016 is limited to issuing the Minister of Home Affairs Regulation No. 118 of 2017 on Family Card Forms, Registers and Civil Registration Deeds. The regulation aims to improve the services of the Civil Administration professionally, to meet the standards of information technology, and to be dynamic and orderly in achieving excellent service toward the Family Card Forms, Registers and Civil Registration Deeds.

The Regulation of the Minister of Home Affairs Number 118 of 2017 does not work effectively in the local faith community. Lack of information and access to change data on civil administration is the main obstacle for the believers who generally reside in a remote village. This happened, for example, to the community of Malim believers in Toba Samosir Regency, North Sumatera Province, where some families did not have Family Cards and marriage certificates.

The obstacles faced by the Indonesian government to implement the Constitutional Court Decision are, *firstly,* the government is not ready to revise the civil administration law. *Secondly*, the government has not established a technical regulation to accommodate the rights to religion inclusion in the ID column. Although the Decision of the Constitutional Court Number 97/PUU-XIV/2016 has become a legal breakthrough, its implementation does not serve as a guide for the government in making a public policy related to the constitutional rights of the local belief communities living in various regions in Indonesia.

The Indonesian government should prepare itself and consciously think to participate in incorporating social issues into legal materials because of the interaction, interrelation, and interdependence between law and social changes (Tutik, 2014). The Indonesian government's policy in responding to community issues with legal norms is expected to change people's behaviour.

Protection of the constitutional rights of Indonesian citizens is not only regulated in the Law but must apply it in real situations or even imaginable situations to occur in developing law following the development

of the existing community. Therefore, every law written in the law must be clearly defined in society. The same was said by Jack M Balkin that defining here the intention was to find possible changes and conceptual boundaries created by the law itself (Balkin, 2004). More complete than Balkin's statement is as follows: "law is full of conceptual oppositions created by distinctions, which separates things in certain categories from things that fall outside it". According to Balkin (2004), that these changes that must be captured by legal experts include the forming of state law, and therefore the law, in this case, will always be "contested" and limitations in the law itself will always be tested by changes in society. The ability of the state/government to protect and provide the needs of citizens will greatly affect social and political stability.

According to Unger (1975) that in the formation of law by itself also reflects certain socio-political values. Unger said that law is inseparable from politics and various other non-legal norms. Laws are formed by various non-legal factors such as economic, racial, gender, or political interests. The formation of law always presupposes interaction and negotiation between various community groups. As a result, a doctrinal legal analysis will only isolate the law from its socio-political context, and make the law unable to overcome various socio-political problems: racial, gender, religious, or class discrimination.

According to Balkin (2004), to criticize discriminatory state law, values must be established that are more important than the positive norms of humanitarian, cultural and convention laws. By using deconstruction to criticize unjust justice and create more justice. This deconstruction can be used to criticize the laws and regulations made by the Government of Indonesia that are discriminatory to the followers of the original faith.

So the state, in this case, is responsible for forming laws in the form of laws that are progressive, non-discriminatory, and can interact with marginal communities in society. The concrete step is by evaluating discriminatory regulations at the central and regional levels and forming legislation that further guarantees and protects the constitutional rights of citizens, especially the rights to religion and belief.

The evaluation and formation of these laws and regulations must be based on the values of freedom, justice, and equality in the rule of law that upholds the rule of law. Thus, the law is not just a tool to bring order but to bring prosperity and justice for all people. In Indonesia, based on Pancasila as the basis of the Indonesian state, the relationship between religion and state in Indonesia is substantial, meaning that in religion there are substantial teachings and values. This means that in religion there are substantive values that contain ethical and moral principles in the community and state. Religious values become a reference and guide in carrying out and carrying out community life and state politics. Thus, the state of Indonesia is a Godhead of the Almighty, with the type of the Almighty God based on a just and civilized basis.

CONCLUSIONS

The Decision of the Constitutional Court Number 97/PUU-XIV/2016 has only reflected certainty, justice and benefits in Indonesian societies in terms of constitutionalism. The implementation of the Constitutional Court Decision by the Indonesian government as a government regulator and operator has not worked optimally. The Indonesian government's unpreparedness to provide technical rules, socialization, information and access for the indigenous faith communities indicates that the government has been unconstitutional. Protection of the constitutional rights of Indonesian citizens who adhere to the original beliefs of Indonesia is constructed through positive Indonesian law, as well as political and cultural protection so that the protection of constitutional rights can be truly realized. The Government of Indonesia should immediately formulate a technical regulation in the form of the Minister of Home Affairs Regulation, the Minister of Education Regulation, the Minister of Health Regulation, and the Minister of Law and Human Rights Regulation which are interrelated (correlated), consistent and continuous. The regulations act as a form of implementation toward the fulfillment of the constitutional rights in the field of civil administration, health, education, law and government affairs. The local government should provide guarantees to the community groups to fulfill their constitutional rights by conducting socialization, advocacy and open access for the indigenous faith believers in the area.

ACKNOWLEDGEMENT

Special thanks to the Center for the Study of Pancasila and Kenusantaraan (PUSPANTARA) which has assisted with the cost of this research and all related parties involved in this research.

REFERENCES

Abdullah, R. (1984). *Pancasila sebagai dasar negara dan pandangan hidup bangsa* [Pancasila as the basis of the state and national life outlook]. Jakarta, Indonesia: CV. Rajawali.

Alder, J. (2002). *General principles of constitutional and administrative law*. New York, USA: Palgrave Macmillan.

Anggono, B. D. (2014). *Perkembangan pembentukan undang-undang di Indonesia* [The development of the formation of laws in Indonesia]. Jakarta, Indonesia: Konstitusi Press.

Aquinas, T. (2002). *On law, morality, and politics* (2nd ed.). Indianapolis, USA: Hackett Publishing Company.

Arianingtyas, R., Aminah, S., Sihombing, U. P., & Yasin, M. (2009). *Buku saku kebebasan beragama, jaminan hukum dan HAM kebebasan beragama* [The pocket book religious freedom, legal assurance and human rights for religious freedom]. Jakarta, Indonesia: The Indonesian Legal Resource Center (ILRC).

Asshiddiqie, J. (2010a). *Konstitusi dan konstitusionalisme Indonesia* [Indonesian constitution and constitutionalism]. Jakarta Timur, Indonesia: Sinar Grafika.

Asshiddiqie, J. (2010b). *Model-model pengujian konstitusional di berbagai negara* [Constitutional testing models in various countries]. Jakarta, Indonesia: Sinar Grafika.

Asshiddiqie, J. (2015). *Gagasan konstitusi sosial: Institusionalisasi dan konstitusionalisasi*

kehidupan sosial masyarakat madani [The notion of a social constitution: Institutionalization and constitutionalisation of civil society's social life]. Jakarta, Indonesia: LP3S.

Balkin, J. M. (2004). Digital speech and democratic culture: A theory of freedom of expression for the information society. *New York University Law Review*, *79*(1). Yale Law School, Public Law Working Paper No. 63.

Budiardjo, M. (2003). *Dasar-dasar ilmu politik* [Fundamentals of political science]. Jakarta, Indonesia: Gramedia.

Budijanto, O. W. (2016). Penghormatan hak asasi manusia bagi penghayat kepercayaan di Kota Bandung [Respect for human rights for beliefs of trust in the city of Bandung]. *Jurnal Hak Asasi Manusia, 7*(1), 35-44.

Budiyono. (2014). Hubungan negara dan agama dalam Pancasila [The relationship between state and religion in Pancasila]. *Jurnal Ilmu Hukum, 8*(30). 410.

Darmadi, N. S. (2015). Kedudukan dan wewenang mahkamah konstitusi dalam sistem hukum ketatanegaraan Indonesia [Position and authority of the constitutional court in the Indonesian constitutional law system]. *Jurnal Pembaharuan Hukum*, *2*(2), 258-269.

de Cruz, P. (2010). *Perbandingan sistem hukum common law, civil law, dan socialist law* [Comparison of common law, civil law and socialist law systems]. Bandung, Indonesia: Nusa Media.

Diponolo, G. S. (1975). *Ilmu negara* [State studies]. Jakarta, Indonesia: Balai Pustaka.

Djahiri, A. K. (1971). *Ilmu politika* [Politics]. Bandung, Indonesia: PD. Parmaco.

Gilissen, J., & Gorle, F. (2007). *Sejarah hukum: Suatu pengantar* [Legal history: An introduction]. Bandung, Indonesia: Refika Aditama.

Hager, B. M. (2000). *The rule of law: A lexicon for policymakers.* Washington, USA: The Manfield Center for Pacific Affairs.

Handayani, F. (2009). Konsep kebebasan beragama menurut UUD tahun 1945 serta kaitannya dengan HAM [The concept of religious freedom according to the 1945 Constitution and its relation to human rights]. *Toleransi-Media Ilmiah. 1*(2), 218 – 231.

Harahap, K. (2004). *Konstitusi Republik Indonesia menuju perubahan Ke-5* [The constitution of the Republic of Indonesia towards the 5th amendment]. Jakarta, Indonesia: PT. Grafitri Budi Utami.

Harsono, A. (August 26th, 2016). *Commentary: Indonesia religious discrimination harms education rights.* Retrieved on September 15, 2017, from https://jakartaglobe.id/opinion/commentary-indonesia-religious-discrimination-harms-education-rights/

Hoesein, Z. A. (2009). *Judicial review di Mahkamah Agung RI, tiga dekade pengujian peraturan perundang-undangan* [Judicial review in the Supreme Court of the Republic of Indonesia, three decades of judicial review]. Jakarta, Indonesia: Raja Grafindo Persada.

Huijbers, T. (1982). *Filsafat hukum dalam lintasan* sejarah [Legal philosophy in the course of history]. Yogyakarta, Indonesia: Penerbit Kanisius.

Indra, M. R. (1990). *Undang-undang dasar 1945 sebagai karya manusia* [The 1945 Constitution as a human work]. Jakarta, Indonesia: Pustaka Sinar Harapan.

Kurnia, T. S. (2015). Mahkamah Konstitusi dan hak untuk bebas dari perlakuan diskriminasi [The Constitutional Court and the right to be free from discrimination]. *Jurnal Konstitusi, 12*(1), 21-42.

Kusnardi, M., & Saragih, B. R. (2000). *Ilmu negara* [State Studies]. Jakarta, Indonesia: Gaya Media Pratama.

Mas'udi, F. (2011). *Sejarah konstitusi UUD 1945 dalam perspektif Islam* [History of the 1945 constitution in the Islamic perspective]. Jakarta, Indonesia: Pustaka Alvabet.

Menski, W. (2016). (Khozim, M. Trans). *Perbandingan hukum dalam konteks global sistem Eropa, Asia, dan* Afrika [Comparative law in the global context of European, Asian and African systems]. Bandung, Indonesia: Nusa Media.

Munawar, B., & Rachman. (2011). *Membela kebebasan beragama: Percakapan tentang sekularisme, liberalisme, dan pluralisme* [Defending religious freedom: Conversations about secularism, liberalism and pluralism]. Jakarta, Indonesia: Democracy Project.

Nainggolan, Y. A., Widodo, R., Rahman, & Yuli. (2009). *Pemaksaan terselubung hak atas kebebasan beragama dan berkeyakinan* [Covert coercion of the right to freedom of religion and belief]. Jakarta, Indonesia: Komisi Nasional Hak Asasi Manusia.

Rahardjo, S. (2000). *Ilmu hokum* [Legal studies (5th ed.)]. Bandung, Indonesia: Citra Adytia Bhakti.

Rahman, A. (2017). Kewenangan Mahkamah Konstitusi dalam menilai agama (kajian yurudis putusan Mahkamah Konstitusi No. 97/PUU-XIV/2016) [The authority of the Constitutional Court in evaluating religion (judicial review of the Constitutional Court ruling No. 97 / PUU-XIV / 2016)]. *Jurnal HAKAM*, *1*(2), 199 - 215.

Risdiarto, D. (2017). Perlindungan terhadap kelompok minoritas di Indonesia dalam mewujudkan keadilan dan persamaan di hadapan hukum [Minority group protection in Indonesia to realize justice and equality before the law]. *Jurnal Rechtsvinding Media Pembinaan Hukum Nasional, 6*(1), 125 - 142.

Rohidin. (2011). Problematika beragama di Indonesia: Potret persepsi masyarakat terhadap otoritas fatwa Majelis Ulama Indonesia [Problems of religion in Indonesia: A portrait of public perceptions of the fatwa authority of the Indonesian Ulema Council]. *Jurnal Hukum, 1*(18), 1–19.

Rudy. (2013). Kedudukan dan arti penting UUD 1945 [Position and significance of the 1945 Constitution]. *Jurnal Ilmu Hukum, 7*(2), 126–134.

Soemantri, S. (2006). *Prosedur dan sistem perubahan konstitusi* [Procedures and systems for changing the constitution]. Bandung, Indonesia: Alumni.

Sulaiman. (2016). Kriteria agama dalam perdebatan (pandangan masyarakat Sumba Barat, Nusa Tenggara Timur) [Religious criteria in the debate (the views of the people of West Sumba, East Nusa Tenggara)]. *Jurnal Multikultural & Multireligius*, *15*(3), 87-101.

Suparlan, P. (1982). *Pengetahuan budaya, ilmu-ilmu sosial dan pengkajian masalah-masalah* agama [Cultural knowledge, social sciences and the study of religious issues]. Jakarta, Indonesia: Pusat Penelitian dan Pengembangan Lektur Agama.

Susanti, B., Suyudi, A., Pamungkas, B., & Sikumbang, S. M. (2000). *Semua harus terwakili: Studi mengenai reposisi MPR, DPR, dan lembaga kepresidenan di* Indonesia [All must be represented: Studies on the repositioning of the MPR, parliament and presidential institutions in Indonesia]. Jakarta, Indonesia: Pusat Studi Hukum & Kebijakan Indonesia (PSHK).

Syafi'ie, M., & Umiyati, N. (2012). *To fulfill and to protect: Membaca kasus-kasus aktual tentang hak asasi* manusia [To Fulfill and to Protect:Read actual cases of human rights]. Yogyakarta, Indonesia: PUSHAM UII.

Tanya, B. L. (2013). *Teori hukum: Strategi tertib manusia lintas ruang dan generasi* [Legal theory: Human orderly strategy across spaces and generations]. Yogyakarta, Indonesia: Genta Publishing.

Tutik, T. T. (2014). *Konstruksi Hukum Tata Negara Indonesia pasca amandemen UUD 1945* [Indonesian Constitutional Law construction post amendments to the 1945 Constitution]. Jakarta, Indonesia: Kencana Prenada Media Group.

Unger, R. M. (1975). *Knowledge and politics*. New York, USA: Free Press.

Wheare, K. C. (1975). *Modern constitutions*. London, England: Oxford University Press.

Wibowo, M. (2015). Menakar konstitusionalitas sebuah kebijakan hukum terbuka dalam pengujian undang-undang [Measuring the constitutionality of an open legal policy in judicial review]. *Jurnal Konstitusi, 12*(12), 196-216.

Wolhoff, G. J. (1955). *Pengantar Ilmu Hukum Tata Negara Republik Indonesia* [Introduction to the Law of State Administration of the Republic of Indonesia]. Makasar, Indonesia: Timun Mas N.V.

Zuchron, D. (2017). *Menggugat manusia dalam konstitusi: Kajian filsafat atas UUD 1945 Pasca Amandemen* [Suing Man in the constitution: Philosophy study of the 1945 Constitution Post Amendment]. Jakarta, Indonesia: Rayyana Komunikasindo.

Zulkarnaen & Saebani, B. A. (2012). *Hukum Konstitusi* [Constitutional Law]. Bandung, Indonesia: Pustaka Setia.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1233 - 1248 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Plea Bargaining in Corruption Cases: A Solution for the Recovery of Financial Losses by Indonesia?

Febby Mutiara Nelson* and Topo Santoso

Faculty of Law, Universitas Indonesia, Depok, West Java 16424, Indonesia

ABSTRACT

This paper discusses the possibility for Indonesia of the plea-bargaining model as a solution for the recovery of financial losses to the state in corruption cases. Plea bargaining has become a common procedure in common law countries, where the majority of cases are resolved through the mechanism of plea bargaining. This paper uses a conceptual, historical, and comparative approach through literature review to examine how Indonesia as a civil law country could apply plea bargaining in its criminal justice system, particularly in cases of corruption involving financial losses to the state. This paper concludes that corruption prevention efforts focusing on state losses require new approaches to be more effective; this would be in line with both the UNCAC as well as the applicable elements of the legal system in Indonesia. The mechanism of plea bargaining, an agreement reached between the prosecutor and the accused persons in which the accused person acknowledges his or her guilt and willingly returns the gains of their corruption, is, on the other hand, still in line with one of the clauses in the UNCAC, and also has similarities with the existing provisions of the Indonesian Criminal Code through the *Afdoening Buiten Proces* as well as in the Law on Economic Offences.

Keywords: Corruption, discretion, plea bargaining, state financial losses

ARTICLE INFO

Article history:
Received: 03 May 2019
Accepted: 26 Feb 2020
Published: 26 June 2020

E-mail addresses:
feby.mutiara@ui.ac.id (Febby Mutiara Nelson)
santosox@ui.ac.id (Topo Santoso)
* Corresponding author

INTRODUCTION

Corruption eradication has become a common concern for all countries, especially for the signatory states of the 2003 United Nations Convention Against Corruption (UNCAC), including Indonesia. The preamble to this convention expresses concern about the serious threat posed by corruption to the stability and security

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

of the society, including its tendency to undermine the core ethical and legal values of democratic institutions and to disrupt sustainable development and law enforcement.

The UNCAC is particularly concerned with cases of corruption involving large quantities of assets that form an important part of the country's resources and can threaten the country's political stability and sustainable development. The convention also emphasizes that corruption is an international phenomenon affecting the society and the economy of the entire world.

Efforts to combat corruption (as well as other crimes) are carried out primarily through the criminal justice system (CJS). The criminal justice system is closely related to the legal system in a country. The criminal justice system is a sub-system of the national legal system as a whole that is adopted by a country (Hiariej, 2005).

Pertaining to the enforcement of anti-corruption laws, Article 36 of the UNCAC states that state parties shall, in accordance with the fundamental principles of their legal system, ensure the existence of bodies or specialized agencies to combat corruption through law enforcement. Interestingly, the convention underlines that each state party shall consider providing for the possibility, in appropriate cases, of mitigating punishment of an accused person who provides substantial cooperation in the investigation or prosecution of an offense established in accordance with the convention.

The provision listed above, forms a model for the prevention of crime: namely, plea bargaining. In the limited number of cases where the accused person is willing to cooperate with law enforcement in the investigation or prosecution of corruption, the possibility is raised of reducing the sentence of the accused person who provides such cooperation. This paper discusses the role of plea bargaining in the prosecution of corruption cases. Can this model provide a solution for recovering financial losses suffered by the state in corruption cases in Indonesia?

METHODS

This paper applied the qualitative method and conceptual, historical, as well as comparative approach through a literature review to examine the issue discussed. The data collection technique applied used available data, such as available public documents and official records (Singleton et al., 1988). The data collection method applied in this research was a document study aimed at seeking legal materials, namely primary legal documents which include laws and regulations (Soekanto, 2010).

In addition to studying documents through primary and secondary legal materials, comparative research materials also examined as part of the process of aligning and cross-checking based on various secondary data obtained, which could be done by conducting interviews (Denzin & Lincoln, 1994). Interviews conducted to obtain accurate information concerning

the application of plea bargaining in the criminal justice system and on whether or not the concept of plea bargaining could be potentially applied in Indonesia.

The data obtained was analyzed by processing data obtained through the literature review supported by interviews, in order to answer the question "can this model provide a solution to financial losses by the state in corruption cases in Indonesia?" In the first part, plea bargaining in common law countries was discussed, followed by comparison with similar models in civil law countries. The application of plea bargaining in corruption in several countries was discussed further. After that, the research result was used to discuss the issue of corruption in Indonesia and the weaknesses in recovering state losses by using the conventional model. Furthermore, the results of the literature review and interviews were used to discuss the possibility of applying plea bargaining in the Indonesian justice system, particularly in corruption cases with a focus on the recovery of state losses. A critical view of applying plea bargaining in general as well as in corruption cases and relevant theories were also used in the discussion on the main issue in this paper.

RESULT AND DISCUSSION

Plea Bargaining: Only in Common Law Countries?

Plea bargaining has not been practiced widely in Indonesia, but it has been discussed, developed, and practiced in other countries, including those that adhere to the common law as well as those that adhere to the civil law system. In the Common Law legal tradition, confession of a guilty plea to prove an offense has been known for centuries (Alschuler, 1979). However, it was only in the 19th century that there was evidence of plea bargaining being a normal practice in Great Britain and the United States (Mather, 1979). At present, plea bargaining has become a major procedure in common law countries, where the majority of cases are resolved through the mechanism of plea bargaining (Langbein, 1979; see also Dubber, 1997; Dusek, 2010; Fisher, 2003; Flynn & Kate, 2011; Mnookin, 2005; Rauxloh, 2012; Thaman, 2010; Tuner, 2009). In the Brady v. United States (1970), the court concluded that plea bargaining was: "inherent in the criminal law and its administration"(Alschuler, 1979). The American criminal justice system is a system of pleas (Crespo, 2019).

Plea bargaining is an exchange of concessions offered by law enforcement for the accused person's guilty plea. These concessions may be explicit or implicit and may be related to the reduction in the sentences handed down by the court or recommended by the public prosecutor, an alteration of the crime charged, or other conditions (Alschuler, 1979).

Plea bargaining is a negotiation process in which the public prosecutor offers the accused persons to admit their mistake (guilty plea) with their own conviction and awareness. According to Joshua Dressler, plea bargaining is a process in which the accused person in the prosecution agrees to conduct "self-conviction" with some

reciprocity from the public prosecutor (for the benefit of the accused person) (Dressler, 1997).

Through the mechanism of plea bargaining, the parties can mutually agree on certain things and they have the incentive and authority to bargain (Mnookin, 2005). The negotiations between the public prosecutor and the accused persons (or more accurately with the accused person's lawyer) may be of three types: (1) horizontal plea bargaining, regarding the number of indictments faced by the accused person; (2) vertical plea bargaining, regarding the severity of the indictment, indictment for serious crimes or quantity of crimes; and (3) sentence bargaining about the severity of the threat of punishment. In the case of some serious charges the three types of plea bargaining can be negotiated together.

One of the advantages achieved by plea bargaining is to reduce the burden of state-borne cases, especially to the prosecutors. Plea bargaining may also be justified by the weak position of the prosecutor who, if the case is forwarded to trial, can be defeated; this would induce the prosecutor to suggest a plea bargain. When dealing with victims of crimes who do not wish the case to be resumed, or other similar factors, plea bargaining may provide the best possible resolution to the case (Holten & Lamar, 1991).

The philosophy that underlies plea bargaining, among other things, is the view that trials are "zero-sum games" whereby both sides (the prosecutor as well as the accused persons) are bound to lose, none of the parties benefits. Therefore, negotiation or plea bargaining offers at least some advantages to both sides. This argument is also related to each side being aware of their weak position thus facing potential defeat if they proceeded to trial, hence an offer for plea bargaining is made or accepted. Sometimes, it may also be related to a victim who does not wish to continue the case and opts for settlement through plea bargaining, along with other factors (Holten & Lamar,1991).

Apart from the advantages of the above described guilty plea system, certain disadvantages of the same have also been experienced in its implementation in countries that have adopted it. This issue is discussed by Smith (1987) in his piece "The Plea Bargaining Controversy". Some critics argue that a system of negotiated justice undermines the deterrent effect of punishment and can be used by influential perpetrators to evade legal sanctions. Others maintain that perpetrators with prior criminal records, and hence more firsthand experience with the justice system, are able to negotiate more favorable sentences. Additional attacks on plea bargaining focus on the alleged coerciveness of the process (Alschuler, 1979; Fine, 1987; Kishan, 2018; Schulhofer, 1992; Smith, 1987). The policy debate over plea bargaining has focused, in large part, on one question: do plea bargains help accused persons or hurt them. Proponents of plea bargaining argue that plea bargains are good for the accused persons. The other side, as mentioned above, explores the coercive features of the plea bargaining process (Gill & Shahar, 2009).

The application of this common law procedure in the CJS of civil-law countries is of some interest, though naturally each system will apply the mechanism according to its own peculiarities. The adoption of judiciary practices from other legal traditions, such as Civil Law countries adopting criminal legal procedure concepts and practices from Common Law countries and vice versa, is neither new nor recent. The history of the development of criminal justice in Civil Law countries clearly indicates the existence of convergence (Thaman, 2008). The authors use the German model as an instance of the civil law process which has been using plea bargaining.

Plea bargaining has been practiced in several countries that adopt the Civil Law tradition, including Germany. In the old tradition of Civil Law countries, a guilty plea (admitting to one's guilt) was indeed admitted as evidence; however, it could not be used for the judiciary process. However, in the course of their development Civil Law countries such as Germany have accepted plea bargaining. As a Civil Law process, Germany's criminal judicial system is aimed at seeking material truth. The court must be able to uncover the truth, beyond the facts previously submitted by the parties (the public prosecutor and the accused person's attorney) (Rauxloh, 2010). In 1987, the German Federal Constitutional Court decided in a case that in order for an informal settlement to be acceptable, the following requirements must be met: involvement of all related parties; pronouncement of the entire negotiation process and particular details in the main trial session; the absence of *ultra vires* commitments; and the result of negotiation must be lawful and justified; although such agreement is non-binding, there may be no deviation from the agreement for no cause; and related to the principle of material truth, the tribunal must examine whether the accused person's confession is authentic.

On May 28, 2009 the German Federal Parliament ratified the Bill for the Regulation of Agreements in the Criminal Procedure, formalizing agreements reached in a criminal court. The German Law on Criminal Proceedings (*Strafprozessordnung*, StPO) was supplemented with a new article, namely Article 257c, allowing agreements in the criminal court without violating the principles of the existing German law on criminal proceedings providing for the same (Rauxloh, 2010). The said article provides for agreements made among the court, the public prosecutor and the accused person's attorney-in-fact. The agreement becomes valid once the court announces the substance which is allowed in an agreement, and it is subsequently agreed to by the prosecutor's office and the accused person's attorney-in-fact. The provisions of the above mentioned new article are aimed at ensuring that there is material justice. A verdict can only be passed after the charges are thoroughly examined and there is sufficient reason to believe that the confession to wrongdoing is true. The said provision also excludes "charge bargaining" known under the Common Law system. (Rauxloh, 2010).

The above description of agreements under German criminal proceedings (the German model of plea bargaining) is rather interesting as on the one hand there is the on-going practice of informal negotiation for agreement between the parties prior to holding hearings, while on the other hand as a Civil Law process it upholds material truth in its law on criminal proceedings, thereby creating convergence. It is submitted that such practice would be more suitable if plea bargaining were to be applied in Indonesia, due to similarity in principle namely the criminal justice system seeking material justice; thus despite an agreement having been reached between the accused person and prosecutor, seeking the material truth remains the main guiding principle in the criminal court. The above overview of plea bargaining in Civil Law countries, particularly in Germany, provides useful insight in the context of introducing the possibility of adopting plea bargaining in Indonesia, especially in view of formal agreement in plea bargaining.

The official format of the agreement is extremely important because as mentioned above in the discussion on plea bargaining in Germany, as Civil Law process where the criminal procedure law is seeking material truth, it needs to be emphasized in order to convince the adjudicating judge that the bargaining process conducted prior to the hearing was not a result of coercion or due to the accused person telling a lie, wishing to achieve another goal by making such confession (for instance, confessing to a deed which was in fact committed by another person, whereby such other person has promised to provide various generous compensation to the accused person admitting to wrongdoing). In other words, the official format provides legal certainty. The official report on the agreement between the accused person and the public prosecutor along with the supporting files must be submitted in a complete form to the judge. The judge will then make a decision in his/ her verdict based on such an official report.

Having discussed the implementation of plea bargaining in Civil Law countries, particularly in Germany, we shall follow up with the main issue of this article whether the plea bargaining model can be chosen as an alternative solution to handle corruption cases and the problem of state financial losses in Indonesia.

Corruption Issues in Indonesia and State Financial Losses

In Law No. 31 of 1999 and Law No. 20 of 2001 ("Anti Corruption Law"), there are more than 30 types of corruption that are regulated in 13 articles which can be grouped into seven categories of corruption: The first category of corruption offenses is corruption "detrimental to state finances". The second category is bribery. The third category is embezzlement in the office. Embezzlement in this context is a form of corruption committed by someone who holds a position as a public servant who deliberately embezzled money or securities. The fourth category is corruption in the form of blackmail in office. The fifth category offense is cheating/ fraud. There are about

six criminal acts included in this fraudulent group namely contractor committing fraud, the project supervisor allows fraudulent acts. The last category is corruption in the form of a conflict of interest in procurement (Komisi Pemberantasan Korupsi, 2006).

The criminal act of corruption, which causes enormous losses to the state, is perceived to hamper national development. Each year the number of corruption cases—as well as state losses caused by corruption—increases. The large number of cases results in an increase in the backlog of criminal cases which must be resolved by the CJS. The length of the corruption case investigation process itself creates additional law enforcement issues in the area of corruption in Indonesia. The financial losses suffered by the state are also enormous, while recovery efforts have not been able to recoup the state's financial losses caused by the criminal act of corruption.

Related to State Financial Losses, the concept of state finance will first be discussed. The term state finance is included in the Constitution of the Republic of Indonesia, but the term still raises different interpretations, because in reality state finance is not only absolute state money, there are also regional finances and other legal entity finances that originate from state assets separated in State-Owned Enterprises and Regional-Owned Enterprises are also still categorized as state finance (Indrawati, 2014). State finance is all activities or activities that are closely related to money conducted by the state for the public interest at any place and for any purpose (Atmadja, 2005).

According to the General Elucidation on Law No. 31 of 1999, state finances are all state assets in any form, either separated or not separated, including all portions of state assets and all rights and obligations arising from being: A. under the control, management and accountability of state officials, both at the central and regional levels; B. in the possession, management, and responsibility of State-Owned Enterprises / Regional-Owned Enterprises, foundations, legal entities, and companies that include state capital, or companies that include third-party capital based on agreements with the State.

Law No. 31 of 1999 and Law No. 20 of 2001 uses the term "state financial losses", rather than "state losses" as can be seen in the considerations considering item A of Law Number 31 of 1999 and Article 2 paragraph (1) and Article 3 of the said Law. The same terminology namely "state financial losses" is also found in Article 4, Article 32 paragraph (2), and Article 33. Meanwhile, in contrast to the above, another term namely "state losses" [without the word financial] is used in Article 1 item 15 of Law Number 15 of 2006 concerning the Audit Board ("BPK Law").

The question would be, do "state financial loss" and "state loss" have identical meanings or is there a difference between them? In what context is corruption present? In practice, these two terms are used in the same sense. State financial losses relating to expenditures are state expenditures incurred in excess of those allowed, or state expenditures which should not have been incurred, and / or state expenditures carried

out faster than allowed. State financial losses related to expenditure transactions can occur due to the following: (1) Fictitious activities, namely when activities included in the budget (*APBN, APBD, BUMN* Budget) are not implemented, but are reported as if they had already been carried out; (2) Expenditures made based on legislation that is no longer valid; and (3) Expenditures which are official, but are accelerated; for example in the case of payments to suppliers or contractors before the agreed work is achieved (Tuanakotta, 2014).

The restitution of state financial losses is the most important goal of criminal prosecution. A review of the database of corruption compiled by the UGM Research Team Laboratory of Economic Sciences shows the value of state losses due to corruption in Indonesia during the period 2001–2015 amounting to IDR203.9 trillion. During the same period, however, the total financial penalty was only IDR21.26 trillion (10.42%); it means that IDR182.64 trillion (89.58%) of Indonesia's losses due to corruption were not returned. Nor does this financial reckoning account for the social costs of corruption. The data above shows the prevention and eradication of corruption in Indonesia through the imposition of criminal sanctions according to the current Criminal Justice System; imposing a prison sentence is not directly proportional to the return of state assets that are lost due to corruption (Pradiptyo et al., 2015).

Data provided by the UGM Laboratory Research Team shows also that the financial penalties paid by corporate convicts tended to be suboptimal; again, total state losses from 2001–2015 amounted to IDR203.9 trillion, while the corporate financial punishment assessed was only IDR5.5 trillion and penalties assessed by the court was IDR21.3 trillion (Pradiptyo et al., 2015). This data emphasizes the great disparity between state losses caused by corruption and the restitution paid; as a result, one can conclude that there is a need for some other mechanism to maximize the restitution received by the state in compensation for state financial losses due to the crime of corruption (Toegarisman, 2016).

The Need for a New Paradigm

To date, criminal acts are processed and adjudicated under Indonesian law by applying the regular procedure, namely through trial and verdict. Corruption cases are investigated by the police, the prosecutor or anti-corruption commission (*KPK*) and are adjudicated at the anti-corruption court. The basis for investigation, prosecution and administering justice can be found in the procedural law provided for in the Criminal Procedure Code (KUHAP) and partially in Law No.31 Year 1999 and Law No. 20 Year 2001 concerning the Criminal Act of Corruption, as well as Law No. 46 Year 2009 concerning the Anti-Corruption Court.

Handling corruption cases, as well as other criminal cases, takes a long time ranging from investigations to judges' judgment in the first level court, the process to the judgment at the appeal level, to the cassation and review judgment. The mechanism for checking corruption goes

through many stages, it also requires a long period of time. The amount of time for handling such cases can be viewed as a weakness in resolving criminal acts of corruption. As with other criminal acts in our process according to the Criminal Procedure Code, as in most other Civil Law countries, even though prior to entering the trial process the suspect acknowledges his/her guilt of committing corruption and returns state losses by way of repayment or returning the bribe received, the case is not completed faster because it still continues to be processed through trial, verification, and verdict. The time required is relatively the same as if the suspect did not admit his/her mistake and did not return the state's loss or the result of the bribe received.

To overcome those weaknesses and problems, the Indonesian justice system needs a new paradigm to handle corruption cases with the purpose to resolve state financial losses, sort of plea bargaining as practices in several countries, including Civil Law countries such as Germany and the Netherland.

With regard to the above discussion, the interesting issue that arises is whether, plea bargaining can be implemented to handle corruption cases. Are there any actual examples in which such a model has been applied in corruption cases? Indeed, the answer is yes, this model has been implemented by countries encountering the problem of corruption as Indonesia. Plea bargaining has been applied in corruption cases, such as in Nigeria and Pakistan. The legal basis used in applying plea bargaining in Nigeria was Section 14 (2) of the Economic and Financial Crime Commission (EFCC) Act stating that the EFCC can combine criminal acts committed under the criminal law provided for in this law by entering into an agreement to pay an appropriate amount of money, in excess of the amount the person would have to pay if declared liable in a verdict. Plea bargaining is also used in corruption cases in Pakistan, where it is known under the National Accountability Ordinance 1999. The purpose of applying plea bargaining in Pakistan is to offer the opportunity to the accused person in a corruption case to return all property obtained in an unlawful manner in exchange for freedom, however, by taking away such person's political rights (Khan, 2016).

The above-mentioned discussion has proven that it is quite possible for a country that has corruption and state financial losses (such as Indonesia) to use plea bargaining as a new approach in the criminal justice system. Coming back to the situation in Indonesia, plea bargaining is also in line with the new development in the philosophy of punishment in Indonesia where the concept of criminal punishment has been gradually perceived as a system contravening the concept of rehabilitation (medical model), social reintegration as well restoration. The new approach is intended to ensure the perpetrators realize their wrongdoings and not repeat their crimes (Nelson, 2017).

The Plea Bargaining Mechanism is a mechanism for resolving criminal cases committed at the stage of the prosecution, between the prosecutor and the accused

person or his/her legal counsel. Both of these mechanisms are highly dependent on the Prosecutor's ability to negotiate with the accused person or his/her legal counsel. The prosecution is an important step in the settlement of a criminal case because it connects the investigation and examination process in court. In other words, the prosecutor has the power to decide whether or not to sue for almost any criminal offense (Surachman & Hamzah, 1996).

In addition to the prosecutor's authority not to prosecute, the prosecutor is also permitted to settle an out-of-process dispute in what is known as the *Afdoening Buiten Proces*, which is regulated in Article 82 of the Indonesian Criminal Procedure Code. Remmelink said that, before the trial proceedings, the prosecutor may determine one or more requirements (especially those mentioned in the payment of a certain amount of money) to prevent or terminate the continuation of prosecution because of a crime (Remmelink, 2003).

The opportunity provided in Article 37 paragraph 2 UNCAC providing that reduction of punishment is possible in corruption cases when the perpetrator significantly cooperates in resolving the ongoing corruption case. The said provisions of Article 37 paragraph 2 of UNCAC are related to the reduction of punishment (a lot closer to justice collaborator and plea bargaining).

There are a number of major corruption cases in Indonesia, which have been very long to adjudicate, until many years to go to court and decided by the judge. The verdicts for these cases are mainly prison sentences and fines, as well as payment of compensation in the amount of value obtained from the accused person's actions. For example, Anas Urbaningrum in Hambalang case in which the investigation began in 2011 was only decided by the Corruption Court at the Central Jakarta District in 2014 with a sentence of 8 years in prison and a fine of 300 million rupiah, and over 57 billion in compensation (Case No. 55 /Pid.Sus/TPK/2014/PN.JKT.PST). This decision was strengthened by the Supreme Court at the 2015 cassation level with a sentence of 14 years imprisonment and a fine of 5 billion rupiahs and replacement money equal to the decision of level 1 (Case No. 1261 K / Pid.Sus / 2015).

The other big case is a procurement project of e-identification cards (E-KTP) that seems to involve several political parties. One the accused person stated that some political parties also took bribes from E-KTP project, which was estimated to cost the country approximately 2.3 trillion rupiah (US $172 million) from the total project amount of 5.9 trillion rupiah (US $ 443 million) (Mulyati & Santoso, 2019).

If such cases are resolved by applying the plea bargaining model, the adjudication of the case will not take a long time and the recovery process is easier, and recovery of state financial losses could be more significant. The reason is that the accused persons in plea bargaining should be more cooperative, either in recognizing his guilty and disclosing information about his assets. It is submitted that the process of plea

bargaining in corruption cases in Indonesia can begin since the Pre-adjudication process, namely in the prosecution phase, similar to the U.S. and Nigeria. The plea bargaining can be initiated by the public prosecutor; under the Indonesian criminal justice system it can be done by the prosecutor at the Public Prosecutor's Office of the Republic of Indonesia or the prosecutor at *KPK* who has the function as a prosecutor in corruption cases in Indonesia. With regard to the above corruption cases, the following steps could be taken: (1) Formal plea bargaining to produce an agreement spelled out in an official report prepared by the prosecutor under the Attorney General Office or prosecutor of the Anti-Corruption Commission (KPK); (2) The official format of the agreement must be submitted in complete form to the judge; (3) The judge will then make a decision in his / her verdict based on such an official report. Therefore, the verification process did not last long because the accused persons have already acknowledged his actions, willing to return the state losses which had all been agreed in the plea bargaining agreement.

The legal substance related to plea bargaining and thus requiring change or adjustment is at least the *KUHAP, KUHP,* the Anti Corruption Law, the Anti-Money Laundering Law, the Law on the Police, the Law on The Public Prosecutor's Office, the Law on General Judicature, the Law on the Anti-Corruption Commission, and implementation thereof. The said laws contain provisions allowing for or ensuring the implementation of the plea bargaining model thus increasingly paving the way toward strengthening the basis for the implementation of both above-mentioned models.

One of the instances of such legal substance is related to the application of Article 4 of Law No. 31 Year 1999 *jo.* Law No. 20 Year 2001 (Law on the Anti-Corruption Court) stating that: "Returning state financial losses or losses to the national economy does not eliminate criminal charges against the perpetrator of the criminal act as intended in Article 2 and Article 3". The applicability of the said Article 4 can potentially hamper the implementation of plea bargaining (as well as of other models such as *transactie* or deferred prosecution agreement). This particular provision needs to be revised to make it in line with the new model as proposed.

Besides, there is a need to strengthen the capacity of law enforcement agencies in order to enable them to enhance efficiency in the implementation of the plea bargaining procedure and strengthen their code of conduct, bearing in mind that this new model is highly dependent on the discretion of law enforcers, particularly prosecutors at the Public Prosecutor's Office of the Republic of Indonesia and the Anti-corruption Commission (*KPK*), where the discretion exercised in plea bargaining calls for moral/ ethical and legal accountability.

Critique of Plea Bargaining in Corruption Cases

The application of plea bargaining in corruption cases also raises certain criticism. Such has been the case with the process

of applying plea bargaining in corruption cases in Nigeria. The application of plea bargaining in Nigeria, particularly in corruption criminal cases, has been creating controversy. On the one hand, it is considered to be useful in reducing case backlog in courts, fulfilling the principle of speedy and low-cost justice, reducing the number of the prison population and preventing recidivism, it can ensure the recovery of state money and support the national economy (Adeleke, 2012; Imosemi & Ogundare, 2017; Mudasiru, 2015; Obida, 2019).

On the other hand, plea bargaining has been met with resistance as there are hidden motives in its application, fraud, it can be used as justification for committing a crime, and it is prone to be misused as the accused person in corruption criminal cases tend to be affluent and powerful people. Thus far, many people think that the EFCC, which was established for the eradication of criminal acts of corruption in Nigeria, has failed in its work for lacking the ability to produce the deterrent effect, due to handing down light sentences to perpetrators through plea bargaining practices, lack of funds, and political intervention (Adeleke, 2012; Imosemi & Ogundare, 2017; Mudasiru, 2015; Obida, 2019).

In the Indonesian context, the idea of applying plea bargaining in corruption cases is also criticized, as conveyed by former justice Artijo Alkostar (Interview, July 2, 2018), who stated that plea bargaining in Indonesia will create a new type of corruption. In addition, it is not easy to adopt a model from Common Law countries for the Indonesian criminal justice system, where the accused person's guilty plea is not automatically used to decide a case. Besides, it is considered to violate the principle of non-self incrimination and not in harmony with the objective of criminal law to seek material truth.

CONCLUSIONS

Based on the foregoing it can be concluded that Indonesia is now increasingly accepting external legal concepts into its judicial system. Plea bargaining, an important concept that has been widely applied in the criminal justice system in other countries, has not yet been implemented in Indonesia. In regard to corruption cases, to date Indonesia has prosecuted these by imposing penalties (imprisonment and fines) for individuals within corporations and pecuniary penalties for corporations. Such penalties are imposed based on the criminal procedure law, which does not recognize the bargaining approach of the common law. In order to implement plea bargaining in the Indonesian criminal justice system, it is important to improve the discretionary role of public prosecutors. As in many other jurisdictions, prosecutors in Indonesia have the authority to revoke an indictment or to stop legal proceedings with or without conditions.

In order to implement plea bargaining in the Indonesian criminal justice system, it is important to improve the discretionary role of public prosecutors. As in many other jurisdictions, prosecutors in Indonesia have

the authority to revoke an indictment or to stop legal proceedings with or without conditions. There are two types of authority that the public prosecutor can exercise without being demanded by others, namely termination of prosecution for technical reasons and termination of prosecution by discretion. The authority to not prosecute by discretion is also known as the principle of opportunism. In addition to the prosecutor's authority not to prosecute, he or she is also permitted to settle an out-of-process dispute or also known as *Afdoening Buiten Process*, which is provided for in Article 74 Sr/Article 82 of the Criminal Code. However, this provision is only relevant for minor cases entailing fines as punishment.

For criminal prosecution, discretion involves the choice of the article for sentencing, the choice of types of crime, and the choice of how severe the punishment should be. In the context of a new plea bargaining model which would allow prosecutors to bargain with accused persons, this discretionary authority becomes very important. It is relevant for Indonesia, in the context of the prevention of corruption, because plea bargaining will assist in the recovery of the state's losses due to corruption since as a result of the agreement the perpetrator acknowledges guilt and is willing to return what he/she has gained through corruption, while the prosecutor demonstrates the willingness to file a lighter charge, provide a lighter punishment, not prosecute the perpetrator at all, or charge others who committed crimes along with the perpetrator. This model requires a trustworthy prosecutor and external supervision. Plea bargaining could be an alternative solution in the handling of corruption, especially in the recovery of the state's losses, but it will only be possible after additional study of its juridical, philosophical, and sociological aspects.

Article 4 of Law No. 31 Year 1999 *jo.* Law No. 20 Year 2001 (UU PTPK) states that: "Returning state financial losses or national economy losses shall not eliminate the criminal punishment of the perpetrator of criminal act as intended in Article 2 and Article 3". The application of the said Article 4 can hamper the implementation of plea bargaining (as well as other models such as *transactie* or deferred prosecution agreement). Therefore, the wording of Article 4 of the said Law needs to be amended or deleted, so that it will not hamper the implementation of a new model such as plea bargaining.

ACKNOWLEDGEMENT

The authors would like to thank the Ministry of Higher Education and Research of the Republic of Indonesia and Universitas Indonesia for providing financial support. The project was supported by the Research Grant for Final Year's Student's Indexed International Publication (PITMA A) NKB-0836/UN2.R3.1/HKP.05.00/2019.

REFERENCES

Adeleke, G. O. (2012). Prosecuting corruption and the application of plea bargaining in Nigeria: A critique. *International Journal of Advanced Legal Studies and Governance, 3*(1), 53-70.

Alschuler, A. W. (1979). Plea bargaining and its history. *Columbia Law Review, 79*(1), 1-43.

Atmadja, A. P. S. (2005). *Pengertian Keuangan Negara Pasca Amandemen UUD 1945 dalam keuangan publik dalam perspektif teori, praktek dan kritik* [The Meaning of State Budget Post 1945 Constitution amendment, in theoritical, practice, and critical perspective]. Jakarta, Indonesia: Badan Penerbit Fakultas Hukum Universitas Indonesia.

Brady v. United States 1970, 397 U.S. 742

Crespo, A. M. (2019). The hidden law of plea bargaining. *Columbia Law Review, 118*(5), 1303-1424.

Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. California, USA: Sage publication.

Dressler, J. (1997). *Understanding criminal procedure.* New York, USA: Matthew Bender.

Dubber, M. D. (1997). American plea bargain, German lay judges and the crisis of criminal procedure. *Stanford Law Review, 49*(3), 547-605.

Dusek, J. G. (2010). *The effect of plea bargaining vs. trial conviction on the sentencing of offenders charged with a drug offense in Cook County* (Doctoral Thesis, Loyola University Chicago Illinois, USA). Retrieved February 10, 2019, from http://ecommons.luc.edu/luc_diss/269.

Fine, R. A. (1987). Plea bargaining: An unnecessary evil. *Marquette Law Review, 70*(4), 615-632.

Fisher, G. (2003). *Plea bargaining's triumph, a history of plea bargaining in America*. Stanford, USA: Stanford University Press.

Flynn, A., & Kate, F. G. (2011). Bargaining with defensive homicide examining Victoria's secretive plea bargaining system post-law reform. *Melbourne University Law Review, 35*(3), 905-932.

Gill, O. B., & Shahar, O. B. (2009). The prisoners' (plea bargain) dilemma. *Journal of Legal Anaylisis, 1*(2), 737-773.

Hamzah, A. (2005). *Perbandingan pemberantasan korupsi di berbagai process* [Comparative of corruption eradication in various countries]. Jakarta, Indonesia: Sinar Grafika.

Hiariej, E. O. S. (2005). Criminal justice system in Indonesia, between theory and reality. *Asia Law Review, 2*, 2.

Holten, N. G., & Lamar, L. L. (1991). *The criminal courts: Structures, personnel, and processes*. New York, USA: McGraw-Hill.

Imosemi, A., & Ogundare, B. (2017). Plea bargaining in Nigeria: An aftermath of the administration of Criminal Justice Act 2015. *International Journal of Business & Law Research,* 5(4), 93-105.

Indrawati, Y. (Ed.) (2014). *Aktualisasi hukum keuangan publik* [Actualisation of public finance law]. Bandung, Indonesia: Mujahid Press.

Khan, F. (2016). *How not to control corruption, Pakistani style.* Retrieved February 3, 2019, from blogs.lse.ac.uk/southasia/2016/05/31/how-not-to-control-corruption-pakistani-style/

Kishan, H. (2018). Darker side of plea bargaining: The worldwide scenario with future perspectives. *International Journal of Advance Research and Development, 3*(6), 28-37.

Komisi Pemberantasan Korupsi. (2006). *Memahami untuk membasmi - Buku panduan untuk memahami tindak pidana korupsi* [Understanding to eliminate - Guidance book to understand corruption]. Jakarta, Indonesia: Komisi Pemberantasan Korupsi.

Langbein, J. H. (1979). Understanding the short history of plea bargaining. *Law & Society Review, 13*(2), 261-272.

Mnookin, J. L. (2005). Uncertain bargains: The rise of plea bargaining in America. *Stanford Law Review, 57*(5), 1721-1743.

Mather, L. M. (1979). Comments on the history of plea bargaining. *Law & Society Review, 13*(2), 281-285.

Mudasiru, S. O. (2015). Democracy, plea bargaining and the politics of anti corruption campaign in Nigeria (1999-2008). *African Journal of Political Science and International Relations, 9*(9), 335-348.

Mulyati, N., & Santoso, T. (2019). Analysis of criminal liability of political parties in Indonesia. *Indonesia Law Review, 2*, 63-86.

Nelson, F. M. (2017). Legal dualism and inconsistency regarding inmates's rights: A review of the implementation of Government Regulation Number 99 of 2012. *Indonesia Law Review, 2*, 208-228.

Obida, D. I. (2019). Courteous invitation to plea bargaining and the administration of criminal justice in the fight against economic and financial crime in Nigeria: A critical appraisal. *The International Journal of Humanities & Social Studies, 7*(1), 72-82. doi:10.24940/theijhss/2019/v7/i1/HS1812-071

Pradiptyo, R., Partohap, T., & Pramashavira. (2015). *Korupsi struktural: Analisis database korupsi versi 4 (2001-2015)* [Structural Corruption: Analysis of Corruption Database, Version 4 (2001-2015)]. Jogjakarta, Indonesia: Universitas Gajah Mada. Retrieved March 21, 2017, from http://cegahkorupsi.feb.ugm.a.id

Rauxloh, R. E. (2010). Formalisation of plea bargaining in Germany: Will the new legislation be able to square the circle. *Fordham Law International Journal, 34*(2), 296-331.

Rauxloh, R. (2012). *Plea bargaining in national and international law*. Oxon, England: Routledge.

Remmelink, J. (2003). *Hukum pidana* [Criminal law]. Jakarta, Indonesia: PT Gramedia Pustaka Utama.

Schulhofer, S. J. (1992). Plea bargaining as disaster. *The Yale Law Journal, 101*(8), 1979-2009.

Singleton, R. J, Straits, B. C., Straits, M. M., & McAllister, R. J. (1988). *Approaches to social research*. Oxford, England: Oxford University Press.

Smith, D. A. (1987). The plea bargaining controversy. *Journal of Criminal Law and Criminology, 77*(3), 949-968.

Soekanto, S. (2010). *Pengantar penelitian hukum* [An introduction to legal research]. Jakarta, Indonesia: Universitas Indonesia-Press.

Surachman, R. M., & Hamzah, A. (1996). *Jaksa di berbagai negara, peranan dan kedudukannya* [Public prosecutor in various countries, its role and status]. Jakarta, Indonesia: Sinar Grafika.

Thaman, S. C. (2008) *Comparative criminal procedure - A casebook approach* (2nd ed.). Durham, USA: Carolina Academic Press.

Thaman, S. C. (2010). *World plea bargaining, consensual procedures and the avoidance of the full criminal trial*. Durham, USA: Carolina Academic Press.

Toegarisman, M. (2016). *Pemberantasan korupsi dalam paradigma efisiensi* [Corruption eradication under the efficiency paradigm]. Jakarta, Indonesia: Kompas Media Nusantara.

Tuanakotta, T. M. (2014). *Menghitung kerugian keuangan negara dalam tindak pidana korupsi* [Calculating state financial losses in corruption]. Jakarta, Indonesia: Salemba Empat.

Tuner, J. L. (2009). *Plea bargaining across borders*. New York, USA: Aspen Publishing.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1249 - 1262 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Deconstruction of Lord Shiva in the Era of Post-Truth: A Study of Amish Tripathi's *The Immortals of Meluha*

S. Karthik and Sangeeta Mukherjee*

Department of English, Vellore Institute of Technology, Vellore 632014, India

ABSTRACT

In the current era of Post-Truth, the concept of truth is not easily found out. Nowadays the false or fabricated appearance and ideas when presented make them appear more logical, reasonable and far widely accepted with emotional and personal belief, and appeal than the original and pure truth. Taking this concept into account, the current research paper aims to investigate how "Lord Shiva" who is worshipped by the Hindus the world over as the 'Lord of Lords', has been portrayed as a 'human being' possessing extraordinary prowess by Amish Tripathi in his first and debut novel of the *Shiva Trilogy - 'The Immortals of Meluha'*. The paper examines the post-truth hidden in the evolution of myths and fables surrounding Lord Shiva and the other Indian deities and portrays the evolution of Lord Shiva as the 'Supreme God' from a 'human being' who lived centuries ago. The novel under investigation has been analysed using the Postmodern and Post-truth theories and perspectives.

Keywords: Deconstruction, fables, God, human, Meluha, myth, post-truth, Shiva

ARTICLE INFO

Article history:
Received: 22 September 2019
Accepted: 14 February 2020
Published: 26 June 2020

E-mail addresses:
mskarthik17@gmail.com (S. Karthik)
sangeetamukherjee70@gmail.com (Sangeeta Mukherjee)
*Corresponding author

INTRODUCTION

The novel *The Immortals of Meluha* was published in 2010 by Amish Tripathi. This was his first step towards the success series. He continued his success steps with *The Immortals of Meluha* (2010), the first of the series of Shiva Trilogy, followed by *The Secret of the Nagas* (2011), and *The Oath of the Vayuputras* (2013). He then continued with the Ram Chandra Series, the first book

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

being *The Scion of Ikshvaku* (2015). He was the one who set the new trend of writing Post-Modern Mythological Fiction and was followed by Ashwin Sanghi, Kavita Kane, Anand Neelakantan, Krishna Udayasankar, Vamsee Juluri, and Anuja Chandramouli. Amish Tripathi has re-narrated myths in the modern contemporary way by reviewing ancient mythology with a new perspective.

Review of Literature

Paul (2017) pointed out that myth had been used as a metaphor by Amish Tripathi. She said that the author did not discover a new world but used the magical realism techniques to express the supernatural elements with the usual and accustomed world. The actual truth of Shiva as the Lord of Lords, a mythical god, is covered by the Post-truth created by Tripathi in portraying Shiva as a mortal being who has risen to the state of Godhood through his Karma. This perspective helps us to identify the research gap for the current study. Nair and Chandran (2017) in Amish Tripathi's *Shiva Trilogy* asserted that 'Lord Shiva' or 'Mahadev' was prevalent in every individual. An individual should discover and regenerate the ability to captivate the negativity and evil and redirect them to have a positive effect on the others around them. Sumathi (2017) in her research article commented that the novel *The Immortals of Meluha* gave a perception about the culture and ideologies of Prakriti and Karma - life and the universe. Kaviya (2017) remarked that in the novel *The Immortals of Meluha*, the Vikrama-class individuals had been portrayed as the marginalized class who were treated as untouchables and had been isolated due to the sins they had committed in their previous birth. Shiva, the warrior, liberated them from the unfair humility they had undergone. The research article discusses the marginalization of the Vikrama class and their emancipation from tyranny.

Singh (2016) in his research paper pointed out that some of the contemporary writers like Amish Tripathi, Ashok Banker, and Ashwin Sanghi had probed into the genre of mythology by synthesizing it with other genres of writing. This interblend of mythology with fantasy has initiated a novel practice of writing in the world of fiction. Their objective had been to view the ancient mythologies from a new perspective. Sharmely (2016) in her research article discussed how Lord Shiva had been represented as a human being and it was due to his karma and resultant deeds in life that made him God in Amish Tripathi's Shiva Trilogy. Balaji (2016) in his research paper stated that an author could reconstruct ancient mythology by adding some required objects to the ancient story to construct a new story. Farsana (2015) too, opined that retelling the actual myth in modern writing had become a trend in the past few decades. She stated that especially in Indian writings in English, this way of writing had captured the attention of modern readers. The contemporary readers developed a liking for the post-truth 'Shiva' rather than the original Lord Shiva as a mythical being. On the other hand, Kusugal (2015) probed into the credible representation of equipment, medicine,

manufacture of Somras, enlightened lifestyle, and the evolution of Shiva from the 'chief' of the Tibetan Guna Tribe to 'Lord Shiva'. Choudhury (2014) stated that the Meluhans created an identity for other clusters by governing, controlling and subjugating the other groups based on their ethnicity and residential identities. He went on to affirm that the dynamics of power and knowledge were used to gain the power to govern other groups. Amish Tripathi has thus projected the dominance of power and knowledge by the Meluhans.

MATERIALS AND METHODS

Objective

The study explores how the traditional and mythological character of 'Lord Shiva' has been decentered in *The Immortals of Meluha* and projected as a 'human being'. In light of the above observation, the present paper aims to bring out the truth surrounding Lord Shiva and other Deities who have been portrayed as mortal beings rather than Gods in the era of Post-Truth.

Methodology

The theories implemented for analysing the text, *The Immortals of Meluha* by Amish Tripathi, were Post-Truth and Post Modernism theories. The methodology used for the study was descriptive (observational method) and analytical (literary research).

Background of *The Immortals of Meluha.* Amish Tripathi has portrayed Lord Shiva as a human being in his debut novel *The Immortals of Meluha*. The novel was set in Mount Kailash (Tibet) in 1900 BC where Shiva was portrayed as a twenty-one-year-old chief of the Guna tribes who fought with the Pakratis every month for survival. Nandi was one of the captains of the Meluhan army who went to Tibet for some time to request the Guna tribes to come as immigrants to his country Meluha *in lieu* of by promising lands for cultivation and peaceful lives. One day the Pakratis attacked the Guna tribes and Nandi fought against them. Shiva started trusting Nandi and after consulting with his tribe agreed to go with him. Nandi took them to Srinagar and introduced them to Chitraangadh, an orientation executive, who arranged rooms for their stay. The Guna tribals were given medical rehabilitation under the supervision of Ayurvati, the chief of Medicine in Meluha, for seven days.

Ayurvati gave medicinal drink called Somras to all the Guna tribals in the rehabilitation centre. He also instructed them strictly to maintain hygiene. As a result of consuming Somras, the guna tribals suffered from a fever which ultimately cured all their diseases. Ayurvati treated all the Guna tribals but Shiva did not contract the fever and instead, his throat turned blue. Nandi and Ayurvati were surprised to witness this miracle. Nandi addressed Shiva as "My Lord" and "Neelakanth". He informed Emperor Daksha who ordered him not to disclose it until he met him. Nandi introduced Shiva to the emperor who proclaimed him as the 'Neelakanth' - the destroyer of the evil

Chandravanshis. Daksha told Shiva that they were Suryavanshis and the Chandravanshis were evil people who had joined the Nagas - the cursed people born with deformities.

Shiva met Sati at Meru near a temple where he saved her from a group of kidnappers. He was unaware that she was the daughter of Daksha. One day he heard the sound of someone dancing near the garden and found it to be Sati. He pointed out the small flaws in Sati's dance steps, and while teaching Sati, he accidentally touched her. He came to know that she belonged to the Vikrama class. She asked him to go for the Suthikaram because Vikrama class people were cursed in their previous birth and hence they were not supposed to be touched. Later Shiva came to know that Sati got married ninety years ago and gave birth to a stillborn child. Her husband too drowned the same day the dead child was born and after this she was declared as a 'Vikrama'.

Shiva enquired about the Somras and found that it was manufactured in mount Mandar. Daksha requested him to save them from the evil 'Chandravanshis' and asked permission to proclaim his arrival but he refused as he wanted to visit the Somras manufacturing site. Daksha, his family members, Nandi, Parvateshwer and Sati's friend, Krittika visited the place. Shiva met Brahaspati, the chief Meluhan scientist, and befriended him who explained how to make Somras. The Chandravanshis and the Nagas attacked them.

Shiva learnt that they were the trouble-makers and they even attacked Sati with a fire arrow. Ayurvati treated her but she was not confident whether she would recover or not. Shiva advised her to consume the Somras after which Sati recovered. Daksha asked Shiva whether he was willing to marry Sati, to which Shiva readily agreed. A seven-day grand marriage function was arranged that was attended by important members. While returning from the marriage ceremony, Brahaspati was brutally murdered by the Nagas; whereupon Shiva declared war against the Chandravanshis. Shiva won the battle and ten thousand Chandravansis were killed and their emperor and his son were captured. They were asked to follow the Meluhan ways of life. Daksha declared Parvateshwer as the governor. Anandmayi – the Ayodhyan Princess met Shiva and revealed the truth that they were not evil and they did not have any relationship with the Nagas either. Shiva felt guilty of having killed ten thousand people without knowing the truth. In Ayodhya, Shiva met a pandit who hailed him as 'Mahadev'. The pandit further proclaimed that Shiva's karma would guide his future. Sati, who had been waiting for Shiva outside, was attacked by the Nagas and the novel ends with Shiva rushing to save Sati.

Postmodernism

Postmodernism is defined as "any of a number of trends or movements in the arts and literature developing in the 1970s in reaction to or rejection of the dogma, principles of established Modernism,…" ("Postmodernism," n.d.). The impact of Postmodernism was first initiated in

the discipline of architecture and civil engineering before its rays could fall in the discipline of philosophy, art, technology, literature, and the other disciplines of study. The end of world wars brought hopelessness and insecurity in the hearts of people which got reflected in all other fields. This hopelessness and absurdity of life resulted in the development of Postmodernism. The basic notions that Postmodernism embraced were questioning, nihilism, inter-textuality and decentering.

Postmodernism rejects the dominance of the center and its influence on the marginalized, and the dominance of the aristocrats upon the subjected one, be it human or ideology.

The major proponents of the field were Jean-Francois Lyotard, Friedrich Nietzche, Jean Baudrillard, Jacques Derrida, and Michel Foucault. Postmodernism thus aims at liberating man from the shackles that held them with various names of the center, and from the strong ideologies and western concepts as superior.

Deconstruction

Jacques Derrida, the founder of the concept of 'Deconstruction', stated that deconstruction was a strategy or a tool to "rules for reading, interpretation, and writing" (Dobie, 2012) the text in multiple perspectives. Deconstruction helps us to understand that a text has numerous interpretations. He borrowed the idea of a sign, signifier and signified from Saussure, and stated that a signifier would lead to different signified.

Post-truth

The axiom "Post-Truth" got media-hype after being selected as the word of the year in 2016 in Oxford English Dictionary. The term was first used by Steve Tesich (1992) in his article *The Watergate Syndrome – A Government of Lies* in The Nation magazine. Teisch discussed the fake moral face of Bush. Donald Trump's way of giving alternative facts about the number of people attending his swearing-in ceremony was more than Barack Obama's but the truth was just the opposite.

Pattanaik (2018) in his article titled *"Is Post-Truth same as Myth?"* commented that in Post-Truth the concept of alternative facts or narratives was developed to hide the original truth from the people whereas, in Indian mythology, there were many alternative narratives other than facts. He argued that people in the Middle East and America believed in one God, which resulted in singular and linear belief in all fields of life. Therefore, the Western myth considered the alternative narratives as false and myths in the 19th Century paved the way for the colonizers to conquer the places they wished to conquer. Pattanaik (2018) commented that Western mythology neglected facts and the very nature and concept of diversity. The important concepts that will be used for analysing the novel are puffery, confirmation bias, and alternative facts.

RESULTS AND DISCUSSIONS

Mythology

Myths, according to Donald Mills (2003), "are a cultural inheritance, a tradition handed down from one generation to another, and therefore invested with communal values. This explains the close association between a community and its mythology". On the other hand, mythology is

> the study and interpretation of often sacred tales or fables of a culture known as myths or the collection of such stories which deal with various aspects of the human condition: good and evil; the meaning of suffering; human origins; the origin of place-names, animals, cultural values, and traditions; the meaning of life and death; the afterlife; and the gods or a god. (Mark, 2018).

Mythologies are abundant with the stories of gods or god-like humans the world over. In Hindu mythology also, we find the mention of many gods and goddesses. Among them, Lord Shiva holds a special place and there exists diverse myths surrounding him in both North (Aryan / Vedic culture) and South (Dravidian culture) India.

Evolution of Lord Shiva in Hindu Mythology

The origin of Lord Shiva dates back to as early as the Indus Valley Civilization. Shaivism or Siva traditions probably started during 200 BC to 100 AD. During the Pre-Historic/Non-Aryan period, the religion and belief system of the Dravidians (South Indians) were similar to that of Shaivism. A few researchers claim that the origin of Shaivism during the Non-Aryan period is based on the archaeological excavation of the "Pashupati Seal" from the Indus Valley Civilization. There exists many interlinks between the Indus Valley Civilization and the Dravidian forms of Hinduism in South India. The Proto-Siva is almost identical to the seated bull icons found in early Elamite Seals from 3000 to 2750 BC (Flood & Flood, 1996).

Iyengar (1989), in his book *Dravidian India*, cited few eminent scholars like Ragozin, Fergusson, and Steveson who strongly regarded Shiva to be a Tamil God. It can be said that Pre-Historic/Non-Aryan Proto-Siva religious beliefs were Dravidian in origin but after the Aryan invasion, the Dravidian Proto-Siva assimilated many concepts from Aryan Vedic scriptures that led Shaivism to evolve into an individual cult in itself.

The further enhancement of Shaivism had its assimilation in the Vedic scriptures such as 'Rig-Veda' (hymns 1.114, 1.43, 2.33), 'Yayur-Veda' and 'Svetasvatara Upanishads' where he is known as God Rudra who is considered to be a precursor to Shiva in Aryan culture (Flood, 2003).

Iyengar (1989) inferred that the worship of Siva during the Stone Age existed in the form of 'Linga worship' which was carried forward by the Aryans during the Vedic period from 1500 to 500 BCE. Lord Shiva is also mentioned in the *Ramayana* and the *Mahabharata*. In the Mahabharata, Pasupathas are mentioned as one of the most ancient worshippers of Lord Shiva.

The *Shiva Puranas* mention Lord Shiva as the Supreme Being or the God of Gods. According to some historians, the word 'Shiva' is derived from the Tamil word, Chivan or Shivan which means 'red in colour'. In Dravidian mythology, mention is made of Punyakshi, a maiden with extraordinary powers who wanted to marry Lord Shiva. Shiva travelled to South India to marry her but could not do so due to the tricks played by the people of her community. Unable to bear this pain, Punyakshi left her body in a place which later came to be known as 'Kanyakumari' after her (Sadhguru, 2016). Thus there are a lot of myths surrounding Lord Shiva in Hindu mythology.

The Immortals of Meluha in the Light of Deconstruction Perspective

Comparison of Actual Myth and Amish Tripathi's Novel. There are many myths and fables surrounding Lord Shiva and other Indian deities but the major myths have been deconstructed by the author in his text *The Immortals of Meluha*. Those myths have been altered by Amish Tripathi in a different perspective. Indian myths have diverse narratives as discussed by Pattanaik (2018). A few are discussed below which are mostly believed to be authentic myths and fables about Lord Shiva and other Indian deities.

Shiva. There is a popular myth that a Primordial Goddess took birth just three days prior to the coming into existence of the earth and universe. She grew up quickly into a woman and then yearned for a man to satiate her needs. The Primordial Goddess set on a search for a man and when she found none, she gave birth to Lord Brahma. Brahma grew up very fast and was the eldest of all. When the Goddess asked him to sleep with her he refused, since she had given birth to him and was his mother. In fury, the Goddess opened her third eye which was in the palm of her hand. As a result of the fire, Brahma was burned down to a heap of ashes. The very next day she created Lord Vishnu, but he also ended up in a similar fate (Ramanujan, 1990).

Finally, on the third day, she created Shiva. Once she created him, she asked him to sleep with her. She also warned him by showing the ashes of the other two. After learning the fate of his brothers; he accepted to sleep with her but under few conditions. He asked her to teach all that she knew to make him equal to her otherwise he will be inferior to her. He also said that no woman would like to have an inferior man as her husband, so he asked her to share all the powers and knowledge she possessed with him; so that when they unite they would complement each other. The Goddess accepted those conditions and shared her power, knowledge, and wisdom with Shiva (Ramanujan, 1990).

But in *The Immortals of Meluha*, the author portrays Shiva as a twenty-one-year-old young warrior and the chief of Guna tribes living at the foot of Mount Kailash in Tibet in 1900 BC. Shiva and his Guna tribals are seen migrating to Meluha for leading a peaceful and prosperous life as promised to them by Nandi and other Meluhan officials.

> 1900 BC, Mansarovar Lake (At the foot of Mount Kailash, Tibet).
>
> Shiva gazed at the orange sky. The clouds hovering above Mansarovar had just parted to reveal the setting sun. The brilliant giver of life was calling it a day once again. Shiva had seen a few sunrises in his twenty-one years. But the sunset! He tried never to miss the sunset! ….. He squatted and perched his lithe, muscular body on the narrow ledge extending over the lake. The numerous battle-scars on his skin gleamed in the shimmering reflected light of the waters. Shiva remembered well his carefree childhood days…. He still held the record in his tribe for the highest number of bounces: seventeen. (Tripathi, 2010).

Brahaspati, the chief scientist of the Meluhan Empire, was very rationalistic and told Shiva that all the people and the emperor might think of him as the saviour of the Suryavanshis. Brahaspati also said that there would be a scientific reason behind Shiva's throat turning blue and added that Neelkanth would only be a destroyer of Evil. Meluhans think that Shiva would destroy Chandravanshis as they considered them to be Evil but besides this, many other problems were there to be solved in Meluha. Daksha and Meluhans looked upon Shiva as God and Savior of the Suryavanshis but Parvateshwar and Brahaspati did not consider Shiva as God and rather addressed him as Shiva.

Neelkantha vs Neelkanth. Lord Shiva is also popularly known as Neelkantha or the 'blue-throated one'. The story behind Shiva's throat turning blue dates back to the time when Devas (Gods) and Asuras (Demons) were churning the ocean (Samudra Manthan) to acquire the potion of life (Amrit). The first potion that came out of the churning was Halahala, which was in the form of a dark sticky foam. Halahala could destroy the whole universe. To save the universe, Shiva drank it and while he was consuming it, Goddess Parvathi caught hold of Shiva's neck to stop the poison from spreading into his body. The poison got stuck in the throat that made his neck turn blue. It is also said that snake Vasuki (King of Snakes) helped Shiva to hold the poison in his neck. Shiva was overwhelmed by this gesture of Vasuki and accepted him around his neck forever.

In the above-mentioned original myth, Shiva's throat turns blue due to the consumption of the Halahala poison during the churning of the ocean but in the novel, Amish Tripathi has retold the incident from a different perspective. According to him, Shiva is a warrior and the Chief of Guna Tribes in Mount Kailash, Tibet. He and his people are brought to Meluha by Nandi for protection and in lieu of land and peaceful life. Shiva and his people migrate to Meluha. According to Meluha Immigration policies, they should stay in Srinagar for one week for medical examination and rehabilitation. During this juncture, Ayurvati gives Somras to all the Guna tribesmen including Shiva. After drinking the Somras, the Gunas suffer

from sudden high fever except Shiva. The consumption of Somras turns the colour of his throat to blue and hence he is called Neelkanth.

> Ayurvati just pointed at Shiva's neck. Nandi looked up. The neck shone an eerie iridescent blue. With a cry that sounded like that of a long caged animal just released from captivity, Nandi collapsed on his knees. 'My Lord! You have come! The Neelkanth has come!'
>
> ……'What the hell is going on here?' Shiva asked agitatedly.
>
> Holding a hand to his freezing neck, he turned around to the polished copper plate and stared in stunned astonishment at the reflection of his neel kanth; his blue throat. (Tripathi, 2010).

Sati. Sati was the daughter of Daksha and is also called Dakshayani. According to the legend, Daksha was against the marriage of Sati and Shiva. As an act of vengeance, Daksha arranged an auspicious ritual to which all the gods were invited except Shiva. On hearing this news, Sati became very furious and went to the ceremony alone where she was humiliated by her father. Unable to bear this, she threw herself into the auspicious fire that was ignited in the ceremony. When Shiva learnt of Sati's death, he created two demons Virabhadra and Rudrakali from his hair. The two demons created destruction in the ceremony and beheaded Daksha. The other Gods rushed to Shiva and appealed to stop the chaos and destruction. At their behest, Shiva brought Daksha back to life by fixing a goat's head. Many years later, Sati took reincarnation as Parvathi. Parvathi often incarnates as Kali and Durga to kill evil whenever it takes the upper hand on earth (Cartwright, 2018).

Sati in the actual myth is regarded as the 'blessed one' and she is considered married only to Shiva. But in the novel understudy, she belongs to the Vikrama class who are considered to be 'cursed' due to the sins perpetuated in their previous birth. She was considered to be cursed since she gave birth to a stillborn child and her first husband died of drowning in the river at the time of the birth of her child. Sati was also portrayed as a fierce fighter and a warrior in the novel.

> 'What! Sati was married?!'
>
> 'Yes. That was around ninety years back. It was a political marriage with one of the noble families of the empire. Her husband's name was Chandandhwaj. She got pregnant and went to the Maika to deliver the child. It was the monsoon season. Unfortunately, the child was stillborn.'
>
> 'Oh my god!' said Shiva, empathising with the pain Sati must have felt.
>
> 'But it was worse. On the same day, her husband, who had gone to the Narmada to pray for the safe birth of their child, accidentally drowned. On that cursed day, her life was destroyed.'
>
> …. 'She became a widow and was declared a vikarma the same day.' (Tripathi, 2010).

Daksha is very happy to learn that Shiva is in love with Sati whereas, in the original mythology, Daksha is against their relationship.

Nandi. Surabi was the mother of cows in heaven. Unexpectedly, she started giving birth to too many cows. As a result, milk from all these cows oozed out and flooded the meditation house of Shiva. Shiva, being disturbed and angry by this act of the cows, burnt all the cows with his third eye. The Gods rushed to calm Shiva's fury and anger and offered him a magnificent bull named Nandi. Nandi was born from the union of Surabi and Kasyapa. Shiva accepted him and rode upon him. Nandi also received a boon that whoever whispered their wishes in his ears would get them granted by Shiva immediately. Nandi thus became the guardian of other animals (Chauhan, 2016).

Nandi has been portrayed by Amish Tripathi as a human and he holds the position of Captain in the Meluhan Army. He is considered to be a vicious warrior. Nandi's character is introduced in the novel as an official who helps to immigrate Shiva and Guna tribals to the city of Meluha. Shiva considers Nandi to be his close friend:

> 'Of course, you may. You don't need to take my permission, Nandi,' said Shiva. 'But in return, you have to promise me something, my friend.'
>
> 'Of course, Sir,' replied Nandi bowing slightly.
>
> 'Call me Shiva. Not Sir,' grinned Shiva. 'I am your friend. Not your Chief.' A surprised Nandi looked up, bowed again and said, 'Yes Sir. I mean, yes, Shiva.' (Tripathi, 2010).

The Immortals of Meluha in the Light of Post-Truth Perspective

Puffery. Mohler (2005) in his article titled *The Post-Truth Era – Welcome to the Age of Dishonesty* discussed the key concepts and ideologies of the post-truth era written by Ralph Keyes in his book titled *The Post-Truth Era: Dishonesty and Deception in Contemporary Life.* Keyes (2004) only concentrated on the American culture and society whereas today the elements or characteristics of Post-Truth have spread all over the world and are not restricted to certain parts or nations in the world. Keyes commented that 'puffery' had become an art in itself in America.

Puffery, according to Oxford English Dictionary means "exaggerated or false praise" ("Puffery", n.d.). Individuals, institutions or groups acquire the old concepts, materials, subjects or ideologies available and recoat them in a new way to get high recognition or for promotional purposes. Similarly, Keyes (2004) said that individuals overstressed the truth with new facts that were false to hike up the societal ranking.

Amish Tripathi, a banker, turned to writing novels and wanted to write a philosophical thesis on the nature of evil. His family members, especially his brother and sister, asked him to write an adventurous novel messed with a philosophical touch in it because it was the writing trend prevalent

in contemporary times. Tripathi had used the old myth and fables surrounding Lord Shiva but deconstructed the existing myth with a scientific explanation stating that Shiva's karma and actions raised him to the status of God.

> Over the centuries, no foreigner who came to our land — conqueror, merchant, scholar, ruler, traveller — believed that such a great man could possibly exist in reality. They assumed that he must have been a mythical God, whose existence could be possible only in the realms of human imagination. Unfortunately, this belief became our received wisdom. (Tripathi, 2010).
>
> This work is, therefore, a tribute to Lord Shiva and the lesson that his life teaches us. A lesson lost in the depths of time and ignorance. A lesson, that all of us can rise to be better people. A lesson, that there exists a potential god in every single human being. (Tripathi, 2010).

Tripathi had decentred Shiva - the Lord to an ordinary human being with extraordinary powers who had raised himself on the societal ladder and attained popularity around the world.

Confirmation Bias

Sebastian Dieguez (2017) in her article *Post-Truth: The Dark Side of the Brain* analysed Post-Truth from the perspective of psychology. Dieguez discussed the concept of confirmation bias wherein she stated that the human brain had strong affirmations and a few sets of standard beliefs. When the human brain receives new beliefs or information about the already existing standard belief it holds; the brain analyses both the beliefs and information and retains only the set of beliefs or information that matches or correlates with the already existing sets of beliefs or information; and this process is termed as Confirmation Bias.

Dieguez (2017) commented that in the era of post-truth, politicians were speaking with more freedom which of course was utter gibberish and the fake news was propagating swiftly. She stated that the worst of this swiftly propagating fake news was that the human brains tended to love it more than the actual truth.

The Immortals of Meluha and the other two novels received much criticism because of Tripathi's portrayal of Lord Shiva as a human being and the reversal of the actual myth with rationale. Due to the reversal of actual myth, it gained controversial comments and criticisms. Many individuals have 'confirmation bias' of considering Shiva as God. Due to their strong belief in the idea of Lord Shiva as God, they are not ready to accept the perspective of Amish Tripathi's Shiva as a Warrior who rose from the status of a human being to Lord.

> But what if we are wrong? What if Lord Shiva was not a figment of a rich imagination, but a person of flesh and blood? Like you and me. A man who rose to become god-like because of his karma. That is the premise of the Shiva Trilogy, which interprets the rich mythological heritage of ancient India,

blending fiction with historical fact. (Tripathi, 2010).

Post-truth by Indifference

Monod and Lipetz (2017) in their article titled *Between Post-truth and Epistemocracy: Positioning a Democratic Politics* discussed two types of 'post-truth'- the first type was where an individual, group or institution's beliefs were upheld and considered significant than the truth that could be proved logically and the second type of truth was 'Post-Truth by Indifference' which was a premeditated creation of fabricated facts, principles and beliefs.

Tripathi had read all the old myths surrounding Shiva and had knitted the new fabricated story about Shiva based on the old prevalent myths. He had a rich knowledge about myths and Gods that he inherited from his grandfather who was a Pandit. He had re-created the existence of Shiva as a leader of the Guna tribe in the opening chapter 'He Has Come!' of his novel. Shiva as Leader or Chief of tribes says:

> 'I keep nothing secret from you. All of you are aware of the invitation of the foreigners,' continued Shiva, pointing to Nandi and the Meluhans. 'They fought shoulder-to-shoulder with us today. They have earned my trust. I want to go with them to Meluha. But this cannot be my decision alone.'
>
> 'You are our chief, Shiva,' said Bhadra. 'Your decision is our decision. That is the tradition.'
>
> 'Not this time,' said Shiva holding out his hand. 'This will change our lives completely. I believe the change will be for the better. Anything will be better than the pointlessness of the violence we face daily. I have told you what I want to do. But the choice to go or not is yours. Let the Gunas speak. This time, I follow you.' (Tripathi, 2010).

Thus the above quote portrays Shiva as a democratic leader rather than an autocratic leader. He asks for suggestions and opinions from the tribals before implementing plans. This indicates the indifference of Amish Tripathi towards the actual myth of Shiva where he is considered as an Ultimate.

CONCLUSION

Amish Tripathi in his novel *The Immortals of Meluha* has deconstructed the original myth of Shiva which is difficult to be accepted as true and real. Tripathi had portrayed Shiva as a human character who made sarcastic comments on the class system that was prevalent in Meluha. Shiva disliked being hailed and addressed as Lord or Sir in the novel. Tripathi has deconstructed various myths that are prevalent among people. The characters of Shiva, Sati, Nandi, and Neelkanth are deconstructed to portray them as human beings rather than as mythical Gods and Goddesses. Similarly in the post-truth perspective, Tripathi used myth to climb up the social ladder by publishing the mythological novels. He faced both controversies for projecting Lord Shiva as a human and hailed for his creative work in

literature. He suggested that every human being had an inner voice which guided them in their difficult times. When humans listen to their inner voice, they reach the state of God like Shiva. Thus, Amish Tripathi has courageously deconstructed the myth of Lord Shiva in the contemporary Post-Truth Era.

ACKNOWLEDGEMENTS

The authors would like to thank the reviewers of this article for their valuable observations and suggestions. No fund or grant was received for this research.

REFERENCES

Balaji, A. (2016). Re-visiting, resurrecting and reconstructing the mythology: Three dimensions of resurging young adult novels. *An International Multidisciplinary Research e-Journal, 2*(3), 54-58.

Cartwright, M. (2018, May 10). *Shiva-ancient history encyclopedia.* Retrieved July 12, 2018, from https://www.ancient.eu/shiva/

Chauhan, D. (2016, April 18). 9 fascinating stories about the legend of Shiva you need to read today. *ScoopWhoop.* Retrieved July 12, 2018, from https://www.scoopwhoop.com/Interesting-Legends-About-Lord-Shiva/

Choudhury, S. R. (2014). Power/knowledge dynamics, the politics of domination and the assertion of identity by the oppressed: Amish's Shiva trilogy in perspective. *The International Journal of Humanities & Social Studies, 2*(12), 285-289.

Dieguez, S. (2017). Post-truth: The dark side of the brain. *Scientific American Mind, 28*(5), 43-48.

Dobie, A. B. (2012). *Theory into practice: An introduction to literary criticism.* Boston, USA: Cengage Learning.

Farsana, B. (2015). Amish Tripathi's The Immortals of Meluha as cocktail of myths and fiction. *International Research Journal of Humanities, Engineering & Pharmaceutical Sciences, 1*(1), 62-65.

Flood, G. (Ed.). (2003). *The Blackwell companion to Hinduism.* Chicester, England: John Wiley & Sons.

Flood, G. D., & Flood, G. D. F. (1996). *An introduction to Hinduism*. New York, USA: Cambridge University Press.

Iyengar, T. S. (1989). *Dravidian India.* New Delhi, India: Asian Educational Services.

Kaviya, K. (2017). Marginalisation in the immortals of Meluha: A study of the Vikarma class. *Bodhi International Journal of Research in Humanities, Arts and Science, 1*(2), 47-49.

Keyes, R. (2004). *The Post-truth era: Dishonesty and deception in contemporary life.* n.p.: Macmillan.

Kusugal, S. K. (2015). Deconstructing the Myth in Amish Tripathy's Shiva trilogy - a review. *Journal of Innovative Research and Solutions, 1*(1), 33-44.

Mark, J. J. (2018, October 31). *Mythology. Ancient history encyclopedia.* Retrieved January 5, 2019, from https://www.ancient.eu/mythology/

Mills, D. H. (2003). *The hero and the sea: Patterns of chaos in ancient myth*. Wauconda, USA: Bolchazy-Carducci Publishers.

Mohler, R. A. (2005). *The post-truth era: Welcome to the age of dishonesty.* Retrieved January 8, 2019, from https://albertmohler.com/2004/12/10/the-post-truth-era-welcome-to-the-age-of-dishonesty-2

Monod, J. C., & Lipetz, S. (2017). Between post-truth and epistemocracy: Positioning a democratic politics. *Esprit, 10,* 143-153.

Nair, S. A., & Chandran, M. S. (2017). Humanizing the divine: A select study of Amish Tripathi's

The Immortals of Meluha. *Research Journal of English Language and Literature, 5*(2), 456-465.

Pattanaik, D. (2018). *Is Post-truth same as a myth?* Retrieved January 5, 2019, from https://devdutt.com/articles/is-post-truth-same-as-myth/

Paul, R. (2017). Shiva for all times: A study of Amish Tripathi's The Immortals of Meluha. *Research Journal of English Language and Literature, 5*(1), 425-428.

Postmodernism [Def. 1]. (n.d.). In *Dictionary.com.* Retrieved January 5, 2019, from https://www.dictionary.com/browse/postmodernism?s=t

Puffery [Def. 1]. (n.d.). In *Lexico.com.* Retrieved January 10, 2019, from https://www.lexico.com/en/definition/puffery

Ramanujan, A. K. (1990). *Who needs folklore?: The relevance of oral traditions to South Asian Studies.* Hawaii, USA: Center for South Asian Studies, School of Hawaiian, Asian, and Pacific Studies, University of Hawaii at Manoa.

Sadhguru. (2016, February 26). *Shiva's South Indian love affair.* Retrieved January 10, 2019, from https://isha.sadhguru.org/in/en/wisdom/article/shivas-south-indian-loveaffair

Sharmely, G. (2016). Representation of Lord Shiva as man in Amish Tripathi's Shiva trilogy. *The Creative Launcher: An International & Refereed E-Journal in English, 1*(5), 33-40.

Singh, V. (2016). Rewriting myth: A critical analysis of Amish Tripathi's Shiva Trilogy. *International Research Journal of Management Sociology & Humanities, 7*(3), 148-151.

Sumathi, S. (2017). Portrayal of mythology in Amish Tripathi's The Immortal of Meluha. *An International Multidisciplinary Research e-Journal, 3*(3), 58-61.

Tesich, S. (1992). *A government of lies*. Nation, 254(1), 12-14.

Tripathi, A. (2010). *The Immortals of Meluha.* New Delhi, India: Westland Ltd.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1263 - 1276 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

'Inscription' as Speaking for Women: African Women Writers and their Writing Form

Shalini Nadaswaran

English Department, Faculty of Arts and Social Sciences, University of Malaya, 50603 Kuala Lumpur, Malaysia

ABSTRACT

African Literature has grown exponentially in the past 50 years, with key literary giants as pioneers establishing its literary field. Even in present research and scholarship, African writings have helped inform and articulate modes of literary and theoretical discourse. Even more so, early African women's works (Flora Nwapa, Buchi Emecheta, Ama Ata Aidoo and Mariama Ba), were said to have laid the foundations for contemporary African women writers to continue 'speaking' boldly for Africa and its women. My article argues that the bold strides taken by early writers Buchi Emecheta and Mariama Ba through the epistolary form, were fundamental for contemporary third-generation African women's writing that continued this legacy of inscription. Sade Adeniran's *Imagine This* (2007), Chimamanda Ngozi Adichie's *Purple Hibiscus* (2004) and Adaobi Tricia Nwaubani's *I do not come to you by chance* (2009) are selections of works whose literary topos employs the epistolary forms of letters, diary entries and emails as ways to articulate the nuances experienced in Africa. Drawing on the similar form of the epistle used by Emecheta and Ba, the results of the analysis of Adeniran, Adichie and Nwaubani's works will inform us of the ways in which pioneering writings by African women were trailblazing to the quest of African female inscription.

Keywords: African literature, African women writers, epistolary, inscription, third generation

INTRODUCTION

If Achebe's (1958, 1975) *Things Fall Apart* and *Morning Yet On Creation Day* can be seen as blueprints that laid the foundation for literary works to suggest the need to break away from (neo)colonial yokes of oppression, Buchi Emecheta and Mariama Ba's semi-autobiographical and epistolary

ARTICLE INFO

Article history:
Received: 01 October 2019
Accepted: 19 February 2020
Published: 26 June 2020

E-mail address:
shalininadaswaran@um.edu.my

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

works *Second Class Citizen* (1974) published later as *Adah's Story* (1983) and *So Long A Letter* (1979) respectively, were integral to the legacy of African women's writing. This article will focus on how Emecheta and Ba's use of the semi-autobiographical and epistolary form in their early works played a central role in responding to the complex realities of women's disempowerment in society. These texts written by these second-generation African women writers paved the way for contemporary works by third-generation women writers to address the further nuances and ambiguities experienced by contemporary Africa and Africans. Emecheta and Ba's literary ruminations were critical of the limitations placed by many African societies on African women. Their works also sought to re-inscribe the image of the oppressed woman which offered further possibilities of imagining the new African woman beyond a victim-centered portrayal to that of agency and self-determination. Thus, this article is significant not only as a blueprint that traces the importance of inscription, which is writing for African women but also provides a canvas on the legacy of African women's writing forms, from its early inception to contemporary times. The overarching contribution of this article, therefore, is its novelty in providing a cursory overview of understanding the literary history (legacy) of African women's writing form to the African women's writing canon, which played a key role in the construction and nurturance of African literary aesthetics. In discussing these (African) women's writing forms, this article reemphasizes the need to discuss the roles of pioneering African female creative writers in using inscription to pave the way for challenging the various silences faced by women through writing. Pertinently, this article posits that these confident strides made by these early African women writers have allowed contemporary African women writers to use similar creative forms to continue articulating women's concerns through writing.

MATERIALS AND METHODS

For this article, I use a few theoretical ideas to frame my argument. Pertinent to the discourse of early African women's writing is the Mother Africa trope which exposes the ways patriarchy binds women to the domestic realm and their biological functions as a wife, mother, and daughter. Early women writers like Mariama Ba and Miriam Tlali debunk the myths surrounding the nostalgic praise of motherhood by uncovering how women are muted and oppressed within this trope. Central to this idea is also Omolara Ogundipe-Leslie's *Six Mountains on A Woman's Back* which pinpoints the six categories in which women are oppressed. The mountain's discussed is influenced by both external and internal forces like colonialism and postcolonialism, traditional structures, the woman's backwardness, man, race and the woman herself. By identifying the mountains that force women to conform to a prescribed state of being, Ogundipe-Leslie offers an insight into women's commodified and objectified circumstances. These similar

categories are challenged in Emecheta and Ba's texts, revealing how systematic oppression must be fought by exposing its fallacies through writing. Womanist theory is also vital to understanding the African woman's story. Both Alice Walker and Chikwenye Okonjo Ogunyemi in the 1980s coined the term womanism independently to theorize the Black and African woman's experiences respectively. Womanism's exegesis was necessary to discuss the African woman's condition. Early women-centered theories like feminism and even postcolonial feminism did not provide enough space for the African female dialogue, which is why Ogunyemi coined African womanism as a theory. Ogunyemi theorised that the African woman became a womanist after an emotional or tragic experience that pushed her towards agency and self-definition. This womanist experience will be seen in the texts discussed in the article. Collectively, these three major ideas used in this article help foreground my argument on the importance of early African women's writing on contemporary (third-generation) African women's literature.

Furthermore, the texts chosen for analysis in this article were based on the focus of forms of writing, the epistolary and autobiographical forms. The first two texts that are discussed in the earlier parts of the article hone in on Mariama Ba's and Buchi Emecheta's works (*So Long a Letter* (1979) and *Adah's Story* (1983) respectively) because it is the only two significant texts written during its time by African women writers that use the epistolary/ autobiographical form to showcase the importance of writing for writing ie the importance of inscription for African women. As a driving point for this article, my selection of texts in the latter half of the article was based on the significance as well as influence Ba's and Emecheta's writing forms and female representations had to third-generation women writers who employed similar 'writing forms' to continue to articulate the quest for speaking and representing African women through writing. Therefore, Sade Adeniran's *Imagine This* (2007), Chimamanda Ngozi Adichie's *Purple Hibiscus* (2004) and Adaobi Tricia Nwaubani's *I do not come to you by chance* (2009) are selections of works that use the epistolary forms of letters, diary entries and emails as a means to articulate the various, complex experiences of contemporary Africa.

RESULTS AND DISCUSSION

Mariama Ba's epistolary text *So Long a Letter* (1979) is a key precursor in African literature. Written in 1979, Ba employs this unique genre form of writing for writing, using female writing narrators to speak for and against the injustices as well as misrepresentations faced by women, effectively countering the "masculine plural" (Anzaldua, 1987). Ba's epistle was her response to reconstructing notions and romanticizations set about within the *la femme noire* (which is also seen in Senghor's poem *Femme noir*), specifically the Mother Africa trope or pedestal which ideological binds women. Ba notes,

> The woman writer in Africa has a special task. She has to present the position of women in all its aspects … As women we must work for our own future, we must overthrow the status quo which harms us and we must no longer submit to it. …We no longer accept the nostalgic praise to the African Mother who, in his anxiety, man confuses with Mother Africa. (Ba, 1981/1990).

Ba aptly observed that in conflating the African mother with Mother Africa, patriarchy revered motherhood but simultaneously equated womanhood to motherhood, which in the course of history had muted and silenced women's voices from speaking, placing unrealistic demands on the African woman which had inadvertently left her defenseless, subjugated and submissive. On a similar note, another African woman writer Miriam Tlali, criticised the figure of Mother Africa,

> it is a problem when men want to call you Mother Africa and put you on a pedestal, because then they want you to stay there forever without asking your opinion- and [they are] unhappy if you want to come down as an equal human being! (quoted in Schipper, 1987).

Tlali further exposed the double bind within the symbol of Mother Africa which was an idealization as well as archetypal imaging, both dangerous and paralyzing to the African woman's identity, personhood and womanhood.

Questioning similar appropriations, Buchi Emecheta's poetics of writing back interrogated the legitimacy of this trope's frameworks and manifestations that place women in inferior positions. In *The Joys of Motherhood,* Emecheta (1979) created Nnu Ego, a female character who followed all the dictates of her culture through selfless dedication towards her husband and eight children but in the end, died tragically alone,

> Nnu Ego lay down by the roadside, thinking that she had arrived home. She died quietly there, with no child to hold her hand and no friend to talk to her. She had never really made many friends, so busy had she been building up her joys as a mother. (Emecheta, 1979).

In this satirical novel, Emecheta dispelled the myths and ideologies surrounding motherhood and mothering by exposing the 'realities' of motherhood. While *The Joys of Motherhood* (1979) was exceptional for an early African woman writer's works, it was her first two semi-autobiographical novels *In the Ditch* (Emecheta, 1972) and *Second Class Citizen* (1974) which were compiled later in one volume *Adah's Story* (1983) that began Emecheta's vocation as a writer. These texts were seminal works for African and Nigerian women's literature in which Buchi Emecheta continued Flora Nwapa's dialogue for female personhood by challenging anachronistic practices in her marriage through the fictional character of Adah. In "African Women, Culture and Another Development", Omolara Ogundipe-

Leslie theorizes that there are six mountains on an African woman's back which serve as oppressive tools that ensure her subjugation and prevent her development. The mountains of tradition, patriarchy and the woman herself are some of the aspects which Emecheta (1983) addresses in *Adah's Story* which will be discussed in the latter part of this article. Through the use of the semi-autobiographical form, Emecheta created a new topos for African women's writing by dismantling representations of passivity and self-abnegation for those of self-definition and self-actualization. Hence, the veneration and glorification of the equation of motherhood with womanhood is demystified through both of these women's works, early examples of resistance that helped envision and create literary spaces for other female characters such as Kambili (Chimamanda Ngozi Adichie), Ofunne (Azuah, 2005), Enitan (Sefi Atta), Lola (Sade Adeniran), Olanna (Adichie), Kainene (Adichie), Tolani (Atta) and many other strong, independent female depictions.

Writing for Self-Inscription

The use of the epistolary and semi-autobiographical form by early African women writers like Ba and Emecheta foregrounded the notion of using various writing forms to put across the reality of the humiliation that characters like Ramatoulaye and Adah faced within incontestable circumstances of inequality, oppression and exploitation. Thus, in their first pieces of published works both Ba and Emecheta do not only use the genre of the novel but employ semi-autobiographical and epistolary techniques to cultivate a sense of intimacy as well as immediacy with their readers to insight change and re-inscription.

The idea of writing within writing or personal writing is a technique that has been used by early women writers like Charlotte Perkins Gilman in *The Yellow Wallpaper* (1892) to reveal the private struggles of the female person to the public. When Gilman first wrote *The Yellow Wallpaper* (1892), she was faced with many criticisms, particularly the bleak and depressing nature of her short story. However, her writing did exact change, when doctors stopped prescribing the rest-cure for women of her time who were experiencing postpartum depression. In a similar vein, Mariama Ba and Emecheta used these writing forms not only to critique Eurocentric notions of representations (postcoloniality) but more importantly the gendered discourse which affected African women and ensured their absence from participating in mainstream dialogue. Their works did not merely "[emerge] in their present form out of the experience of colonization and asserted themselves by foregrounding the tension with the imperial power" (Ashcroft et al., 1989), but also focused on the additional, multilayered oppression African women faced under patriarchy and traditions rooted in indigenous customs. In their writing back, Ba and Emecheta created a bridge between fiction and testimony through the semi-autobiographical and epistolary form, as "literature offers one of the most important ways in which these

new perceptions are expressed … the day-to-day realities experienced by colonized peoples have been most powerfully encoded and so profoundly influential" (Ashcroft et al., 1989). The semi-autobiographical and epistolary text then represents much of the author's 'self' or self-reflections that unsubscribe phallocentric ideology, while releasing female subjectivity. Ramatoulaye and Adah narratives depict a refusal to continue to be relegated to the margins and reduced to biological objects.

So Long a Letter (1979) and *Adah's Story* (1983) present Ba and Emecheta's vigorous arguments around the construction of African women's lives particularly against prevailing structures that ensure their voiceless, muted state. In speaking through forms that enhance their agenda for women's self-inscription and survival, each of these authors provides a distinct, critical perspective on women's subjectivity and agency. Not only is originality the merit of these texts but also its space-staking assignments, which solidify the African woman's writing legacy. Ba and Emecheta on the issue of 'voice', through these texts propose that it is imperative that women should speak and define themselves in ways that reflect their experiences and challenges, forms which are "sites of identity production" as "they both resist and produce cultural identities" for African women (Gilmore, 1994). The semi-autobiographical and epistolary texts become discursive domains where Ba and Emecheta unapologetically attempted epistemic ventures on the gendered subject. Through the use of the first person speaking position, the African female character launched a caustic attack against the 'mountains' on her back (namely that of tradition, patriarchy and the woman herself through years of internalizing strictures and structures of oppression), that kept her in a victimized position. This is evident in the following lines by Ramatoulaye's response to widow inheritance and polygamy in *So Long a Letter* (1979),

> I am not an object to be passed from hand to hand … I shall never be one to complete your collection [as fourth wife]. My house shall never be for you the coveted oasis: no extra burden; my "turn" every day; cleanliness and luxury, abundance and calm! No, Tamsir! (Ba, 1979).

A careful reading of Ba's work presents us with valid points of criticism of widow inheritance as forced marriage, this form of practice within African tradition that further oppresses women and places another layer of limitation on them. Crudely put, the widow is handed over to her brother-in-law, which in practice is actually an extension of handing over the responsibility of a daughter to her husband because she is seen as incapable of caring for herself. Here, Ramatoulaye not only refuses to be treated as a weak subject in need of a man's protection but also exposes the ideological foundations of widow inheritance which continues the systematic and cyclical oppression of women in society, of coming under male, masculine protection. Through the writing

narrator (Ramatoulaye), Ba exposed the true conditions of widow inheritance and polygamous marriages, "what of your wives, Tamsir? Your income can meet neither their needs nor those of your numerous children. To help you with your financial obligations, one of your wives dyes, another sells fruit, the third untiringly turns the handle of her sewing machine" (Ba, 1979). This literary episteme not only expresses women's responses to their everyday experiences but it also articulates the shortcomings within the social realities and practices faced by African women particularly with regards to gender roles, and African men's failure to fulfill their said duties and obligations. In this text then, it is the African woman who becomes the referential "I" as she effectively silences her brother-in-law, "Tamsir, purge yourself of your dreams of conquest. They have lasted forty days. I shall never be your wife" (Ba, 1979), exposing his failures and inadequacies. In speaking rather than to be spoken for, Ramatoulaye subverted the *la femme noire*, by rejecting the pedestal of Mother Africa and forcing Tamsir instead to occupy the silenced, muted space, "Tamsir got up without a word. He understood fully that he'd been defeated … when I quelled his lust for conquest" (Ba, 1979).

Roger A Berger's *Decolonizing African Autobiography* postulates that,

> Any reading of African Literature, or for our purposes, autobiography must be both specific and global – must account for the synchronic realities that emerge from the localized experience of specific writers and for the diachronic, historical developments that presented different imperatives for different historically situated writers … then African autobiographies—part of an ongoing historical process—are Africanized metaphors, both human narratives attempting to construct an order from life. (Berger, 2010).

While Emecheta's later work *Head Above Water* (1986) was her autobiography which explored her immigrant life in London, my article intends to look at the precursor to this text *Second Class Citizen* (Emecheta, 1974), a semi-autobiography of Emecheta's life seen through the character of Adah because it was one of her firsts texts that laid the synchronic as well as diachronic trajectory for envisioning African women's subjectivity and agency, the impetus for her other literary endeavors. In this text, Emecheta became more self-aware and confident as the text progresses, interweaving her personal struggles to that of her migrant experience, authorizing Adah to 'speak' for and of her condition. In an interview, Emecheta explained, "that the experiences of Adah in her second novel *Second Class Citizen* (1974) were, in fact, her own"[1] (Bazin, 1986). In many ways then, Adah is inextricably bound to Emecheta not only because she is her author but also her story, the merging voices offering

[1] This was published in *Opzij*, a Dutch feminist monthly in September 1981 where Buchi Emecheta said *Second Class Citizen* (1974) was "largely a personal document" in an interview titled "It's Me Who Changed".

an interesting dynamic between textual inscription and writer-reader conversation, the African female character/author no longer choosing to remain unquestioning and silent.

One of the most poignant moments of self-inscription in *Second Class Citizen* is when Adah's husband Francis burnt her manuscript, effectively bringing an end to her complicity (Emecheta, 1974). In her seminal article *Womanism: The Dynamics of the Contemporary Black Female Novel in English* Chikwenye Okonjo Ogunyemi stated that the female person could become a womanist,

> after a traumatic event such as menarche or after an epiphany or as a result of the experience of racism, rape, death in the family, or sudden responsibility. Through coping with the experience she moves creatively beyond the self to that concern for the needs of others characteristic of adult womanists. (Ogunyemi, 1985).

Buchi Emecheta narrated how the years of exclusion and invisibility could no longer keep her silenced once she began writing, "she could not go back now. She had known the feeling she had when she finished the story, she had tasted the fulfillment of seeing others read her work, and had felt an inner glow" (Emecheta, 1986). In burning her first manuscript, Francis had not received the desired results of submission, "I was afraid you'd dig them out of the bin. So I had to burn them" (Emecheta, 1986), but instead was confronted by Adah who "remained adamant to her resolution. Her money was for herself and her children (Emecheta, 1986). One can postulate that, as Adah witnessed the burning of her manuscript, the "feeding of crumpled sheets into the stove and watching the burnt papers flying lifelessly about the room like blackbirds" (Emecheta, 1986), it ignited the womanist within her. Instead of accepting her domain as fixed, "brainless females like you who could think of nothing except how to breastfeed her baby" (Emecheta, 1986), Emecheta not only debunked the Mother Africa trope that equated her womanhood as synonymous with motherhood but also challenged the various mountains that impinged on her agency. Emecheta did not reject her role as mother but instead looked at writing as a source and act of mothering. She is a writer and mother, writing seen as her 'brainchild', her legacy for African women but also income to take care of her children. *Second-Class Citizen* (1974) like *So Long A Letter* (1979) lays bare the inequities that attempt to strip African women of their dignity. In revisiting the sites which are used to oppress women, in these texts the family specifically marital relationships between husband and wife, characters like Adah, Ramatoulaye and Aissatou refuse to remain immutable (Nnaemeka, 1994).

It is also important to note that a reflection of the biases women had to contend with could be seen in the ways in

which male critics responded to African women's writing. In his deplorable response to Emecheta's stance as a feminist with a small 'f', Taban lo Liyang remarked,

> I hope that at the end of the day we will still have African motherhood intact and African sisterhood intact so that at least even after all the problems they will still bring up another child who will still remember the mothers and the sister who brought him up. I am trying to say this because I suspect that feminism may destroy that which up to now has enabled Africa to withstand all the buffeting from other cultures. I think I should appeal to us to keep the African household intact at the end of the day, otherwise we may have our younger sisters going off and joining in dances in Lapland which concern the people of Lapland only. (Petersen, 1988).

Clearly, this response is sobering as it reflects the very foundation of Emecheta and Ba's concerns. As an early African male writer and critic, Liyang did not see the African female writer as his equal counterpart, quick to reduce her to domestic roles of wife and mother in order to uphold the African household. Pertinent to the discussion is also his disparaging implication that African women's works 'may' be a negative influence on the younger generation. Similar parallels can also be found in Femi Oja-Ade's (1982) criticisms of Emecheta and Ba's quest for agency and freedom through their writing, inherently discrediting their concerns as unfounded and baseless. Again, the African woman writer contends against multiple encounters of indignation, ironically from within the internal circle of male writers and critiques themselves. The question that follows is, why did mainstream discourse insist on placing early women writers like Emecheta and Ba within the axis of silence, when it should have been working together with them against Eurocentric definitions that (continue to) marginalize Africa? Also, if women are so integral to the task of biological mothering as suggested by Liyang, should not their roles as orators of their culture be as equally important since they are deemed the cultural bearers of their communities? Undoubtedly, following first-generation writer Flora Nwapa, Buchi Emecheta and Mariama Ba refused to be circumscribed by these gendered ideologies and used writing as redemptive of their personal as well as collective narratives. It is in the footsteps of these trailblazers then that other early African women writers like Tsitsi Dangarembga and Yvonne Vera took on the dialectic inquisitions that further paved the way for contemporary third-generation women writers. Mariama Ba and Buchi Emecheta's speaking through writing is then indeed an internal act that is transmitted externally as a heritage for other African women's voices.

From Speaking to Being Heard: Women Writers after Ba and Emecheta

In *Hearing Black Women's Voices: Transgressing Imposed Boundaries*, Carole Boyce Davies postulated "we need to foreground the need to HEAR WOMEN'S VOICES as well as MAKING WOMEN'S VOICES HEARD" (Davies, 1995). Davies was apt in observing that the act of speaking necessitated hearing. Drawing on bell hooks, Davies further noted that it was "transgressive speech … [that] challenges situations of oppression, challenges power and talks back to authority when necessary" (Davies, 1995). In many ways, this reminds us that in using the epistolary and semiautobiographical form, Ba and Emecheta were beginning the process of transgressive speaking by re-producing and re-constructing their subjectivities which were initially shaped by repressive, male discourse. It is within these parameters as well that their female protagonist's Ramatoulaye and Adah, represent the growing importance of women's voices and story-telling, which imbued the third generation with the similar legacy and tradition of oral literature. In this section of my article, I intend to consider the ways in which Sade Adeiran's *Imagine This* (2007), Chimamanda Ngozi Adichie's *Purple Hibiscus* (2004) and Adaobi Tricia Nwaubani's *I do not come to you by chance* (2009), are some examples (but not exclusive) of texts by third-generation African women's writings that continued the earlier generation's quest for *self-presentation* and *hearing* by drawing on similar methods of construction, through both form and content that is intent in breaking the conditions of silence. The collective analysis of these texts is meant to offer a brief review of the ways in which Ba's and Emecheta's texts have influenced contemporary writers in form and content.

The first text considered in this study is Sade Adeniran's *Imagine This* (2007). Adeniran used diary fiction very much like Ba's epistolary form of letters to 'imagine' change for the young protagonist from an early age. In writing in and to her diary Jupiter, Lola began a dual process of writing and reading from her diary which became an emotional and intellectual space that not only allowed her to navigate her life story for herself from the age of nine to adulthood but also served as an alternate, secure space from her abusive circumstances. Lola's diary writing allowed for the female subject to "[represent] the record of an 'I' who constructed a view of herself in connection to the world at large. Diary writing, as a quotidian cultural practice, involves reflection and expression" (Dijck, 2006). Lola took on the referential 'I' from an early age, observing and reflecting on her life as well as those who crossed her path. She was particularly scathing in her depiction of her physically and emotionally absent patriarchal father who saw her as a reflection of her mother who walked out on their marriage. Interestingly, Adeniran inserted a letter from Lola's mother in the diary, further highlighting the importance of the theme of female voice and agency. Constance Olufemi wrote "it has taken a lot

of courage to do this … you have destroyed my pride as a woman … you have separated me from my children" (Adeniran, 2007). Adeniran addressed many issues in this letter. She noted that second-generation female characters like Lola's mother Constance could exact change only by leaving her marriage and even her children. Within the (emotionally or physically) absent mother trope which seems to be a recurring imaging in third-generation Nigerian women's writing (seen in Adichie's *Purple Hibiscus*, Atta's (2005) *Everything Good will Come* and Unoma Azuah's (2005) *Sky-High Flames*), Lola's change began at an early age as she challenged different aspects of her family relationships to achieve self-definition, beginning with writing in her diary, attending university and finally leaving the country to begin a new life for herself (Nadaswaran, 2011). The end of the novel-diary was the beginning of her life, acknowledging "I started this journal as a little girl … you're the only thing that has kept me going and kept me sane … I could pour out my thoughts feelings and frustrations without fear", while simultaneously declaring "I do know that [I'm] no longer a lost little girl looking for salvation … The time has come for me to start my life. THE BEGINNING" (Adeniran, 2007). Adeniran's undertone is similar to Ba's in *So Long A Letter* (1979) "I can feel new buds springing up in me … I shall go out in search of it. Too bad for me if once again I have to write you so long a letter" (Ba, 1979). The emerging female protagonist achieves her self-actualization (within the theme of female voice and agency) at an early age unlike Ba's Ramatoulaye, growing and maturing with her diary writing yet Adeniran's literary signposting is unmistakable as she draws on the similar redemptive scope of writing and new beginnings.

Third generation writing also continues to focus on the constraining conditions of women within the family. Jane Bryce posited that Chimamanda Ngozi Adichie's *Purple Hibiscus*'s "opening sentence signals its entanglement with Achebe and his project of reclamation, but relocates it firmly in the home" (Bryce, 2008). Bryce's assessment of Adichie's assignment within the family may be accurate but Adichie's opening lines in her text "things started to fall apart at home when my brother, Jaja, did not go to communion and Papa flung his heavy missal across the room and broke the figurines on the étagère" (Adichie, 2004), signify more of an 'entanglement' with the legacy of first- and second-generation women writers rather than just with Achebe. Flora Nwapa's *Efuru* (1966) was in many ways a response to Achebe's treatment of women in *Things Fall Apart* (1958), and Emecheta's *Joys of Motherhood* (1979) continued to interrogate the preoccupation with motherhood seen in Efuru. Through Kambili's narrative, the thematic pulse of *Purple Hibiscus* (2004) is unmistakable as Adichie continues to re-vision the young Igbo protagonist. Kambili's diegesis of her family leads her from a journey as an observer to the assessor. The novel touches on many uneasy subjects, such as the devout catholic patriarch's

abusive nature, Kambili's romantic feelings for her catholic priest and finally Beatrice's poisoning of her husband. My reading of the opening lines of the novel hones in on the broken figurines on Beatrice's étagère, the outward mirage of perfection juxtaposed against the internal chaos in the family caused by Eugene that not only physically shattered but also symbolically became the catalyst for Beatrice's un-silencing. Things fell apart in the Achike household because the mother in the family refused to endure her husband's abuse anymore. Eugene's abuse caused Beatrice multiple miscarriages. It was her final miscarriage that drove her to poison her husband, a similar echo of Adah leaving Francis after he 'kills' her brainchild. Kambili too negotiated her own womanhood throughout the text (once again reinforcing the theme of female agency like Lola in Sade Adeniran's *Imagine This* 2017). She carried Father Amadi's letters with her because "they remind [her] of [her] worthiness, because they tug at [her] feelings" (Adichie, 2004), helping her arrive at an independent conclusion, that she did not need to consult anyone about her choices because she had the right to do so on her own, "I no longer wonder … I just go ahead" (Adichie, 2004). Kambili's growth and Beatrice's agency finds its parallels in Adeniran, Ba and Emecheta's characterizations, suggesting the continued dialogue of speaking and hearing by African women writers. While Adichie throughout the text explores Kambili's quest for personhood, the 'epistolary form' used to end the novel seen in the letters Kambili writes to Father Amadi, reflects the ways in which Kambili inscribes agency for herself through independent decision-making.

Adaobi Trica Nwaubani's *I do not come to you by chance* (2009), extends the literary history of African women writers' to "dialectically question postcolonial Africa's political failures or the betrayal of nationalist hope" through a novel interspersed with emails (Okuyade, 2014). In exploring the corrupt fabric of Nigerian society through the 419 internet fraud, here it was Nwaubani as a female author that put forwards the theme of female voice and agency through her writing, speaking about the conditions of postcolonial Nigeria. She traced the downward spiral of her male protagonist Kingsley into amorality, expressing her discontent on the misgoverned nation which now impinged on its people. Kingsley's amorality was depicted through the modern epistolary form – the emails he composed and sent as a scammer "I DO NOT COME TO YOU BY CHANCE. UPON MY QUEST FOR A TRUSTED AND RELIABLE FOREIGN BUSINESSMAN OR COMPANY" (Nwaubani, 2009). Kingsley is a byproduct of his nation's failures, the lack of jobs and social welfare that left his father Paulinus "retired and wasted, nothing to show for" (Nwaubani, 2009). As Kingsley helplessly watched his father die due to the lack of proper medical care, he was jolted into awareness that the only way to survive a corrupt system was to be corrupt "in real, live-action" himself (Nwaubani, 2009). Nwaubani's delineation signals the shifting trends and development

in African women's literature, indicative of the daunting task of "[engaging] imaginatively and constructively with pressing socio-political issues (Okuyade, 2014).

CONCLUSION

My article has used seminal works by Mariama Ba and Buchi Emecheta as examples of works to consider the ways in which early women writers began the quest for self-inscription and paved the path for other women writers to continue this legacy. The epistolary and semi-autobiographical form is particularly pertinent in introducing early writing, seeing as how these styles elicited hidden misogynistic structures that ensured the cyclical and progressive oppression of women. In exposing these limitations, Mariama Ba and Buchi Emecheta undeniably created comparative parameters within a new tradition of women's writing which was inherited by third-generation women writers as a means to continue probing and resisting the multi-faceted anxieties as well as challenges faced by contemporary African women. Third generation writers are tasked not only to continue the heritage of their foremothers but to carve new traditions of their own that unrelentingly question systems and strictures around them.

ACKNOWLEDGEMENT

Thank you to the English Department, University Malaya. As always, thank you to the African women writers who inspire me; my family, especially my husband Jon, I am always grateful for your unwavering love and support.

REFERENCE

Achebe, C. (1958). *Things fall apart*. Portsmouth, England: Heinemann African Writers Series.

Achebe, C. (1975). *Morning yet on Creation Day*. Peterborough, England: Anchor Press.

Adeniran, S. (2007). *Imagine this*. London, England: SW Books.

Adichie, C. (2004). *Purple hibiscus*. London, England: Harper Perennial.

Anzaldua, G. (1987). How to tame a wild tongue. In *Borderlands/ La Frontera: The New Mestiza*. USA: Aunt Lute Books.

Ashcroft, B., Griffiths, G., & Tiffin, H. (1989). *Empire writes back*. London, England: Routledge.

Atta, S. (2005). *Everything good will come*. Northampton, England: Interlink Books.

Azuah, U. (2005). *Sky-high flames*. Baltimore, USA: Publish America.

Ba, M. (1979). *So long a letter*. Portsmouth, England: Heinemann African Writers Series.

Ba, M. (1990). La Fonction politique des litteratures africaines ecrites [The political function of African written literature]. *Ecriture francaise dans le monde, 3.1,* 6. In C. Miller (Ed. & Trans.), *Theories of the Africans*. Chicago, USA: The University of Chicago Press. (Original work published 1981).

Bazin, N. T. (1986). Feminist perspectives in African fiction: Bessie Head and Buchi Emecheta. *The Black Scholar, 17*(2), 34-40.

Berger, R. A. (2010). Decolonizing African autobiography. *Research in African Literatures, 41*(2), 32-54.

Bryce, J. (2008). Half and half children: Third-generation women writers and the new Nigerian

novel. *Research in African Literatures, 39*(2), 49-67.

Davies, C. B. (1995). Hearing Black Women's voices: Transgressing imposed boundaries. In C. B. Davies (Ed.), *Moving Beyond Boundaries, Volume I: International Dimensions of Black Women's Writing* (pp. 3-14). New York, USA: NYU Press.

Dijck, J. V. (2006). Writing the self: Of diaries and weblogs. In S. Neef (Ed.), *Sign Here!* (pp. 116-132). Amsterdam, Netherlands: Amsterdam University Press.

Emecheta, B. (1972). *In the ditch*. Portsmouth, England: Heinemann African Writers Series.

Emecheta, B. (1974). *Second class citizen*. Portsmouth, England: Heinemann African Writers Series.

Emecheta, B. (1979). *The joys of motherhood*. New York, USA: George Braziller Inc.

Emecheta, B. (1983). *Adah's story*. London, England: Allison & Busby.

Emecheta, B. (1986). *Head above water*. Portsmouth, England: Heinemann African Writers Series.

Gilmore, L. (1994). The mark of autobiography: Postmodernism, autobiography, and genre. In K. Ashley (Ed.), *Autobiography and Postmodernism* (pp. 3-18). Amherst, USA: University of Massachusetts Press.

Nadaswaran, S. (2011). Rethinking family relationships in third generation Nigerian women's fiction. *RELIEF, 5*(1), 19-32.

Nnaemeka, O. (1994). From orality to writing: African women writers and the (re)inscription of womanhood. *Research in African Literatures, 25*(4), 137-157.

Nwaubani, A. T. (2009). *I do not come to you by chance*. London, England: Weidenfeld & Nicholson.

Ogunyemi, C. O. (1985). Womanism: The dynamics of the contemporary Black female novel in English. *Signs, 11*(1), 63-80.

Oja-Ade, F. (1982). Still a victim? Mariama Ba's Une si Longue Lettre. *African Literature Today, 13*, 71-87.

Okuyade, O. (2014). Tradition and change in contemporary West and East Africa fiction. *Matatu, 45*, x-xix.

Petersen, K. H. (Ed.). (1988). *Criticism and Ideology*. Uppsala, Sweden: Scandinavian Institute of African Studies.

Schipper, M. (1987). Mother Africa on a pedestal. *African Literature Today, 15*, 35-54.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1277 - 1289 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Master-Slave Dialectics and the Evolution of the Self in Bulosan's *America is in the Heart*

Met'eb Ali Alnwairan

English Section, Department of Foreign Languages, University of Nizwa, Birkat Al-Mouz, P.O. Box 33, PC 616, Sultanate of Oman

ABSTRACT

This paper is devoted to dissecting the master-slave dialectics in Carlos Bulosan's *America is in the Heart* (1947). The paper deals with the dialectics as a depiction of a unique "productive process" and transformation in human societies. Dialectics describes the evolution of the self-conscious human individuality as a foundation of the individual's moral agency. The readings provided in this paper reveal a part of the wide scope of interpretations this dialectics can provide. I argue that the novel represents a historical stance, in which Bulosan's self-consciousness is formed. His journey from the Philippines to America represents the master-slave dialectics introduced by Hegel and adopted by Marx later on. The paper illustrates the role of the dialectics in helping the protagonist to better understand his identity and to overcome his internal conflicts.

Keywords: America is in the Heart, Carlos Bulosan, Filipino Americans, Hegel, identity recognition, Marx, master-slave dialectics, self-consciousness

INTRODUCTION

The concepts of identity, identity recognition, and the means to attain that recognition are among the issues that attracted the attention of thinkers and fiction writers alike throughout history. Immigrant novelists, for example, attempted to come to terms with many challenges of identity recognition in their host communities. Adams (2007) declared that American immigrant writers tended to tackle crucial issues about power and identity more than any other issue in their new communities. The Filipino-American novelist Carlos Bulosan, for instance, is one of the prominent writers who depicted immigration experience in terms of identity-definition and struggle toward recognition.

ARTICLE INFO

Article history:
Received: 14 January 2020
Accepted: 19 February 2020
Published: 26 June 2020

E-mail address:
m.alnwairan@unizwa.edu.om

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

Before diving deep in Carlos Bulosan's novel and exploring the dialectical relationships in it, it is worth pursuing a brief survey of the master-slave dialectics within the works of the two German philosophers, Georg Wilhelm Hegel and Karl Marx. The master-slave dialectics was developed in Georg Wilhelm Hegel's *Phenomenology of Spirit.* In the section entitled "Lordship and Bondage," Hegel (1977) explains the development of one's self-consciousness through the encounter with two forces, master and slave. The purpose of the master-slave dialectics, according to Hegel, is to bring to light a better understanding of the fundamental necessity of human beings, self-conscious. In "Lordship and Bondage," Hegel (1977) argues that humans can acquire freedom by going through a unique dialectical process. This process can only be performed through self-consciousness and knowledge.

In Hegelian dialectics, a struggle for recognition is initiated, which, in turn, escalates to a 'life-or-death struggle'. Hegel explained that both master and slave "must engage in this struggle, for they must raise their certainty of being for themselves to truth, both in the case of the other and in their own case" (Hegel, 1977, p. 114). The result of this struggle is the enslavement of one man by the other, establishing two opposed types of consciousness: lord and bondsman. One of the outcomes of this struggle, according to Hegel (1977), is the recognition (Anerkennung) between the master and the slave as both sides realize the interdependent relationship that governs their lives. In the same way, Bulosan employed similar Hegelian conceptions throughout his novel. Carlos, the protagonist of the novel, went through a fierce struggle against the traditional masters in the Philippines as well as in America. With the progress of actions, Carlos testified Hegel's conclusions as he overcame the obstacles of dependency that faced him. The young man succeeded in confronting the brutality of the Master while reshaping the nature of traditional master-slave dialectics.

MATERIALS AND METHODS

This article used Hegelian and Marxist dialectics to dissect the internal conflict that the protagonist of the novel undertook. Carlos passed through two opposing phases: the slave phase and master phase, which, in turn, represented moving from inauthentic self towards the authentic mode of existence. The novel shows how a self-conscious individual, like Carlos, succeeds in obtaining true and free existence by going through a long struggle against various types of repressive authorities.

It is worth mentioning here to refer to the impact of Hegelian dialectics on Karl Marx and his extended philosophical tradition that followed his death. Marx's views of the role of the working class in the social struggle towards establishing a classless society is obviously akin to the Hegelian narrative of the role of bondsman in developing true self-conscious being. Although Marx deviates at a certain point from Hegel, we can still find many parallels between the two. The position of the proletariat in Marxist thought

is similar to the role of the bondsman in Hegelian philosophy. The proletariat acquires the same production value as the slave. Their labor allows them to reevaluate their surroundings and position in this world because of their ability to create value. In the same sense, the capitalists (for Marx) is equal to the Master (for Hegel) as both receive the necessary supplies and make the profit they need from the labor of the proletariat/slave. The worker's dependency on the capitalist master provides the latter with his position as a dominating power over the workers.

Marx was not a mere passive imitator of Hegel's philosophy. He adopted and developed Hegel's dialectics and took it to a more "materialistic" level. Although both Marx and Engels considered Hegelian dialectics as one of the greatest achievements of German philosophy, Hegel's ideas were too idealistic and abstract for them. In *Anti-Dühring* Friedrich Engels writes, "Marx and I were pretty well the only people to rescue conscious dialectics from German idealist philosophy and apply it in the materialist conception of nature and history" (quoted in Carver, 2011, p. 404). In *Capital* (1974), Marx gave more explanations about how he deviated from Hegel. He explained, "to Hegel, the life-process of the human brain ... is the demiurge of the real world, and the real world is only the external, phenomenal form of 'the Idea.'" (Marx, 1974, p. 27). With Marx, the equation is different. For him, "the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought." (Marx, 1974, p. 27).

One of the major quests for Marxist dialectics is resolving class struggle because of its vital role in achieving class consciousness and prosperity. Further, the term "class struggle" was mainly developed by Marxist thinkers to define the dialectical relationship between mental labor (capitalist) and manual labor (proletariat). The struggle between the different social classes is essential for Marxist dialectics to act. This struggle, in turn, takes the oppressed individual to a higher level of self-consciousness. Reading Bulosan's novel through Marx's lens highlights the dynamics of class issues presented in the novel. After their migration to the United States, Carlos and his brother were involved in a more complex dialectical relationship within the American capitalist system. Similarly, in the United States, thousands of Filipino immigrants faced the same exploitation they had faced in the Philippines. On the plantations and in factories of early twentieth-century America, poor immigrants endured the exploitation of merciless masters and were entangled in complex master-slave relationships. The discussion below exposes the hidden dynamics of the master-slave dialects as they appear in different settings in the novel, ranging from the rice fields in the Philippines to the fish canneries in the United States.

RESULTS AND DISCUSSION

We can say that Carlos Bulosan's *America is in the Heart* is a good example of a literary text that shows class dialectics in motion.

Bulosan's *America is in the Heart* presents a story of the young Carlos who overcomes the brutality of both feudalism and capitalism and achieves a better understanding of one of the fundamental necessities to human beings, self-consciousness. Bulosan was a Filipino-American novelist, poet, labor organizer, and activist who spent his life struggling for the rights of immigrants and workers in the United States. In 1930, Bulosan immigrated to the United States in search of a better life. In the States, he was one of the pioneering figures in the long struggle for civil rights for Filipino-American people as one of the dynamic components of American society. The novel, from a more general perspective, presents decisive testimony to the role of human struggle in achieving self-consciousness and freedom.

The ties between the work and the author's life experiences are so strong that the novel is occasionally called an autobiography. Bulosan himself was born in Binalonan, a Filipino city on the island of Luzon, to a working-class family. Bulosan spent his early childhood doing manual labor in the rural areas of the Philippines until his late teenage years when he left his homeland to the United States. He first arrived in Seattle, Washington in 1930 and would never return to the Philippines.

Master-slave relationships are so obvious in *America is in the Heart*. The author, intentionally or not, shows us how the different human dynamics/dialectics within the same society are the engine room of the class struggle between the oppressor and the oppressed as well as means of acquiring self-consciousness and freedom. This includes "human relations" in various frames, both large and small, both on global, political, and personal levels.

In the novel, Carlos spends his childhood in an unfair world of rigid traditions and brutal feudalism. The novel's opening provides an overview of the culture of the rural Philippines in the first half of the twentieth century. Plowing the land with water buffalos and using old techniques in farming with other primitive social practices are described. Traditions, like finding out if a bride is a virgin or not, are being challenged by the younger educated generation. This clash between the two generations is clear when Carlos's brother Leon leaves the barrio and moves to Luzon with his wife. The novel clarifies that there is fierce social agitation in the Philippines at that time. The 'estranged' younger generation has initiated a movement for social change and national independence away from old social restrictions and the domination of colonial powers. Throughout the first part of the novel, the author vividly portrays the rural areas which are filled with farmers who work for the bacienderos, the landowners. Carlos's family works on four hectares of land only. It is a subsistence kind of farming for it is just enough to feed the family. This feudal system is a fertile ground for dialectics to work.

Interestingly, Hegel's master-slave dialects is situated in the feudal system in the first place as a more accurate translation of Hegel's master-slave relationship is

"lord-bondsman." In fact, translations that use "master-slave" instead of "lord-bondsman" (like A. V. Miller's translation of the *Phenomenology of the Spirit* 1977) miss the feudal dimension of the equation conveyed in the German terms "Herrschaft" and "Knechtschaft". Cole suggested that Hegel used the terms *Herr* and *Knecht* for a special purpose. Cole added that, usually, the struggle between lord and bondsman revolved around "land," and this gives relevance to Hegel's criticism of feudal dialectics. Cole believed that the dialectical struggle for recognition that led to self-consciousness works perfectly in a feudal system as it was viewed as the specific system within which a better realization of modernity and freedom was accommodated (Cole, 2015).

Feudalism as a rigid system of land ownership and human exploitation is clearly presented in the novel. When brother Macario needed money to finish his schooling, he returned to Binalonan to ask for his family's aid. The helpless parents had no other choice except to sell the rest of their land to provide Macario with the money he needed. The novel sheds light on the fact that peasants, in the Philippines, have a hard life and are exploited by all other classes in society, exemplified by the usurers, middle class, and the landowners. Here we find the typical dialectical relationship outlined by Hegel. Hegel's lord-bondsman dialectics was founded upon Hegel's observations of German feudalism. Cole argued that "there was no capitalism around for Hegel to critique. The truth of the matter is born from an analogy: what feudalism is to Hegel capitalism is to Marx" (Cole, 2015, p. 814). Bondsmen like Carlos's father were exploited and mistreated by landlords and moneylenders. In *Phenomenology of Spirit*, Hegel explained this relationship as one of the earliest stages of history, which participated in the evolution of Man's spirit and self-consciousness. Because of this struggle between lords and bondsmen, social conditions reach the point where there is a rebellion of peasants breaking out in some rural provinces in the Philippines.

Carlos's family became more and more entangled in the troubles of the feudal system of the Philippines. Carlos was not disconnected from the surrounding environment in which he lived. Although he was still a young boy, he developed a social awareness because of his family's loss of land. He became aware and critical of poverty and degradation he experienced. The father, who sold the last hectare he owned, could not acquire land from any other place and hired himself out in many menial jobs as a day laborer. Carlos himself was under the scourge of the harsh society in which he lived. He worked in a project of building a highway from Manila to Baguio.

In the novel, the author wants to bring the truth of feudalism to the surface. It is clear now that Carlos opened his eyes for the first time in a feudal world. The rural areas are filled with farmers who farm the land for the "bacienderos" or the landowners. Using water buffalos and other primitive practices for plowing the land, the family members toil all over the year to save what is enough

for the basics of a living. The main part of the income goes to the landowners. Not surprisingly, Carlos had no childhood at all. Like any other kid living in the rural parts of the Philippines, he must work in the fields or in the local markets at an early age. With almost no skills or education, they go from one menial job to another to make a living. In a subsistence level of life, peasants cannot offer their children a better life.

Despite being illiterate, Carlos's father was fully aware of the importance of education in enhancing people's life. Brother Macario, the hope of the family, was attending high school and the father was selling land, one hectare at a time to a moneylender, to afford Macario's education and living expenses. Carlos explained, "My father and mother, who could not read or write, were willing to sacrifice anything and everything to put my brother Macario through high school" (Bulosan, 1973, p. 14). The whole family hoped that Macario would return to Binalonan and started his teaching career to save the family from their miserable life. The intention of the father was to use the income of Macario's teaching career to help pay off the moneylender and to afford his other sons' education. Wesling pointed out, "Education is thus at the center of an exploitative patriarchal, colonial arrangement masquerading as a democratic intervention" (Wesling, 2011, p. 154). Ironically, the family sacrificed almost everything and sank deeper in poverty only to ensure the education of one of its members. Perhaps this 'sacrifice' stems from the family's aspiration for liberty that would bring self-consciousness.

The importance of education and its role in liberating the working class is vital for establishing self-consciousness. According to Wood, the aim of education for Hegel lies in "developing a character which values itself for what it has in common with other people" (Wood, 1998, p. 24). In the same sense, Marxists suppose that education is one of the effective means to liberate the proletariats. In Marxism, the educational system is one component of the superstructure and, as a result, a reflection of the economic reality. Education, as one of the major institutions in any society, reflects the material world and material conditions that produced it. Ferreira and Bittar clarify that for Marx and Engels, education was an important concern due to its role in constructing the individual "whose physical and spiritual potential would be fully developed and not subjugated to the domination of capital" (Ferreira & Bittar, 2008, p. 639). Further, in their *Communist Manifesto*, Marx and Engels called for "Free public education for all children and abolition of all child labor in factories" (Marx & Engels, 1967, p. 125). Here Marx emphasized the idea that the educational system of his time needed a holistic revision to meet the needs of the ever-changing nature of societies. He thought that a lot of false assumptions were taught to people all over the world. He argued that education could bring solutions for the crushed proletariat.

Marx and Engels foresaw that without education, the working class would remain locked in poverty and hardships. It is only

with the education they will gain the chance to create a better life. Therefore, in their *Communist Manifesto*, Marx and Engels (1967) argued that education could fight the ruling class. At their time, the bourgeois class was waging war against the feudal powers in Germany and thus enlisted the proletariat as its ally. Because of such a conflict, the proletariat gained education and experience which was used to fight the ruling class (Marx & Engels, 1967). The *Communist Manifesto* proposes that expanding the scope of public education and making it accessible by the working class are among the major demands, and henceforth Marx and Engels found themselves underlining new and revolutionary guidance to the working class and socialist movement in the world.

In the novel, Macario educated his younger brother, Carlos, in the Philippines to prepare him for the future struggle. In the second part of the novel, we discover that even during his stay in Los Angeles County Sanitarium, Carlos spared no time to read and educate himself. He was introduced to many insightful works which shaped his identity and elevated his thought. He took advantage of the new life offered to him to establish a more complex understanding of life and self. This stage in Carlos's life was so decisive that it prepared him to be a social activist whose mission was protecting the rights of his fellow Filipino immigrants on the West Coast.

Class issues are also present in the first few chapters of Bulosan's novel. During his many trips with his mother to sell their products, the young Carlos noticed the arrogance and pride of the upper class and their attitudes towards the peasants. Carlos was critical of the class differences as his mother,

> did not pay too much attention to her work, but was admiring the delicately embroidered dresses of the rich women, their smooth, silk handkerchiefs, and the way they carried themselves in the market. For the first time, I realized that mother, always in rags, noticed how people wore elegant clothes and walked royally in the crowded place. (Bulosan, 1973, p. 37).

Carlos's mother was so affected by her class consciousness. She looked to be obedient when she dealt with women from higher classes. The Mother's character develops what is known as false-consciousness— a mental state developed in the mind of the working class. False-consciousness is a Marxist claim that various processes in capitalist systems are misleading and false to the proletariat, and to other classes. Jost (1995) defined false-consciousness as "the holding of false or inaccurate beliefs that are contrary to one's own social interest and which thereby contribute to the maintenance of the disadvantaged position of the self or the group" (Jost, 1995, p. 400). These processes change the true balance of forces between these classes. False-consciousness keeps the working class trapped in their miserable life, endlessly struggling to make a living day after day.

The encounter with the rich class does not end with this. That particular day had changed Carlos's life forever. Carlos was aware of every single incident or gesture that happened that day. He could look deep inside the manners of people around him. He was mainly concerned with how his mother was dealing with such situations, especially when the young rich girl approached them,

> The wonderful creature with the dainty agility approached our booth and noticed my mother's shining curiosity and envy. She stopped abruptly in front of my mother, her lips trembling with contempt. 'What are you looking at, poor woman?' she asked, raising her silk umbrella in her hand. My mother was dumbfounded by her elegance. Suddenly the girls struck the basket of the beans and dashed off, leaving my mother with startled eyes. … My mother crawled on her knees scooping up the beans into the basket. 'It is all right,' she kept saying. 'It is all right'. (Bulosan, 1973, p. 38).

It was not all right at all for the young boy. His soul was still not infected by the false-consciousness that plagued the other peasants. It was Carlos's first discovery of class clashes in Filipino society. After that day, Carlos had become more familiar with the middle-class social attitudes and their stand on the peasant issues. He had become more aware of their stand regarding national issues, too. Carlos discovered in this striking moment his actual status in the society. For the first time in his life, he felt alienated. In such a merciless society, peasants are always living in an alienated state of mind since they are deprived of the products and wealth of the country they have produced.

This encounter with the upper class brings to light the Other's gaze and its role in the dialectical relationship between the lord and the bondsman. Sartre argued that it was the "gaze" of the Other which triggered the conflict that governed all social relations. Through the gaze of the Other, the subject experienced alienation from himself/herself because the gaze reduces the subject to a "being-in-itself" rather than a "being-for-itself" and eventually, this relationship threatened the subject's own *freedom*. The other's gaze reduced the person to an object rather than a subject. To complicate the matter more, Sartre explained that in this situation, the subject's becoming "stolen" by the Other. Sartre continued his narration to this dialectical relationship as he claimed "while I attempt to free myself from the hold of the Other, the Other is trying to free himself from mine; while I seek to enslave the Other, the Other seeks to enslave me" (Sartre, 1996, p. 364). As we may tell now, Sartre's argument is derived from Hegel's "master/slave" dialectical relationship I discussed at the beginning of this essay. When Carlos's mother met the rich woman in the market, the two immediately entered into a struggle against each other as each lady tried to overcome the other. The struggle stems from their need to prove and practice their own being; the gaze seeks to

shake off the Other's understanding of her being as a free subject.

Al-Jarrah (2018) built on Lewis R. Gordon's account and presented his perception of the "third self," a particular state between *I* and *myself* (*Me*). He explained "the *I* connotes my subjectivity; as a person of action and agency, the *myself* implies the *I* as an object of my consciousness, whereas the *me* means the *I* as objectified by others" (Al-Jarrah, 2018, p. 258-259). Al-Jarrah added, this *third self* contained two existential forces: the first detached the subject from his/her own self and the second absorbed the subject's feeling of *otherness* (Al-Jarrah, 2018). In *America is in the Herat*, the *third self* was an expected consequence of the identity crisis that emerges from the Other's gaze. The young Carlos found it difficult, puzzling, and even shameful to understand his identity under the Other's gaze.

Gradually, Carlos learnt that under the present feudal system nothing would protect his helpless family from oppression and exploitation. Understanding his situation as a mere object in the upper-class eyes and a tool in the feudal system becomes a priori in Carlos's struggle towards affirming his true self. His father expresses his own criticism of the whole system they live in. After losing the last hectare of land, he told Carlos, "There is something wrong in our country when a man can take away something that belongs to you and your family … this is the end son" (Bulosan, 1973, p. 54). After that, the social and economic situation in the Philippines declined drastically as there were more peasant uprisings due to the greedy landlords and their endless ambitions. Carlos observed, "Each year the landlords demanded a larger share, until it became impossible for the peasants to live" (Bulosan, 1973, p. 58).

Carlos, who was aspiring for a positive change in his life, immigrated to the United States in search of better life conditions away from the hardships, poverty, and exploitation which he experienced in his homeland. Mercene pointed out that the first records of Filipino immigration to the United States went back to the sixteenth century (Mercene, 2007). Sterngass stated that small settlements were first documented in the beginnings of the eighteenth century. While the main immigration waves did not begin until the early twentieth century when the Philippines was ceded by Spain to the United States in the Treaty of Paris (Sterngass, 2007).

Ironically, when Carlos moved to the New World, he went out of the frying pan into the fire. He was so ambitious for a better future. The myth of the American dream had seduced him. In America, Carlos was still young, naïve, lacking the necessary experience in life. When Carlos and Marcelo arrived in Seattle, things did not go the way the young men had planned. They engaged in a card game that ended with losing all of their money. They could not pay the hotel bill and were forced to work in a fish cannery in Alaska. The brothers found themselves trapped again in a more complex dialectical relationship within the American capitalist system. Carlos recalled,

> We were forced to sign a paper which stated that each of us owed the contractor twenty dollars for bedding and another twenty for luxuries. What the luxuries were, I have never found out. … It was the beginning of my life in America, the beginning of a long flight that carried me down the years, fighting desperately to find peace in some corner in life. (Bulosan, 1973, p. 101).

Ironically, Filipino peasants faced the same exploitation in the United States they faced in the Philippines. At the cannery, obviously, there was the same exploitation, and the same kind of master-slave relationship. The work conditions were dangerous, unhealthy, and unendurable. Carlos explained that many fellow Filipino workers were negatively affected by such conditions,

> The contractors rapaciously exploited their workers. They had henchmen in every cannery who saw to it that every attempt at unionization was frustrated and the instigators of the idea punished. The companies also had their share in the exploitation; our bunkhouses were unfit for human habitation. The lighting system was bad and dangerous to our eyes, and those of us who were working in the semi-darkness were severely affected by the strong ammonia from the machinery. (Bulosan, 1973, p. 101-102).

America is not what Carlos expected earlier. The poor newcomer faces the greed and exploitation of Capitalism in the United States. Besides exploitation, Carlos faces the ugliest kinds of racial discrimination, too. It was so hard and dangerous to be a Filipino living in the United States in the thirties and forties of the past century. Carlos observed, "it was now the year of the great hatred: the lives of Filipinos were cheaper than those of dogs. They were forcibly shoved off the streets when they showed resistance" (Bulosan, 1973, p. 143). Carlos explained how he was confronted with the extremist hatred of the whites wherever he went. He was not happy with his life in America, but still, he was not ready to give up his hope of freedom and self-recognition. He was still determined to make it work. He was so sure that he must fight against the master's mentality until the bright end came. Here Carlos was more aware of the nature of class struggle as he showed a more sophisticated level of class consciousness which would take him later to a superior level of self-consciousness. Carlos—as a model of the slave in Hegelian dialects—realized the master's dependency on him. It was through this dialectical relationship, Hegel concluded, the slave could acquire his true sense of self-consciousness and freedom. It is at this moment in the novel, and for the first time perhaps, Carlos understood that the capitalist masters were dependent on the labor of the workers and their ability to produce and serve the capitalist system. The young man decided to take action and fought for the rights of the oppressed cannery workers.

Toward the last few chapters of the novel, Carlos became curious to express himself and spoke to the world about his story and struggle against the greed and exploitation of the capitalist society he lived in. In such situations, the oppressed subject has two options of response, inauthentic and authentic responses. To use Sartre's labels, by shifting to inauthenticity (or bad faith), the subject, due to the pressure practiced by the social environment, embraces false values, surrenders to the pressure, and abandons his/her freedom and identity, in other words acting inauthentically. The other option, namely the "authentic" response, requires the subject to gain identity by obtaining the Other's recognition and to develop this identity positively for the good of the subject. For Sartre, authenticity "consists in having a true and lucid consciousness of the situation, in assuming the responsibilities and risks that it involves, in accepting it in pride or humiliation, sometimes in horror and hate" (Sartre, 1995, p. 65). In *America is in the Heart*, Carlos proved to be among these rare authentic subjects. When Carlos realized that he could read and write in English well enough to communicate, he became so happy and proud of himself for this achievement because he had the means to obtain the recognition of the Other.

Equipped with the skills to write, Carlos continued his "authentic" struggle against the exploitation and discrimination of Capitalism. He wrote articles for newspapers. He became more aware of the battle going on between the labor force and the dominant capitalist system. Carlos's friend, José, explained the situation as he said, "It is a long story. This is a war between labor and capital. To our people, however, it is something else. It is an assertion of our right to be human beings again, Carl." (Bulosan, 1973, p. 186). Carlos's activities developed as he started to write a column and helped organize workers to claim their rights. Writing in newspapers supports constructing other Pilipino immigrants' self-consciousness of their rights and their status. Carlos wrote to gain recognition as an individual and as part of the larger American self. He used writing to call for the rights of Filipinos in the country. Carlos was mainly influenced by his friend Pascual who taught him, " 'It is for the workers that we must write,' he said weakly. 'We must interpret their hopes as a people desiring the fullest fulfillment of their potentialities'". (Bulosan, 1973, p. 187)

Carlos and his friends became social activists with revolutionary ideas. They began their open campaign calling for a new social order based on equality. Carlos dreamed of a new world in which there was no exploitation nor discrimination. Carlos and other Filipino activists established a union called the United Cannery, Agricultural, Packing and Allied Workers of America (UCAPAWA) that targeted achieving the full rights of Filipino workers as its primary goal. After that, he participated in an organization called the Committee for Protection of Filipino Rights (CPFR); the major goal of this committee was to obtain full citizenship rights and status for Filipino immigrants in the United States.

According to Marxism, as the dialectics complicates further, the proletariat forms organized unions to protect their rights. It does not take a long time, when the workers understand that their traditional demands—the improvement of wages and working conditions—can only bring temporal benefits. Marx explains the limitations of economic struggle as workers,

> Ought not to forget that they are fighting with effects, but not with the causes of those effects; that they are retarding the downward movement, but not changing its direction; that they are applying palliatives, not curing the malady. (Marx, 2006, p. 61).

As the economic struggle cannot improve the lifestyle of the workers in the long run, the workers' unions need to turn to a "political struggle." This step can be taken as a sign of self-consciousness progress.

Towards the end of the novel, Carlos developed "political self-consciousness" as an advanced stage in his struggle for freedom and self-recognition. Bignall (2011) declared that resistance of the oppressed "is enabled by the identification of a collective, self-conscious and oppositional subjectivity." (Bignall, 2011, p. 60). Bignall added this "political self- consciousness is asserted through counter-discourse and concrete action" (Bignall, 2011, p. 60), and facing the discourses used to legitimize the subjugation of the oppressed individuals. In a similar vein, Carlos's activities developed as time passes. He held classes, teaching the workers about democracy and their universal rights. When the Philippines was attacked by the Japanese during World War II, the immigrant Filipinos in the United States wanted to help fight for the Philippines. Carlos and other Filipino activists began a movement to allow Filipinos to join the American army. Eventually, their efforts led to a special proclamation, allowing Filipinos to serve in the armed forces. Carols considered that as the first victory the Filipinos had achieved in their battle for civil rights in the United States.

CONCLUSIONS

The paper deals with the dialectics as a necessary liberating and productive process in the history of human struggle towards obtaining recognition and freedom. Based on the principles of Hegel's and Marx's dialectics, the paper sheds light on the evolution of the self-conscious, human individuality as a foundation of the individual's moral agency.

Bulosan's *America is in the Heart* presents a story of a young man who overcomes the brutality and exploitation of both feudalism and Capitalism and achieves a better understanding of one of the fundamental necessities to human beings, self-consciousness. Carlos acquired freedom by going through a unique dialectical process performed through self-consciousness and knowledge. Carlos social and economic consciousness increased day by day throughout the novel. First, Carlos, like his father, believed in the value of education as an important means of

freeing the oppressed peasants. The writer showed the great capacities of education in developing human consciousness that valued itself and stood firm to claim its rights. By the end of the novel, Carlos was free of the false consciousness which plagued the other peasants/workers and made them blindly accept the unfair structure of the systems they lived in. Carlos reestablished his new identity as a human being free of exploitation, suppression, and alienation in the new world. Carlos confronted the obstacles of dependency that faced him, established new types of authority over traditional 'masters,' and, eventually, gained the power to reverse traditional master-slave dialectics.

ACKNOWLEDGEMENT

The author would like to thank the reviewers and editors for their valuable comments and recommendations to improve this article.

REFERENCES

Adams, R. (2007). The ends of America, the ends of postmodernism. *Twentieth Century Literature, 53*(3), 248-272.

Al-Jarrah, H. A. (2018). The white gaze and third self in Suzan-Lori Parks' *imperceptible mutabilities in the third kingdom*. *International Journal of English and Education*, *7*(1), 256-264.

Bignall, S. (2011). *Postcolonial agency: Critique and constructivism*. Edinburgh, Scotland: Edinburgh University Press.

Bulosan, C. (1973). *America is in the heart*. Seattle, USA: University of Washington Press.

Carver, T. (2011). The Marxian tradition. In G. Klosko (Ed.), *The Oxford handbook of the history of political philosophy,* (pp. 393-413). Oxford, England: Oxford University Press.

Cole, A. (2015). The function of theory at the present time. *PMLA, 130*(3), 809-818. doi: 10.1632/pmla.2015.130.3.809

Ferreira, A., Jr., & Bittar, M. (2008). Education in a marxist perspective: An approach based on Marx and Gramsci. *Interface - Comunicação, Saúde, Educação*, *12*(26), 635-646.

Hegel, G. W. (1977). *Phenomenology of spirit* (A. V. Miller, Trans.). Oxford, England: Clarendon Press.

Jost, J. (1995). Negative illusions: Conceptual clarification and psychological evidence concerning false consciousness. *Political Psychology*, *16*(2), 397-424.

Marx, K. (1974). *Capital*. (C. Paul & E. Paul, Eds.). London, England: Dent.

Marx, K. (2006). *Wage-labour and capital & value, price, and profit*. New York, USA: International Publishers.

Marx, K., & Engels, F. (1967). *The communist manifesto*. Harmondsworth, England: Penguin.

Mercene, F. (2007). *Manila men in the new world: Filipino migration to Mexico and the Americas from the sixteenth century*. Quezon City, Philippines: University of the Philippines Press.

Sartre, J.-P. (1995), *Anti-semite and Jew* (G. Becker, Trans.). New York, USA: Schocken Books.

Sartre, J.-P. (1996), *Being and nothingness* (H. Carby, Trans.). London, England: Routledge.

Sterngass, J. (2007). *Filipino Americans*. New York, USA: Chelsea House.

Wesling, M. (2011). *Empires proxy: American literature and U.S. imperialism in the Philippines*. New York, USA: New York UP.

Wood, A. W. (1998). *Hegel on education*. In A. O. Rorty (Ed.), *Philosophy as education.* London, England: Routledge.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1291 - 1309 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Keyboard Warrior, Online Predator or Cyber Bully? The Growing Menace of Child Exposure to Internet Harm based on Research Evidence

Sarina Yusuf[1]*, Khairuddin Idris[2], Asnarulkhadi Abu Samah[2], Adamkolo Ibrahim[3], Nor Sabila Ramli[2], Muhamad Shamsul Ibrahim[4] and Nur Atikah A Rahman[5]

[1]Department of Communication and Media, Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak, Malaysia
[2]Cyber Generation Laboratory, Institute for Social Science Studies, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
[3]Department of Mass Communication, University of Maiduguri, 1069 Maiduguri, Nigeria*
[4]Kolej University Poly-Tech MARA (KUPTM), 56100 Kuala Lumpur, Malaysia
[5]School of Communication, Universiti Sains Malaysia, 11800 Minden, Penang, Malaysia

ABSTRACT

The internet has come along with a myriad of positive and negative challenges. One of the positive developments is the increased access for all age categories, especially people of young ages; however, it is not without a side effect. A cyberbullying threat has become interesting areas of research over the years because of the importance of the concepts toward understanding children's online behaviours and making the internet safe again for the kids to surf. Thus, this article seeks to provide a further understanding of the phenomenon by reporting the findings of a study performed in Selangor, a state of Malaysia. A questionnaire was administered to 375 respondents selected using stratified random sampling from a population of 6,671 primary and secondary school pupils aged 9 to 16 years. The key findings revealed that most children had been involved in the act of cyberbullying. Interestingly, most of them were aware of online threats but did not know that it was bad behaviour. However, most of them were rarely involved in a sex-related cyberbullying incident. A collective approach to guarantee the internet

ARTICLE INFO

Article history:
Received: 02 February 2019
Accepted: 10 December 2019
Published: 26 June 2020

E-mail addresses:
sarinayusuf@fbk.upsi.edu.my (Sarina Yusuf)
kidin@upm.edu.my (Khairuddin Idris)
asnarul@upm.edu.my (Asnarulkhadi Abu Samah)
adamkoloibrahim@yahoo.com (Adamkolo Ibrahim)
nsr.bila@gmail.com (Nor Sabila Ramli)
shamsul@kuptm.edu.my (Muhamad Shamsul Ibrahim)
atikahrahman@usm.edu.my (Nur Atikah A Rahman)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

safety of children and balance their online prospects and risks is recommended to ensure children's online safety.

Keywords: Child online safety, cyberbullying, digital communication, internet, keyboard warrior, online predator

INTRODUCTION

The Malaysian Vision 2020 and the United Nation's 2030 Sustainable Development Goals (SDGs) foresee a planet in which every child grows up healthy and free from violence and exploitation and endeavour to offer children a promising milieu for the full attainment of their rights and capabilities (United Nations Development Program [UNDP], 2016; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2016). The current information age has come with a lot of 21st Century wonders of the world, especially the internet and computers. These technologies have not only remodelled and transformed the world like no other before but also created another world, a utopian world of fantasy and virtualism where distance does not count when it comes to time. This virtual world is populated and ruled by netizens who are referred to as 'generation y' or 'millennials' (Balakrishnan, 2017; Hinduja & Patchin, 2014).

Nonetheless, some groups of netizens opt to abuse the virtually unfathomable freedom and craftiness of the cyber world by masking up in its encrypted pixels and harming others. In fact, over just a single decade or so ago, the seemingly goldmine cyberspace has been transformed into a battleground, wrestling ring or predatory arena by the 'faceless' 'keyboard warrior', who would rather detonate clusters of keyboard grenades (hurtful text messages) to their targets; or the predatory internet behaviour, whose online brutality could induce suicide ideation in their victims, something that even sticks, stones and steel may not be able to; or the haughty, narcissistic 'smartphone gladiator', whose holier-than-thou (notice-me-or-I-crucify-you) attitude incites them to invoke the gruesome power of thunder to hurt their victims online (Cassidy et al., 2009; Ghazali et al., 2017).

Families, neighbourhoods, communities and schools are usually, the milieus where children are normally raised are, but the stark reality is that the online environment where children from about three years old are interacting regularly and for longer durations (Croll, 2016; Yusuf et al., 2018b) can no longer be disregarded. With the increasing accessibility and affordability of the internet, especially mobile broadband in Malaysia and the South-East Asian region, the claim that more children are going online for longer durations is also turning out to be evident in the region (Balakrishnan, 2017; UNESCO, 2016).

With a population of 32.6 million (as of October 2019) (Department of Statistics Malaysia, 2019), 31,63 million (in 2018) and a 28.5 million population of internet users, Malaysia was ranked 11th in terms of internet users in the Asia-Pacific region in 2018 (Statista, 2019). Broadband internet penetration rose from 31.7% in 2009 to

72.2% as of the Second Quarter of 2015 (Alias, 2018). Malaysia Internet Users' Survey (Malaysian Communications and Multimedia Commission) 2017 report shows that in 2015 15.5% of people below the age of 20 years used the internet while the percentage reduced to a mere 13% in 2016. Specifically, in 2015, 13.9% of the country's 20.1 million internet users were aged 15 to 19 years while only 1.6% of them were aged 15 years or under ("Predators in cyberspace", 2016). Most people who use the internet in Malaysia are resident in urban areas (Malaysian Communications and Multimedia Commission [MCMC], 2017).

The Internet is delivering unique opportunities for children's communication, interaction, learning and social development. Unfortunately, the same technologies are exposing children to various online harm, which affect their safety and well-being (Balakrishnan, 2017, 2015; Soni & Singh, 2018). Despite there are diverse forms of risks that children encounter on the internet. Three categories of cyberbullying have been highlighted in the literature, namely content, use and interaction. First, content involves the types of material or substance that children come across online which often may be potentially dangerous, illegal and inappropriate such as platforms, portals and websites that encourage hate speech, pornography, gossiping, fake story/news, snooping or intrusion into others' privacy, self-harm and violence. Second, use refers to the actual consumption of the internet content that may expose the children to risks such as cyberbullying, sexting and privacy and security matters. Driven by Web 2.0, the current generation of the internet facilitates the creation and sharing of content by users (user-generated content). This encourages children to create and share content with peers. Third, interaction or communication involves the contact and communication which take place between individual peers with others especially on chat rooms and social network sites may put children at risks such as online grooming and rendezvous with potential bullies during online or in real life. (Balakrishnan, 2017; Soni and Singh, 2018).

BACKGROUND

Cyberbullying: Definition and Types

The growing menace of cyberbullying has generated tremendous arguments from academia and law enforcement, raising concern over its discreet form which is distinct from bullying. Over the last decade, scholars have vigorously debated whether cyberbullying is a form of bullying or an entirely different form of violent behaviour (Campbell & Bauman, 2018). The scholarly dispute may have been informed by the findings of several studies conducted in various socio-cultural contexts, e.g.: most cyber victims (93%) are bullied both in real life and online (Hase et al., 2015); cyberbullying meets the criteria of bullying but is exhibited in different ways and has similar outcomes to traditional bullying (Thomas et al., 2016); and common predictors have been discovered for both forms of bullying, e.g., low self-esteem, strain, negative relationships with family and peers (Kim et al., 2018).

Research has revealed that both forms of bullying lead to undesirable consequences for children and teenagers and that both are linked with low self-control on the part of the cyberbullies (Kim et al., 2018). However, the findings of a research study performed by Festl et al. (2017) indicated that the proportion of bully-victims (those who are both perpetrators and victims) is much greater for cyberbullying than for traditional bullying.

Basically, cyberbullying and real-life bullying are similar, especially in terms of form and technique. However, cyberbullying and bullying have many differences, with the latter being more harmful (Kim et al., 2017). Firstly, in cyberbullying, victims may not know who the bully is, or why they are being targeted (especially, because of the involvement of a technology interface) (Festl et al., 2017). The technology provides the cyberbully with the virtual cloak to mask his or her identity behind a computer or phone interface (encryption) using pseudonymous screen names, anonymous e-mail addresses, avatars (instead of profile pictures) or fake profile pictures (Campbell & Bauman, 2018; Hinduja & Patchin, 2014).

Secondly, the upsetting, spiteful and hurtful actions of a cyberbully are viral; i.e., a lot of people (in the neighbourhood, at school, in the community, in the city, and even in the world) can be directly or indirectly involved the victimization; or at least, they can learn about the incident with a few clicks on the keyboard or touchscreen impressions (Rodelli et al., 2018). Because of the ubiquitous nature of technology and the social nature of bullying behaviour among children and teenagers, it can be confidently argued that the pool of potential victims, offenders and witnesses/bystanders is boundless (Hinduja & Patchin, 2014; Wright, 2018).

Thirdly, past studies have suggested that it is often easier to be cruel using technology (Bonanno & Hymel, 2013; Kim et al., 2017). This explains why cyberbullying acts can be done from a physically distant location, and the bully does not have to wait and see the immediate response by the target individual (Hinduja & Patchin, 2010, 2014). The worse part of it is that sometimes offenders (perpetrators of a cyberbullying act) ordinarily might not understand the severe harm they are causing because they are veiled from the victim's response (Bauman & Baldasare, 2015).

Fourthly, due to its (virtual, online) nature (Hango, 2016), cyberbullying is more difficult to monitor (Hinduja & Patchin, 2014). In fact, according to Hinduja and Patchin (2014), it is much easier, e.g., for parents and teachers to watch adolescents at school and home than online; many adults do not have the skills and time "to keep track of what teens are up to online". Consequently, it is more likely that a cyberbully victim's experiences could be missed, and a bully's actions could go unnoticed, and then left unrestrained. Unfortunately, in such circumstances even if bullies are identified, many adults may not be able to respond adequately (Rodelli et al., 2018).

LITERATURE REVIEW

The Concept of Cyberbullying in a Malaysian Context

Most cyberbullying cases go unreported and there is a dearth of research on the problem inmost Asia-Pacific nations with most of the existing literature devoted to specific groups such as schoolchildren and the youth (Soni & Singh, 2018). Several surveys have reported the rising rate of cyberbullying in Malaysia. The findings of an empirical investigation on Malaysian children's internet use revealed that one in every five children that go online has become the target of cyberbullying at least once and that 30% of young girls have been sexually harassed in an online chatroom (Yusuf et al., 2018a, 2018b). An international survey involving 1,896 teenage Malaysians aged 12 to 18 years revealed that 40% of the participants encountered cyberbullying, nearly a half (47%) of them sought their parents' advice when they got stuck online while 40% of them were addicted to online peer pressurizing such as using hurtful messages to harass someone (Yusuf et al., 2018a).

Focus-group discussion (FGD) sessions were held in a qualitative study carried out by Ghazali et al. (2017) to explore Malaysian youth's perception of what constitute cyberbullying the findings revealed a seemingly new type of (at least based on the participants' perception in Malaysian context) cyberbullying commonly perpetrated by aggressive messaging by perpetrators known as keyboard warriors (KWs). A KW is a child (or young person) who is incapable of expressing their disapproval and anger physically who would rather overcome this social weakness by tip-off their heaps of aggression on their antagonists on the internet. For example, responses from Ghazali et al.'s (2017) participants R2G4 and R4G2 "Cyberbully is just a keyboard warrior. They did not dare to talk if they were confronted but only have the guts to type" and "Most cyberbullies are keyboard warriors" respectively highlighted this. The study also found that fake identity, split personality and uploading embarrassing pictures online are some of the most common forms of cyberbullying behaviours among the youth. Additionally, the internet and social environment (peers) are the primary sources of information about cyberbullying; and that fun-seeking, revenge-taking and loneliness are some of the major causes of cyberbullying among the kids, which often result in stress, violent conflicts and even suicide in extreme cases.

Ang (2015) reviewed the features, prevention and intervention strategies for cyberbullying in Malaysia, and highlighted that internet use frequency significantly influenced cyberbullying in children. The review also highlighted the most important causes of cyberbullying which included pre-emptive aggression and poor parent-child relationship. Beliefs supporting aggression among children, empathy training, setting guidelines for children's internet use and developing profound and positive parent-child communication and trust have been identified as efficacious tactics to combat cyberbullying and ensure strong parent-child bonds (Ang, 2015).

A survey conducted by Che Noh and Ibrahim (2014) dwelled on the roles of family and schools in establishing a positive environment capable of preventing and to determine cyberbullying incidence among university-going youth was performed with some 134 students in Malaysia. The study discovered a moderate level of cyberbullying incidence among the students. The study also found that some of the respondents were involved in sharing pictures of others online without their permission, posting hurtful comments, uploading videos of others online without permission, gossiping, harassing others online as well as insulting and slandering others via social network sites (Che Noh & Ibrahim, 2014).

An exploratory study was conducted by Balakrishnan (2015) on cyberbullying in Malaysia with about 400 youth aged 17 to 30 years. The study found that the intensity of internet use could give rise to the occurrence of cyberbullying and that existing social network sites and the internet could prompt cyberbullying among the youth. These findings have confirmed past studies which claimed that cyber victims tended to become cyberbullies and *vice-vasa* (e.g., Hinduja & Patchin, 2010, 2014), and are supported in recent studies (e.g., Alim, 2016; Kim et al., 2017; Simon, 2017).

Among the limited literature that provides information about cyberbullying in Malaysia are surveys conducted by CyberSecurityof Malaysia (CSM) in 2010 Microsoft Corporation's survey in 2012. CSM reported that about 12,000 child internet risk incidents were reported in that year most of which involved aggressive online behaviour among school kids, while a year earlier, 5,181 incidents were reported (Cyber Security of Malaysia [CSM], 2013). Microsoft Corporation's survey ranked Malaysia 17th high in cyberbullying incidence in the world. The survey was carried out with a sample of 25 countries from around the globe. Cited in Eek (2009), a UNICEF report also showed that cyberbullying was posing grave harm to the future of Malaysian children. Despite the high possibility of cyberbullying occurrences in Malaysia, limited data exist.

The literature has demonstrated that many detrimental effects are linked with cyberbullying that often extends into the real world. Studies found that many victims reported feeling sad, depressed, angry and frustrated (see Hinduja & Patchin, 2014; Kim et al., 2017). Responding to a survey question in research conducted by Hinduja and Patchin, one teenager expresses his feelings, "It makes me hurt both physically and mentally. It scares me and takes away all my confidence. It makes me feel sick and worthless" (Hinduja & Patchin, 2014). Victims also reveal that they are often afraid or embarrassed to go to school (Hinduja & Patchin, 2010, 2014).

The Cyber Aggression Typology Model

Due to rapid developments in new technologies, difficulties are encountered in defining the specific risky behaviours that occur among children in cyberspace. Various classifications of cyberbullying have been suggested by scholars, especially

based on typology and medium. Schultze-Krumbholz and Scheithauer (2009) defined cyberbullying as a traditional bullying in a new milieu, which was technically advanced or relational cyberbullying; Smith et al. (2008) defined cyberbullying as an aggressive behaviour perpetrated via personal computer (PC) or smartphones; Spears et al. (2009) defined it as overt and covert risky cyber behaviours; Willard (2007) defined cyberbullying using eight distinct behaviours online, namely cyberstalking, denigration, exclusion, flaming, harassment, impersonation, outing and trickery.

Nocentini et al. (2010) summarized those four main types of cyberbullying into the Cyber Aggression Typology Model (CATM) (see Figure 1) with following four constructs, namely (i) written-verbal behaviours (e.g., phone calls, text messages, e-mails, instant messaging, chats, blogs, social networking communities, websites), (ii) visual behaviours (e.g., posting, sending or sharing compromising pictures and videos through mobile phone or internet), (iii) online exclusion (e.g., purposefully excluding someone from an online group) and (iv) impersonation (e.g., stealing and revealing personal information, using another person's name and account). CATM was adopted in this study, and the measurement scale was designed based on its perspective.

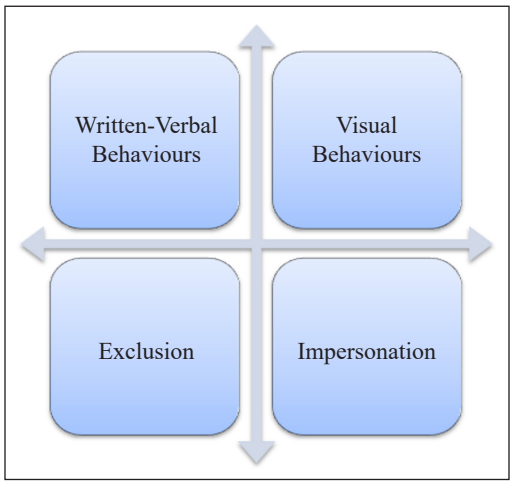


Figure 1. Cyber Aggression Typology Model (CATM) adopted from Nocentini et al. (2010)

MATERIAL AND METHODS

Participants

The participants were 378 primary and secondary school pupils aged between 9 and 16 years selected using a stratified random sampling technique. The sample of the participants was drawn from a population of 6,671 pupils selected from four primary and four secondary schools in the Malaysian state of Selangor. Only pupils who experienced cyberbullying in the previous 12 months were selected. Paired, coded survey forms were administered to the young participants to avoid non-response bias (see Singer, 2006). The respondents were divided into two age groups for data analysis convenience: the children group, consisting of 155 pupils aged 9 to 11 years and the teenage group, consisting of 232 respondents aged 13 to 16 years. However, 15-year-old pupils were exempted from the survey because they were sitting an examination at the time of data collection.

The respondents were collected into small groups during class hours and were administered the questionnaire, which they

completed under the supervision of their teachers. Trained enumerators guide the younger respondents aged 9 to 11 years with their questionnaire completion during class hour, before questionnaire completion time. Although the average time to complete the questionnaire was about 15 minutes, it took the younger respondents about 30 minutes or more to complete. All 400 questionnaires were retrieved: 110 (61 from the pupils and 49 from their parents) were retrieved on the same day they were administered while the remaining 290 were retrieved in later days. The average age of the children was 16.7 (SD = 0.42). However, nearly half of the schoolchildren were aged 13 to 14 years (46.1%), with more than half of them girls (64.8%).

Measures, Data Analysis and Instrument Validity and Reliability

This study focuses on types of cyberbullying commonly experienced among schoolchildren. The Cyberbullying-Victimization scale developed by Álvarez-García et al. (2016) was employed with a few modifications. The modifications were deemed necessary to ensure the validity of the scale for adoption in a Malaysian context. As part of the modifications, based on recommendations by the Malaysian Ministry of Education some words/phrases in the original scale that sound vulgar in Malaysian society were altered. For example, 'having sex' in the original scale was replaced with 'obscene acts' in the modified scale while the phrase 'pictures of naked persons' was replaced with 'inappropriate material'. The original scale consists of 19 items on risks and harm toward children's safety on the internet involving bullying, pornography, sexting and meeting strange people while online. Four more items from impersonation and online exclusion dimensions were added, thus, making the scale have 23 items.

After exploratory factor analysis, only 16 items loaded strongly, with scores above the recommended ≥ 0.50 (see Hair et al., 2006). Of the 400 questionnaires, only 375 cases were analyzed after data cleansing. The inventory of 16 items was measured with a five-point Likert type scale: (1) I experienced it rarely, (2) I experienced it seldom, (3) I'm not sure if I ever experienced it, (4) I experienced it sometimes and (5) I experienced it very often. We adopted a five-point Likert scale because it is one of the most commonly used in studies like this one (see Balakrishnan, 2015, 2017; Che Noh & Ibrahim, 2014; Hinduja & Patchin, 2010). Given that the Malay language is the primary national language with English as the second national language, the questionnaire was designed in English and translated into Malay by a professional translator. The Malay version was used in the survey while the English version was used for reference purposes.

Construct reliability test was then run. The Cronbach alpha coefficient value (α) for the construct for pre-test was $\alpha = .92$ ($n = 63$)while for actual data collection was $\alpha = .88$ ($n = 375$). This shows very

high alpha values for both, indicating that the scale was very reliable (see Salkind, 2008). Furthermore, a committee of experts reviewed the cyberbullying items and validated it. Approvals from the Malaysian ministry of education and the Selangor State department of education were also obtained. Similarly, consent was obtained from authors whose works were adopted in this study.

RESULTS

The demographic information of the participants shows female children outnumbered their male counterparts twice as many (64.8%, n = 243). Generally, the participants were aged between 9 and 16 years (M=12.51), with a little over two-thirds of them (60.1%) aged 13 to 14 years. Their average age was 12.51 (+/– 0.46), which indicates that their average age was between 12.97 (approximately 13 years) and 12.05 (approximately 12 years), showing that most of them were young children with over one-third of them (37.6%) adolescents aged 14 to 16 years. Well over half of the children (57.6%) lived and attended school in urban areas (see Table 1).

Table 1
The demographic data of the pupils (n=375)

Variables	*F*	%
Gender		
Male	132	35.2
Female	243	64.8
Age		
9	48	12.8
10	49	13.1
11	54	14.4
13	83	22.1
14	90	24.0
16	51	13.6
Living area		
Urban	216	57.6
Rural	159	42.4

The Level of Cyberbullying Incidence in Malaysia

With a mean value that is only 1.05 lower than 5.00 (M = 3.05, SD = 0.35), the audio construct recorded the highest mean value in the scale, indicating that the items had the greatest impact on most of the children's cyberbullying behaviours. Two items had the highest mean values in the construct namely, "I received insults via voice message (SMS) or instant messaging apps (e.g., WhatsApp, Messenger, WeChat)" and "False rumours about me were shared on a social network site". This shows that most of the children had been involved in cyberbullying incidents relating to insults and false rumours whether as victims or bullies. Coincidentally, the (audio) construct's alpha value (α = .92) is the highest in the entire scale, which suggests a very high internal consistency and reliability score (see Table 2).

The construct with the second highest mean value is video (M = 2.84, SD = 0.48). Cyberbullying behaviours involving video content follows in the importance of cyberbullying behaviours relating to video content. Like in the audio construct, two items had the highest mean values in this

construct as well: "Fake video of me (made up) was posted online to hurt me or laugh at me" and "I was forced to perform acts I didn't want to do (regardless of whether I finally agreed to do or not) because I was threatened with the viral sharing of conversations or intimate images of me". Both items addressed issues surrounding online humiliation and coercion, which have been identified as some of the common forms of cyberbullying behaviours among peers. With an alpha value α = .89, the video construct recorded the third highest reliability index in the scale (see Table 2).

The impersonation construct had the third highest mean value (M = 2.65, SD = 0.64) in the entire scale. A couple of items with highest mean values include: "I was impersonated online, and comments posted in my name as if coming from me" and "Someone intruded my social network accounts intending to embarrass me in front of my friends". Account/profile intrusion (especially hacking, or secretly getting access to the victim's password and invading their profile) and the act of committing bad behaviour while posing as someone (impostor) is also serious cyberbullying behaviour. This construct had the second highest Cronbach alpha value (α = .90) (see Table 2).

The fourth, as well as the last construct, is online exclusion. As its name suggests, this construct contains items that address issues surrounding deliberate snubbing, ignoring or expulsion of an individual peer from a group online to hurt their feelings. A couple of items with the most prominent mean values are: "A group of peers agreed to ignore me on social media" and "I was excluded from or not accepted in the contact list of a chat room, social network site or instant messaging app (e.g., WhatsApp, Messenger) without having done anything wrong, just because it was me". Coincidentally, the construct had the lowest alpha in the scale (α = .81). All the alpha values in the scale are within the very high range thus, yielding an overall alpha value α = .88, which is very high as well. This confirms all the items in the scale measured exactly what they were meant to (Hair et al., 2006) (see Table 2).

As the primary objective of this article, determining the level (mean percentage) of cyberbullying incidence among Malaysian schoolchildren is obtained as follows:

$$\frac{osm}{M}(100)$$

$$\frac{2.78}{5} \times 100 = 55.6\ (+/-10.6)$$

(+/–10.6)

Where:

osm = overall scale's mean value (see Table 2)

M = the highest mean value that can be scored based on the five-point Likert scale used

The +/–10.6 value is the scale's overall standard deviation (0.53) expressed in percentage using the above formula. Therefore, the level (incidence) of cyberbullying among Malaysian schoolchildren was 55.6% (+/–10.6).

Table 2
The mean values and Cronbach alpha of the various constructs in the measurement scale (n=375)

Construct Item	Mean	SD	Cronbach Alpha
1. Video			***.89***
a) Genuine but compromised images or videos (of sexually-explicit or implicit) of me were shared online or via mobile phone without my permission.	1.89	0.64	
b) Fake photos of me (photoshopped) were posted online to hurt me or laugh at me.	3.33	0.40	
c) I was forced to perform a humiliating act, and this was recorded and shared online to make fun of me.	3.00	0.50	
d) I was forced to perform acts I didn't want to do (regardless of whether I finally agreed to do or not) because I was threatened with the viral sharing of conversations or intimate images of me.	3.13	0.38	
Overall construct's mean	*2.84*	*0.48*	
2. Audio			***.92***
a) I received calls insulting or mocking me.	3.01	0.34	
b) I received insults via text message (SMS) or instant messaging apps (e.g., WhatsApp, Messenger, WeChat)	3.53	0.54	
c) I received anonymous threatening or intimidating calls.	2.45	0.31	
d) Audios of false rumours about me were shared on a social network site.	3.20	0.22	
Overall construct's mean	*3.05*	*0.35*	
3. Impersonation			***.90***
a) I was impersonated online and comments posted in my name as if coming from me.	3.02	0.42	
b) Someone intruded my social network accounts with the intention to embarrass me in front of my friends.	3.00	0.60	
c) I was impersonated on social media and a false user (photo, personal data, etc.) created through which I was insulted or ridiculed.	1.58	0.89	
d) Someone close to me used my social media accounts without my knowledge with the intention to ridicule me.	2.99	0.65	
Overall construct's mean	*2.65*	*0.64*	
4. Online Exclusion			***.81***
a) I was excluded from or not accepted in the contact list of a chat room, social network site or instant messaging app (e.g., WhatsApp, Messenger) without having done anything wrong, just because it was me.	2.79	0.56	
b) A group of peers agreed to ignore me on social media.	2.99	0.77	
c) False complaints were made about me in forums, social network sites or online games, which had me expelled from the group.	1.76	0.55	
d) I was excluded and belittled often by a group of peers on social network sites.	2.78	0.67	
Overall construct's mean	*2.58*	*0.64*	
Overall scale's mean	*2.78*	*0.53*	
Overall cronbach alpha of the scale			***.88***

Note: M: mean, S.D: standard deviation

DISCUSSION

A study was conducted to determine the level of cyberbullying incidence among Malaysian schoolchildren. The results show that most of the children were female, aged between 12 and 13 years and hailed and studied in urban areas. With female respondents having a higher percentage in the sample, chances are that a great deal of the cyberbullying incidents reported in this article involved many of them. This is if we go by the literature which claims that girls are susceptible to involve in danger and risks regardless of the medium (both online and in real life) (Alim, 2016). Typically, boys are more aggressive and have a better capability of confronting bullies and/or bullying others. Boys tend to exhibit overt, overpowering behaviours whereas girls tend to back down often. In effect, keyboard warriors are more likely to be girls and probably shy boys.

With the rapidly evolving innovations in technologies, a phenomenon that 'abruptly' and 'instinctively' empowers more and more children and youth to access and use the internet and its related technologies such as social networking sites and internet gaming for various purposes such as learning, socialization, entertainment, interactions, shopping and even reading news, many innocent and vulnerable children are increasingly getting exposed to cyber victimization and other online risks (Balakrishnan, 2017; Ghazali et al., 2017). For example, recently (in July 2018), a 12-year-old Saudi Arabian boy was reported to have committed suicide over an online game 'Blue Whale'. This is a big tragedy since young children who may be not old enough to own a mobile phone are clandestinely accessing the net through other means unknown to parents and exposing themselves to great dangers that could even lead to their death. It may not be surprising that most cyberbullying incidents occur among urban children and youth (Baldry et al., 2018). This suggests that the environment (geographical location) could be a correlate of cyberbullying. Because the present research did not focus on this issue and because the data that are available in the present research on this issue are not sufficient to warrant determining the correlation between environmental or geographical factors and cyberbullying, the researchers decided to leave this problem for future research to investigate.

To determine the most common forms of cyberbullying behaviours among the children and determine their impacts in the likelihood of them getting involved in cyberbullying is the secondary objective of this article. Four key typologies of cyberbullying have been identified, namely written/verbal behaviours, visual behaviours, impersonation and online exclusion as enshrined in CATM. Under each typology, several types of cyberbullying behaviours were examined as items in the various dimensions (constructs).

Firstly, in the visual (video) context, sharing online of fake pictorial content without owners' consent, coercion of someone to perform shameful acts, recorded and shared viral online as well as sharing

online of pictorial/video content of someone nude or their private parts are some of the most common types of online risks involving young schoolchildren. This mean and hurtful behaviour could impact negatively on not only the pupils' well-being, safety and academic performance (learning) but also on their parents' well-being (Hinduja & Patchin, 2014). Healthy, safe and well-behaved children signify a society's prosperous future (Balakrishnan, 2015, 2017; Ghazali et al., 2017; Hinduja & Patchin, 2014). Parents, authorities and teachers should collaboratively canvass for the inclusion of children's concerns in the core of technology designing and manufacturing.

Secondly, most of the common forms of cyberbullying behaviours involving most children concerning written/typed/audio category include insults through phone calls, insults via voice message, via mobile phone or instant messaging apps (e.g., WhatsApp, Messenger, WeChat), anonymous threatening or intimidating phone calls, hidden-contact phone calls and sharing online audio clips of false information about others. Most of these mean behaviours create profound discomfort in the victims and ultimately tell on their psychosocial well-being. Parents and educators should ensure they monitor children's technology access and user behaviour every so often. Technology developers should integrate parental control and child safety features on virtually all types of technologies that can be accessed and used by children and other young persons. This will ensure adherence to the United Nations principles of the Convention on the Rights of Children, which is one of the best global advocacies for child protection, well-being and safety (Hinduja & Patchin, 2014).

Thirdly, another key cyberbullying category that has been identified in this article is impersonation. As the name suggests, this online risky behaviour involves deliberately assuming appearances like those of the real owners of an online profile or page and using the same to post content in the name of the real owners capable of tarnishing their image and embarrassing them. Some of the typical types of cyberbullying behaviour involving this context include 'cross-appearing' as someone online and posting comments as if they were the ones doing it, intrusion/ invasion of others' social networking sites' accounts to embarrass them among peers and friends, using false user (video, personal data, etc.) created and shared online to insult or ridicule others and the used of someone's social network accounts without their knowledge or permission to ridicule them.

The encryption characteristic of the internet offers individual users a great deal of control over their privacy and personalization facilitated by features such as walls and encryption may have been developed with good intentions, yet same technology features provide malicious cyber citizens like online predators, smartphone wrestlers, keyboard warriors and internet gladiators with a great deal of 'underpinning' to hide their identity and perpetrate whatever online risky behaviour they may wish without being detected. Much as privacy

and personalization are some of the most unique and appealing features of the cyber world, user safety and well-being, especially children should be prioritized (Ghazali et al., 2017; Soni & Singh, 2018). Thanks to Facebook and Twitter for empowering users to be able to control a great deal of their content and privacy. However, more need to be done and authorities should make the activation of such features mandatory in systems installed in premises frequented by children and youth.

Fourthly and finally, online exclusion is the fourth as well as the last context. As the name suggests, this online risky behaviour involves deliberate expulsion or shutting out of a member of a peer group online from the group to embarrass and humiliate them. Overpowering cyberbullies may attempt to exert undue influence in a certain online 'territory', or group by embracing their loyalists and shutting out, expelling or shunning others who may be competing with them (rivals) to control the group, or their foes or antagonists (Alim, 2016; Baldry et al., 2018; Hinduja & Patchin, 2014).

As to bully is childish, early adolescence comes with a lot of physical and psychological changes in the human body. Among such changes is consciousness for self-realization and self-identification. These affect children's behaviour tremendously, e.g., the urge to bully others, the hunger for power, where, when, how and on whom to expend the power. The 'why' to expend the power on a particular subject (child, e.g.) does not much count because, typically, children lack the concept of right and wrong reasoning to a great degree (Baldry et al., 2018; Hinduja & Patchin, 2014). Hence, a bully-hungry or power-monger child may exhibit some aggressive behaviour on others simply to be praised and/or feared by peers.

In some circumstances, a powerful and bully-hungry child may mobilize peers against a particular friend who may be their rival or foe to be shunned, ignored or expelled from an online group or chatroom (Hango, 2016), for example. In addition to always appealing to parents, teachers, law enforcement and technology developers to extend a 'kid's glove-covered' helping hand toward ensuring children's cyber safety, alternatively parents and teachers should be admonished to adopt 'carrot and stick' approach when necessary and punish erring children responsibly as a deterrent. Unless erring kids are punished accordingly, bullies and cyberbullies may assume what they do as normal rather than a sanctionable act (Hango, 2016; Hinduja & Patchin, 2014). Future research should focus on exploring problems associated with child digital literacy.

CONCLUSION

Indicating an overall scale mean value of 2.78 (SD = 0.53) as shown in Table 2, this study found that the average of the level of cyberbullying incidence among Malaysian children is moderate (55.6%). This implies that the incidence of cyberbullying among schoolchildren in Malaysia is neither high nor low; is in the middle. Given that a five-point Likert scale was used to gauge the respondents' responses, a mean

score of 3 would have been the absolute moderate (with mean scores of 1 and 2 as well as 4 and 5 at the top and bottom extremes). Therefore, since the overall mean value of the scale was 2.78 (plus or minus 0.53), if this figure is rounded to the first decimal place, 2.78 = 2.8; if 0.53 points are added to 2.8 it is approximately 2.9, which would be nearly 3.0 mean score (absolute moderate). But if 0.53 is subtracted from 2.8 it is approximately 2.7, which would still be nearly 3.0 mean score (moderate). However, given that it is approaching a 60%, the incidence level is pointing to a higher level; if the problem is left to prevail uncontained, probably under the pretext that the actual level could be lower because some past studies suggested so, it might reach an alarming level. For example, a few earlier studies suggested that cyberbullying incidence in Malaysia was low (e.g., Yusuf et al., 2018a); was moderate (e.g., Yusuf et al., 2018b); its prevalence was more prominently among young children rather than youth (Balakrishnan, 2015); and cyberbullying is not a novel phenomenon in Malaysia (Ghazali et al., 2017). Despite the conclusions of these studies, this article confirms that cyberbullying incidence in the country is beyond low or ordinary moderate; it is rising towards a 'high' rate. Only future research can establish how faster it is approaching the high rate.

Furthermore, statistics provided by in a past survey carried out by Cyber Security of Malaysia (2011) reported that no fewer than 354 cases of cyber risks were reported, 30% of girls were involved in cyberbullying and that one in every three Malaysian children was involved in a cyberbullying incident. A year later, a Digi Cyber Safe survey found that 80% of schoolchildren aged 9 to 17 in the country were involved in cyber risky behaviours.

All these statistics and findings demonstrate that child online risky behaviours are alarmingly occurring among children and youth in the country, unequivocally suggesting a high incidence level that supports this article's finding. The most common forms of cyber risks prevalent in the Malaysian cyberspace posing threats to children are mainly gossips, exclusion, impersonation, posting inappropriate content, insults, intimidating voice messages, nasty calls and keyboard intimidation. Sex-related cyberbullying is low. Therefore, this article concludes that many children have been involved in cyberbullying incidents whether as bullies, victims or both and that most of the perpetrators and victims were aware of what cyberbullying is. However, digital literacy courses should be designed and incorporated into school curriculums.

The intimidations and dangers of the cyber world as discussed earlier emphasize that the roles and responsibilities of parents and other adults in educating their teenage children while online is enormously vital. With a suitable approach, internet risks among teenage children such as cyberbullying can be decreased. Without control and supervision from their parents and concerned adults in the society teenage children may confront and mismanage the

bullying experience, and it is feared that that may cause other undesirable consequences including engaging in sexuality and porn behaviour. Apart from parents, important others that play a crucial role in the safety of children are teachers and schools. To curb the menace of cyberbullying and related children's online risks, safety awareness, especially children's cyber risks literacy should be incorporated into Malaysian schools' curricula.

Limitations and Future Research Directions

This study is only limited to a descriptive analysis of a quantitative approach. Although both schoolboys and girls have been surveyed, this study did not focus on determining the differences between the genders in cyberbullying/cybervictimisation incidence. This article, therefore, recommends that future research should focus on determining the factors influencing the involvement of the schoolchildren in cyberbullying behaviours. Thus, future research should find out the difference in the degree of the influence of cyberbullying behaviours between the schoolboys and girls. Also, there is a need to examine what factors can predict cyberbullying among the kids, e.g., is it parenting style, is it peer influence, is it obsession/addiction with the internet, and so on. This can help toward offering clues capable of mitigating the incidence of the risky internet-child behaviour.

Given that the present study provided only descriptive information about the participants' demographics, future research should explore the relationships between demographic characteristics (e.g., gender and age, and even parental attachments) and cyberbullying. Furthermore, for a more comprehensive understanding of cyberbullying phenomenon, future research should investigate the effect of cyberbullying on other parties involved in the behaviour namely, the bully, the bully-victim and the bystander (audience) as suggested by Hinduja and Patchin (2014).

ACKNOWLEDGEMENT

Authors of this article would like to extend their utmost appreciation to the Research Management Center of UPM for funding the research project that has led to the production of this article. The authors are grateful of the anonymous reviewers and editors for their guiding comments.

REFERENCES

Alias, A. (2018, June 19). Malaysia's Internet penetration is now 85.7 percent. *New Strait Times.* Retrieved on March 7, 2019, from https://www.nst.com.my/business/2018/03/346978/malaysias-internet-penetration-now-857-cent

Alim, S. (2016). Cyberbullying in the world of teenagers and social media: A literature review. *International Journal of Cyber Behavior, Psychology and Learning, 6*(2), 68-95. https://doi.org/10.4018/IJCBPL.2016040105

Álvarez-García, D., Barreiro, A., Núñez, J. C., & Dobarro, A. (2016). Validity and reliability of the cyber-aggression questionnaire for adolescents (CYBA). *The European Journal of Psychology Applied to Legal Context, 8*(2), 69-77. doi: 10.1016/j.ejpal.2016.02.003

Ang, R. (2015). Adolescent cyberbullying: A review of characteristics, prevention and intervention strategies. *Aggression and Violent Behavior, 25*(A), 35-42.

Balakrishnan, V. (2015). Cyberbullying among young adults in Malaysia: The roles of gender, age and internet frequency. *Computers in Human Behavior, 46,* 149-157.

Balakrishnan, V. (2017). Unravelling the underlying factors sculpting cyberbullying behaviours among Malaysian young adults. *Computers in Human Behavior*, *75*, 194-205.

Baldry, A. C., Farrington, D. P., Sorrentino, A., & Blaya, C. (2018). Cyberbullying and cybervictimization. In A. C. Baldry, C. Blaya & D. P. Farrington (Eds.), *International Perspectives on Cyberbullying: Prevalence, risk factors and interventions* (pp. 323). New York, USA: Palgrave Macmillan, Cham.

Bauman, S., & Baldasare, A. (2015). Cyber aggression among college students: Demographic differences, predictors of distress and the role of the university. *Journal of College Student Development*, *56*, 317-330. doi: 10.1353/csd.2015.0039

Bonanno, R. A., & Hymel, S. (2013). Cyberbullying and internalizing difficulties: Above and beyond the impact of traditional forms of bullying. *Journal of Youth and Adolescence*, *42*, 685-697. doi: 10.1007/s10964-013-9937-1

Campbell, M., & Bauman, S. (2018). *Cyberbullying: Definition, consequences, prevalence*. Brisbane, Australia: Academic Press.

Cassidy, W., Jackson, M., & Brown, K. N. (2009). Sticks and stones can break my bones, but how can pixels hurt me? Students' experiences with cyber-bullying. *School Psychology International*, *30*(4), 383-402. https://doi.org/10.1177/0143034309106948

Che Noh, C. H., & Ibrahim, M. Y. (2014). Research on cyberbullying among UMT students. *Procedia - Social and Behavioral Sciences*, *134*, 323-329.

Croll, J. (2016). *Let's play it safe: Children and youths in the digital world*. Retrieved July 11, 2018, from https://www.ictcoalition.eu/medias/uploads/source/available%20here.pdf

Cyber Security of Malaysia. (2011). Children and teenagers exposed to negative cyber culture. *Bernama News.* Retrieved January 28, 2014, from http://www.cybersecurity.my/en/knowledge_bank/news/2011/main/detail/2087/index.html

Cyber Security of Malaysia (2013). *A national survey report 2013: Safety net: Growing awareness among Malaysian school children on staying safe online*. Cyber Security of Malaysia. Retrieved December 4, 2014, from https://digi.cybersafe.my/files/article/DiGi_Survey_Booklet _COMPLETE.pdf

Department of Statistics Malaysia. (2019). *Current Population Estimates, Malaysia, 2018-2019.* Retrieved July 5, 2019, from https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=155&bul_id=aWJZRkJ4UEdKcUZpT2tVT090Snpydz09&menu_id=L0pheU43NWJwRWVSZklWdzQ4TlhUUT09

Eek, T. S. (2009). *A big sister helps students cope with bullying*. UNICEF Malaysia. Retrieved October 4, 2009, from https://www.unicef.org/protection/malaysia_51549.html

Festl, R., Vogelgesang, J., Scharkow, M., & Quandt, T. (2017). Longitudinal patterns of involvement in cyberbullying: Results from a latent transition analysis. *Computers in Human Behaviour, 66*, 7-15. https://doi.org/10.1016/j.chb.2016.09.027

Ghazali, A. H. A., Abdullah, H., Omar, S. Z., Ahmad, A., Abu Samah, A., Ramli, S. A., & Shaffril, H. A. M. (2017). Malaysian youth perception on

cyberbullying: The qualitative perspective. *International Journal of Academic Research in Business and Social Sciences*, *7*(4), 87-98. doi: 10.6007/IJARBSS/v7-i4/2782

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. Upper Saddle River, USA: Pearson Prentice Hall.

Hango, D. (2016). *Cyberbullying and cyberstalking among internet users aged 15 to 29 in Canada*. Ottawa, Canada: Statistics Canada.

Hase, C. N., Goldberg, S. B., Smith, D., Stuck, A., & Campain, J. (2015). Impacts of traditional bullying and cyberbullying on the mental health of middle school and high school students. *Psychology in the Schools*, *52*, 607-617. https://doi.org/10.1002/pits.21841

Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying and suicide. *Archives of Suicide Research*, *14*(3), 206-221.

Hinduja, S., & Patchin, J. W. (2014). *Cyberbullying: Identification, prevention and response*. USA: Cyberbullying Research Center. Retrieved July 10, 2015, from https://cyberbullying.org/Cyberbullying-Identification-Prevention-Response.pdf

Kim, S., Boyle, M. H., & Georgiades, K. (2017). Cyberbullying victimization and its association with health across the life course: A Canadian population study. *Canadian Journal of Public Health*, *108*(5-6), e468-e474. https://doi.org/10.17269/CJPH.108.6175

Kim, S., Colewell, S. R., Kata, A., Boyle, M. H., & Georgiades, K. (2018). Cyberbullying victimization and adolescent mental health: Evidence of differential effects by sex and mental health problem type. *Journal of Youth Adolescence*, *47*(3), 661-672. https://doi.org/10.1007/s10964-017-0678-4

Malaysian Communications and Multimedia Commission (2017). *Internet users survey 2017: Statistical brief number twenty-one*. Selangor, Malaysia: Author. Retrieved July 7, 2018, from https://www.mcmc.gov.my/mcmc-internet-users-survey.2017.pdf

Nocentini, A., Calmaestra, J., Schultze-Krumbholz, A., Scheihauer, H., Ortega, R., & Menesini, E. (2010). Cyberbullying: Labels, behaviours and definition in three European countries. *Australian Journal of Guidance and Counselling*, *20*(2), 129-142.

Predators in cyberspace. (2016, July 24). *New Strait Times (NST)*. Retrieved January 4, 2018, from https://www.nst.com.my/news/2016/07/160330/predators-cyberspace

Rodelli, M., De Bourdeaudhuij, I., Dumon, E., Portzky, G., & DeSmet, A. (2018). Which healthy lifestyle factors are associated with a lower risk of suicidal ideation among adolescents faced with cyberbullying? *Preventive Medicine*, *113*, 32-40. https://doi.org/10.1016/j.ypmed.2018.05.002

Salkind, N. J. (2008). *Statistics for people who (think they) hate statistics*. Los Angeles, USA: Sage.

Schultze-Krumbholz, A., & Scheithauer, H. (2009). Social-behavioral correlates of cyberbullying in a German student sample. *Journal of Psychology*, *217*(4), 224-226. https://doi.org/10.1027/0044-3409.217.4.224

Simon, S. (2017). Cyber victimization: School experience of Malaysian cyberbullied teenagers. *International Journal of Humanities and Social Sciences*, *11*(3), 713-720.

Singer, E. (2006). Introduction: Nonresponse bias in household surveys. *The Public Opinion Quarterly, 70*(5), 637-645. Retrieved February 14, 2020, from www.jstor.org/stable/4124219

Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., & Russell, S. (2008). Cyberbullying: Its nature and impact in secondary school students. *Journal of Child Psychology and Psychiatry*, *49*, 376-385.

Soni, D., & Singh, V. (2018). See no evil, hear no evil: Audio-visual-textual cyberbullying detection. *Proceedings of the ACM on Human-Computer Interaction, 2*(CSCW), 26. https://doi.org/10.1145/3274433

Spears, B., Slee, P., Owens, L., & Johnson, B. (2009). Behind the scenes and screens: Insights into the human dimension of covert and cyberbullying. *ZeitschriftfürPsychologie/ Journal of Psychology*, *217*(4), 189-196. https://doi.org/10.1027/0044-3409.217.4.189

Statista. (2019). *Number of internet users in selected countries in the Asia-Pacific region as of January 2019, by country.* Retrieved January 3, 2019, from https://www.statista.com/statistics/265153/number-of-internet-users-in-the-asia-pacific-region/

Thomas, H. J., Chan, G., Scott, J., Connor, J., Kelly, A., & Williams, J. (2016). Association of different forms of bullying victimization with adolescents' psychological distress and reduced emotional wellbeing. *Australian and New Zealand Journal of Psychiatry*, *50*(4), 371-379. https://doi.org/10.1177/0004867415600076

United Nations Development Program. (2016). *Human development report 2016: Human development for everyone*. New York, USA: UNDP. Available from http://hdr.undp.org/en/content/human-development-report-2016

United Nations Educational, Scientific and Cultural Organization. (2016). *A policy review: Building digital citizenship in Asia-Pacific through safe, effective and responsible use of ICT*. Bangkok, Thailand: UNESCO Bangkok.

Willard, N. (2007). *Cyberbullying and cyberthreats. Responding to the challenge of online social aggression, threats, and distress*. Illinois, USA: Research Press.

Wright, M. (2018). Cyberbullying victimization through social networking sites and adjustment difficulties: The role of parental mediation. *Journal of Association for Information Systems*, *19*(2), 113-123. https://doi.org/10.17705/1jais.00486

Yusuf, S., Hassan, M. S., Abu Samah, B., Ibrahim, M. S., Ramli, N. S., Rahman, N. A. A., & Osman, M. N. (2018a). Parental attachment and cyberbullying experiences among Malaysian children. *Pertanika Journal of Scholarly Research Reviews*, *4*(1), 67-80.

Yusuf, S., Hassan, M. S. H., & Ibrahim, A. M. (2018b). Cyberbullying among Malaysian children based on research evidence. In M. Khosrow-Pour (Ed.), *Encyclopedia of information science and technology* (4th ed.) (pp. 1704-1722). Hershey, USA: IGI Global.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1311 - 1334 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Framing Analyses of Malaysia's Media Outlets and Editorial Decisions Concerning Frame Preferences after the 2008 General Election

Muhammad Izawan Baharin*, Moniza Waheed, Akmar Hayati Ahmad Ghazali, and Abdul Mua'ti @ Zamri Ahmad

Faculty of Modern Languages & Communication, Universiti Putra Malaysia, 43400 Serdang, Malaysia

ABSTRACT

A study was conducted to investigate the journalistic practices in Malaysian news outlets post-2008 general elections through a combination of content analysis and interviews. Through a content analysis of news articles of an UMNO-owned media (*Utusan Malaysia*) as well as an independent news portal (*Malaysiakini*), the study identified five different news frames (conflict, human interest, economic consequences, morality, and responsibility) employed in the news articles. The study established that the previously government-owned media relied heavily on the morality frame, while the responsibility frame was most dominant in independent news portals. The study revealed that the responsibility frame was written in a positive tone while morality and conflict frames were written in negative tones. The study suggests that there were differences and similarities in terms of framing practices employed by the media. It also found that the tonality of the news strengthened the functions of frames. To further understand the relationship between the frames and journalistic practices, semi-structured interviews with editors from both media outlets were conducted. The editors noted that their organizations' agendas functioned as guidelines on how political issues were highlighted. The interviews also revealed that although both news outlets received political instructions, the media still strived to promote fair reporting within their scope and capacity.

Keywords: Framing practices, independent news portals, Malaysia's 12th general election, Malaysian politics, pro-government media

ARTICLE INFO

Article history:
Received: 24 August 2019
Accepted: 20 December 2019
Published: 26 June 2020

E-mail addresses:
izawan@mediaprima.com.my (Muhammad Izawan Baharin)
moniza@upm.edu.my (Moniza Waheed)
akmar@upm.edu.my (Akmar Hayati Ahmad Ghazali)
abmuati@upm.edu.my (Abdul Mua'ti @ Zamri Ahmad)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

The results of Malaysia's 14th general election had proven that its citizens were daring enough to vote for a change after 61 years of being under the same political party, Barisan Nasional (National Front or BN). BN's hegemony collapsed on May 9, 2018, after the historic general election. However, early signs of objection and rejection were detected since Malaysia's 12th general election in 2008. The electoral outcomes had shown that the underdog opposition parties, the Pakatan Rakyat (People's Alliance or PR) were able to threaten BN's position in five states (Mokhtar, 2008).

Since the release of the electoral results in 2008, issues revolving better political governance echoed in the media. The manner in how the media portrayed political issues generally influenced people's thoughts, feelings, and beliefs. This notion had become the center of most research on framing (Neuman et al., 1992; Strömbäck & Nord, 2006). Therefore, the aim of the present study is to investigate the frame preferences of Malaysian news outlets after the 2008 general election. The partisanship in the traditional media towards BN before May 2018 was obvious (Anuar, 2005; Steele, 2009; Tapsell, 2013), but in the context of gaining back voters' trust during the non-election period, the framing strategies had changed in efforts to challenge the independent news portals.

In an attempt to achieve the aim of this study, the presence of generic frames in two different media outlets was conducted to evaluate their ideologies and cultural variations in news stories concerning political manifestos after the 2008 election. In addition, the study conducted interviews with newspaper editors to bridge the theoretical analyses with the reality in media newsrooms. More specifically, the editors interviewed were working in the frontlines during the 2008 general election. Editors' input are known to provide inside information on the policy-making process (Dorussen et al., 2005). By understanding the internal and external factors that play important roles behind the scenes in the frame setting process, this study can enrich the kinds of literature relating to media in Malaysia, which has been largely ignored.

Politics in Malaysia

Malaysia gained independence from the British in 1957 and the movement was attributed to the United Malays National Organization (UMNO), which later managed to form a government with the coalition of 13 political parties (most of which were ethnic-based) under the umbrella name of Barisan Nasional (BN). With the coalition, BN was able to secure two-thirds of parliamentary seats – forming a large majority needed to form a government.

BN's status quo and superiority during elections were said to be associated with electoral, money and media manipulations (Case, 2010; Fee & Appudurai, 2011; Lee, 2007; Moten, 2009). The media became part of BN's machinery and propaganda agent through ownership and legislation. The media systematically projected negativity and hostility towards the opposition to instill

fear among the voters if they support the opposition parties that lack experience in governance (Abbott, 2011; Gomez, 2014b).

Despite the fear tactics employed, BN's dominance began to waiver during the 12th general election in 2008. They lost their two-thirds majority seats in parliament and thus dispelled the notion of the party's invincibility (Mokhtar, 2008). Political observers argued that the loss was attributed to the increasing momentum of the PR coalition consisting of Parti Keadilan Rakyat (People's Justice Party or PKR), Parti Islam SeMalaysia (Malaysian Islamic Party or PAS) and Democratic Action Party (DAP). Other factors that negatively affected BN's support were the economic slowdown, increase in the cost of living and the influence of new media (Baharin et al., 2017; Case, 2010; Moten, 2009). BN suffered even more during the 13th general election in 2013 by losing seven more seats in parliament despite heavy effort used by the government machinery (Azizuddin, 2014).

Due to the dramatic losses, it is important to understand the strategies used by the media to capture public interest during the non-election period. The media needed to use the right frame to tell their stories, not only in creating a link with their audiences but to persuade them in decision-making during elections.

Factors Influencing the News Frames

Editors served as gatekeepers in the news publishing process. They are the decision-makers within news media organizations who select, shape, and present news content is a systematic process (Schwalbe et al., 2015). Therefore, their insights can clarify the frames employed. In this study, frames refer to the process of constructing complex issues into information that can be easily understood by citizens. Frames can potentially influence citizens' opinion, judgment, and considerations (Chong & Druckman, 2007; Scheufele & Tewksbury, 2007). Frames function by creating linkages between media frames (how media translate the meaningless into the noticeable event) with individual frames (how the audiences interpret the event) (Scheufele, 1999).

Choosing the right tone for the frame is equally important. de Vreese and Boomgaarden (2003) argued that the nature of the frames was insufficiently examined if the tone that indicated polarization between the good and bad and implicitly carrying positive or negative element, was ignored. The inherent tonality of the frames potentially affected voters to be more critical or less critical towards political parties and their issues.

In Malaysia, however, political parties are able to influence editors' decisions because the media are controlled through ownerships and legislations such as the Printing Press and Publications Act (PPPA) of 1984, the Sedition Act of 1948 and the Official Secret Act (OSA) (Baharin et al., 2017). Using these laws, the government was able to control the flow of information until the Internet was introduced in the late 1990s. The 90s was when Malaysians saw the emergence of independent news portals.

Research Questions

The study aims to understand and answer the following research questions:

RQ1: To what extent were the five frames presented in both *Utusan Malaysia* and *Malaysiakini*?

RQ2: What are the tones used in the framing of the political news in *Utusan Malaysia*?

RQ3: What are the tones used in the framing of the political news in *Malaysiakini*?

RQ4: What are the perspectives of *Utusan Malaysia* and *Malaysiakini* editors on political news between 2008-2013?

METHODS

To achieve the aim of this study, a mixed-method involving the content analysis and semi-structured interviews were conducted.

Content Analysis

Sample. Two media outlets, *Utusan Malaysia* (representing mainstream government-owned media) and *Malaysiakini* (representing independent news portals) were chosen for content analysis guided by framing theory and the concept of tonality.

The sample was drawn from March 9, 2008, a day after the results of the 12th general election was announced until April 5, 2013. The period was chosen to investigate how media portrayed news related to the progress of the political manifestos after the general election. From a total of 412 news articles collected, 261 (63%) articles were from *Utusan Malaysia* and 151 (37%) were from *Malaysiakini*. The number of articles published according to the year for both news outlets is as shown in Table 1.

Research Instrument. A codebook was developed as a guideline to determine specific information and the presence of the frames' prominence within the news articles. The first part of the codebook described how to extract general information; the name of the media, date of the articles published, the total number of paragraphs in an article and the number of paragraphs that are relevant to the manifestos. The general information was written on a coding sheet.

Operationalization. Only news articles which mentioned manifestos including statements connoting intentions, promises, emphases, policies, pledges or goals to be

Table 1
Frequency (n) of news coverage for each year

Media	Year						Total (*n*)
	2008	2009	2010	2011	2012	2013	
Utusan Malaysia	56 (21.5%)	9 (3.4%)	10 (3.8%)	21 (8%)	59 (22.6%)	106 (40.6%)	261
Malaysiakini	14 (9.3%)	4 (2.6%)	18 (11.9%)	24 (15.9%)	36 (23.8%)	55 (36.4%)	151
Total	70 (16.2%)	13 (3%)	28 (6.5%)	45 (10.4%)	95 (22%)	161 (37.3%)	412

activated if the political party managed to secure power (Bara, 2005), were chosen. Eder et al. (2017) argued that manifestos must have at least three functions – streamline the party's campaign, a campaign tool to directly inform voters and provide a compilation of valid party positions. Due to the vital roles of the manifestos, it was important for the political parties to continuously inform voters of their achievement and development of the promises made.

The unit of analysis used for the present study was by paragraph, (those that mentioned or paraphrased the content of manifestos). Each paragraph within a news article served as the mechanism to measure the occurrence of a particular frame. This was based on the suggestion by Fan (1988) and Roberts (1989) where a paragraph count is a solid procedure that elucidates the presence of frames within media content (as cited in Shah et al., 2002).

The key variables in the coding of paragraph comprised of Semetko and Valkenburg's (2000) five generic frames (conflict, human interest, economic consequences, morality, and responsibility). Conflict frame refers to conflict or disagreement that occurs between individuals, groups or institutions. A conflict frame can impact certain policies negatively or positively by leading citizens to be more informed about the advantages and disadvantages of important political decisions (Bartholomé et al., 2018).

The human-interest frame brings an individual's story to the presentation of an event, issue or problem. It refers to an effort to personalize, dramatize or emotionalize news to capture and retain the audience's interest (Boukes et al., 2015). The economic consequences frame may describe an issue, event or problem affecting individuals, groups, parties, institutions or the country within the scope of economic consequences. The morality frame emphasizes the moral and religious aspects of an issue, event or problem. The responsibility frame is used to portray an issue or problem in a manner that attributes the entity responsible for causing or solving the problem (see Appendix 3 for the excerpt).

Procedure. After filling in the codes regarding general information, the actual article was coded on a number of variables. Each paragraph within the article was separated into individual paragraphs. The relevant paragraphs that mentioned manifestos, whether in the form of direct quotes, paraphrases or the effect of the political pledges, were identified. Each paragraph needs to be read twice by the coder before filling the code sheets.

The coding was based on the individual paragraph. The frequency of frames occurring in the relevant paragraphs was considered as the dominant one. The coder had to decide which of the frame was presented in each paragraph. The coding decision was based on prior knowledge concerning the event or issues discussed in the paragraph. During this process, the coder referred to the definitions of each frame.

The coder then needed to identify the tone of the viewpoints within each paragraph. As suggested by Guenduez et al. (2016), a positive tone reflects gains, successes, hope, and enthusiasm, while negative tonality deals with frustration, anger, disappointment, skepticism, threat and risk, political failure, crisis, and disaster. A news article with a neutral tone occurs when it reflects neither negative nor positive views. The procedure only involved paragraphs that had already been identified as relevant to the study. The most frequent tone that occurred was considered as the dominant tone. The tone of each paragraph in the news article was decided from the predicate and the source's point of view. A predicate refers to a sentence consisting of a subject. A predicate provides information about the subject such as what the subject is doing or what the subject likes. Data regarding the relevant frame were coded individually with 1 representing 'present' or 0 representing 'not present'.

Inter-Coder Reliability. An inter-coder reliability test was conducted between two coders. As suggested by Lombard et al. (2002) at least 10 percent of a sample can be used as a representative from the full sample to be coded to assess reliability. In the present study, Krippendorff's alpha was used because it allows a simultaneous comparison of more than two coders at a time (Lecheler & De Vreese, 2010). A total of 56 articles or 12 percent from overall samples selected randomly were coded by both coders. Inter-coder reliability was conducted on the dominant frames and tones present in the news articles. The present study achieved an overall reasonable inter-coder reliability score as shown in Table 2. The average score for five values of frames was Krippendorf's $\alpha = 0.7$, while the average score for the tonality was Krippendorf's $\alpha = 0.8$.

Table 2
Inter coder reliability for each sample

Items	α
Conflict frame	0.6
Human Interest frame	0.7
Economic consequences frame	0.7
Morality frame	0.74
Responsibility frame	0.72
Positive tone	0.76
Negative tone	0.8
*Neutral Tone	-

Note: The neutral tones were not present in the selected sample

Semi-Structured Interviews with Editors

Sample. Two separate interviews were conducted with *Utusan Malaysia*'s editor and *Malaysiakini*'s editor in *Utusan Malaysia* headquarters in Jalan Chan Sow Lin, Kuala Lumpur and *Malaysiakini* headquarters in Petaling Jaya. Both of the editors were working with the respective media organizations during the 2008 general election. Both editors were senior political reporters that directly involved in the coverage of the general election. *Utusan Malaysia*'s editor had been with the media organization for 19 years and serve as journalist and bureau chief in several

states. *Malaysiakini*'s editor had joined the organization for 11 years and currently, he holds the responsibility as a gatekeeper for Bahasa Malaysia news section including the commentary column.

Interview Protocol. Semi-structured interviews were conducted with the editors due to the flexibility of the procedure and the opportunities for both interviewer and interviewee to discuss the topics in more detail (Jamil & Ahmad, 2015). Only one editor was chosen to represent *Utusan Malaysia* and *Malaysiakini.* Scholars (Adler & Adler, 2012; Becker, 2012; Denzin, 2012; Meuser & Nagel, 2009) had argued that the number of experts in the qualitative survey was less concerning because the goal of the analysis was not to find the empirical generalization. Therefore, even a small number of cases is enough as long as it provides the analysis with the criteria of unique adequacy and allows the presence of participant-observation.

The interview questions were designed with Semetko and Valkenburg (2000)'s generic frames as a guideline. The duration of the interviews was between 20 to 30 minutes. Before the interviews, the editors were informed that the questions are concerning regarding four main areas: their responsibility, the process of news writing and publishing, challenges, and their extent of influence (refer Appendix 1 for interview guide). The questions that reflected their responsibility were phrased as "your specific goal in editing or portraying political news" and "the balance reporting role in news reporting". The formulation of these phrases was adapted from Semetko and Valkenburg (2000) definition of the generic frame. The list of the frames was never mentioned before or during the interview to prevent any priming effect that may influence the interviewees' answers on this topic. Interviews were first recorded, and then fully transcribed.

Data Analysis Procedures. Data collected been analyzed thematically by identifying implicit and explicit ideas within the themes (Jamil & Ahmad, 2015). To represent the themes and linked data for analysis, codes were developed according to the coding agenda suggested by Mayring (2000) (see Appendix 2 for the excerpt). The coding agenda are explicit definitions, examples and coding rules for each deductive category.

Some categories and subcategories were created deductively before commencing an in-depth analysis of the transcripts. For instance, the study assumes that the answer to the process of news writing can be an important theme that would be highly relevant to answering the research question. Thus, the study created a category called "the process of news writing" and followed by relevant subcategories such as "steps of news writing", "internal and external factors" that influence the process. In this study, some categories were also created inductively such as "the formation of news framing" and "the tone in the news" through careful reading and re-reading of the data to identify emerging themes.

RESULTS AND DISCUSSIONS

Content Analysis

Presence of Five Generic Frames. The first research question intended to investigate the presence of the five generic frames in *Utusan Malaysia* and *Malaysiakini*. The level of presence of the five generic frames in both news outlets showed that the responsibility frame was mostly present (*n*=181, 41.9%) while human-interest (*n*=8, 1.9%) was the least present. The morality frame presented 33.6% (*n*=145) from the overall sample, while the conflict frame was 10% (*n*= 43) and economic consequences frame was 8.1% (*n*= 35, 8.1).

Results from an independent sample *t*-test showed that morality frame was significantly more present in *Utusan Malaysia* ($M = 0.47$, $SD = 0.50$) compared to *Malaysiakini* ($M = 0.15$, $SD = 0.36$), $t(390.5) = 7.39$, $p < 0.001$ as shown in Table 3. On the other hand, the independent sample *t*-tests result shows that responsibility frame was significantly higher in *Malaysiakini* (M = 0.64, SD = 0.48) compared to *Utusan Malaysia* (M = 0.32, SD = 0.47); t (410) = -6.63, $p < 0.001$.

Results from an independent sample t-test showed that there were significant differences between *Utusan Malaysia* and *Malaysiakini* for two out of five generic frames, which were morality and responsibility. This is in line with Semetko and Valkenburg's (2000) conceptual distinction between morality and responsibility frames. *Utusan Malaysia* relies heavily on frames that indicate a religious context or moral prescriptions tenets in the political manifestos. Religion, ethnicities and moral issues are sensitive in Malaysia. Interestingly, they were able to capture the interest of the Malays, the ethnic majority in the country (Moten, 2009). By concentrating on issues that are personal to the Malays, UMNO through *Utusan Malaysia* tried to retain the Malays support to the party based on safeguarding the interests of religion, in particular, Islam.

The dominance of the responsibility frame in *Malaysiakini*'s news coverage suggests that news oftentimes describes issues related to the government, group or individual. In this context, the news portal plays their parts as an independent news provider by providing space for any

Table 3
The presence of five generic frames in media

Generic Frame	*Utusan Malaysia*		*Malaysiakini*		
	M	*SD*	*M*	*SD*	*t*
Conflict	0.10	0.30	0.12	0.33	-0.75
Human Interest	0.03	0.16	0.01	0.08	1.7
Economic consequences	0.09	0.28	0.08	0.27	0.30
Morality	0.47	0.50	0.15	0.36	7.39**
Responsibility	0.32	0.47	0.64	0.48	-6.63***

Note: ***p<0.001.

views even against the interest of the ruling party to highlight or to find the solution for a particular problem. The oppositions have also been allowed to criticize or voice out their views on issues involving government policies and actions thus creating an alternative perspective for the citizens (Abbott & Givens, 2015).

***Utusan Malaysia* News Tone.** The second research question enquired about the tone used in the framing of the political manifestos in *Utusan Malaysia*. To answer the research question, Pearson's correlation analysis between frames and tone was conducted. Results revealed significant moderate positive correlation between responsibility frame and positive tone, r = 0.40, $p < 0.001$ (Table 4). There were also weak positive correlation between conflict frame and negative tone, $r = 0.29$, $p < 0.001$ and morality frame with negative tone, r = 0.21, $p < 0.01$.

A regression analysis between frames and tone was conducted. Results from a simple linear regression show a significant relationship between responsibility frame and positive tone (r = 0.40, B = 0.41, SE = 0.46, $(p < 0.001)$, R^2 = 0.15. This means that the model containing only a positive tone can explain 15% of the variation of responsibility frame. On average, for every responsibility frame present, there is a 41% chance that a positive tone will occur. Multiple regressions were carried out to investigate whether the conflict frame and morality frame could significantly predict the negative tone. Results show a significant relationship between conflict frame with negative tone (r = 0.29, B = 0.66, SE = 0.46, $(p < 0.001)$, R^2 = 0.18, and morality frame with negative tone (r = 0.21, B = 0.33, SE = 0.46, $(p < 0.001)$, R^2 = 0.18. Results indicated that the model containing only a negative tone explained 18% of the variation of conflict frame and morality frame. On average, for every conflict frame present, there is a 66% chance that a negative tone will occur. There is a 33% chance that a negative tone will occur for every morality frame that present.

The results are predictable as the traditional media during the BN reign is been directed to create the perception that only the party is capable to ensure the country's future using tone that highlighted

Table 4
The correlation between frames and tone for Utusan Malaysia

Generic Frame	Positive	Negative	Neutral
	r	***r***	***r***
Conflict	-0.28***	0.29***	-0.04
Human Interest	-0.03	0.03	-0.02
Economic consequences	0.01	0.00	-0.03
Morality	-0.19**	0.21**	-0.10
Responsibility	0.40***	-0.41***	0.16*

Note: *p<0.05, **p<0.01, ***p<0.001

gains and successes, hope and enthusiasm (Guenduez et al., 2016). The opposition parties especially the party that control the state legislature have been reflected as politically failed to capture the citizen's interest due to lack of experience in terms of administration.

***Malaysiakini* News Tone.** The third research question enquired about the tone used in the framing of the political manifestos in *Malaysiakini*. Interestingly, the correlation analysis between frames and tone revealed a significant moderate positive correlation between conflict frame and negative tone, $r = 0.50$, $p < 0.001$ (Table 5). Similarly, significant moderate positive correlation exists between morality frame and negative tone, $r = 0.45$, $p < 0.001$. The responsibility frame also showed significant moderate positive correlation with positive tone, $r = 0.61$, $p < 0.001$. The presence of these frames and tone is dependent on one another. This suggests that an increase in these frames subsequently will cause an increase in a particular tone.

Simple linear regression was carried out to investigate the relationship between the responsibility frame and a positive tone. There was a significant strong positive relationship between the two, $r = 0.61$, $B = 0.63$, $SE = 0.40$, $(p < 0.001)$, $R^2 = 0.38$. The model containing only a positive tone can explain 38% of the variation of responsibility frame and on average, for every responsibility frame present, there is a 63% chance that positive tone will occur. Multiple regression was carried out to investigate whether conflict and morality frames could significantly predict the negative tone. The results of the regression analysis between conflict frame and negative tone was $r = 0.50$, $B = 0.86$, $SE = 0.33$, $(p < 0.001)$, $R^2 = 0.53$, while morality frame with negative tone is $r = 0.45$, $B = 0.72$, $SE = 0.33$, $(p < 0.001)$, $R^2 = 0.53$. Results show that a significant strong positive relationship exists between the two generic frames with a negative tone. This means that the model containing only a negative tone could explain 53% of the variation of conflict and morality frames. On average, for every conflict frame present, there is an 86% chance that a negative tone will occur. While there is a 72% chance that a negative tone will occur for every morality frame that present.

Table 5
The correlation between frames and tone for Malaysiakini

Generic Frame	Positive	Negative	Neutral
	r	***r***	***r***
Conflict	-0.44***	0.50***	-0.09
Human Interest	0 .07	-0.06	-0.02
Economic consequences	-0.004	0.04	-0.07
Morality	-0.43***	0.45***	-0.02
Responsibility	0.61***	-0.68***	0.12

Note: *p<0.05, **p<0.01, ***p<0.001

The results showed that although the types of frames used by pro-government newspaper and independent news portal significantly different, the tone used within the frames were similar. The use of the responsibility frame in a positive tone in the *Malaysiakini* can be explained by the space given to the opposition to share their manifesto achievement especially in the states under their administration. The finding is in line with previous works of literature where the online news portal gave voice to the voiceless and views that were against the ruling party's political interests (Azreen & Mazni, 2017; Steele, 2009). The analysis also reveals that conflict and morality exist in the coverage of news by *Malaysiakini*. The conflict frame provides opposing views for both the government and opposition parties and exposes citizens to different views (Bartholomé et al., 2018). The morality frame in *Malaysiakini* reporting can be associated with the comparison made by the political parties to portray which one was better in terms of personal traits, adherence to religion and political struggle.

In conclusion, the dominance of the morality frame with a negative tone in *Utusan Malaysia* political news coverage possibly was due to the direct or indirect control by UMNO. *Malaysiakini* on the other frequently using responsibility frame with a positive tone and the preferences is comprehensible due to the non-partisan practice that provides alternative views (Gomez, 2014a; Rajaratnam, 2009).

Interviews

The editor from *Utusan Malaysia* was label as Editor 1 and editor from *Malaysiakini* labeled as Editor 2.

Factors Influencing the Editorial Operation. The fourth research question in the present study enquired on the perspectives of *Utusan Malaysia* and *Malaysiakini* editors on the political news between 2008-2013. To gain a deeper understanding, the researcher asked a question regarding balance reporting and factors that influenced the editorial operational process. There are similarities for both media outlets especially in terms of producing balanced reporting. Editor 1 admitted that the ethics of balance reporting needed to be applied.

> *"... in reporting, we have been taught about balanced reporting, so if we have a comment from one side, we need to get a comment from the other side but if he refuses to give any comment, we cannot do anything."*

Editor 2 said, balance reporting was their standard operating procedure but they were choosy and did not simply write on any political stories.

> *"The internal SOP is fair reporting, but we also look at the worthiness of the story. If it is time-consuming, nobody wants to read it and costly, we will not proceed. The second consideration is the news is fair*

for both sides and the facts are correct."

However, in explaining the external factors that could control the news writing, both editors provided different justifications. Editor 1 said his organization needed to follow instructions especially from the owner of the company.

"We admit that we need to follow the instructions from the owner of the company. However, in political reporting, the most important thing is, we need to highlight is the words from politicians that can contribute to our stability because we are a multiracial country."

Editor 2 also admitted that his organization received instructions and political requests after the 2008 general election, in particular from the opposition parties that gained momentum from voters during that time. Editor 2 said, "Yes, we receive requests because they thought we are their friend but we just ignore it. For example, a politician asks us to write something good about him, it happens. Attempts to give instructions also happen." Editor 2 stressed that his organization only accepted the request especially to make any correction within the news if the mistakes were proven. Editor 2 explained:

"They claim this story is wrong and ask us to retract it. Normally we ask which part is wrongly reported and we recheck to ensure his claim is true. If we found no mistakes, the context is right; we will not retract the story. If the context is wrongly interpreted, we just correct. We only retract the stories if it is wrong."

From the collective answer by both editors, it can be concluded that generally, there are differences in their operations. *Utusan Malaysia* needed to follow instructions from the owner of the company, while *Malaysiakini* leaned towards the worthiness of the news. Interestingly there is little reason to believe that both media organizations value balance reporting.

Formation of News Frame and Tone. Both editors gave different perspectives on how their news outlets portrayed political news after the 2008 general election. Both editors pointed out that their respective organization's agenda had become the guideline in portraying political news. Editor 1 said, "Every organization has agendas and the same goes for us. In *Utusan*, we do have our own goals that are *Alif, Ba, Ta. Alif* is for Islam*, Ba* is Bangsa (race) *and Ta* for Tanah air (homeland)". *Alif, Ba,* and *Ta* is part of *the Jawi* alphabet, which is an Arabic script for writing Malay. The script contains 36 characters that can be classified into a group form an individual form (Razak et al., 2009). Editor 2, however, believed that helping the public to understand certain issues was important to them. He said, "Yes we have own agenda but it is not a personal agenda. It is not an agenda to create hatred.

We lean more towards understanding and highlighting issues. Issues that involve public interest."

In expressing the tone in their news writing, Editor 1 admitted that due to certain instructions, his newspaper relied on negative tone in portraying news related to the oppositions. He said, "Sometimes we report negatively and sometimes positively. But if there is a ratio, it difficult to say it is a balance. Maybe 60 percent negative and 40 percent positive." For Editor 2, even though the political landscape after the 2008 election showed changes in voters' preferences, he said for his news outlet, they just reported as it was as long as it involved public interest. "We don't specifically report the five states (under PR administration), only the one that has stories. During that time, we don't have many bureaus. We don't have many reporters so we focus on news that is 'sexy'. We rely much on information from the public, from our readings, sources, and politicians."

Based on the responses, it can be concluded that it is business as usual for both news outlets although the political environment in the phase of changing after the 2008 general election. *Utusan Malaysia* news reporting relies on morality frame and negative tone especially when the news associated with the opposition. This argument was justified by Editor 1, "We need to follow the instructions from the owner of the company", wherein this case is UMNO. Editor 1 also clearly said that the negative reports are more compared to positive. On the contrary, based on Editor 2 response, the responsibility frame believed to be more present in *Malaysiakini* reports. The tones present in *Malaysiakini* political news are more positive or neutral. This was supported by Editor 2 argument, "We lean more towards understanding and highlighting issues. Issues that involve public interest."

CONCLUSION

The present study was undertaken to investigate the frame preferences by Malaysia's news outlets after the 2008 general election. In terms of the frames employed, the study discovered that there were differences in the news coverage between *Utusan Malaysia* and *Malaysiakini*.

The study did not support Sevenans and Vliegenthart's (2015) argument that the conflict frame would be dominant in political news coverage, rather, the study shows that *Utusan Malaysia* relied heavily on morality frames. This indicated the issues in the news containing messages related to moral values or religious teachings. Hitlin and Vaisey (2013) defined morality as universal standards of right and wrong linking to concerns about justice, fairness, and harm that differed between persons and social groups. Morality is more important in the Islamic perspective as it involves faith toward God and encompasses both one's duties to God and one's fellow human beings (Halstead, 2007). This also became the goal of *Utusan Malaysia,* which is *Alif, Ba,* and *Ta.*

The morality frame used by *Utusan Malaysia* is associated with negative tonality to describe the oppositions. This rhetorical strategy has been used by BN to create the perception that voting for the opposition will jeopardize the country's future (Pepinsky, 2013). Even the editor admitted that the negative tone was more present in *Utusan Malaysia* because of the 'instruction from the owner of the company'. This strategy associated with UMNO because the party relied heavily on Malays support in rural constituencies (Case, 2010) and morality with negative tone is used to scare the rural Malay voters.

The responsibility frame, on the other hand, dominated news coverage in *Malaysiakini*. The frame present issues in a way that the responsibility for causing and solving problems lies with the government or political party (Yuslinda & Hasmah, 2011). This is in line with *Malaysiakini* editor explanation that stressed their main goal was the public interests and becoming an alternative voice for the public. This is also concurrent with the portal's goal, which is informing citizens on the current affairs and help them hold the government of the day accountable through citizen participation, action and voting decision (Malaysiakini, n.d.). The positive and neutral tone that had been highlighted by the editor also indicated that the opposition politician had been provided with the opportunity to express something good about their party, ideology, and achievements.

The tonality embedded with the frames in *Malaysiakini* was significantly stronger compared to *Utusan Malaysia.* This is an important finding because of the tone able to indicate clear polarization between the good and bad, and implicitly carry positive or negative elements within the nature of frames (de Vreese & Boomgaarden, 2003). One possible reason is the media still plays their roles as usual. The traditional media are used to attack the opposition parties, while the alternative media provides a platform for the opposite views. The realm of political news reporting in Malaysia after the 2008 general election remains unchanged. Both editors have further justified this argument. The editor from *Utusan Malaysia* admitted that while they strived to produce a balanced and fair political reporting, they still abided by following political instruction from the ruling party. Whereas, *Malaysiakini* was only able to focus on the political news that were worthy due to the lack of reporters in many states. This also supports the argument that journalistic routine, culture, organizational pressures and constraints from media's political orientations are the factors that influence the frames used by media (Borah, 2011; Zhang et al., 2015).

The study has contributed to the existing body of knowledge of news framing by combining results from content analysis and interviews. The empirical analysis of both methods enabled a more thorough observation of identifying the type of frames used by media outlets, particularly in the Malaysian context. This enhances the understanding of media organizational agenda, their strength, and their limitation in fulfilling the role in cherishing democracy in Malaysia.

This study has some caveats. First, separating news articles into paragraphs in the coding procedures can lose the context of the sentences. This could not be avoided because it would be too subjective and difficult to define the whole sentences with a single dominant frame and tone. Second, the varied coders' perception is unavoidable due to the subjectivity of the sentences. Third, the interviews allowed the study to qualitatively explore the in-depth perceptions of editors, however, the editors were quite reluctant to give direct answers to some questions. This probably has something to do with their organizations' policies or best interests. Hence, their responses were rather indirect in some instances.

Despite the limitations, this present study found that there were baselines for future research. First, surveys or interviews with readers to understand the effects of public opinion can strengthen the findings in the study. Second, nowadays, the Pakatan Harapan (PH) - a rebranding of PR facing criticism after failing to fulfill their election manifesto after a year of taking over the administration from BN (Anuer, 2018). The government plan to reduce the legal voting age for Malaysians from 21 to 18 in the 15th general election onwards (Manirajan, 2019), provides a new dimension in framing analysis regarding Malaysia political realm. Although there are several weaknesses, the study was able to fulfill its objectives and provide additional information to enhance better political news writing and thus improve the quality of democracy that has begun to show signs of improvement since May 9, 2018.

ACKNOWLEDGEMENT

The authors wish to thank the editor of *Utusan Malaysia* and *Malaysiakini* for their participation in the study. We also acknowledge the help of the staff of both media organizations who support the fieldwork of data collection.

REFERENCES

Abbott, J. P. (2011). Electoral authoritarianism and the print media in Malaysia: Measuring political bias and analyzing its cause. *Asian Affairs: An American Review*, *38*(1), 1-38. doi:10.1080/00927678.2010.520575.

Abbott, J., & Givens, J. W. (2015). Strategic censorship in a hybrid authoritarian regime? Differential bias in Malaysia's online and print media. *Journal of East Asian Studies*, *15*(3), 455-478. doi:10.1017/S1598240800009140.

Adler, P., & Adler, P. (2012). Expert voices. In S. E. Baker & R. Edwards (Eds.), *How many qualitative interviews is enough*. National Centre for Research Methods Review Discussion Paper (pp 8-11). Retrieved March 18, 2019, from http://eprints.ncrm.ac.uk/2273.

Anuar, M., K. (2005). Politics and the media in Malaysia. *Kasarinlan: Philippine Journal of Third World Studies*, *20*(1), 25-47. doi:10.1057/bp.2008.14.

Anuer, A. H. (2018). *PH mesti berani mengaku gagal tunai manifesto* [PH must dare to admit failure of fulfilling the manifesto]. Retrieved May 17, 2019, from http://www.utusan.com.my/berita/politik/ph-mesti-berani-mengaku-gagal-tunai-manifesto-1.711409#ixzz5LbIrE81d

Azizuddin, M. S. M. (2014). Malaysia's 13th general election: Political partisanship in the mainstream print media. *Asia Pacific Media Educator*, *24*(1), 61-75. doi:10.1177/1326365X14539186.

Azreen, A. Z., & Mazni, B. (2017). Content analysis of online news portal: Issues and challenges. *Journal of Social Sciences and Humanities*, *1*(1), 15–25.

Baharin, M. I., Waheed, M., & Hellmueller, L. (2017). The impact of digital media platforms on the ethnic-based political system in Malaysia. *Communication Research Trends*, *36*(3), 4-16.

Bara, J. (2005). A question of trust: Implementing party manifestos. *Parliamentary Affairs*, *58*(3), 585-599. doi:10.1093/pa/gsi053

Bartholomé, G., Lecheler, S., & de Vreese, C. (2018). Towards a typology of conflict frames. *Journalism Studies*, *19*(12), 1689-1711. doi:10.1080/1461670X.2017.1299033

Becker, H. (2012). Expert voices. In S. E. Baker & R. Edwards (Eds.), *How many qualitative interviews is enough*. National Centre for Research Methods Review Discussion Paper. Retrieved March 18, 2019, from http://eprints.ncrm.ac.uk/2273

Boukes, M., Boomgaarden, H. G., Moorman, M., & de Vreese, C. H. (2015). Political news with a personal touch: How human interest framing indirectly affects policy attitudes. *Journalism & Mass Communication Quarterly, 92*(1), 121-141. doi:10.1177/1077699014558554.

Borah, P. (2011). Conceptual issues in framing theory: A systematic examination of a decade's literature. *Journal of Communication*, *61*(2), 246-263. doi:10.1111/j.1460-2466.2011.01539.x.

Case, W. (2010). Malaysia's 2008 general election – Transition from single-party dominance? *Journal of Current Southeast Asian Affairs*, *29*(2), 121-156.

Chong, D., & Druckman, J. N. (2007). Framing theory. *Annual Review of Political Science*, *10*(1), 103-126. doi:10.1146/annurev.polisci.10.072805.103054.

de Vreese, C. H., & Boomgaarden, H. G. (2003). Valenced news frames and public support for the EU. *Communications, 28*(4), 361-381.

Dorussen, H., Lenz, H., & Blavoukos, S. (2005). Assessing the reliability and validity of expert interviews. *European Union Politics*, *6*(3), 315-337. doi:10.1177/1465116505054835.

Denzin, N. (2012). Expert voices. In S. E. Baker & R. Edwards (Eds.), *How many qualitative interviews is enough*. National Centre for Research Methods Review Discussion Paper (pp. 23-24). Retrieved March 18, 2019, from http://eprints.ncrm.ac.uk/2273.

Eder, N., Jenny, M., & Müller, W. C. (2017). Manifesto functions: How party candidates view and use their party's central policy document. *Electoral Studies*, *45*, 75-87. doi:10.1016/j.electstud.2016.11.011.

Fan, D. P. (1988). *Predictions of public opinion from mass media: Computer content analysis and mathematical modeling.* Retrieved March 18, 2019, from https://books.google.com.my.

Fee, L. K., & Appudurai, J. (2011). Race, class and politics in Peninsular Malaysia: The general election of 2008. *Asian Studies Review*, *35*, 63-82. doi:10.1080/10357823.2011.552706.

Gomez, J. (2014a). Malaysia's 13th general election: Social media and its political impact. *Asia Pacific Media Educator*, *24*(1), 95-105. doi:10.1177/1326365X14539213.

Gomez, J. (2014b). Media and elections in Asia: The changing role in coverage and control. *Asia Pacific Media Educator*, *24*(1), 1-5. doi:10.1177/1326365X14540245.

Guenduez, A. A., Schedler, K., & Ciocan, D. (2016). Generic frames and tonality: Mapping a polarizing issue in a multifaceted context. *European Journal of Communication*, *31*(5), 584-599. doi:10.1177/026732311666647

Halstead, J., M. (2007). Islamic values: A distinctive framework for moral education? *Journal of Moral Education*, *36*(3), 283-296. doi:10.1080/03057240701643056

Hitlin, S., & Vaisey, S. (2013). The new sociology of morality. *Annual Review of Sociology*, *39*, 51-68. doi:10.1146/annurev-soc-071312-145628

Jamil, H., & Ahmad, M., Z. (2015). *Qualitative research methodology*. Penang, Malaysia: Institute of Postgraduate Studies Universiti Sains Malaysia.

Lecheler, S., & De Vreese, C. H. (2010). Framing Serbia: The effects of news framing on public support for EU enlargement. *European Political Science Review*, *2*(01), 73-93. doi:10.1017/S1755773909990233

Lee, J. C. H. (2007). Barisan Nasional – Political dominance and the general elections of 2004 in Malaysia. *Journal of Current Southeast Asian Affairs*, *2*, 38-65.

Lombard, M., Snyder-duch, J., & Bracken, C. C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research*, *28*(4), 587-604. doi:10.1111/j.1468-2958.2002.tb00826.x

Malaysiakini. (n.d.). *About Malaysiakini*. Retrieved May 14, 2019, from https://about.malaysiakini.com/.

Manirajan, R. (2019). Youthquake: Cabinet agrees to lower voting age to 18. Retrieved May 14, 2019, from https://www.nst.com.my/news/politics/2019/04/474881/youthquake-cabinet-agrees-lower-voting-age-18

Mayring, P. (2000). Qualitative content analysis. *Forum: Qualitative Social Research Sozialforschung*, *1*(2),1-10. http://dx.doi.org/10.17169/fqs-1.2.1089

Meuser, M., & Nagel, U. (2009). The expert interview and changes in knowledge production. In A. Bogner, B. Littig, & W. Menz (Eds.), *Interviewing Experts* (pp. 17-41). New York, USA: Palgrave Macmillan.

Mokhtar, T. M. (2008). The twelfth general elections in Malaysia. *Intellectual Discourse*, *16*(1), 89-100.

Moten, A. R. (2009). 2004 and 2008 general elections in Malaysia: Towards a multicultural, bi-party political system? *Asian Journal of Political Science*, *17*(2), 173-194. doi:10.1080/02185370903077469.

Neuman, W. R., Just, M. R., & Crigler, A. N. (1992). *Common knowledge: News and the construction of political meaning*. Chicago, USA: The University of Chicago. doi:10.2307/2074663.

Pepinsky, T. B. (2013). The new media and Malaysian politics in historical perspective. *Contemporary Southeast Asia*, *35*(1), 83-103. doi:10.1355/cs35-1d.

Rajaratnam, U. D. (2009). Role of traditional and online media in the 12th general election, Malaysia. *The Journal of the South East Asia Research Centre for Communication and Humanities*, *1*(1), 33-58.

Razak, Z., Ghani, N. A., Tamil, E. M., Idris, M. Y., Noor, N. M., Salleh, R., ... & Yusoff, Z. B. (2009). Off-line *Jawi* handwriting recognition using hamming classification. *Information Technology Journal*, *8*(7), 971-981.

Roberts, C. W. (1989). Other than counting words: A linguistic approach to content analysis. *Social Forces, 68*(1), 147-177. doi: 10.1093/sf/68.1.147

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, *49*(1), 103-122. doi:10.1111/j.1460-2466.1999.tb02784.x

Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of*

Communication, *57*(1), 9-20. doi:10.1111/j.1460-2466.2006.00326.x.

Schwalbe, C. B., Silcock, B. W., & Candello, E. (2015). Gatecheckers at the visual news stream: A new model for classic gatekeeping theory. *Journalism Practice*, *9*(4), 465-483. doi:10.1080/17512786.2015.1030133.

Semetko, H. A., & Valkenburg, P. M. (2000). Framing European politics. A content analysis of press and television news. *Journal of Communication*, *50*(2), 93-109. doi:10.1111/j.1460-2466.2000.tb02843.x

Sevenans, J., & Vliegenthart, R. (2015). Political agenda-setting in Belgium and the Netherlands: The moderating role of conflict framing. *Journalism & Mass Communication Quarterly*, 1-17. doi:10.1177/1077699015607336

Shah, D. V, Watts, M. D., Domke, D., & Fan, D. P. (2002). News framing and cueing of issue regimes: Explaining Clinton's public approval in spite of scandal. *Public Opinion Quarterly*, *66*(3), 339-370. doi:10.1086/341396

Steele, J. (2009). Professionalism online how Malaysiakini challenges authoritarianism. *International Journal of Press/Politics*, *14*(1), 91-111. doi:10.1177/1940161208326927

Strömbäck, J., & Nord, L. W. (2006). Do politicians lead the tango? A study of the relationship between Swedish journalists and their political sources in the context of election campaigns. *European Journal of Communication*, *21*(2), 147-164. doi:10.1177/0267323105064043

Tapsell, R. (2013). Negotiating media 'balance' in Malaysia's 2013 general election. *Journal of Current Southeast Asian Affairs*, *32*(2), 39-60.

Yuslinda, M. Y., & Hasmah, Z. (2011). Visibility of PM Najib's 100 days in office: A framing approach of his political branding identity. *Malaysian Journal of Communication*, *28*(2), 151-172.

Zhang, Y., Jin, Y., & Tang, Y. (2015). Framing depression: Cultural and organizational influences on coverage of a public health threat and attribution of responsibilities in Chinese news media, 2000-2012. *Journalism & Mass Communication Quarterly*, *92*(1), 99-120. doi:10.1177/1077699014558553

APPENDICES

Appendix 1

Interview guide

No.	Theme	Guiding questions
1.0	General questions	
	1.1 Self-related	Can you share your background? (e.g., where are your from, family, education background)
	1.2 Work-related	How long you have been working *with Utusan Malaysia/Malaysiakini*? * What is the nature of your current job? * What are your main responsibilities? * How much control you have in what you do? * Are there any rules you must obey? * What interests you most about *Utusan Malaysia/Malaysiakini*? * What is your position in *Utusan Malaysia/Malaysiakini* in 2008-2013?
	1.3 News framing	* Do you have a specific goal in editing or portraying political news? * What is the most important aspect when writing political news? * Do the balanced reporting in political news play a role in your work? * After the 2008 general election, do the political news writing style change especially involving state government under PR? *Do you been instructed to write something in specific or portraying news toward a ruling party or opposition party? * How the news been portray involving PR that manage to take over state government during 2008-2013?
2.0	People involve in news writing	
	2.1 Process of news writing and publishing	Could you share something about the process of news writing and publishing? * Who gives out the instruction for you to write political news? * Are there changes after the news been read by editors? * Do you agree with the changes? (yes/no… why?)
	2.2 Politician involvement in news writing	* After the 2008 general election, do you get a comment from both BN and PR representatives in your news writing? * Did politicians give feedback to your writing? * Did the politicians ask you to make an amendment of the news if they don't agree with your writing? * If they ask for correction or amendment, do you follow their instructions?

Appendix 2

Excerpt of coding agenda

Categories	Definition	Examples	Coding rules
Background	State of origin, family, education.	'I am from Johol, Negri Sembilan. Married and have three children. I have a degree in Islamic Studies from UKM. I have been working with Utusan Malaysia for 19 years.'	Explicit reference to personal background, experience in media
Process of news writing	The process the reporters go through from writing to publishing the news. From the beginning till the end.	'Reporter normally gets their assignment a day before. But before they get to know their assignment, we have an editorial meeting every evening. The meeting involves editors and reporters.'	Explicit mention of the process. They may not clearly say steps 1, 2 or 3 but in general, a description of how they come to produce news.
Influence of internal factors	Factors, which play a role in news writing. It could be the organization policy, agenda, ethics, target readers, internal instruction, standard operating procedures.	'Internal SOP is fair reporting and whether the story is worth it or not. For instance, investigative reporting needs times, so we look at whether it is worth it or not. Big story or not. If not worth it, time-consuming, nobody wants to read it and involve financial constraint, we will not proceed. This is our first consideration. The second is, fair reporting. If we are fair for both sides and the facts are 'ok', then there will be no problem.'	Explicit references to the internal factors that shape the news
Influence of external factors	Factors, which play a role in news writing. Could be the laws, political instruction or request, political party influence, pressure from a certain group, legal action.	'Yes, we receive request but we just ignore it. For example, a politician asks us to write something good about him, it happens. Attempts to give instructions also happen. They claim this story is wrong and ask us to retract it.'	Explicit references to the external factors that shape the news.
The formation of news framing			
1. Conflict frame	This frame refers to conflict or disagreement between individuals, groups or institutions in order to capture audience interest.	'We do receive warnings and threats when we write something that considers as sensitive to a particular political party. But this is our job to tell what is right and wrong in society.'	Explicit reference to organizational goals, principles, and beliefs. This also includes personal and working principles, loyalty factors in the organization.

Appendix 2 *(continue)*

Categories	Definition	Examples	Coding rules
	Step 1: Locate the response to the question do you guide your reporters on what to ask or write when assign them to cover political news/ Do you have a specific goal in editing or portraying political news/ Do you been instructed to wrote something in specific or portraying news toward a ruling party or opposition party. Step 2: Identify the frames used based on the answer. This frame brings an individual's story to the presentation of an event, issue or problem.		
2. Human interest frame	This frame brings an individual's story to the presentation of an event, issue or problem.	'A big story sometimes comes from an unknown man from the street. News of a struggling nasi lemak seller can be an eye-opener to the society and the first step toward changing in policy or maybe the government.'	Explicit reference to the sources of the news based on organizational goals, principles, and beliefs.
3. Economic consequences frame	Reporting issues in financial or economic consequences manners.	'Political news has a strong connection with the country's economic environment. If we write something that portrays instability in our political environment, this can negatively affect our economy. So we need to be careful.'	Explicit reference to the organizational goals, principles, and beliefs. The focus may involve economic or financial aspects.
4. Morality frame	This frame puts the event, issue or problem in the context of religious tenets or moral prescriptions; emphasizes collaboration and fellowship.	'Every organization has an agenda and the same goes for us. In Utusan, we do have our own goals that are *Alif, Ba, Ta.*'	Explicit reference to the organizational goals, principles, and beliefs. The focus may involve religious tenets or moral prescriptions.
5. Responsibility frame	This frame presents an issue or problem in a manner that attributes the entity responsible for causing or solving a problem.	'We are more towards understanding and highlighting issues. Issues that involve public interest.'	Explicit reference to the organizational goals, principles, and beliefs. The focus may involve highlighting issues and finding a solution.

Appendix 2 *(continue)*

Categories	Definition	Examples	Coding rules
The tone in the news			
1. Positive tone	Positive tone describes positive feelings, emotions, portraying good judgments or opinions. The tone should be decided from the interviewee's point of view. Positive tone describes positive feelings, judgments or opinions. The tone also comes from nonverbal cues such as eye contact, head nodding, and body gestures. Step 1: Locate the response to the question after the 2008 general election, do the political news writing style change especially involving state government under PR/ How the news been portray involving PR that manage to take over state government during 2008-2013. Step 2: Identify the tone used based on the answer.	'What I love working here is the freedom of writing. As long as the facts are right and correct, we can write the stories without any instruction to this and to do that from the politician.	Explicit reference to the positive vibe, emotions, and attitude in describing the situation, providing solutions and portraying something beneficial.
2. Negative tone	Negative tone describes negative feelings, judgments or opinions.	'Stories such as scandal involving politicians, or issues relates to their morals are to key to attract readers' attention. It also can affect their political survival.'	Explicit reference to the negative vibe, emotions, and attitude in describing the situation in negative manners.
3. Neutral tone	Neutral tone describes neither positive nor negative feelings, judgments or opinions.	'We always support the good policy introduced by the government as long as it benefits the people. What we do is providing alternative views on what happens around us that other media pay no attention to.'	Explicit reference to neither positive nor negative vibe, emotions, and attitude in describing the situation.

Appendix 3

Excerpt of coding analysis

A. Present of the frames
Types of frames will be used to indicate the existence of the following frame in the news article;

Conflict frame:
Emphasizes conflict between individuals, groups, parties, or institutions as a means of capturing audience interest; reflects disagreement among and between individuals, groups, parties, or institutions; an individual, group, party, or institutional reproach; dichotomizes or labels the good and bad; news item refers to two sides instead of more than two sides of the issue/problem; news items refer to winners and losers.
Example:
Opposition party PKR has challenged Second Finance Minister Ahmad Husni Hanadzlah to back his criticism of the Pakatan Rakyat manifesto with real figures and calculations, instead of mere allegations and rhetoric.

Human interest frame:
Brings a human face or an emotional angle to the presentation of an event, issue, or problem; refers to an effort to personalize the news, dramatize or emotionalize the news in order to capture and retain audience interest; employs adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy, or compassion; emphasizes how individuals and groups are affected by the event, issue, or problem; news items go into the private or personal lives of the actors.

Example:
Seorang peniaga, Mohd. Azeem Niaz Mohd. 55, berkata, kekalahan Barisan Nasional (BN) di Pulau Pinang kerana ada segelintir daripada wakil rakyat BN yang tidak menjalankan kerja yang diamanahkan dengan baik.

Economic consequences frame:
Reports the consequences of an event, issue or problem has on individuals, groups, parties, institutions or the country; reports the outcome of a court case; reports the investigation or legal action was taken against any individual, groups, parties or institutions.

Example:
Over the past two years, Najib's government has handed out about US$2 billion in one-off payments to poorer families, in what the opposition has called thinly disguised vote-buying.

Morality frame:
Puts the event, issue or problem in the context of religious tenets or moral prescriptions; emphasizes collaboration and fellowship.

Example:
At most, the Pakatan manifesto only made references to uphold the constitutional description of Islam as the "religion of the federation" and other honors according to the faith, as already stated in the constitution - a stand that is more in tune with DAP's viewpoint.

Responsibility frame:
Presents an event, issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual, group, party or institution.

Example:
Public declaration of assets was an election promise that the PR government in Penang has yet to honor although the various state assembly reps claimed that they have revealed their possessions to Lim, who is also DAP national secretary-general.

B. News tone

The way the news or information been presented to reflect a particular idea and viewpoint for the interest of a specific group of readers. It also means that how the news has its story told.

Tone can be positive, negative or neutral. The tone should be decided from the predicate. A predicate provides information about the subject such as what the subject is doing or what the subject is like.

Example 1

Datuk Seri Abdullah Ahmad Badawi mengingatkan seluruh wakil rakyat kerajaan supaya sentiasa menunjukkan peribadi yang baik, mesra rakyat serta menjauhi rasuah bagi menghasilkan kerajaan berwibawa yang diterima rakyat.

The predicate of this paragraph is 'sentiasa menunjukkan peribadi yang baik, mesra rakyat serta menjauhi rasuah'. The tone is positive because the Prime Minister wanted the federal government representative to show good personality, friendly to the citizen and avoid corruption.

Example 2

PKR has accused the prime minister of ripping off Pakatan Rakyat's policies and using it to lure taxi drivers into voting for BN in the coming general election.

The predicate of this paragraph is 'ripping off Pakatan Rakyat's policies and using it to lure taxi drivers into voting for BN'. The tone is negative because PKR accused Prime Minister copying their policies.

Example 3

Pengerusi Barisan Nasional (BN) Pahang, Datuk Seri Adnan Yaakob berkata, pembangkang yang berjaya membentuk kerajaan di Perak, Kedah, Selangor, Pulau Pinang dan Kelantan perlu menunaikan janji-janji mereka seperti terkandung dalam manifesto Pilihan Raya Umum Ke-12.

The predicate of this paragraph is 'perlu menunaikan janji-janji mereka seperti terkandung dalam manifesto Pilihan Raya Umum Ke-12'. The tone is neutral because the Pahang's BN Chairman wanted the state government under opposition to fulfill their promises in their election manifesto.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1335 - 1355 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Chinese Cultural Preservation, Identity and Community: Examining the roles of *Sin Chew Daily* in Bridging Chinese Education, Cultural and Religious Rights of the Chinese Community in Malaysia

Miew Luan Ng[1]* and Yuen Beng Lee[2]

[1]Faculty of Communication and Creative Design, SEGi University, 47810 Petaling Jaya, Selangor, Malaysia
[2] School of Communication, Universiti Sains Malaysia, 11800, Minden, Pulau Pinang, Malaysia

ABSTRACT

Since its existence, *Sin Chew Daily* (SCD) as the largest circulating Chinese press in Malaysia plays the role of bridging the Chinese community with the ruling government. SCD does this by informing the government of the day about the demands of the Chinese community in terms of Chinese culture, Chinese education and Chinese language in multiethnic Malaysia. As the Chinese culture is an important element to the Chinese community and as the indicator of their cultural identity, the implementation of affirmative action and ethnic based policies that favor the *Bumiputeras* (literally, sons of the soil) has been deemed as sidelining other Malaysians. As such, the Chinese community has taken up efforts of self-preserving the Chinese language, Chinese culture, and Chinese education and such efforts of preserving and safeguarding the Chinese culture are carried out through various platforms including on SCD. This paper uses content analysis to examine the efforts of Chinese cultural preservation by SCD as it highlights issues of education, cultural and religious rights of the Chinese community to the ruling government from May 1, 2012, to April 30, 2013, one year before the 13th Malaysian General Election (GE13).

ARTICLE INFO

Article history:
Received: 3 November 2019
Accepted: 14 February 2020
Published: 26 June 2020

Keywords: Chinese culture, Chinese education, Chinese press, cultural preservation, identity, Malaysia, Sin Chew Daily

E-mail addresses:
miewluan@gmail.com (Ng Miew Luan)
adrianlee@sunway.edu.my (Lee Yuen Beng)
*Corresponding author

Current affiliation

Yuen Beng Lee
Department of Film and Performing Arts, School of Arts, Sunway University, 47500 Petaling Jaya, Selangor, Malaysia

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

In Malaysia, one of the main roles and concerns of the Chinese newspapers is Chinese culture preservation that includes the preservation of Chinese education, cultural and religious rights. Chinese newspapers in Southeast Asia are sharing the same role and concern of Chinese cultural preservation. This is because Chinese communities in Southeast Asian countries usually exist as minority groups and hence the respective governments often neglect the practice and preservation of Chinese culture. This is where Chinese newspapers carry out the role of cultural preservation and such a role is very much welcomed and supported by the local Chinese communities (Chang, 2005).

Efforts of cultural preservation in Malaysia and Southeast Asian countries are related to the use of the Chinese language, which is the medium of the Chinese newspapers (Peng, 2005). The usage of Chinese language, according to Peng, is also a symbol of identity that distinguishes the Chinese living with other ethnic groups in their countries. The publication and distribution of Chinese newspapers indeed provide a suitable environment for the Chinese to learn their language. To Peng (2005), the initiative to save and disseminate the Chinese culture came from the Chinese newspapers, and this effort enables Chinese newspapers in Malaysia and Southeast Asia to continue their roles of preserving and promoting the Chinese culture. As the media and newspapers do not exist in a vacuum, Chinese newspapers carry out its response to the society in which they originate from and serve an audience that directly determines their survival based on readership and circulation that influence the advertising revenues. The relationship between the media and society lays the foundation for this study of the Chinese cultural preservation agenda in *Sin Chew Daily* (SCD), the largest circulating Chinese newspaper in Malaysia.[1]

Apart from disseminating information, providing entertainment and being a persuasive advertising tool, the Chinese newspapers in multi-ethnic Malaysia such as SCD share a common 'traditional' role of upholding the cultural preservation of the Chinese community (Peng, 2005, 2007, 2008; Siew, 2007, 2008). There currently exist thirteen Chinese newspapers: six are from Peninsular Malaysia, namely *Sin Chew Daily*, *Guang Ming Daily*, *Nanyang Siang Pau*, *China Press*, *Kwong Wah Yit Poh* and *Oriental Daily News*; and in Sabah and Sarawak, seven such presses. In Sarawak, the Chinese newspapers are *See Hua Daily News*, *International Times* and *United Daily News*; and in Sabah, *Overseas Chinese Daily News*, *Morning Post*, *Merdeka Daily News* and *Asia Times*.

SCD in its efforts of cultural preservations greatly concerns itself with issues of Chinese education. Since the times of British imperialism, Malaysian Chinese schools seldom receive governmental

1 The circulation of *Sin Chew Daily* was 293, 804 from January-June 2018 according to Audit Bureau of Circulation Malaysia's report. See http://abcm.org.my/wp-content/reports/2018/abc-circulation-figures-jan-to-june-2018-newspapers-states-distribution.pdf

support. As such, Chinese education has been a community enterprise that is supported by private funding since the British colonial period (Voon, 2008). Despite such efforts, the development of Chinese schools in Malaya (before Merdeka/independence) and then Malaysia (in 1963) was often restrained by educational reform proposals. These included the Barnes Report 1951 that suggested the complete removal of Chinese schools in Malaya; the Education Act 1952 that proposed replacing the Chinese schools with Malay and English medium schools; the Razak Report 1956 that proposed the final goal of the 'one language, one type' of school that would only use the Malay language as the medium for the Malayan/Malaysian education system; the Education Act 1961 that empowered the Minister of Education to convert the national-type primary Chinese schools to the national-type Malay schools, and the Education Act 1996 that aimed to materialize the final goal of Malaysian education as mentioned above (Huang, 2008). These proposals and regulations were deemed as 'unfriendly' to the Chinese community as they sought to restrict the development of Chinese education in Malaya/Malaysia. In response, Chinese educational non-government organizations (NGOs) such as The United Chinese School Teachers' Association of Malaysia (教总/*jiaozong*) and the United Chinese School Committees' Association of Malaysia (董总/*dongzong*) were established in 1951 and 1954 to work very closely with the government to preserve the rights to Chinese education.

Today, the remaining sixty Chinese independent secondary schools in Malaysia continue being dependent on the Chinese community for survival. Besides, the Unified Examinations Certificate (UEC), the standardized examination conducted by *dongzong* for the Chinese independent secondary schools, has yet to receive official recognition by the Malaysian Ministry of Education.[2] At the same time, the 1,297 national-type primary Chinese schools that only enjoy 'half' of the financial support from the Malaysian government remain reliant on the Malaysian Chinese community for the development of their facilities.[3] As such, family and community sponsorship of Chinese education is a common occurrence due to inadequate access to official grants and subsidies from the Malaysian government. The Chinese community in Malaysia, therefore, is made to shoulder the entire recurrent and developmental expenditures of three (university) colleges, sixty independent secondary schools and a substantial amount of the building funds of most of the Chinese primary schools as education is placed highest in the lives of the Chinese community (Voon, 2008). The Chinese newspapers in Malaysia, including SCD, therefore frequently report on issues

2 See Ho (2015). In Sarawak, the late-Chief Minister, Adenan Satim officially recognized UEC and described the Federal government as 'stupid' for not recognizing this qualification (Jalil, 2016).

3 The allocation for the national-type Chinese primary schools from 2012 to 2015 was RM3 billion in contrast to RM14.5 billion allocated to national-type Malay primary schools. See *Jiaozong press statement*, 2015.

of Chinese education while raising funds for the Malaysian Chinese schools.[4]

As mentioned above, besides Chinese education, the rights of the Malaysian Chinese in Chinese culture and religion need to be included in the discussion of Chinese culture preservation. Yang (2002) asserted that the formation of the cultural identity of Malaysian Chinese was rooted on their geographical identity (地缘认同), dialect identity (方言认同), religious identity (宗教信仰认同), living custom identification (生活习俗认同) and culture value identification (文化价值认) that they inherited from their ancestors from mainland China. In addition, according to Yen (2003), the Malaysian Chinese hold a strong attachment to Chinese cultural preservation since the early 1900s.

To most of the Chinese educated people in Malaysia, the definition of Chinese culture in a wider context includes Chinese education, Chinese language and literature, Chinese festivals and cultural activities as well as the Chinese guilds and association (CGAs). All these aspects are inter-related to each other. For instance, many of the CGAs were actively advocated Chinese education and Chinese cultural activities especially after the independent of Malaya (Yen, 2000), whilst the Chinese education is important in the transmission of the core cultural values, namely the Confusion values to the students (Voon, 2008). On top of that, the development of Chinese language and literature is highly dependent on the development of Chinese education. Moreover, the introduction of Malaysian Chinese Cultural Festival (全国华人文化节) by the Federation of Chinese Associations Malaysia (华总, *Huazong*) in 1984 indicated the significance of Chinese culture rights to the Chinese community in Malaysia. The establishment of the Chinese Assembly Hall (华堂, *Huatang*) in each of the state in Malaysia, in addition to the formation of Federation of Chinese Associations Malaysia (华总, *Huazong*) in 1991 and the existence of Seven Major Clan Association (马来西亚七大乡团协调委员会) also shows the importance of CGAs in their efforts to preserve Chinese culture.

One of the characteristics of a multi-ethnic country such as Malaysia is the diversity of religious beliefs. Although Islam is the religion for the Federation, other religions are allowed to practice in peace and harmony in any part of the Federation. Article 11 of the Malaysian Federal Constitution (2010) clearly granted freedom of religion to all Malaysian. In this setting, Chinese religious rights become important in the context of Chinese culture preservation. Generally, the Malaysian Chinese follows diverse religions and beliefs. Some of them are Buddhists, Taoists, Christians or even Muslims. However, Chinese religion, to Tan (1983), has been misinterpreted. According to Tan, there are several misconceptions about the Chinese religion in terms of the classification of Chinese worshipers as Buddhists, Taoists or

4 One example is the Top Ten Charity Campaign organized by *Nanyang Siag Pau*, *China Press* and sponsored by Carlsberg Malaysia. Since 1987, this event raised funds for Malaysian Chinese schools (http://www.toptencharity.com.my/web/aboutus/au_about_us.php).

Confucianists. Nevertheless, to the general public, Malaysian Chinese are either the follower of Buddhism or Taoism.

The reporting of Chinese education, culture, and religious rights become important in Chinese newspapers, and particularly in SCD during the time of general elections. This is because issues pertaining to Chinese education culture and religious rights reflect the communal demands of the Chinese-speaking people who are also the readers of SCD. Besides, the related issues especially in Chinese education, also draw the attention of the Chinese ethnic-based political parties, including the Malaysian Chinese Association (MCA), *Parti Gerakan Rakyat Malaysia* (GERAKAN) and Democratic Action Party (DAP) in their efforts to gain the support of the Chinese voters during the elections, and in the context of this paper, the 13th General Election (GE13). Hence, the study was conducted a year before the GE13 on 5 May 2013 because the general election is always the right time for the voters to bargain with the incumbents from the ruling and opposition parties. This paper on SCD, Chinese education, culture, and religion is also based on the political economy of the media during the GE13. It is an extensive research of Ng and Lee (2018) that provides a full 12-month quantitative data based on the content analysis of SCD from 1 May 2012 to 30 April 2013, with the purpose to further examine the roles of SCD in bridging Chinese education, cultural and religious rights of the Chinese community in Malaysia. In the work of Ng and Lee, the authors only analyzed the content of the newspaper for three months, namely from August to October 2012. In other words, this paper provides more insights on the roles of the minority Chinese ethnic press SCD in bridging and representing Chinese education, cultural and religious rights one year before the GE13.

METHODS

SCD was selected as the research sample based on the nonprobability purposive sampling method. SCD also meets specific characteristics or quality of purposive sampling, i.e. it is the leading circulation Chinese newspaper read by the majority of the Chinese-educated people in Malaysia. The circulation of SCD from January to June 2018 was 293,804. As more than 1.18 million Malaysians read SCD, this makes SCD a highly influential Chinese newspaper in Malaysia.[5]

The one year research period (May 1, 2012 to April 30, 2013) was exactly a year before the 13th General Election (GE13) that was held on 5th May 2013. To collect the data, several units of analysis and their categories were identified. For Cultural rights, the categories are 1. News of local Chinese guilds and associations; 2. News of local Chinese festivals; 3. News of local Chinese cultural activities; 4. News related to the Chinese language; 5. News related to

5 See Audit Bureau of Circulation Malaysia's report (http://abcm.org.my/wp-content/reports/2018/abc-circulation-figures-jan-to-june-2018-newspapers-states-distribution.pdf) and Media Chinese International Limited official website (http://www.mediachinesegroup.com/htm/content.cfm?channel=biz&path=biz_05a&lang=E).

Chinese literature, and 6. News of Chinese literature workshops or competitions. For Chinese education, the categories are 1. News of local Chinese schools and 2. News of local Chinese education issues. For Chinese religious rights, the categories are 1. News of local Chinese temples and 2. News of local Chinese religious activities. Each of the news items would be analyzed based on the news highlights, page numbers, news sources, news slants and pictures used. The operational definition for each of the unit of analysis and category is shown in Table 9 (see Appendix).

After that, a coding descriptor and coding sheet were created to enable a more systematic coding process. Upon completion of the coding/ data collection, the data were analyzed and presented in frequency and percentage. Microsoft Excel was used in both the data collection and analysis.

RESULTS AND DISCUSSION

Content Analysis Finding

A total of 3,329 news items were found during the research period for the three themes identified in this study. These items are Cultural rights (1462/ 43.9 per cent); Chinese education (1691/ 50.8 per cent) and Chinese religious rights (176/ 5.3 per cent). Amongst the three, news on Chinese education (50.8 per cent) was reported the most as compared to news on Cultural rights (43.9 per cent) and news on Chinese religious rights (5.3 per cent). See Table 1.

Table 1
Types of news

Types of News/Total	Frequency	Percentage (%)
Cultural rights	1462	43.9
Chinese education	1691	50.8
Chinese religious rights	176	5.3
TOTAL	**3329**	**100**

The analysis on news of Chinese education indicates that 59.8 per cent (1012 items) was news on local Chinese education issues while the remaining 40.2 per cent (679 items) was news on local Chinese schools (see Table 2). For news on Cultural rights, 65.6 per cent (959 items) was news of local Chinese guilds and associations; 11.8 per cent (173 items) news of local Chinese festivals; 11.0 per cent news (161 items) of local Chinese cultural activities; 5.4 per cent (79 items) news related to Chinese literature; 4.9 per cent (71 items) news related to Chinese language and 1.3 per cent (19 items) as news of Chinese literature workshops or competitions (see Table 3). The content analysis also shows that out of 176 news of Chinese religious rights, 69.3 per cent (122 items) was news of local Chinese religious activities and 30.7 per cent (54 items) was news of local Chinese temples (see Table 4).

Analysis of News Highlights, Page Numbers, News Sources, News Slants and Pictures Used. The following discusses the content analysis of each news theme and its

Table 2

Total news of Chinese education issues

Categories/Total	Frequency	Percentage (%)
Local Chinese schools	679	40.2
Local Chinese educational issues	1012	59.8
TOTAL	**1691**	**100**

Table 3

Total news of culture rights

Categories/Total	Frequency	Percentage (%)
Local Chinese guilds and associations	959	65.6
Local Chinese Festivals	173	11.8
Local Chinese Cultural Activities	161	11
Related to Chinese Language	71	4.9
Related to Chinese Literature	79	5.4
Chinese Literature Workshop/ Competition	19	1.3
TOTAL	**1462**	**100**

Table 4

Total news of religious issues

Categories/Total	Frequency	Percentage (%)
Local Chinese Temples	54	30.7
Local Chinese Religious Activities	122	69.3
TOTAL	**176**	**100**

categories based on news highlights, page numbers, news sources, news slants and pictures used. The discussion is based on the most to the least reported news themes, namely 1. News of Chinese education; 2. News of Chinese culture rights; and 3. News of Chinese religious rights.

News of Chinese Education.

News of Chinese education was divided into two categories, 1. News of local Chinese schools and 2. News of local Chinese education issues.

The findings revealed that the Chinese education issues mainly highlighted by SCD during the research period were the issue of the establishment of SM Chong Hwa, Kuantan and the disputes of the status of the school as a private Chinese school or a pure Chinese independent school. The other issue highlighted was the issue of recognizing the Unified Examination Certificate (UEC). Others including the issue on the status of Chinese independent schools and national-type Chinese primary schools, as well as and the issue of the allocation

to all Chinese schools (including Chinese independent schools, national-type primary and secondary Chinese schools). Besides, the issue of the shortage of Chinese schools and Chinese school teachers, the relocation of Chinese schools, the controversy of the Malaysia Education Blueprint 2013-2025, *dongzong* 926 and 1125 rallies was also the main highlights of SCD.[6]

Other than that, the Chinese community-funded colleges, namely the New Era University College, Southern University College and Han Chiang University College, along with the MCA party-funded Tunku Abdul Rahman University College and Tunku Abdul Rahman University were also highlighted by SCD. Other issues emphasized included the controversy of *dongzong*'s withdrawal from the round-table meeting, the criticism on the mono-lingual schools; the news on the Malaysian government to recognize the public and private universities in Taiwan and the news on the peaceful assembly to fight for the official status of the national-type secondary Chinese schools. [7]

In terms of page numbers, out of the 1691 news of Chinese education, 82.0 per cent (1387 items) were published in the rest of the news section, 13.6 per cent on pages 2 & 3 (230 items) while 3.7 per cent (62 items) on the front page, which continued to other pages, and 0.7 per cent (12 items) on the front page (see Table 5).

Most of the sources of news of Chinese education were from *dongzong/ dong lianhui* (350/20.7 per cent), followed by "Other" sources such as individual sources, school authorities, exclusive interviews by SCD reporters and events organized by SCD (320/18.9 per cent); the *Barisan Nasional* (BN) government and other Chinese NGOs such as the Lim Lian Geok Cultural & Development Centre, the Board of Directors of Chinese schools and National Union of Heads of Schools (263/15.6 per cent, respectively), BN ruling parties (162/9.6 per cent), Chinese guilds and associations (91/5.4 per cent), *huazong/ huatang*, including *xue huatang* (89/5.2 per cent), *jiaozong* (43/2.5 per cent), unclear sources (41/2.4 per cent), *Pakatan Rakyat* opposition parties (30/1.8 per cent), PR government (14/0.8 per cent), *xiaoyou lianzong* (12/0.7 per cent), *dongjiao zong* (11/0.7 per cent) and non-ethnic based NGOs (10/0.6 per cent) (see Table 6). [8]

6 926 rally was organized by *dongzong* on 26 September 2012 to pressure the government to give attention to the issues faced by Malaysian Chinese Education (Cai, 2012), and 1125 rally was organized by *dongzong* and other Chinese education organizations to advocate multiculturalism in Malaysian education system through the Malaysia Education Blueprint 2013-2025 ("Yu bai huatuan", 2012).

7 The round-table meeting referred to the special committee set up by the Ministry of Education to address the shortage of teachers at Chinese primary schools. It was chaired by the then Deputy Minister of the Ministry of Education, Wee Ka Siong.

8 *donglianhui* (**The United Association of Private Chinese Secondary School** /华文独中董联会**);** *huatang* (The Chinese Assembly Hall/华人大会堂); *xuehuatang* (The KL & Selangor Chinese Assembly Hall/吉隆坡暨雪莪华人大会堂); *xiaoyou lianzong* (The Malaysian Chinese Schools' Alumni Associations/马来西亚华校校友联合会总会); *dongjiao zong* (Alliance of *Dongzong* and *Jiaozong*/董教总).

Table 5

Page number

Page Number	Chinese Education		Cultural Rights		Religion Rights	
	F	**%**	**F**	**%**	**F**	**%**
Front page	12	0.7	0	0	2	1.1
Page 2&3	230	13.6	49	3.4	2	1.1
Rest of news section	1387	82	1398	95.6	168	95.5
Front page continues to other pages	62	3.7	15	1	4	2.3
TOTAL	**1691**	**100**	**1462**	**100**	**176**	**100**

Table 6

Source of news

Source of News	Chinese Education		Cultural Rights		Religion Rights	
	F	%	F	%	F	%
BN Government	263	15.6	65	4.4	12	6.8
PR Government (Pulau Pinang, Selangor, Kelantan	14	0.8	19	1.3	3	1.7
BN-Ruling Party	162	9.6	13	0.9	1	0.6
PR- Opposition Party	30	1.8	8	0.5	0	0
Dong Jiao Zong	11	0.7	3	0.2	0	0
Dong Zong or Dong Lian Hui	339	20	17	1.2	0	0
Jiao Zong	43	2.5	8	0.5	0	0
Hua Zong or Hua Tang	85	5	99	6.8	0	0
Xue Hua Tang	4	0.2	10	0.7	0	0

In terms of news slant, 67.5 per cent (1142 items) were reported neutrally, 31.1 per cent (525 items) pro Chinese education issues and 1.4 per cent (24 items) against Chinese education. For pictures used, a total of 1524 pictures were found with the news of Chinese education. Among them, 86.9 per cent (1325 pictures) were coloured pictures and 13.1 per cent (199 pictures) were non-coloured pictures (See Table 7 & Table 8).

Table 7

News slant

News Slants	**Chinese Education**		**Cultural Rights**		**Religion Rights**	
	F	%	F	%	F	%
Neutral/Balanced	1142	67.5	1351	92.4	164	93.2
Pro (related issues)	525	31.3	109	7.5	12	6.8
Against (related issues)	24	1.4	2	0.7	0	0
TOTAL	**1691**	**100**	**1462**	**100**	**176**	**100**

Table 8

Picture used

News Slants	**Chinese Education**		**Cultural Rights**		**Religion Rights**	
	F	**%**	**F**	**%**	**F**	**%**
Colour	1325	86.9	1253	80.3	208	90.4
No colour	199	13.1	307	19.7	22	9.6
TOTAL	**1524**	**100**	**1560**	**100**	**230**	**100**

News of Chinese Cultural Rights.

News of cultural rights was divided into six categories. They are 1. News of local Chinese guilds and associations (CGAs), 2. News of local Chinese festivals, 3. News of local Chinese cultural activities, 4. News related to the Chinese language, 5. News related to Chinese literature and 6. News of Chinese literature workshops or competitions.

The content analysis shows that most of the news of cultural rights was news of local CGAs. Out of the 1462 news, 65.6 per cent (959 items) were news of local CGAs (see Table 3). The CGAs in Malaysia play their role as social and welfare organizations for the Chinese community, as well as act as an apparatus in expressing the demands of the Chinese community on matters involving politics, economy, culture and

education. The CGAs are divided into dialect organizations (*diyuan zhuzhi*, 地缘组织/ *tongxiang huiguan*, 同乡会馆), clan affinities associations (*xueyuan zhuzhi,* 血缘组织/ *zongqin xiangtuan*, 宗亲乡团), Chinese trade and guilds organizations (*shanghui*, 商会) or industry organizations (*yeyuan zhuzhi*, 业缘组织) and other Chinese associations. The news of CGAs was found throughout the twelve months research period.

Most of the news that was highlighted during the research period either related to activities organized by the CGAs, or their Presidents' comments on current affairs, especially those that affected their members and the Chinese community in general. For example, the main highlights were of the controversy of the bird's nest export;[9] the issue related to the implementation of the minimum wage and the issue of closing Chinese cemeteries in Pengerang, Johor. Also, SCD highlighted the news of the annual assembly of *huazong*, the Associated Chinese Chambers of Commerce and Industry of Malaysia and the Federation of Malaysian Chinese Surname. Other news that were related to the dialect organizations, such as the Federation of Hokkien Association Malaysia, *Persekutuan Persatuan-Persatuan Hakka Malaysia*, the Federation of Kheng Chew Hwee Kuan of Malaysia, *Persatuan-persatuan Teo Chew Malaysia, Persatuan Kwangsi Malaysia*, and the news related to the clan affinities associations, for instance, Huang Association of Malaysia, Malaysia Lim Clansmen Association, The Federation of Tan Clan Associations Malaysia, as well as the news related to the Chinese trade and guilds organizations or industry organizations. For example, Selangor Bird's nest Merchants Association, the Grocers Association, the Malaysia United Furniture Association, the SME Association of Malaysia, the Master Builders Association Malaysia, the Malaysia Heavy Construction Equipment Owners' Association, the Federation of Chinese Physicians and Acupuncturists Associations Malaysia, the Federation of Livestock Farmers' Associations of Malaysia, the Malaysia/ Singapore Coffee Shop Proprietors' Association and others, were some of the main highlights of SCD during the research period.

Out of the 1462 news of cultural rights, 11.8 per cent (173 items) were news of local Chinese festivals (see Table 3). The local Chinese festivals such as the celebration of the Chinese New Year (CNY) were the main highlights of SCD. The controversy of the Kedah state government CNY performance guidelines was also highlighted by SCD.

The findings show that 11.0 per cent (161 items) of the news of local Chinese cultural activities was found in the category of the news of cultural rights in this study.

9 China banned the imports of bird's nest from Malaysia in July 2011 due to nitrate contamination. Since then, the Ministry of Agriculture and Agro-based industry worked on new regulations that required Malaysian companies exporting bird's nest to obtain quality certifications.

The National Chinese Culture Festival and the National Chinese Culture Congress were some of the news highlights in SCD.

The study reveals that 4.9 per cent (71 items) of news related to the Chinese language was found in the category of the news of cultural rights. Examples of the news highlights included the National Chinese Debate Competition for the national-type secondary schools, and the issue of sending UPSR examiners who did not understand Mandarin to national-type primary schools in the Selangor state.

Only 5.4 per cent (79 items) were news related to Chinese literature. Some of the highlights included the competition of Chinese calligraphy and the Malaysian Chinese literary events.

There was only 1.3 per cent (19 items) news of Chinese literature workshop or competition found during the research period. Most of the news was related to Chinese literature workshops and competitions that were held throughout the research period. Examples of such events are the Flora Trail Chinese Literature Award organized by SCD.

In terms of the page number, out of the 1462 news of cultural rights, 95.6 per cent (1398 items) of the news of cultural rights was published in the rest of the news section, 3.4 per cent (49 items) on pages 2 & 3 while only 1.0 per cent (15 items) was found on the front page, which continued to other pages. No news of cultural rights was published on the front page of SCD (see Table 5). More than half of the sources of news of cultural rights were from the CGAs (859/58.8 per cent); this was followed by the "Others" sources, such as individuals, school authority/principals, private company representatives, SCD events, publishers, NGOs, parents, Chinese literature competition organizers and so forth (136/9.3 per cent); other Chinese NGOs, such as University alumni associations and University Chinese language associations. (113/7.7 per cent); *huazong/ huatang*, including *xue huatang* (109/7.5 per cent); unclear news source (76/5.2 per cent); the BN government (65/4.4 per cent); non-ethnic based NGOs (27/1.8 per cent); the PR government (19/1.3 per cent); *dongzong/dong lian hui* (17/1.2 per cent); BN's ruling parties (13/0.9 per cent); PR's opposition parties and *jiaozong* (8/0.5 per cent, respectively); *xiaoyou lianzong* (5/0.4 per cent) and Chinese religious groups (4/0.3 per cent) (see Table 6).

For the news slant, out of the 1462 news of cultural rights, 92.4 per cent (1351 items) were reported neutrally, 7.5 per cent (109 items) pro cultural rights and only 0.1 per cent (2 items) were reported against cultural rights. A total of 1560 pictures were found with the news of cultural rights. Among them, 80.3 per cent (1253 pictures) were coloured pictures while 19.7 per cent (307 pictures) were non-coloured pictures (see Table 7 & Table 8).

News of Chinese Religious Rights.

News of Chinese religious rights was divided into two categories, 1. News of local Chinese temples and 2. News of local Chinese religious activities. The findings

show that 30.7 per cent (54 items) of the total news of Chinese religious rights was the news of the local Chinese temples (see Table 4). Examples of the news highlights included the controversy of the approval of the Chinese temple land title by the Selangor state government and the parade of the Johor Old Chinese temple. Besides that, 69.3 per cent (122 items) of the news of Chinese religious rights was the news of local Chinese religious activities and most of the news highlights in this category were related to the news of Chinese temples and religious, for instance, Buddhism and the Taoism. Less focus was given to Chinese Christian religious activities and news on Chinese Muslim religious activities were reported the least. Examples of the news highlights for this category included news of the visit of Taiwanese Buddhist teacher Venerable Hsing Yun.

In terms of page number, out of the 176 news of Chinese religious rights, 95.5 per cent (168 items) were published in the rest of the news section, 2.3 per cent (4 items) on the front page which continued to other pages while 1.1 per cent (2 items) was published on the front page and pages 2 & 3 respectively.

The majority of the sources of news of Chinese religious rights were from Chinese religious groups (125/71.1 per cent), followed by "Others" sources such as individuals, NGOs, students, the public, university principals and Chinese temples' spokesperson (9/8.5 per cent), unclear sources and the BN government (12/6.8 per cent, respectively), the PR government (3/1.7 per cent), non-Chinese religious group (2/1.1 per cent) and BN ruling parties (1/0.6 per cent).

The findings indicate that 93.2 per cent (164 items) of news of Chinese religious rights was reported neutrally and 6.8 per cent (12 items) were pro Chinese religious rights. No news was reported against Chinese religious rights. In terms of pictures used, a total of 230 pictures were published with the news of Chinese religious rights. Out of these, 90.4 per cent (208 pictures) were coloured pictures while 9.6 per cent (22 pictures) were non-coloured pictures.

Discussion

In discussing about Chinese cultural preservation, the content analysis shows that Chinese education is the main issue to SCD. This is based on the news quantity as well as the use of coloured pictures during the research period. Chinese education organizations such as *dongzong, jiaozong, dongjiao zong, donglian hui, xiaoyou lianzong*, and CGAs s *huazong, huatang* and *xue huatang* were the main sources of the news of Chinese education. The issues related to Chinese independent schools, the national-type Chinese primary and secondary schools were also the main news agenda of SCD. These illustrate the close relationship between the Chinese newspapers, the CGAs and Chinese education, which are always described as the three main pillars of the Malaysian Chinese community (Sim & Soong, 2007; Wong, 2011). As *dongzong* and *jiaozong* are the spokesperson for Chinese Education in

Malaysia and two major leading Chinese NGOs that strike for Chinese communal rights, specifically Chinese education rights, hence, it is not a surprise to find out that their voices were most represented in SCD during the research period. On top of that Chinese newspapers have the social responsibility to help to develop Chinese education, the Chinese education system in return produces potential readers for Chinese newspapers. This includes SCD.

The results of the content analysis also reveal and prove that SCD maintained close ties with the CGAs that represented the voices of the Chinese community in Malaysia. The CGAs also played the role of the pressure groups with regards to matters of government policies in Chinese education, culture, and religion. The role of the Chinese newspaper in preserving the Chinese culture is also shown in this finding. Evidently, SCD gave little attention to news of the Chinese religious rights of the Chinese community in Malaysia in comparison to news of Chinese education and Chinese cultural rights. This suggests that news of Chinese religious rights for the Malaysian Chinese was not as important as news on Chinese education and culture to SCD. In other words, the Malaysian Chinese are least vocal when comes to issues related to religion. The findings show that the Chinese ethnic minority press SCD was also cautious in representing religious issues in a country where Islam is the official religion and the religion of its majority populations.

From the perspective of media and society, the news agenda of Chinese cultural preservation in SCD indicated that SCD played the role in responding to the needs and demands of the Chinese society in Malaysia. For most of the Chinese-educated people in Malaysia, the development of Chinese education is seen as important to the development of the Chinese culture that they inherited from their ancestors who migrated from Mainland China. The use of the Chinese language, the development of Chinese literature and the sustainability of Chinese culture through the practice of Chinese festivals such as Chinese New Year are crucial to the development of the Chinese community, especially in multi-ethnic Malaysia. To preserve the Chinese culture, Chinese language and Chinese education become one of the main agendas of the Chinese ethnic minority group in Malaysia, especially for those who are Chinese-educated. The existence of CGAs such as *huazong* and Chinese education organizations such as *dongzong* is seen playing the role of an advocator in this matter. This then explains the reason SCD gave more coverage on news related to the issues of Chinese education. The content analysis revealed that both CGAs and Chinese education organisations were identified as the main source of news for Chinese cultural rights and issues related to Chinese education. The importance of the voices of CGAs in the Chinese community was also proven, as most of the news found in the category of Chinese culture rights was news of local CGAs.

It is important to note that to most of the Chinese-educated people in Malaysia, the

Chinese language and Chinese education are important markers of their cultural identity or 'Chinese-ness' (Khor & Ng, 2006; Shamsul, 1999). Hence, this explains the reason SCD continues to represent the Chinese cultural anxiety as part of its traditional role, especially when facing the Malay-centric state power or the government led by UMNO who introduces and implements its mono-ethnic policies that are seen as 'unfriendly' to the Chinese language, Chinese education and Chinese culture, such as the practice of mono-ethnic language and culture policy in the 1960s and 1970s, as well as the Malay centric economic policies in the 1970s. The role of the Chinese newspaper SCD in upholding the Chinese education and cultural rights by representing the related news as found in the content analysis of this study also echoed the work of Ang (2014) who asserted that the struggle of Chinese communal rights in Malaysia, especially Chinese education rights was built on rallies and campaigns mounted with the help of Chinese newspapers.

The political environment a year before GE13 had given more spaces to the Chinese ethnic minority group to voice their communal demand related to issues about education, culture, and language. The content analysis findings of SCD during the research period proved that the role to preserve Chinese culture is still 'marketable' especially when the multi-ethnic nation of Malaysia is still ruled by the UMNO-led BN government prolonged its Malay centric policies in all aspects of life of Malaysians. Hence, on one hand, the Chinese cultural preservation agenda in SCD was a response to the cultural anxiety of the Chinese ethnic minority group, especially during GE13 and on the other hand, it was a response to the UMNO-led BN government and their ethnic policies. The Chinese cultural anxieties felt by the Chinese ethnic group through the representation of SCD is a typical example of the response of an ethnic minority press towards UMNO's *Ketuanan Melayu* (Malay dominance) in multi-ethnic Malaysia.[10]

From the perspective of the media and market, SCD as an ethnic minority press is highly dependent on the Chinese-educated community for its readership, circulation and subsequently the advertising revenue. Hence, it is important for SCD to represent the Chinese communal rights in Malaysia that concerning the issues related to Chinese education, Chinese culture and religious rights.

CONCLUSION

This paper has discussed how SCD performs its role as the mouthpiece of the Chinese community in expressing their cultural anxieties and demands to the UMNO-led BN government particularly before the GE13. The Chinese cultural preservation agenda is undoubtedly vital to SCD in terms of gaining the support of the Chinese speaking community and to maintain the survival of SCD in the current media market environment. This paper has also discussed how a Chinese ethnic minority

10 *Ketuanan Melayu* is a concept that has been used to frame the relationship between Muslim Malays and non-Malay citizens of Malaysia. For further reading see Liow (2015).

press responded to the state power during the times of general elections. On one hand, SCD succeeded in representing the Chinese communal voices and demands. However, by reporting most of the news in a neutral tone, it shows that the SCD failed to play the role as a discussion and debate platform in a multi-ethnic nation context in the issue of Chinese cultural preservation and '*Ketuanan Melayu'*. SCD must provide the debate platform, for instance, to discuss how the two largest ethnic groups in the multi-ethnic nation of Malaysia can achieve a balanced point between Chinese cultural preservation and '*Ketuanan Melayu'*, other than merely reporting on the one-sided story that only represented the Chinese communal voices.

This study of -SCD was meant to examine how the Chinese ethnic minority press responded to Chinese communal rights (through the representation of Chinese cultural preservation agenda) in the multi-ethnic nation that is dominated largely by the Malays who are represented by the strong party-state of UMNO, the dominant party in the ruling BN coalition. The findings revealed that SCD was selling its cultural preservation agenda to maintain the pool of Chinese readership that contributed to the profit of the newspaper company and its owner. The fact is that the commodification of media has turned the media (in this case, SCD) into a commodity for profit and survival is always the bottom line of everything in the eyes of the media owners and their stakeholders.

ACKNOWLEDGEMENT

The authors would like to thank Dr. Mahyuddin Ahmad, Dr. Mustafa Kamal Anuar and Dr. Wong Chin Huat for their feedbacks for this paper.

REFERENCES

Ang, M. C. (2014). *Institutions and social mobilization: The Chinese education movement in Malaysia 1951-2011.* Singapore: ISEAS Publishing.

Cai, W. J. (2012, September 25). Chuxi 926 jihui, shiya zhengfu guanzhu huajiao [Attended the 926 gathering, pressured the government to pay attention to Chinese education]. *Malaysiakini.com.* Retrieved July 15, 2016, from https://www.malaysiakini.com/letters/209897

Chang, T. P. (2005). *Huaren shehui, zhongwen baoye yu xinwen ziyou yundong-jianlun huashe dui zhongwen baoye de "wenhua shiye qingjie"* [Chinese society, Chinese press and the press freedom movement: A discussion on the "Chinese cultural emotional attached" of the Chinese press]. Retrieved February 20, 2017, from https://wami528.wordpress.com/%E4%BA%BA%E7%A4%BE%E4%BC%9A%EF%BC%8C%E4%B8%AD%E6%96%87%E6%8A%A5%E4%B8%9A%E4%B8%8E%E6%96%B0%E9%97%BB%E8%87%AA%E7%94%B1%E8%BF%90%E5%8A%A8/

Federal Constitution. (2010). *Federal Constitution.* Reprint 2010. Retrieved March 10, 2018, from http://www.agc.gov.my/agcportal/uploads/files/Publications/FC/Federal%20Consti%20(BI%20text).pdf

Ho, W. F. (2015, November 15). Value of UEC beyond recognition. *The Star Online.* Retrieved October 23, 2017, from https://www.thestar.com.my/news/nation/2015/11/15/certificate-recognised-around-the-world-but-not-in-malaysia/

Huang, J. F. (2008). Mantan malaixiya huawen jiaoyu de gaikuang [A discussion on the Malaysian Chinese education]. In *The 10th Global Reunion of Nanyang University Alumni* (pp. 109-111). Retrieved December 10, 2017, from http://www.nandazhan.com/r2006/r06p109.htm

Jalil, H. (2016, March 29). UEC not recognized due to 'national sovereignty' issue: Kamalanathan. *The Sun Daily.* Retrieved March 15, 2018, from http://www.thesundaily.my/news/1743007

Jiaozong press statement on the allocation for national-type Chinese primary schools in Malaysia based on the Budget 2016. (2015). Retrieved May 23, 2019, from http://web.jiaozong.org.my/index.php?option=com_content&task=view&id=2250

Khor, Y. L., & Ng, M. L. (2006). Chinese newspapers, ethnic identity and the state: The case of Malaysia. In S. Wanning (Ed.), *Media and the Chinese diaspora community, communications and commerce* (pp. 137-149). London, England & New York, USA: Routledge.

Liow, J. C. Y. (2015). *Ketuanan Melayu: What's in a name?* Retrieved April 5, 2018, from https://www.rsis.edu.sg/wp-content/uploads/2015/01/CO15004.pdf

Ng, M. L., & Lee, Y. (2018). Malaysian Chinese language newspapers and national identity: A study of the roles of Sin Chew Daily in Chinese cultural preservation and nation-building. *Journal of Malaysian Studies/ Kajian Malaysia, 36*(1), 63-103.

Peng, W. B. (2005). *A study of Chinese newspapers in Southeast Asia.* Shanghai, China: Social Sciences Academic Press.

Peng, W. B. (2007). *An introduction to oversea Chinese media.* Guangzhou, China: Jinan University Publication.

Peng, W. B. (2008). *A study of Sin Chew Daily.* Shanghai, China: Fudan University Press.

Shamsul, A. B. (1999). Identity contestation in Malaysia: A comparative commentary on 'Malayness' and 'Chineseness'. *Akademika, 55*(July), 17-37.

Siew, N. C. (2007, August 20). *Youzou gangsuo weihu hexie-jiafeng zhong de huawen meiti* [Ropewalking: The Chinese media caught between survival]. China News. Retrieved January 20, 2013, from http://www.chinanews.com/hr/kong/news/2007/08-20/1005900.shtml

Siew, N. C. (Ed.). (2008). *Xinzhou ribao lishi xiezai dama tudi shang* [Walkingtall: Journalism on Malaysian soil]. Petaling Jaya, Malaysia: Sin Chew Daily.

Sim, R., & Soong, F. K. (2007, September 9). The three pillars of the Chinese community. *New Straits Times,* p. 27.

Tan, C. B. (1983). Chinese religion in Malaysia: A general view. *Asian Folklore Studies, 4*2(2), 217-252.

Voon, P. K. (2008). Education and culture: The "soft" contributions to nation-building. In P. K. Voon (Ed.), *Malaysian Chinese and nation-building: Before Merdeka and fifty years after* (Vol. 2) (pp. 637-672). Kuala Lumpur, Malaysia: Centre for Malaysian Chinese Studies.

Wong, C. K. (2011). *Xingzhou meiti jituan zhixing zhuxi zhang xiaoqing yu shangpin hua de malaixiya huayu zuqun xiangxiang* [Sin chew media corporation executive chairman Tiong Hiew King and commoditization of Malaysian Chinese imagination]. Retrieved September 10, 2017, from http://ccs.nccu.edu.tw/word/HISTORY_PAPER_FILES/1319_1.pdf

Yang, Y. Y. (2002). Wenhua rentong de duli xing he dongli xing: Yi malaixiya huaren wenhua rentong de yanjin yu chuangxin wei li [The independence and dynamic of cultural identity: An example of the evolution and innovation of Malaysian Chinese's cultural identity]. In C. W. Zhang & X.

Y. Tang, (Eds.), *Haiwai huazu yanjiu lun ji: Wen hua, jiaoyu yu rentong* (3rd ed.) (pp. 407-420). Taipei, Taiwan: Overseas Chinese Association. Retrieved August 14, 2014, from http://2017s.pbworks.com/w/file/fetch/120804846/s11-%E6%96%87%E5%8C%96%E8%AA%8D%E5%90%8C-%E6%96%B0%E9%A6%AC-%E6%A5%AE%9C%E9%9F%B3.pdf

Yen, C. H. (2000). Historical background. In K. H. Lee & C. B. Tan (Eds.), *The Chinese in Malaysia* (pp. 1-36). USA: Oxford University Press.

Yen, C. H. (2003). *Yibai nian lai malaixiya huashe suo zou guo de lishi dao lu* [The historical trail of the Malaysian Chinese community in the past one decade]. Paper presented at the Conference of the Malaysian Chinese Community in A Decade in Kuala Lumpur, Malaysia. Retrieved August 14, 2012, from http://nantah.org.my/index.php?option=com_content&view=article&id=132

Yu bai huatuan xiangying 1125 jihui, dongzong qiandiao bu chao lengfan [More than a hundred Chinese associations responded to 1125 rally, dongzong emphasized it will not be new wine in old bottles]. (2012, November 1). *Oriental Daily News Malaysia.* Retrieved August 14, 2013, from https://www.orientaldaily.com.my/index.php/news/nation/2012/11/01/25537

APPENDIX

Table 9

Operational definition for the study

1. News of local Chinese guilds and associations-The Malaysian Chinese Guilds and Association (CGAs) was formed based on the relationship by descent from the common ancestor or family relationship (consanguinity), occupation and geographical origin of the Chinese people in China. News of all Chinese organizations, which fall into these categories, was counted.

2. News of local Chinese festivals-This includes news on Chinese New Year celebrations, Autumn Festivals, and so on.

3. News of local Chinese cultural activities-This includes news about cultural performances, martial arts (Wushu), lion dance, music, cemetery issues, and so on.

4. News related to the Chinese language-This includes news related to the Chinese language or Mandarin in terms of its usage, development and others.

5. News related to Chinese literature-This includes news of calligraphy and books exhibition.

6. News of Chinese literature workshops or competitions-This includes news to advocate Chinese literature and workshops or competitions on Chinese literature.

7. Chinese Education Issues: refers to news of local Chinese schools and education issues.

8. News of local Chinese schools-This includes news of all Chinese primary schools, independent schools, converted secondary schools, the three colleges (presently upgraded to University College) run by the Chinese community, particularly Han Chiang College, New Era College and Southern College, and the MCA run Universiti Tunku Abdul Rahman (UTAR) and Kolej Tunku Abdul Rahman (TAR Colleges; presently upgraded to University Colleges).

Table 9 *(Continued)*

9. News of local Chinese education issues-This includes issue on recognition of the United Examination Certificate (UEC) by BN, issues on teachers' Chinese qualification, the expansion of Chinese independent schools, the lack of Chinese teachers in primary, secondary and independent schools, issues on financial support from the state and federal governments, the degradation of decision making power by the school boards and issues on study opportunities of students in Chinese independent schools.

10. Chinese Religious Rights: refers to the religious rights of the Chinese community in Malaysia. It was reflected based on the news of local Chinese temples and religious activities. This includes news of Chinese Taoists, Buddhists, Christians and Muslims, as well as the issue of non-Muslim religious teaching in the schools.

11. Page Number: refers to the page number where the news article was being studied was located. There are four categories:

11.1 Front page-News article published on the front page of the newspaper.

11.2 Pages 2 and 3-News article published on page 2 and page 3 of the newspaper.

11.3 The rest of news section-News article published in the rest of the news section.

11.4 Front page continued on other pages-News article published on the front page that continued to other pages.

12. Headlines: refers to the news headlines in its original language. The headlines provided information on the most highlighted issues in SCD according to each news theme identified.

13. Source of the news: refers to the name of the individual(s) or organization(s) whose words were quoted in the article. There are ten categories:

13.1 Government-This was divided into the BN and PR Government (the States of Penang, Selangor and Kelantan).

13.2 Political party-This was divided into the BN and PR coalition.

Table 9 *(Continued)*

13.3 Chinese ethnic NGOs- This was divided into eight categories: (1) Dong Jiao Zong, (2) Dong Zong or Dong Lian Hui, (3) Jiao Zong, (4) Hua Zong or Hua Tang, (5) Xue Hua Tang, (6) Xiao You Lian Zong, (7) Chinese associations and clan associations and (8) Others (other Chinese ethnic NGOs that were not categorized into (1) to (7)).

13.4 Other ethnic-based NGOs-This includes the Malay, Indian and other ethnic-based NGOs.

13.5 Non-ethnic based NGOs- This includes all non-ethnic based NGOs, such as professional associations, student organizations, political party's supporters, labor union, and etc. concerned about environmental issues and human rights issues.

13.6 Religious groups-This includes Chinese religious groups and non-Chinese religious groups.

13.7 Others-This includes individuals, school/university authorities, police, Sin Chew Daily, Royalties or family members, private companies, and etc.

13.8 Not clear-This refers to news articles that did not state the news sources clearly.

14. News slant: refers to the direction of the news in terms of 'Pro', 'Neutral' or 'Against' based on each type of news.

14.1 Neutral/Balanced-News that did not support or oppose the related issues.

14.2 Pro-News that supported the related issues.

14.3 Against-News that opposed the related issues.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1357 - 1369 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Psychometric Study of Bar-On Emotional Quotient Inventory: Youth Version in Malaysian Sample

Chua Bee Seok*, Shazia Iqbal Hashmi, Lailawati Madlan and Jasmine Adela Mutang

Faculty of Psychology and Education, Universiti Malaysia Sabah, 88400 Kota Kinabalu, Sabah, Malaysia

ABSTRACT

The concept of emotional intelligence (EQ) is an important topic among today's modern society. People are now gaining realisation that these skills can help them in better managing both their professional and personal lives. However, scales available to measure EQ are limited especially among the Malaysian population. Therefore, this study sought to investigate the psychometric proprieties of the Bar-On Emotional Youth Version Quotient Inventory (EQi:YV) in Malaysian samples. A total of 728 students aged between 14 to 20 years old from four secondary schools in Kota Kinabalu, Sabah participated in this study. The EQ-i:YV contains 35 self-report items designed to assess: Intrapersonal, Interpersonal, Adaptability, and Stress Management. The Structural Equation Modelling was used to assess the suitability of the model. The reliability and validity of the model were also measured. Confirmatory factor analysis was employed to test its compatibility. Multiple goodness-of-fit indicators initially revealed that the measurement model failed to reach some of the recommended standards for model fitness. After necessary adjustments were made, the modified model, which retained 30 items, produced a better level of fitness and met recommended standards. The analysis found that EQi: YV had a satisfactory level of reliability despite some convergent and discriminant validity issues. Overall, the EQi:YV is suitable for use in the Malaysian context. Recommendations for future research are also discussed.

ARTICLE INFO

Article history:
Received: 22 May 2018
Accepted: 4 March 2020
Published: 26 June 2020

Keywords: Confirmatory factor analysis, emotional quotient, psychometric, reliability, validity

E-mail addresses:
chuabs@ums.edu.my (Chua Bee Seok)
shaziaih@ums.edu.my (Shazia Iqbal Hashmi)
laila@ums.edu.my (Lailawati Madlan)
jasmine@ums.edu.my (Jasmine Adela Mutang)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

From the perspective of positive youth development, emotional intelligence among the youth is an important aspect of constructing their future careers. In today's globalised and competitive world, our youth needs to be equipped with the ability to recognise, understand, and react appropriately to their own emotions and feelings as well as those of others, so that they will be able to form a productive future workforce and improve the lives of coming generations. The concept of emotional intelligence is currently important as people are now realising that these skills can help them manage both their professional and personal lives.

Researchers have differing points of view when interpreting the term emotional intelligence. In defining the term emotional intelligence, contemporary theorists like Salovey and Mayer (1990) considered emotional intelligence as part of social intelligence, and therefore suggested that both of these concepts were interrelated and could be representing the same construct. Salovey and Mayer (1990) also suggested that it involved five domains of abilities that could be categorized as (1) managing emotions (2) self-awareness, (3) motivating oneself (4) handling relationships, and (5) empathy. Thus, the conceptualized of emotional intelligence was influenced by the early definitions of social intelligence. Looking at the five domains mentioned above, we can see that they have a wide range of useful implications for adolescents and young adults who are at their career building stages in life. In essence, it can be said that a certain level of self-awareness will help a person to control, adapt and manage their mood, responses and emotions through self-management. These skills will further help them in navigating their emotions and guide them to take the appropriate actions. EQ is also a powerful skill that maximises a person's abilities to recognise and discern the feelings of others, gain trust, and make a connection. EQ can further help young people to build quality relationships with others, work as an effective team member, relate to other people in a social situation, and resolve conflicts that may arise through negotiations in everyday lives. The youth age category in Malaysia is the highest group. This means that this group is the backbone of the nation's social welfare. With the available data of Emotional Intelligence for this group, relevant parties can consider an initiative or program relevant to develop strengthen social well-being in Malaysia. Thus, the easy-to-use instrument Emotional Quotient inventory: YV from Reuven BarOn special develop for youth purposed.

Therefore, the psychometric study of this instrument is very important to show that it has good value and is suitable for youth.

Literature Review

Past studies have shown that efforts have been made to combine both the social and emotional components of the construct. Gardner (1983), in explaining multiple intelligences, conceptualized that personal intelligence was based on intrapersonal intelligence, which constituted emotional and

interpersonal intelligence which, according to him, referred to the social component of the construct. Furthermore, Bar-On (1988) suggested that emotional-social intelligence was composed of various interpersonal and intrapersonal skills and competencies that worked together to elicit effective human behaviour in different contexts. Later, Saarni (1990) explained eight interrelated social and emotional skills that could be referred as emotional competence. Therefore, based on the above mentioned past studies, to be more precise, this construct should be referred as "emotional-social intelligence" instead of "emotional intelligence" or "social intelligence" only. Today, many studies of emotional intelligence in Malaysia use different instruments such as Goleman, Mayer's and Petrides. However, EQ: i YV is built for the youth category. Bar-On has developed a number of emotional intelligence instruments according to specific age categories, for example, school students, university students and workers. Psychometric studies of emotional intelligence have been conducted by Wan Sulaiman and Noor (2015) but the instrument used was the Wong and Law Emotional Intelligence Scale (WLEIS). Psychometric Studies on EQ:I still rare especially in Malaysia.

Bar-On Model of Emotional Social Intelligence. The current research paper focuses on the Bar-On (1988) model of emotional-social intelligence (ESI) by exploring the psychometric properties of the Bar-On Emotional Quotient Inventory (EQ-i:YV). The Emotional Quotient Inventory (the EQ-i) played a vital role in the development of Bar-On (1988) model of ESI. Rigorous research that led to the development of the measure of ESI and Bar-On model were carried out over a period of 17 years in six major stages; these stages were: (1) identifying and grouping together various socio-emotional competencies thoughts that impact psychological well-being based on the clinical experiences of the researchers as well as reviewing the work of earlier researchers; (2) differentiating the separate key clusters of skills and competencies; (3) developing 1,000 items based on the clinical experiences of the researchers as well as by reviewing the literature; (4) developing 15 primary scales and 133 items of the instrument based on a combination of statistical analyses achieved by conducting factor analysis and item analysis and based on theoretical knowledge; (5) developing the norms for the scale based on the data collected from 3,831 adults; and (6) carrying on normalization and validation of the instrument in many different languages across cultures (Bar-On, 2006).

To date, translations of the EQ-i are available in almost 30 languages (Bar-On, 1997) and data using this inventory from various countries around the world have been collected. The EQ-i was first translated from English to Spanish, and the Spanish version was used for large data collection in Argentina. Later on, data collection was also performed in several other countries. The inventory was

later used to collect data involving 3,000 research participants from many countries including Argentina, Germany, India, Israel, Nigeria, and South Africa. EQ:i YV has two types of questionnaires: EQ:i YV and also EQ: i:YV (short form). In this study the questionnaire used was EQ: I YV. The difference between these two questionnaires is the sub-component of General Mood not included in the short form. The short form has 35 Items compared to another one which has 60 items. However, this study only analysed four components of Emotional Intelligence, and according to Bar-On (1997), each component can stand alone.

Apart from providing cross-cultural data, this cross-cultural data collection using the EQ-i helped during scale validation and development by assisting in the process of item selection and alteration, and establishing the final nature of the response format. These cross-cultural research provide evidence that the EQ-i:YV can also be used with Malaysian samples provided that such samples are compatible with the reliability and validity measure of the inventory. Therefore, the main aim of the present study is to determine the psychometric proprieties specifically to assess the suitability of the model, reliability and validity of The Emotional Quotient Inventory: Youth Version (EQ-i:YV) using Malaysian samples to overcome the limitation of available instruments.

METHODS

Participants and Procedure

A total of 728 secondary school students (380 males and 348 females) aged between 14 years old to 20 years old were recruited from four secondary schools in Kota Kinabalu, Sabah to participate in this study. In terms of ethnicity, 31.9% were Bajau, 15.2% were Malay, 8.8% were Melayu Brunei, 2.1% were Kadazandusun, 0.5% were Chinese, 0.3% were Indians and the remaining majority (41.2%) were from the other indigenous groups in Sabah. In terms of religion, a majority of the participants were Muslim (94%), 5.8% were Christians and 0.3% were Buddhists. After a permit has been obtained from the Ministry of Education as well as the State, the study was conducted according to the selected school. The questionnaire was distributed personally by the researchers in the classroom. The participants could ask the researcher directly if any item was not understood.

Measure

The Emotional Quotient Inventory: Youth Version (EQ-i:YV) contains 60 items designed by Bar-On and Parker (2000) to measure four dimensions of Bar-On's Emotional Intelligence model: the intrapersonal scale (6 items), the interpersonal scale (12 items), the stress management scale (12 items), and the adaptability scale (10 items). The sum of these four scales would be used to measure the total Emotional Intelligence scale. In addition to these four scales, the EQ-i:YV also contains a general mood scale (14 items), this scale was used to measure the general level of emotional positivity or negativity, together with a

positive impression validity scale (6 items), which measured the excessively positive or socially desirable. The response format for the items was five-point Likert scales which ranged from 1 = very seldom true of me to 5 = very often true of me. High scores obtained by the respondents on the scale indicate their levels of social competency and self-perceived emotions are higher. The EQ-i short version consisted of twelve reverse-coded items (namely items 6, 15, 26, 28, 35, 37, 45, 46, 49, 53, 54, and 58). In this study, the analysis was only conducted on the four broad dimensions of the EQ-i:YV.

The original version of EQ-i:YV was translated into Malay by using the back-to-back translation method. In the translation process, two independent translators (the lecturer in Psychology program in Faculty of Psychology and Education, Universiti Malaysia Sabah) carried out the translation from the original version to Malay version then another translator (another Psychology lecturer in Faculty of Psychology and Education) also back-translated it to the English version. In the final process, all the researchers in this project involved in harmonizing the final instrument.

Data Analysis

The data were analysed by using IBM SPSS AMOS 23 Program (Arbuckle, 2014). Considering the already existing assumptions of the four-factor of the Emotional Quotient Inventory Youth version (EQ-i:YV) (Bar-On & Parker, 2000), the Confirmatory Factor Analysis was performed to test the suitability of the inventory to apply in Malayasia context and to verify the model fit. The predictive validity of the proposed four-factor (40 item-structure) of the EQ-i:YV was evaluated by comparing the multiple goodnesses of fit indices of the model to the recommended criteria, such as The Chi-square/df ratio should be less than 5.0 (CMIN/DF < 5.0), the goodness-of-fit index should be larger than 0.90 (GFI > 0.90). The GFI is scaled between 0 and 1, higher values indicating better model fit. Jöreskog and Sörbom (1986) do not state a cut-off value for the GFI although it is common for values greater than 0.9 to be considered acceptable. Adjusted GFI (AGFI > 0.80), and the Comparative Fit Index (CFI) (Bentler, 1990), in which the value obtained should be larger than 0.90 (CFI > 0.90). The Root Mean Square Error of Approximation value should be less than 0.05 (RMSEA < 0.05) (Browne & Cudeck, 1993). These criteria are considered as acceptable indices of fit and were used to determine the adequacy of the model of measure. Besides, the criteria used to retain the items was indicated by an item factor loading ≥ 0.5 (Hair et al., 2009). In the present study, composite reliability, discriminant validity, and convergent validity of the scale were also investigated.

RESULTS

Confirmatory Factor Analysis

In the present study, the Confirmatory Factor Analysis (CFA) was conducted using IBM SPSS Amos to perform structural equation modelling (SEM) of the data obtained from the 728 secondary school students.

In conducting the multivariate statistical techniques Kline (2005) suggested the ratio of cases that the free parameters should be 10:1 in order to conduct a confirmatory factor analysis. While, Tabachnick and Fidell (2001) recommended that the sample size should be a minimum of 200 to perform multivariate statistical techniques on the data. In the present study, there were 60 constructs and 728 cases involved, which suggested the ratio of 12:1. Referring to the two recommendations, the size of the sample in the present study is sufficient and should not be an issue.

The CFA results revealed that some of the comparative fit indexes of the four-factor structure of the EQ-i:YV failed to meet the recommended standards for model fit. The fit indices indicated CMIN/DF of 3.40 which is below the threshold of 5, GFI of 0.88 which does not reach the recommended value greater than 0.90, AGFI of 0.84 which is also tolerable but not great, CFI of 0.72 which does not reach the recommended standard, and an RMSEA estimate of 0.05 which is acceptable (refer to Table 1). The parameter estimates range from 0.01 to 0.65 for items on the intrapersonal factor, while for the interpersonal factor the parameter estimates range from 0.35 – 0.52, for adaptability factor (range from 0.41 – 0.58), and stress management factor (range from 0.03 – 0.61). Parameter estimates among factors from the CFA are as presented in Table 2. The results indicated that the four-factor model of the EQ-i:YV had some model fit issues. Therefore, a reasonable adjustment of data was required. Table 1 shows a Measurement Model of the EQ-i:YV.

To discover the model fit issues, the covariance problem between errors on the same factor and the items' loading value had been checked in order to improve the model fit. First, we removed two items (B28 and B53) in the intrapersonal factor, four items (B3, B11, B26, and B39) in the stress management factor, and four items (B41, B20, B51, and B14) in the interpersonal factor, which loaded insufficiently on the corresponding latent factors and some of the items were removed due to high covariance problem (the criteria used to remove the 10 items was based on the parameter estimates and high covariance among the items).

Table 1

Model fit statistics from confirmatory factor analysis for the Emotional Quotient Inventory youth version (EQ-i:YV)

Fit Indices	Recommended Fit	Measurement Model	Modified Measurement Model
CMIN/DF	< 5.0	2.88	2.76
GFI	> 0.90	0.86	0.92
AGFI	> 0.80	0.84	0.9
CFI	> 0.90	0.7	0.83
RMSEA	< 0.05	0.05	0.04

The modified model of EQ-i:YV retained 30 out of a total of 40 items of the four-factor structure of the EQ-i:YV model, with recommended quality standards and better goodness of fit with data (refer to Table 2). As shown in Table 1 (modified measurement model), the estimates for the modified measurement models showed a better fit for the data with a CMIN/DF of 2.76, GFI of 0.92, AGFI of 0.90, CFI of 0.83, and a RMSEA estimate of 0.04. The parameter estimate for the modified model of EQ-i:YV ranged from 0.50 to 0.65 for items on the intrapersonal factor; 0.38 – 0.49 for interpersonal factor; 0.41 – 0.60 for adaptability factor; and 0.41 – 0.53 for stress management factor. Table 2 lists the original 40 items and the 30 retained items of the EQ-i:YV and items parameter estimates.

Table 2

Parameter estimates from the confirmatory factor analysis of the Emotional Quotient Inventory Youth Version (EQ-I:YV)

Measurement Model		Modified Measurement Model	
Item - Scale	Parameter	Item	Parameter
Intrapersonal Scale		Intrapersonal Scale	
B53	0.068		
B43	0.601	B43	0.602
B31	0.649	B31	0.65
B28	0.032		
B17	0.653	B17	0.653
B7	0.528	B7	0.528
Interpersonal Scale		Interpersonal Scale	
B59	0.478	B59	0.529
B55	0.528	B55	0.546
B51	0.325	B45	0.427
B45	0.431		
B41	0.286		
B36	0.383	B36	0.399
B24	0.469	B24	0.46
B20	0.3		
B14	0.351		
B10	0.448	B10	0.518
B5	0.483	B5	0.429
B2	0.527	B2	0.548

Table 2 *(Continued)*

Measurement Model		Modified Measurement Model	
Item - Scale	Parameter	Item	Parameter
Stress Management		Stress Management	
B58	0.602	B58	0.605
B54	0.452	B54	0.457
B49	0.303	B49	0.306
B46	0.454	B46	0.457
B39	-0.004		
B35	0.663	B35	0.653
B26	0.288	B21	0.334
B21	0.323	B15	0.373
B15	0.376	B15	0.378
B11	-0.18		
B6	0.446	B6	0.45
B3	-0.163		
Adaptability		Adaptability	
B57	0.508	B57	0.494
B48	0.499	B48	0.493
B44	0.529	B44	0.53
B38	0.559	B38	0.562
B34	0.595	B34	0.601
B30	0.454	B30	0.456
B25	0.431	B25	0.428
B22	0.455	B22	0.465
B16	0.449	B16	0.447
B12	0.487	B12	0.494

Composite Reliability

Composite reliability index (CR) and average variance extracted (AVE) were used to determine the reliability of the modified measurement model of the EQi: YV). Hair et al. (2010) recommended that the composite reliability should be above the 0.70 threshold and the AVE should be above the 0.50 threshold. In the current study, a satisfactory level of reliability was determined, as the composite reliability (CR) of each scale of EQ-i:YV was found to exceed the threshold value of 0.70, except for the stress management scale. Composite reliability values for all the four factors range between 0.68 and 0.79. However,

analysis of average variance extracted (AVE) showed that out of all the four factors, only the intrapersonal scale (AVE = 0.61) reached the recommended average variance extracted (AVE) of more than 0.50 threshold (Hair et al., 2006). Table 3 shows the CR and AVE of the EQi: YV.

Table 3

Composite Reliability and Average Variance Extracted of the Emotional Quotient Inventory youth version (EQ-i:YV)

Scale	Composite Reliability (CR)	Average Variance Extracted (AVE)
Intrapersonal	0.702	0.373
Interpersonal	0.709	0.235
Stress Management	0.679	0.22
Adaptability	0.767	0.25

Construct Validity

When conducting a Confirmatory Factor Analysis, it is absolutely necessary to establish reliability, as well as construct validity. In the current study, construct validity is in convergent form, and the discriminant validity was assessed for a good-fitting measurement model of EQ-i:YV.

Convergent Validity

The evidence of convergent validity was assessed using three criteria. The composite reliability should be greater than 0.7 (CR > 0.70), the composite reliability value should be greater than the average variance extracted (AVE) value (CR > AVE) and lastly, the average variance extracted (AVE) value should be above the 0.50 threshold (AVE > 0.50) (Hair et al., 2006). Referring to Table 3, the results showed that all factors of the Emotional Quotient Inventory Youth Version (EQ-i:YV) were greater than the recommended levels of CR > 0.70 and CR > AVE. However, for the last criterion, only the intrapersonal scale showed its AVE value to be above 0.50 threshold (AVE > 0.50). The overall results were due to the other three scales (interpersonal, stress management, and adaptability), consisting of items with low factor loading (lower than 0.50). The results also indicated that the scales of EQ-i:YV had some convergent validity issues.

Discriminant Validity

Evidence of discriminant validity was determined if the average variance extracted (AVE) is greater than the squared correlation between each pair of constructs (Hair et al., 2010). The results of discriminant validity analysis showed (Table 4) that the square root of the AVE for the interpersonal (0.485) and adaptability scale (0.500) was less than one the absolute values of the correlations with another factor. The results also indicated that

the AVE for the interpersonal scale (0.373) and the adaptability scale (0.250) was less than the MSV for interpersonal scale (0.312) and adaptability scale (0.312). This suggests that the data have some discriminant validity issues.

Table 4

Analysis of convergent and discriminant validity of the Emotional Quotient Inventory youth version (EQ-i:YV)

Scale	CR	AVE	MSV	MaxR(H)	stressman	intra	interp	Adap
Stress Management **(stressman)**	0.679	0.22	0.012	0.714	**0.469**			
Intrapersonal **(intra)**	0.702	0.373	0.112	0.831	0.11	**0.61**		
Interpersonal **(interp)**	0.709	0.235	0.312	0.881	0.104	0.13	**0.485**	
Adaptability **(Adap)**	0.767	0.25	0.312	0.916	-0.102	0.334	0.559	**0.5**

DISCUSSIONS

Structural equation modelling by applying CFA was conducted to define the goodness of fit of the four-factor model for EQ-i:YV. The results of the CFA do not meet the suggested criteria for GFI (Jöreskog & Sörbom, 1986) and CFI criteria (Bentler, 1990). However, the result is still tolerable. The covariance problem between errors on the same factor and the items loading value had been checked to further improve the model fit. Two items were removed (B28 and B53) in the intrapersonal factor, four items (B3, B11, B26, and B39) were removed in the stress management factor and four items (B41, B20, B51, and B14) were removed in the interpersonal factor, which loaded insufficiently on the corresponding latent factors. After removing these particular items, the researchers conducted subsequent covariance analysis on the items with high covariance problem. The modified model of EQ-i:YV retained 30 out of a total of 40 items of the four-factor structure of the EQ-i:YV model, which met quality standards and better goodness of fit with data. Removing the suggested items resulted in a clearer and more coherent factorial structure. The eliminated items have an almost similar meaning and respondents may have questioned why redundant items are in the questionnaire or they may have difficulty distinguishing the meaning of each item, therefore, it brought confusion to answer which meant that the respondent was experiencing difficulty understanding subtle differences between some of the items. For example, items deleted in the intrapersonal factor was "It is hard to talk about my deep feelings" and "I have trouble telling others about my feelings". As for the eliminated items in the stress management

factor, can indicate that the respondents have a lack of self-awareness. Another possible reason for the lower loading values is the wording or cultural reasons since the respondents consist of various sub-ethnics in Sabah which may have influenced the interpretation of the items. Further investigations on the clarity or understand ability of the items can be done in the future to provide insight of the suitability of these items. Another study by Kun et al. (2012) also had questioned the validity of some items in EQ-i: YV-S. Therefore, some items may need to be relooked to ensure the validity and replicability of the measure.

However, this outcome is still in line with Bar-On analysis using CFA. The psychometric analyses of EQ-I Four-factor model (comprising 40 emotional intelligence items) were empirically supported. Parker et al. (2005) also examined the four-factor structure which included interpersonal, intrapersonal, adaptability, and stress management of the EQ-i:YV by applying CFA. His findings supported the generalisation of the measure with adolescents as the four-factor structure explored by him was found to have adequate fit to the data as fit indices and parameter estimates were satisfactory. Since students from secondary schools were involved in this study, there was no issue in terms of the sampling size.

Its convergent validity showed that all of the factors of the EQ-i:YV were greater than the recommended level of CR > 0.70 and CR > AVE. However, the criteria for the AVE value were above 0.50 thresholds (AVE > 0.50) in intrapersonal scale. The results were due to the other three scales (interpersonal, stress management, and adaptability) consisting of items with low factor loading (lower than 0.50). The results also indicated that there were some convergent validity issues with the scales of EQ-i:YV. According to Parker et al. (2005), researchers in various fields are attracted to the concept of emotional intelligence. Researchers have thus applied this concept based on their own cultural background. Culture can influence the way people experience and express their emotions, thus cautions must be taken when using the emotional intelligence construct in other different cultures, because there might be some convergent validity issues due to the varying cultures.

To test the construct validity of concepts in any theory, researchers need to measure convergent and discriminant validity to ensure that the instrument is validated. Evidence of discriminant validity for the EQ-I; YV was measured by comparing the average of the AVEs for the constructs against the shared variance (squared correlation) between each pair of constructs (Bove et al., 2009; Walsh et al., 2009). Therefore, to determine satisfactory discriminant validity, the AVE should be greater than the squared correlation. According to Fornell and Larcker (1981), discriminant validity can be obtained by determining that the square of the correlation between the latent variables should be lesser than the AVE of the correlated latent variables. The results of discriminant validity analysis

showed the square root of the AVE for the interpersonal scale (0.485) and the adaptability scale (0.500) was found to be less than one, which can indicate the absolute value of the correlations with another factor. The results also indicated that the AVE for the interpersonal scale (0.373) and the adaptability scale (0.250) was less than the MSV for interpersonal scale (0.312) and the adaptability scale (0.312). Even though the AVE is less than 0.5, but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981). Future studies should consider including the Positive Impression scale (available on the original version) as part of the psychometric analysis to ensure whether the respondents are attempting to create an overly positive self-impression.

CONCLUSION

Based on psychometric analyses using CFA, the results revealed that some of the comparative fit indices of the four-factor structure of the EQ-i:YV did not meet the recommended standards for model fitness. However, the results were still tolerable because Fornell and Larcker (1981) mentioned that if AVE was less than 0.5, but composite reliability was higher than 0.6, the convergent validity of the construct was still adequate. Subsequently, 10 items were removed to improve the model fit based on recommended quality standards and better goodness of fit with data. Following this, the EQ-I:YV designed by Bar-On was found to have good psychometric characteristics and suitable for use in the context of Malaysian culture, especially among secondary school students. Hence, EQ-I:YV has provided an important contribution to the emotional-social intelligence in the context of Malaysian youth. Future studies should be carried out in a proportionate age group cohort to explore differences in the emotional-social intelligence between teenagers and early adolescence. Future research can consider that the, sample be extended to youths in rural areas as well to determine any differences due to environmental settings. To further explore the role of ethnicity and different socioeconomic levels, studies should also be carried out in other states in Malaysia. Since this study only involved secondary school students in Kota Kinabalu, the findings cannot be generalised to include the characteristics of other samples.

ACKNOWLEDGEMENT

The research for this paper was funded by Ministry of Higher Education of Malaysia, under Fundamental Research Grant Scheme (FRGS): Kecerdasan Emosi Sosial iaitu Kawalan Rangsangan dalam kalangan Remaja (Ref: FRGS/1/2015/SS05/UMS/03/3).

REFERENCES

Arbuckle, J. L. (2014). *Amos* (Version 23.0) [Computer Program]. Chicago, USA: IBM SPSS.

Bar-On, R. (1988). *The development of a concept of psychological well-being* (Unpublished doctoral dissertation), Rhodes University, South Africa.

Bar-On, R. (1997). *The Emotional Quotient Inventory* (EQ-i): Technical manual. Toronto, Canada: Multi-Health Systems, Inc.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema, 18*(supl.), 13-25.

Bar-On, R., & Parker, J. D. A. (2000). *The handbook of emotional intelligence theory, development, assessment, and application at home, school, and in the workplace* (pp. 363-388). San Francisco, USA: Jossey-Bass.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246.

Bove, L. L., Pervan, S. J., Beatty, S. E., & Shiu, E. (2009). Service worker role in encouraging customer organizational citizenship behaviors. *Journal of Business Research, 62*(7), 698-705.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, USA: Sage.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Gardner, H. (1983). *Frames of mind.* New York, USA: Basic Books.

Hair, Jr. J. F., Black, W. C., Babin, B. J., Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, USA: Pearson Prentice Hall.

Hair, J. F., Black, W., Babin, B. J, & Anderson, R. A. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, USA: Pearson Education.

Hair, J., Black, W. C., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, USA: Prentice-Hall.

Jöreskog, K. G., & Sörbom, D. (1986). *LISREL VI: Analysis of linear structural relationships by maximum likelihood and least squares methods.* Mooresville, USA: Scientific Software.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, USA: Guilford Press.

Kun, B., Urbán, R., Paksi, B., Csóbor, L. V., Oláh, A., & Demetrovics, Z. (2012). Psychometric characteristics of the emotional quotient inventory, youth version, short form, in Hungarian high school students. *Psychological Assessment, 24*(2), 518-523. https://doi.org/10.1037/a0026013

Parker, J. D. A., Saklofske, D. H., Shaughnessy, P. A., Huang, S. H. S., Wood, L. M., & Eastabrook, J. M. (2005). Generalizability of the emotional intelligence construct: A crosscultural study of North American aboriginal youth. P*ersonality and Individual Differences, 39*(1), 215-227.

Saarni, C. (1990). Emotional competence: How emotions and relationships become integrated. In R. A. Thompson (Ed.), *Current theory and research in motivation (Vol. 36), Nebraska Symposium on Motivation, 1988: Socioemotional development* (pp. 115-182). Lincoln, USA: University of Nebraska Press.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9,* 185-211.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, USA: Allyn & Bacon.

Walsh, G., Beatty, S., & Shiu, E. M. K. (2009). The customer-based corporate reputation scale: Replication and short form. *Journal of Business Research, 62*(10), 924-930.

Wan Sulaiman, W. S., & Noor, M. Z. M. (2015). Examining the psychometric properties of the Wong and Law Emotional Intelligences Scale (WLEIS). *eBangi: Journal of Social Sciences and Humanities,* (S2), 81-90.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1371 - 1386 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Multicultural Competency, Spirituality and Self-Efficacy in Dealing with Legal and Ethical Issues

Neerushah Subarimaniam*, Noor Syamilah Zakaria and Wan Marzuki Wan Jaafar

Department of Counselor Education and Counseling Psychology, Faculty of Educational Studies, Universiti Putra Malaysia, Serdang 43400, Selangor, Malaysia

ABSTRACT

Multicultural competency and spirituality help trainee counselors to navigate the challenges of being a professional helper. Recently, the integration of multicultural counseling and spirituality have been proliferating in a number of research fields. Multicultural competency is one's awareness, knowledge, and skills of various cultures. Next, spirituality is the sense of inter-connectedness with God and self-efficacy refers to individuals' beliefs regarding their ability to accomplish tasks successfully. The purpose of this study is to examine the relationship between: (a) multicultural competency and trainee counselors' self-efficacy in dealing with legal and ethical issues; and (b) spirituality and trainee counselors' self-efficacy in dealing with legal and ethical issues. One hundred and forty-eight respondents from three private universities in Malaysia participated in the study through simple random cluster sampling. A total of three instruments were used to measure multicultural competency, spirituality, and self-efficacy respectively. The data were analyzed using Pearson Correlation. Correlation analyses revealed that there is a positive relationship between multicultural competency and self-efficacy. There is also a significant relationship between spirituality and self-efficacy. The coefficient of *r* value between multicultural competency and self-efficacy reflected a substantial relationship; while the strength of the relationship between spirituality and self-efficacy was weak. Hence, this study is vital as it provides the idea of incorporating multicultural competency and spirituality in the process

ARTICLE INFO

Article history:
Received: 7 September 2018
Accepted: 7 February 2020
Published: 26 June 2020

E-mail addresses:
shahmaniam@gmail.com (Neerushah Subarimaniam)
syamilah@upm.edu.my (Noor Syamilah Zakaria)
wanmarzuki@upm.edu.my (Wan Marzuki Wan Jaafar)
*Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

of shaping counselors who eventually will be able to deal with legal and ethical issues in counseling efficaciously.

Keywords: Ethics, legal, multicultural competency, self-efficacy, spirituality

INTRODUCTION

Counselors hold certain principles, concepts, theories, and personal qualities as the backbone of their counseling practices. One of the principles is the adherence to legal and ethics as stated in the Malaysian Counselor Act 1998 (Act 580). The Council for Accreditation of Counseling and Related Educational Programs (CACREP) requires all trainee counselors to obtain demonstrated knowledge in eight core areas: (a) professional counseling orientation and ethical practice; (b) social and cultural diversity; (c) human growth and development; (d) career development; (e) counseling and helping relationships; (f) group counseling and group work; (g) assessment and testing; and (h) research and program evaluation (Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2016).

One of the core areas which is closely related to the current research is 'professional counseling orientation and ethical practice'. The enumeration of ethical codes enables a group of people and those served by the members of the group to make justification on the ethical responsibilities performed in common (Freeman, 2000). It is necessary to maintain decency and to follow the standard guidelines set by the counseling professions (Jaladin & Lau, 2013). Mat Rani et al. (2017) found that registered counselors in Malaysia projected better ethical behaviors and had more ethics awareness and compliance compared to non-registered counselors. This creates more curiosity on the trainee counselors' legal and ethical knowledge, ethical identity, and ethical commitment. Thus, the context of legal and ethics in counseling involving trainee counselors in Malaysia is elaborated further and it is necessary to study how trainee counselors may improve their ability to deal with legal and ethical issues in counseling.

Background of the Study

Ethics involves evaluation of humans' behaviors either as 'right' or 'wrong' (Jaladin & Lau, 2013). The process of making decisions about a behavior needs rational thinking and moral reasoning abilities, followed by specific ethical guidelines (Jaladin & Lau, 2013). The ethical guidelines refer to a code of ethics encompassed with elements of positive and negative behaviors that are clarified by the professionals and enforced by law (Bokhari et al., 2014). Furthermore, the code of ethics reflects the principles of ethical behaviors and punishment for misbehaviors (Welfel, 2013). This is where ethics and legal merge to form a functional system in counseling.

Classic cases such as the Tarasoff case, Miranda Warning, and Buffalo News (Stein, 1990) highlighted the need to uphold professional ethics, standards, and values.

Trainee counselors and other counseling professionals should study these classic cases as reflection of the ethical standards held in the society and it is crucial for them to make rational decisions when they encounter ethical dilemmas. An ethical issue involving an anti-gay counseling student which occurred in 2012 is also a major case that has alarmed all the counselors. The counseling student had negative perceptions of lesbian, gay, bisexual, and transgender (LGBT) and refused to alter her beliefs. According to the counseling student, LGBT is not in favor of the teachings of her religion and thus, she refused to accept her LGBT client. As a punishment, the student counselor was expelled from her college. Therefore, behaviors are associated with various aspects of our lives and positive behaviors would result in excellent outcomes which in this context, successfully encounter ethical issues in counseling.

Bandura's triadic reciprocal causation reveales that an individual's behaviors are influenced by the social environment, personal factors, and overt behaviors. Individuals who have a high level of self-efficacy would be able to manage their behaviors, adapt in any environment, and would view dilemmas as challenges rather than obstacles (Sawyer et al., 2013). Counselors' self-efficacy affects the accuracy and decision-making in ethical issues (Mullen et al., 2014). In Malaysia, the ethics knowledge among counselors is found to be at a moderate level and it is essential for them to increase their ethics knowledge to ensure effective delivery of counseling services (Mat Rani et al., 2017). This would definitely affect the counselors' decision-making process and eventually, increase their avoidance behaviors as they are not confident in dealing with legal and ethical issues. Therefore, the purpose of this study is to identify factors that could improve the counselors' self-efficacy in dealing with legal and ethical issues at the training level. Two factors: (a) multicultural competency (MC); and (b) spirituality (SP) are chosen as factors that may influence trainee counselors' self-efficacy in dealing with legal and ethical issues (SEDLEI).

First, MC is associated with the differences between counselor and client and those differences can be the result of traumatic life events, socialization, or ethnic environment (Gladding, 2013). Furthermore, Nelson-Jones (2009) stated that multicultural counseling involves clients from various cultures, different levels of assimilation, and they can differ from the counselor in the aspect of race, social class, marital status, gender role identity, sexual and affectionate orientation, physical disability, religion or philosophy, and age.

Second, SP involves an active search of a person to become connected with God and to find the meaning of life (Gladding, 2013). Post and Wade (2014) defined SP as one's behaviors, feelings, and thoughts that resulted from a search for the sacred. While Dalmida et al. (2012) mentioned that SP was a person's search for purpose and meaning of life which involved transcendence, self-transcendence, and a personal connection with the highest

power. MC and SP are two different factors that are closely related to the Malaysians' culture and tradition. Counselors in Malaysia are required to be competent and efficacious due to the challenging lifestyles and environments. Thus, it is worthful to examine the relationship among MC, SP, and SEDLEI. This research may improve existing counselor ethics education and training. Educators may want to integrate MC and SP into their teachings to develop efficacy beliefs of trainee counselors.

Problem Statement

Limited research on trainee counselors' self-efficacy in dealing with legal and ethical issues (SEDLEI) indicated the need to fill the gap. To date, there is no assessment used to identify trainee counselors' SEDLEI (Mullen et al., 2014). Furthermore, there is a lack of studies performed on the relationship among multicultural competency (MC), spirituality (SP), and SEDLEI. This could be due to the complexity of ethics as it covers a large number of topics (Mullen et al., 2014). In addition, there are no clear solutions to the ethical dilemmas encountered by counselors (Hill, 2004; Zakaria, 2013; Zakaria & Warren, 2016). Thus, the idea of integrating MC and SP in this study would help to prepare trainee counselors and future counselors to deal with legal and ethical issues in counseling efficaciously. MC and SP may provide solutions and encourage trainee counselors to take up ethical challenges in counseling.

Study Objectives

a) To examine the relationship between multicultural competency (MC) and self-efficacy in dealing with legal and ethical issues (SEDLEI) in counseling.

b) To examine the relationship between spirituality (SP) and self-efficacy in dealing with legal and ethical issues (SEDLEI) in counseling.

LITERATURE REVIEW

Multicultural Competency (MC) and Self-Efficacy

The attention given to multicultural issues in counseling has been increasing (Barden & Greene, 2015; Constantine, 2001; Harun et al., 2014; Lam et al., 2013; Maldonado, 2008; Ngcobo & Edwards, 2014; Ponterotto et al., 1996; Vespia et al., 2010). MC encompasses of knowledge, awareness, and skills that every counselor should have to meet the need of multicultural, multilingual, and multiracial clients (Dodson, 2013). The term 'awareness' which defines multicultural counseling refers to the counselors' awareness of their own cultural biases and how counselors translate these biases into counseling sessions that are culturally insensitive (Ponterotto et al., 1996; Zakaria, 2013).

'Knowledge' reflects the counselors' understanding of their own worldview (Ponterotto et al., 1996). Counselors must have knowledge of their clients' worldview inclusive of culture-specific information such as models of acculturation, the impact of racism on their clients, and racial identity development. Sodowsky et al. (1994)

stated that knowledge was the cognitive domain that involved knowing the cross-paradigmatic approaches, theories, and research of multicultural counseling to understand the cultural diversity. In contrast, skill refers to counselors' capacity or competency to translate their awareness of biases and worldview into culturally sensitive and appropriate interventions (Ponterotto et al., 1996; Zakaria, 2013; Zakaria & Warren, 2014, 2016; Zakaria et al., 2017).

Counselors who are multiculturally competent believe that they should treat every client fairly and equally, regardless of the clients' cultural background. On the contrary, counselors who are multiculturally encapsulated would conduct counseling sessions without considering the cultural, race, and ethnic background of clients (Sodowsky et al., 1994). Counselors who have a strong foundation in MC would be able to expand their self-efficacy in providing positive counseling outcomes (Harun et al., 2014; Wan Jaafar et al., 2011).

However, counselors would seek assistance if they are not multiculturally competent; and this would lead to counselors' avoidance behaviors such as avoid dealing with clients and failure to address ethical dilemmas. Drinane et al. (2014) discussed a model of multicultural competencies (MCCs) adopted by the American Psychological Association (APA). They stated that this model of MCCs guides professionals through the cultural complexities and helps them serve their clients at the best level they could. However, counselors have to focus on the multicultural aspects at a very early stage and not wait till the occurrence of racial incidents or culture clash which would lead to legal and ethical dilemmas (Sodowsky et al., 1994). Thus, the researchers hypothesized that MC was related to SEDLEI.

Spirituality (SP) and Self-Efficacy

The attention given to spirituality (SP) has been mushrooming (Cashwell et al., 2001; Curry et al., 2015). While Dagang et al. (2014) mentioned that the acceptance of SP components was almost absent in Malaysian counseling practices and services. Thus, it is necessary to conduct research on SP to show its effectiveness in improving counselor education and training. SP that is integrated within counselors helps them to navigate the challenging waters of ethical and legal dilemmas (McGhee & Grant, 2008; Plante, 2007). Furthermore, the spiritual experiences of counselors enable them to positively affect the growth of clients (Beringer, 2000). This shows the tendency of counselors to cooperate with clients during the time of ethical dilemmas.

Hamzah et al. (2010) stated that SP was one of the primitive needs and it motivated every human being to behave well. Furthermore, SP teaches Man on how to respond and react to any environment (Hamzah et al., 2010). This clearly shows how spiritual counselors should behave and react to legal and ethical issues. McGhee and Grant (2008) explained that spiritual individuals were most likely to be ethical individuals. The element of SP flourishes

counselors and enables them to become the best human development promoters. Thus, the counselors should promote and facilitate SP at any time (Chandler et al., 1992) especially when they are exposed to risks of legal and ethical dilemmas. Counselors with certain values such as SP and adopted it in the counseling process are more likely to be efficacious in dealing with difficult tasks (Curry et al., 2015). Counselors or trainee counselors may feel uncomfortable to approach clients when they have little knowledge about SP (Curry et al., 2015).

In 2010, Association for Spiritual, Ethical, and Religious Values in Counseling (ASERVIC) enumerated new competencies to help counselors served their clients and one of them was SP (Cashwell & Watts, 2010). SP will not only assist counselors in dealing with ethical issues, but will also help them in guiding their clients with various spiritual issues. Abou-Amerrh (2013) also found a relationship between SP and self-efficacy among trainee counselors at Hashemite University, Jordan. Thus, the researcher hypothesized that SP was related to SEDLEI. The current study which focused on MC and SP would add knowledge to the existing kinds of literature and hope to contribute ideas to the educational institutions in Malaysia. The idea is to integrate MC and SP into the existing counselor education and training program to prepare astute counselors.

Social Cognitive Theory (SCT)

Bandura defined self-efficacy as an individual's ability to accomplish challenging tasks (Chaves-Barboza et al., 2019; Curry et al., 2015). Furthermore, Bandura highlighted that efficacious individuals would see problems as challenging tasks and set the goal to overcome the problem (Sawyer et al., 2013). SCT predicts method on how behaviors can be altered to achieve outcome results (Pei-Hsuan & Schallert, 2008). Efficacious individuals make efforts to achieve desired outcomes and hardly give up despite the negative consequences encountered (Karami & Imani, 2014). Moreover, self-efficacy beliefs determine how individuals feel, what they think, how to respond to challenging tasks, how they make decisions, and how they get motivated (Burney, 2008). SCT reflects the interaction of personal, behavior, and environment as shown in Figure 1.

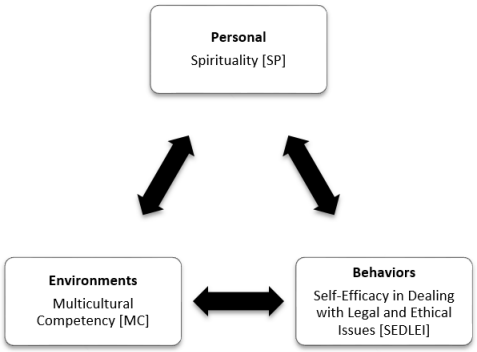


Figure 1. Triadic Reciprocal Causation Model: Interactions among personal, environments, and behaviors.

The interactions of person, environment, and behavior explain further about the research objectives. MC, SP, and SEDLEI are the three human functioning determinants and the interaction would

help in achieving positive counseling outcomes. An individual's personhood is influenced by environment and behavior; behaviors are influenced by personal and environment, and the environment is influenced by behaviors and personal. For instance, trainee counselors who have cultivated spirituality and have a high level of self-efficacy would choose to use their spiritual knowledge in solving ethical issues. Efficacious individuals also would have greater resiliency and it is built based on solid knowledge and skills (Burney, 2008). The individuals would be able to bounce back to the original state of cognition despite any circumstances and obstacles. In brief, positive personal would lead to positive behaviors and positive counseling environment.

MATERIALS AND METHODS

A quantitative research design was used to answer the objectives of the study. The study was conducted at three selected private universities that offer Masters in Counseling program. Private universities were chosen as research location due to various reasons. First, private universities are very much affected by situations such as students' diversity and demanding students (Arokiasamy et al., 2009). Second, public universities in Malaysia were established between the year 1962 and 2007 (Arokiasamy et al., 2009) which are older than most of the private universities in Malaysia. Hence, the number of legal and ethical issues raised at private universities could be higher since their establishment is new compared to the issues raised at public universities. Finally, private university students experience many problems such as personality, family, education, unemployment, drug abuse, future expectations, and psychological problems (Yin-Fah et al., 2016). Thus, the students could encounter problems in dealing with other challenges and issues during their candidature and in their future careers.

The size of the population was 243 including both male and female students. The sample size was determined by using Cochran's (1977) formulas. Based on the formula, the population size of 243 required a sample size with a minimum of 148 trainee counselors, assuming the confidence level of 95%. In addition, simple random cluster sampling was selected from several types of probability sampling. There were many groups of Masters in Counseling students at the three universities. They were clustered based on the semesters in a few classes. Trainee counselors who had completed their first year of studies and above were eligible to participate in this study. Thus, there were a total of 11 classes in all three universities. The researcher randomly selected three clusters from each university and used the members of the selected clusters as respondents. This method was economical and required minimal time to increase sampling efficiency. The age and gender of respondents are not required for data analysis.

Furthermore, a questionnaire was used to gather data for the study. The survey questionnaire is divided into four

sections. There is a total of 67 items and the sections in the questionnaire were as following: (a) Demographic Background; (b) Multicultural Counseling Knowledge and Awareness Scale (MCKAS); (c) Spirituality Index of Well-Being (SIWB); and (d) Ethical and Legal Issues in Counseling Self-Efficacy Scale (ELICSES). First, background information of the respondents was collected through the demographic background section including their belief in God. Second, MCKAS is a 32-item scale that measures individuals' perceived multicultural counseling competency based on two subscales which are multicultural awareness and multicultural knowledge. Coefficient alpha of the awareness and knowledge subscales were .78 and .92 respectively. MCKAS is a 7-point Likert type scale ranging from 1 (Not at All True) to 7 (Totally True). Examples of items include, "I think that clients should perceive the nuclear family as the ideal social unit", "I realize that counselor-client incongruities in problem conceptualization and counseling goals may reduce counselor credibility", and "I believe all clients should maintain direct eye contact during counseling". MCKAS has good content and convergent validity (Cannon, 2008).

Third, the SIWB scale is a 5-point Likert type scale. The range is from 1 (Strongly Agree) to 5 (Strongly disagree). SIWB measures individuals' spiritual values and spiritual quality of life. The self-efficacy and life-scheme subscales recorded alpha values of .83 and .80 respectively. Examples of items including, "I am overwhelmed when I have personal difficulties and problems", "I have a lack of purpose in my life", and "Often, there is no way I can complete what I have started". SIWB has good divergent validity when it is correlated with the Geriatric Depression Scale and good discriminant validity when SIWB is compared with religiosity (Moldovan, 2017).

Finally, ELICSES is an 11-point Likert type scale ranging from 0 (Cannot Do at All) to 100 (Certainly Can Do). ELICSES measures individuals' level of self-efficacy in dealing with legal and ethical issues in counseling across three factors. The three factors are (a) general ethical and legal issues in counseling self-efficacy; (b) suicide, violence, abuse, and neglect self-efficacy; and (c) counselor development and wellness self-efficacy. The Cronbach's alpha values of the factors were .95, .94, and .85 respectively. Examples of items include, "Determine whether a client and counselor interaction is a boundary violation", "Circumvent negative dual relationship", and "Respond to a subpoena for records". ELICSES has good construct validity (Mullen et al., 2014).

The questionnaires were distributed to groups of respondents at the three private universities. The respondents were given 20 minutes to answer the survey and they returned the survey after completing them. Each respondent answered a total of 67 items which were segregated into four sections including demographic background. The researchers conducted exploratory data analysis prior to performing actual data

analysis to explore the suitability of data for the intended correlation analysis. The data obtained from the questionnaires were analyzed through correlation analysis to examine the relationships between (a) MC and SEDLEI; and (b) SP and SEDLEI. Guilford's (1956) rule of thumb was used to interpret the correlation coefficient which is the strength of relationships between two variables.

RESULTS

All the respondents were postgraduate students and at least, in their third semester during their participation in the study. The sample consisted of 18.2% males and 81.8% females. Next, 91.9% of the respondents believed in God and 8.1% of the respondents disbelieved in God. The demographic details are presented in Table 1.

Next, the researcher conducted correlation analyses to determine the relationship between: (a) MC and SEDLEI; and (b) SP and SEDLEI. Based on Table 2, the results showed that MC was positively related to the counselors' SEDLEI (r = .418, p < .01). According to Guilford's rule of thumb, the coefficient of r value which is between .40 and .70 reflects a moderate correlation or substantial relationship. Thus, the relationship between MC and SEDLEI is moderate.

On the other hand, the results as shown in Table 2 indicated a positive relationship between SP and trainee counselors' SEDLEI (r = .241, p < .05). The results revealed that spirituality was one of the factors that might boost trainee counselors' SEDLEI. However, the r value which falls between .20 and .40 is considered as having a low correlation. Thus, the strength of the relationship between SP and SEDLEI is low.

Table 1

Demographic characteristics of the respondents

Gender	Frequency (N)	Percentage (%)
Male	27	18.2
Female	121	81.8
Believe in God		
Yes	136	91.9
No	12	8.1

Table 2

Pearson correlation coefficient

	Self-efficacy in dealing with legal and ethical issues
Multicultural competency	.418**
Spirituality	.241**
Self-efficacy in dealing with legal and ethical issues	1

***Correlation is significant at the .05 level*

DISCUSSION

The results revealed that more females participated in the research. This could be due to the environment of current higher education institutions in Malaysia where more females are studying in universities compared to males. The number of female students enrolling in universities is higher because they have better academic performance at school level and have more positive characteristics that affect their academic achievements compared to males (Ismail, 2014).

Next, most of the respondents believed in God and this could be due to the culture being practiced in Malaysia. Families in Malaysia focus on tradition, culture, spiritual values, religious practices, and multicultural values. The families make sure that their children follow their practices and keep themselves close to God. A large number of mosques, temples, and churches in Malaysia resembles Malaysians' belief in God. Believing in God is not a hypothetical question but it contains significant mass that affects every aspect of humans' lives (Murico, 2011). Individuals who believe in God will possess moral concerns (Jack et al., 2016). Furthermore, cultural adaptation could also influence individuals' beliefs in God. In contrast, individuals disbelieve in God due to the differences in thinking style. Individuals who believe in God could have cognitive defaults meanwhile disbelievers possess analytical thinking and skepticism. Hence, there are multiple factors that affect respondents' decision to believe or disbelieve in God. However, these data do not affect the interpretation of the main analyses.

Next, the correlation analysis revealed a significant relationship between MC and SEDLEI. The relationship between MC and SEDLEI was stronger compared to the relationship between SP and SEDLEI. The results of this analysis are in line with the findings by Drinane et al. (2014), Greene et al. (2014), and Harun et al. (2014). The researchers mentioned that multicultural competency involved counselors' knowledge, awareness, and skills. The acquisition and mastery of multicultural knowledge, awareness, and skills by trainee counselors using the right methods would help them to deal with legal and ethical issues in counseling efficaciously. This process will eventually improve the trainee counselors' efficacious beliefs due to their potential in applying multicultural knowledge and skills.

Kissil et al. (2015) found a significant relationship between MC and self-efficacy among 153 immigrant therapists. The respondents, who were connected to the culture of United States of America, showed a better level of self-efficacy compared to those who were not connected to the culture. The researchers suggest that what is significantly correlated with respondents' self-efficacy is not how much they accept the culture, instead of how much they feel accepted in the culture they live in. Similarly, those respondents who had participated in this study and had a high level of MC would have a good understanding of their own culture and the culture of others. Moreover,

the respondents would have the curiosity to know about various cultures and willingness to accept the cultures equivalent to their own culture. The acceptance would help trainee counselors to deal with legal and ethical issues in counseling as they are confident in what they dealing with.

Next, the findings revealed a positive relationship between spirituality and self-efficacy in dealing with legal and ethical issues. The results of this analysis are in line with the study by Abou-Amerrh (2013), Cashwell and Watts (2010), Curry et al. (2015), and Hamzah et al. (2010). Spirituality helps counselors in overcoming the challenges of dealing with legal and ethical issues by boosting their level of self-efficacy. Furthermore, Karami and Imani (2014) stated that spirituality helped in developing self-efficient beliefs which would eventually revolutionize the beliefs into real and effective actions. Spiritual trainee counselors would possess strong internal strength, quickly adapt to new environments, able to think critically and make rational decisions. The internal strength possessed by trainee counselors would be an agent that promotes effective decision-making (Lietz & Hodge, 2013).

The relationship between SP and SEDLEI confirms the potential of spiritual trainee counselors in dealing with legal and ethical issues efficaciously. SP is a resource that if greatly associated with holistic well-being, reframes distressing conditions, improves self-efficient beliefs, promotes effective coping behaviors, and provides inspirational passage (Oman et al., 2003). The function of spiritual values reflects how it can modify behaviors and help trainee counselors in reframing challenging ethical issues. It is also proven that individuals who are supplied with spiritual tools such as holy books, inspirational talks, and readings reported positive changes in their level of self-efficacy (Oman et al., 2003). Thus, trainee counselors who are spiritual would be efficacious and able to successfully solve legal and ethical issues in counseling.

CONCLUSION

The current study showed a positive relationship between multicultural competency (MC) and counselors' self-efficacy in dealing with legal and ethical issues (SEDLEI). In addition, the study also revealed a positive relationship between spirituality (SP) and SEDLEI. The greater the level of MC and SP, the more efficacious the counselors are. Thus, the process of integrating MC and SP into existing counselor ethics education and training would be possible and help to enhance trainee counselors' SEDLEI. It is one of the methods that could be initiated to prepare trainee counselors before exploring reality which may involve complex issues, unstable situations, and challenging clients. The certified counseling professionals and policymakers could work on the integration process to allow proper conduct of professional counseling services and subsequently, promising great future of counseling.

Recommendations for Future Research

A further in-depth research on MC and SP involving all the trainee counselors from both private and public universities is recommended for future research. Future researchers may compare the results obtained from both types of educational institutions. The research should expand the data obtained in the current research and provide improved results from a greater population. In addition, future researchers may conduct experimental or longitudinal research. For experimental research, the researcher may conduct a pre-test and post-test to examine the effectiveness of MC and SP on trainee counselors' SEDLEI. On the other hand, longitudinal research can be carried out to examine the development of trainee counselors over a long duration involving repeated observations.

Limitations of the Study

The respondents participated in this research were from private universities. There was a limited number of counseling students studying at the Master's level in Malaysian private universities. A total of three private universities participated in the research. Thus, the research scope was smaller and the results represented a smaller group of students compared to the number of trainee counselors studying at master's level in Malaysian public universities. There were also limited past studies focusing on self-efficacy in dealing with legal and ethical issues (SEDLEI). The sources to support SEDLEI were not many as compared to general self-efficacy studies.

ACKNOWLEDGEMENTS

The authors would like to thank the Organizing Committee of 'The 4th International Conference on Educational Research and Practice (ICERP 2017), Universiti Putra Malaysia for the opportunity and support rendered to disseminate the results from this study.

REFERENCES

Abou-Amerrh, O. A. (2013). The level of counselor self-efficacy among sample students at Hashemite University. *European Journal of Business and Social Sciences, 2*(3), 92-101. https://europub.co.uk/articles/10271/view

Arokiasamy, L., Ismail, M., Ahmad, A., & Othman, J. (2009). Background of Malaysian private institutions of higher learning and challenges faced by academics. *The Journal of International Social Research, 2*(8), 61-67.

Barden, S. M., & Greene, G. H. (2015). An investigation of multicultural counseling competence and multicultural counseling self-efficacy for counselors-in-training. *International Journal of Advanced Counseling, 37,* 41-53. https://doi.org/10.1007/s10447-014-9224-1

Beringer, A. (2000). In search of the sacred: A conceptual analysis of spirituality. *The Journal of Experiential Education, 23*(3), 157-165. https://doi.org/10.1177/105382590002300307

Bokhari, M., Saadan, R., Pilus, A. M., Hassan, S. N. S., Jano, Z., Ishak, N. M., & Mahmud, Z. (2014). Contribution of awareness and understanding in legal and ethics towards the practice of confidentiality amongst counselors. *Asian Social Science, 10*(16), 144-151. https://doi.org/10.5539/ass.v10n16p144

Burney, V. H. (2008). Applications of social cognitive theory to gifted education.

Roeper Review, 30, 130-139. https://doi.org/10.1080/02783190801955335

Cannon, E. P. (2008). Promoting moral reasoning and multicultural competence during internship. *Journal of Moral Education, 37*(4), 503-518. https://doi.org/10.1080/03057240802399384

Cashwell, C. C., & Watts, R. E. (2010). The new ASERVIC competencies for addressing spiritual and religious issues in counseling. *Counseling and Values, 55*(2), 2-5. https://doi.org/10.1002/j.2161-007X.2010.tb00018.x

Cashwell, C. S., Young, J. S., Cashwell, T. H., & Belaire, C. (2001). The inclusion of spiritual process in counseling and perceived counselor effectiveness. *Counseling and Values, 45,* 145-153. doi: 10.1002/j.2161-007X.2001.tb00192.x

Chandler, C. K., Holden, J. M., & Kolander, C. A. (1992). Counseling for spiritual wellness: Theory and practice. *Journal of Counseling and Development, 71*(2), 168-175. https://doi.org/10.1002/j.1556-6676.1992.tb02193.x

Chaves-Barboza, E., Solá-Martinez, T., Marin-Marin, J-A., & Sanz-Prieto, M. (2019). Self-efficacy of teachers in initial training: A comparison between the populations of two universities. *Education Sciences, 9*(3), 188. https://doi.org/10.3390/educsci9030188

Cochran, W. G. (1977). *Sampling techniques.* New York, USA: John Wiley & Sons.

Constantine, M. G. (2001). Multiculturally-focused counseling supervision: Its relationship to trainees' multicultural counseling self-efficacy. *The Clinical Supervisor, 20*(1), 87-96. https://doi.org/10.1300/J001v20n01_07

Council for Accreditation of Counseling and Related Educational Programs (2016). *2016 CACREP Standards.* Alexandria, USA: Author. Retrieved June 30, 2017, from http://www.cacrep.org/wp-content/uploads/2017/08/2016-Standards-with-citations.pdf

Curry, J. R., Arbuthnot, K. N., & Witherspoon-Arnold, T. N. (2015). Graduate students' perceived preparation for working with client spirituality and religious values. *Religion & Education, 42*(2), 184-201. https://doi.org/10.1080/15507394.2015.1021224

Dagang, M. R. M., Ibrahim, R. Z. A. R., & Abu Bakar, A. (2014). Counselors' spiritual competence in Malaysia. *Asian Social Sciences, 10*(10), 182-187. https://doi.org/10.5539/ass.v10n10p182

Dalmida, S. G., Holstad, M. M., Dilorio, C., & Laderman, G. (2012). The meaning and use of spirituality among African American women living with HIV/ AIDS. *Western Journal of Nursing Research, 34*(6), 736-765. https://doi.org/10.1177/0193945912443740

Dodson, F. K. (2013). Exploring the multicultural competence of school counselors. *Journal of Counselor Preparation and Supervision, 5*(2), 18-29. https://doi.org/10.7729/52.0041

Drinane, J. M., Owen, J., Adelson, J. L., & Rodolfa, E. (2014). Multicultural competencies: What are we measuring? *Psychotherapy Research, 26*(3), 342-351. https://doi.org/10.1080./10503307.2014.983581

Freeman, S. J. (2000). *Ethics: An introduction to philosophy & practice.* Belmont, USA: Wadsworth/Thomson Learning.

Gladding, S. T. (2013). *Counseling a comprehensive profession.* Upper Saddle River, USA: Pearson.

Greene, J. H., Barden, S. M., Richardson, E. D., & Hall, K. G. (2014). The influence of film and experiential pedagogy on multicultural counseling self-efficacy and multicultural counseling competence. *Journal of the Scholarship of Teaching and Learning, 14*(5), 63-78. https://doi.org/10.14434/josotlv14i5.12656

Guilford, J. P. (1956). *Fundamental statistic in psychology and education* (3rd ed.). New York, USA: McGraw-Hill.

Hamzah, R., Md Isa, K., & Janor, R. M. (2010). Spiritual education development model. *Journal of Islamic and Arabic Education, 2*(2), 1-12.

Harun, M. M., Kadir, R. A., & Noah, S. M. (2014). A brief review of multicultural counseling self-efficacy and multicultural counseling competency. In *Middle-East Journal of Scientific Research 19 (Innovation Challenges in Multidisciplinary Research & Practice)* (pp. 61-68). doi: 10.5829/idosi.mejsr.2014.19.icmrp.10

Hill, A. L. (2004). Ethics education: Recommendations for an evolving discipline. *Counseling & Values, 48,* 183-203. https://doi.org/10.1002/j.2161-007X.2004.tb00245.x

Ismail, L. (2014). Factors influencing gender gap in higher education of Malaysia: A University of Malaya sample. *The Online Journal of Quality in Higher Education, 2*(4), 644-650. Available from https://www.tojqih.net

Jack, A. I., Friedman, J. P., Boyatzis, R. E., & Taylor, S. N. (2016). Why do you believe in God? Relationships between religious belief, analytic thinking, mentalizing, and moral concern. *PLoS One, 11*(3), 1-21. https://doi.org/10.1371/journal/pone.0149989.eCollection2016

Jaladin, R. A. M., & Lau, P. L. (2013). *Isu profesional dan etika dalam kaunseling dan psikoterapi* [Professional issues and ethics in counseling and psychotherapy]. Kuala Lumpur, Malaysia: Penerbit Universiti Malaya.

Karami, A., & Imani, M-N. (2014). The relation between spiritual intelligence and self-efficacy in high school teachers of District 18, Tehran, Iran. *Martinia, 5*(2), 100-106.

Kissil, K., Davey, M., & Davey, A. (2015). Foreign-born therapists: How acculturation and supervisors' multicultural competence are associated with clinical self-efficacy. *Journal of Multicultural Counseling and Development, 43,* 38-57. https://doi.org/10.1002/j.2161-1912.2015.00063.x

Lam, S., Tracz, S., & Lucey, C. (2013). Age, gender, and ethnicity of counselor trainees and corresponding counseling self-efficacy: Research findings and implications for counselor educators. *International Journal of Advanced Counseling, 35*(3), 172-187. https://doi.org/10.1007/s10447-012-9175-3

Lietz, C. A., & Hodge, D. R. (2013). Incorporating spirituality into substance abuse counseling: Examining the perspectives of service recipients and providers. *Journal of Social Science Research, 39*(4), 498-510. https://doi.org/10.1080/01488376.2012.676023

Malaysian Counselor Act 1998 (Act 580).

Maldonado, J. (2008). The influence of gender identification and self-efficacy on counseling students: A multicultural approach. *Journal of Multicultural, Gender and Minority Studies, 2*(1), 1-15.

Mat Rani, N. H., Wan Jaafar, W. M., & Noah, S. M. (2017). Ethical behavior among registered and non-registered counselors. *International Journal of Advanced and Applied Sciences, 4*(3), 137-140. https://doi.org/10.21833/ijaas.2017.03.021

McGhee, P., & Grant, P. (2008). Spirituality and ethical behavior in the workplace: Wishful thinking or authentic reality. *Electronic Journal of Business Ethics and Organization Studies, 13*(2), 61-68.

Moldovan, C. P. (2017). *AM happy scale: Reliability and validity of a single item measure of happiness* (Doctoral dissertation). Available from Loma Linda University Electronic Theses, Dissertations, & Projects (Record No. 438).

Mullen, P. R., Lambie, G. W., & Conley, A. H. (2014). Development of the ethical and legal issues in counseling self-efficacy scale. *Measurement and Evaluation in Counseling and Development, 47*(1), 62-78. https://doi.org/10.1177/0748175613513807

Murico, J. C. (2011). David M. Holley: Meaning and mystery: What it means to believe in God. *International Journal of Philosophy and Religion, 69,* 63-67. https://doi.org/10.1007/s11153-010-9284-z

Ngcobo, H. S. B., & Edwards, S. D. (2014). Self-perceived multicultural counseling competencies in South African psychologists: A basis for practice guidelines. *Journal of Psychology in Africa, 18*(4), 647-652. https://doi.org/10.1080/14330237.2008.10820247

Nelson-Jones, R. (2009). *Introduction to counseling skills.* Thousand Oaks, USA: SAGE Publications.

Oman, D., Hedberg, J., Downs, D., & Parsons, D. (2003). A transcultural program to enhance caregiving self-efficacy: A pilot study. *Complementary Health Practice, 8*(3), 201-224. https://doi.org/10.1177/1076167502250796

Pei-Hsuan, P. H., & Schallert, D. L. (2008). Implications from self-efficacy and attribution theories for an understanding of undergraduates' motivation in a foreign language course. *Contemporary Educational Psychology, 33*(4), 513-532. https://doi.org/10.1016/j.cedpsych.2008.01.003

Plante, T. G. (2007). Integrating spirituality and psychotherapy: Ethical issues and principles to consider. *Journal of Clinical Psychology, 63*(9), 891-902. https://doi.org/10.1002/jclp.20383

Post, B. C., & Wade, N. G. (2014). Client perspectives about religion and spirituality in group counseling. *The Counseling Psychologist, 4*2(5), 601-627. https://doi.org/10.1177/0011000014524601

Sawyer, C., Peters, M. L., & Willis, J. (2013). Self-efficacy of beginning counselors to counsel clients in crisis. *The Journal for Counselor Preparation and Supervision, 5*(2), 28-43. https://doi.org/10.7729/52.0042

Sodowsky, G. R., Taffe, R. C., Gutkin, T. B., & Wise, S. L. (1994). Development of the multicultural counseling inventory: A self-report measure of multicultural competencies. *Journal of Counseling Psychology, 41*(2), 137-148. https://doi.org/10.1037/0022-0167.41.2.137

Stein, R. H. (1990). *Ethical issues in counseling.* New York, USA: Prometheus Books.

Ponterotto, J. G., Rieger, B. P., Barrett, A., Harris, G., & Sparks, R. (1996). *Development and initial validation of the multicultural counseling awareness scale. Multicultural Assessment in Counseling and Clinical Psychology, Paper 12,* 247-282. Retrieved June 29, 2017, from https://digitalcommons.unl.edu/burosbookmulticultural/12/

Vespia, K. M., Fitzpatrick, M. E., Fouad, N. A., Neeta, K., & Chen, Y.-L. (2010). Multicultural career counseling: A national survey of competencies and practices. *The Career Development Quarterly, 59,* 54-71. https://doi.org/10.1002/j.2161-0045.2010.tb00130

Wan Jaafar, W. M., Mohamed, O., Bakar, A. R., & Tarmizi, R. A. (2011). Counseling self-efficacy among trainee counselor in Malaysia. *Procedia-Social and Behavioral Sciences, 30,* 676-679. https://doi.org/10.1016/j.sbspro.2011.10.130.

Welfel, E. R. (2013). *Ethics in counseling and psychotherapy.* Mason, USA: Cengage Learning.

Yin-Fah, B. C., Yeoh, S. F., & Migin, M. W. (2016). Counseling services utilization in a Malaysia Private University. *International Education Studies, 9*(3), 53-61. https://doi.org/10.5539/ies.v9n3p53

Zakaria, N. S. (2013). *Counseling ethics education experience: An interpretive case study of the first-year master's level counseling students* (Doctoral dissertation). Available from ProQuest Dissertations and Theses (UMI 3562075).

Zakaria, N. S., & Warren, J. (2014). Inquiry-based teaching and learning in counseling ethics education. In P. Blessinger, & J. M. Carfora (Eds.), *Inquiry-based learning for the arts,*

humanities, and social sciences: A conceptual and practical resource for educators (Innovations in higher education teaching and learning) (pp. 147-167). Emerald Group Publishing. https://doi.org/10.1108/S2055-364120140000002018

Zakaria, N. S., & Warren, J. (2016). Counseling ethics education: Teaching and learning development reformation. In I. H. Amzat, & B. Yusuf (Eds.), *Fast forwarding higher education institutions for global challenges: Perspectives and approaches* (pp. 83-96). Springer. https://doi.org/ 10.1007/978-981-287-603-4

Zakaria, N. S., Warren, J., & Bakar, A. R. (2017). Counseling ethics education for enhanced professional identity and development: Guidance and counseling teachers lifelong learning acquisition empowered. In I. H. Amzat, & N. P. Valdez (Eds.), *Teacher empowerment for professional development and practice: Perspectives across borders* (pp. 153-166). Springer. https://doi.org/10.1007/978-981-10-4151-8

Pertanika J. Soc. Sci. & Hum. 28 (2): 1387 - 1400 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

The Effect of Sociocultural Identities on Study Destination Choice

Evelyn Hendriana[1]*, Khairil Wahidin Awang[2], Raja Nerina Raja Yusof[3] and Jamil Bojei[3]

[1]Putra Business School, Level 3, Office Building of the Deputy Vice Chancellor (Research and Innovation), 43400 UPM Serdang, Selangor, Malaysia

[2]Faculty of Hospitality, Tourism and Wellness, Universiti Malaysia Kelantan, 16100 Pengkalan Chepa, Kelantan, Malaysia

[3]Department of Management and Marketing, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

ABSTRACT

There are very few studies that consider the relationship between sociocultural identities and tourists' destination choices, in which almost none focusing on the education tourism context. The objective of this research was to examine the effect of national identity, consumer cosmopolitanism and consumer ethnocentrism on international study destination choice. One hundred and twenty questionnaires were distributed to final year high school students, with a usable response rate of 75.83%. The data were analysed using partial least square-structural equation modelling (PLS-SEM). The study found a significant positive effect of consumer cosmopolitanism on students' intention to study in Australia based on their perceived image of the destination and institutions. Contrary to the proposed hypothesis, national identity had a significant positive effect on the destination image of Australia.

Keywords: Consumer cosmopolitanism, consumer ethnocentrism, destination image, institution image, national identity

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
evelynhendriana.phd15@grad.putrabs.edu.my (Evelyn Hendriana)
khairil.w@umk.edu.my (Khairil Wahidin Awang)
nerina@upm.edu.my (Raja Nerina Raja Yusof)
jamiljei@gmail.com (Jamil Bojei)
* Corresponding author

INTRODUCTION

The advantages of studying abroad encourage many students to leave their home country to study overseas. This tendency has resulted in a growing number of international students worldwide, which reached a figure of 5.3 million in 2017 (Organisation for Economic Co-operation and Development [OECD],

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

2019). Marketing scholars and practitioners have been urged to conduct more research in order to understand the factors influencing international students' decisions to study abroad. It is important to consider the factors shaping the image of destinations and institutions because most international students tend to consider these aspects in their decision-making.

Some tourism marketing research have reported that tourists from different countries may hold different images of a destination (Kastenholz, 2010; Ng et al., 2007). This finding implies that one's attachment to a socio-cultural group may lead an individual to have a collective perception of foreign countries. Other work, however, tends to neglect the potential effect of sociocultural identity on destination image formation (Chen et al., 2012a; Tasci, 2009).

Globalisation has various impacts on culture, including how individuals identify themselves (King, 2016). Nowadays it is common for an individual to hold multiple sociocultural identities. This study is one of the few that evaluates the joint predictive power of multiple socio-cultural identities as determinants of international students' choice of study destination. The research aims to examine the effect of national identity, consumer cosmopolitanism and consumer ethnocentrism on international students' choice of study destination based on their perceived image of the destination and institutions.

Literature Review

Destination and Institution Images as Collective Constructs. Previous studies tended to consider the formation of destination and institution images as an individual process (Hemsley-Brown, 2012; Martínez & Alvarez, 2010; Wilkins & Huisman, 2014). Nevertheless, these images may be collectively constructed (Chen et al., 2012a, 2012b). Referring to the self-congruity theory, individuals are likely to maintain their self-concept when purchasing a product (Hosany & Martin, 2012; Sirgy, 2018), including when evaluating a tourism destination (Ahn et al., 2013; Kumar, 2016). One of these self-concepts is shaped by individuals' attachment to sociocultural groups.

Individuals' sociocultural group identity in the international context can be seen from the extent of their national identity, consumer cosmopolitanism and consumer ethnocentrism. Even though individuals may hold multiple group identities, the effect of each identity on consumer behaviour depends on the strength of their affiliation with the group. Social identity theory explains that when individuals recognize their membership of a group, they are likely to adopt in-group values, which in turn influence their perceptions, attitudes, preferences, intentions and behaviours toward an object (Tajfel & Turner, 1986).

National Identity as an Antecedent of Education Tourism Choice. National identity is individuals' identification with their home country, which is reflected by

their sense of belonging, recognition of the country's uniqueness and emotional attachment to the home country (Keillor & Hult, 1999; Carvalho et al., 2019). One's national identity stimulates individuals to hold an in-group bias, which leads to consumer ethnocentrism. Their emotional attachment to their home country encourages them to act in the best interests of the country, including protecting the domestic economy (Carvalho et al., 2019; Fischer & Zeugner-Roth, 2016).

Studies by Conner et al. (2017), Nguyen-Hau et al. (2013), and Sobol et al. (2018) found a positive effect of national identity on consumer ethnocentrism. Based on this argument, the first proposed hypothesis of this study is:

H1: There is a positive relationship between national identity and consumer ethnocentrism.

High national identification may lead individuals to perceive local products as superior to foreign ones (Conner et al., 2017; Fischer & Zeugner-Roth, 2016), which affects their behaviour toward foreign products. However, other scholars believe that national identity does not always lead to rejection of foreign products (He & Wang, 2015; Zeugner-Roth et al., 2015), unless the foreign country may harm the home country's well-being (Brewer, 1999).

This may explain the inconsistency in the relationship between national identity and foreign purchase behaviour. For instance, Chen et al. (2012a, 2012b) found a significant negative relationship between national identity and foreign product purchase behaviour when the home and host countries were in conflict, although He and Wang (2015) and Zeugner-Roth et al. (2015) reported that the relationship was positive.

In the context of education tourism, as governments of emerging economies continue to improve the quality of local higher education institutions, students may change their perception of these institutions. Hence, they may have negative perceived images of foreign study destinations and institutions. The proposed hypothesis on the relationship between national identity and education tourism choice is:

H2: Students with strong national identity will hold negative images of (a) foreign study destinations and (b) foreign institutions.

Consumer Cosmopolitanism as an Antecedent of Education Tourism Choice. Consumer cosmopolitanism describes one's identification as a world citizen, which is characterised by the degree of open-mindedness, appreciation of cultural diversity, and the interest to consume products from other cultures (Riefler et al., 2012; Riefler & Diamantopoulos, 2009). Due to their open-mindedness, individuals with high cosmopolitanism traits are less likely to be ethnocentric (Shankarmahesh, 2006), more receptive to cultural diversity, and more objective in evaluating foreign products (Parts & Vida, 2011; Riefler & Diamantopouos, 2009).

Many studies have reported a negative relationship between consumer cosmopolitanism and consumer ethnocentrism (Cleveland et al., 2009; Parts & Vida, 2011; Riefler et al., 2012). However, some studies in developing economies have found the relationship to be insignificant (Vida et al., 2008; Strizhakova et al., 2008). Therefore, this study proposes the following hypothesis:

H3: There is a negative relationship between consumer cosmopolitanism and consumer ethnocentrism.

Highly cosmopolitan individuals perceive the world as a personal in-group (Visconti et al., 2014). Due to their openness to other cultures, these individuals tend to show curiosity toward foreign products. They consider buying foreign products because they feel local products cannot fully satisfy their needs (Riefler et al., 2012; Riefler & Diamantopoulos, 2009). Dimofte and Zeugner-Roth (2013), Jin et al. (2015), Riefler et al. (2012), and Zeugner-Roth et al. (2015) found that consumer cosmopolitanism had a significant positive effect on foreign product evaluation and the willingness to buy foreign products.

In the education tourism context, cosmopolitan students perceive that studying abroad will enable them to experience something different from their home country. As a result, they tend to have a positive perceived image of the host country and foreign institutions. The proposed related hypothesis is:

H4: Cosmopolitan students will hold positive images of (a) foreign study destinations and (b) foreign institutions.

Consumer Ethnocentrism as an Antecedent of Education Tourism Choice. Consumer ethnocentrism refers to an individual's normative beliefs in the inappropriateness of purchasing foreign products (Shimp & Sharma, 1987). One's membership of and emotional attachment to one's home country is likely to urge people to have a domestic country bias (Conner et al., 2017; He & Wang, 2015).

While widely applied to explain consumer behaviour toward foreign products, consumer ethnocentrism has been little studied in the tourism context. Marketers of foreign destinations must consider the potential effect of consumer ethnocentrism on tourists' behaviour, as it may affect individuals' attitudes and intention to travel abroad. Due to their ethnocentric beliefs, individuals may favour travelling in their home country as opposed to other countries to meet their social expectations and to support local tourism (Fan, 2016; Kock et al., 2018).

Ethnocentric students may fear the negative consequences of studying abroad in their home country. They tend to assume that foreign education will trigger a brain drain, which may threaten the future of their home country. Due to this belief, highly ethnocentric students are less likely to have a favourable attitude toward foreign study

destinations and foreign institutions. Based on this argument, the proposed hypothesis is:

H5: Ethnocentric students will hold negative images of (a) foreign study destinations and (b) foreign institutions.

The Role of Destination and Institution Images in Education Tourism Choice. Studying abroad is a risky decision (Basha et al., 2015) since it entails high commitment and financial resources from the students. Hence, prospective students must be highly involved in all stages of decision-making. Due to the difficulty of assessing the education quality in the host country, students tend to rely on the perceived images of the destination and institutions.

Ahmad and Buchanan (2017), Bamber (2014), and Jon et al. (2014) reported that destination and institution images played a significant role in international students' decision-making. Favourable images of the host country and institutions might lower the perceived risk (Basha et al., 2015), which in turn elevated students' intention to choose the country as their preferred study destination. Following are the hypotheses on the relationship between the images of the destination and institution and students' choice:

H6: A favourable destination image will increase students' intention to study in the host country.

H7: A favourable institution image will increase students' intention to study in the host country.

Figure 1 presents the conceptual framework of the study.

Research Context. Despite Indonesia's position as one of the main providers of international students in Southeast Asia (Chan, 2012; OECD, 2013), there is little research on Indonesian students' decision-making. This study looked at the effect of socio-cultural identities on Indonesian students' intention to study in Australia. Out of the 45,206 Indonesian students studying

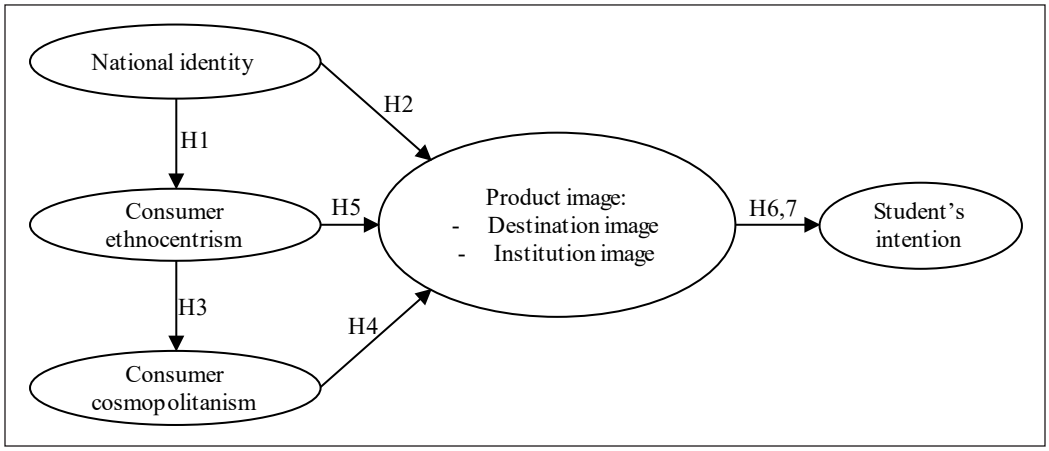


Figure 1. Conceptual framework

abroad in 2017, 24% were studying in this country (UNESCO Institute for Statistics, 2019).

Australia is attractive to Indonesian students due to its geographical proximity, the country's image, and the reputation of its institutions. It is the third most popular country for international students, and eight of its institutions have been selected as being among the best institutions in the world. Australian institutions are highly recognised in the field of arts and humanities, health sciences, social sciences, engineering and technology, life sciences, and physical sciences (Australian Trade & Investment Commission, 2017).

MATERIALS AND METHODS

A quantitative approach focusing on prospective undergraduate students was employed because they tended to consider the host country and institutions before deciding the destination for their study abroad. The study involved final year high school students in Greater Jakarta, Central Java, and Yogyakarta. Judgmental sampling was used to select the samples, on the basis that respondents should come from middle and upper-class segments and be interested in continuing their education abroad. From 120 questionnaires distributed in December 2017 and January 2018, 108 were returned, with only 91 suitable for further analysis.

Sociocultural identities comprise national identity, consumer cosmopolitanism and consumer ethnocentrism. In total, there were 32 questionnaire items measuring these identities. These items consisted of eight items adopted from Cleveland et al. (2015) and Cleveland et al. (2016) to measure national identity, 12 items adopted from Riefler et al. (2012) to measure consumer cosmopolitanism, and 12 items adopted from Sharma (2014) to measure consumer ethnocentrism.

Destination image was assessed by the destination personality image. Six items measured the destination personality image that reflected each dimension of country personality as developed by d'Astous and Boujbel (2007). Six items measuring institution image were adopted from Cubillo et al. (2006), Duarte et al. (2010), and Li et al. (2013). As the dependent variable, students' intention to choose a particular study destination was measured by five items adapted from Gatfield and Chen (2006), Jalilvand et al. (2012), Phau et al. (2010), and Zeugner-Roth and Žabkar (2015).

All items were measured by a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). After validity and reliability tests were completed, 44 items were retained in the analysis, with factor loadings between 0.691 and 0.928, and composite reliability of the first-order construct between 0.845 and 0.942 as presented in Table 1.

This research aimed to test the sequential dependence relationship among variables of interest. The results of Mardia's test of skewness and kurtosis showed that the data fulfilled the multivariate normality assumption (skewness: b = 1,393.10, p-value = 0.069; kurtosis: b = 2,484.93,

Table 1
Validity and reliability tests (n = 91)

Variable/dimension	Item	Factor loading	AVE	Cronbach's alpha	Composite reliability
National identity:					
National pride		0.855	0.703		0.826
National media usage		0.822			
Dimensions:					
National pride	NID1	0.860	0.692	0.850	0.899
	NID2	0.892			
	NID3	0.781			
	NID4	0.788			
National media usage	NID5	0.899	0.808	0.763	0.894
	NID6	0.899			
Consumer cosmopolitanism:					
Open-mindedness		0.868	0.733		0.891
Cultural diversity appreciation		0.825			
Consumption transcending borders		0.874			
Dimensions:					
Open-mindedness	COS2	0.909	0.726	0.807	0.888
	COS3	0.886			
	COS4	0.754			
Cultural diversity appreciation	COS5	0.826	0.681	0.840	0.894
	COS6	0.896			
	COS7	0.871			
	COS8	0.692			
Consumption transcending borders	COS9	0.861	0.695	0.854	0.901
	COS10	0.805			
	COS11	0.819			
	COS12	0.849			
Consumer ethnocentrism:					
Cognitive ethnocentrism		0.834	0.721		0.885
Affective ethnocentrism		0.901			
Behavioural ethnocentrism		0.809			
Dimensions:					
Cognitive ethnocentrism	CET1	0.869	0.675	0.906	0.892
	CET2	0.835			
	CET3	0.816			
	CET4	0.762			
Affective ethnocentrism	CET5	0.917	0.844	0.907	0.942
	CET6	0.911			
	CET7	0.928			

Table 1 *(continue)*

Variable/dimension	Item	Factor loading	AVE	Cronbach's alpha	Composite reliability
Behavioural ethnocentrism	CET9	0.890	0.649	0.826	0.880
	CET10	0.880			
	CET11	0.720			
	CET12	0.714			
Destination image	DPI1	0.721	0.522	0.772	0.845
	DPI2	0.718			
	DPI3	0.729			
	DPI4	0.751			
	DPI6	0.691			
Institution image	IIM1	0.852	0.725	0.924	0.940
	IIM2	0.904			
	IIM3	0.829			
	IIM4	0.889			
	IIM5	0.811			
	IIM6	0.819			
Students' intention	SID1	0.883	0.766	0.923	0.942
	SID2	0.873			
	SID3	0.839			
	SID4	0.918			
	SID5	0.862			

p-value = 0.342). The sample size of this study, however, was below the requirement of CB-SEM. Therefore, the data were analysed using partial least square-structural equation modelling (PLS-SEM).

RESULTS AND DISCUSSION

Table 2 presents the demographic characteristics of the respondents. The majority were female, studying at public high schools, Muslim, living in Greater Jakarta, and had monthly expenditures of less than $75.

As presented in Table 3, the findings confirm the hypothesis regarding the relationship between national identity and consumer ethnocentrism (H1). It was found that national identity had a significant positive influence on the development of consumer ethnocentrism. This supports previous studies by Conner et al. (2017), Nguyen-Hau et al. (2013), and Vida et al. (2008).

Almost all respondents had strong national identification, even though they were still at the identity formation stage. This inclination might be the result of civic education at school and strengthened by government campaigns to raise national awareness in the last three years. They were proud of their home country, which stimulated a domestic country bias that was shown through their perceptions of and emotions toward local products.

Table 2
Profile of respondents (n = 91)

Demographic characteristics		Number	Percent
Gender:	Male	40	43.96
	Female	51	56.04
Type of school:	Public high school	57	62.64
	Private high school	34	37.36
Religion:	Islam	69	75.82
	Christian	7	7.69
	Catholic	14	15.38
	Buddhism	1	0.01
Domicile:	Greater Jakarta	43	47.25
	Central Java	22	24.18
	Yogyakarta	26	28.57
Monthly expenditure:	Less than $75	73	80.22
	Between $75 and $110	14	15.38
	More than $110	4	4.40

Table 3
Hypothesis testing (n = 91)

Path	Regression path	t-value	p-value	Remarks
NID → CET	0.468	6.331	0.000	Supported
NID → DPI	0.341	3.853	0.000	Not supported
NID → IIM	0.154	1.233	0.218	Not supported
COS → CET	-0.170	1.685	0.093	Not supported
COS → DPI	0.580	10.917	0.000	Supported
COS → IIM	0.378	4.216	0.000	Supported
CET → DPI	-0.180	1.865	0.063	Not supported
CET → IIM	-0.057	0.456	0.649	Not supported
DPI → SID	0.509	5.745	0.000	Supported
IIM → SID	0.362	4.161	0.000	Supported

Note: NID = national identity, COS = consumer cosmopolitanism, CET = consumer ethnocentrism, DPI = destination image, IIM = institution image, SID = student's intention to study in the host country

The national identity of respondents was strong, but maybe not fully developed. On one hand, these young respondents wanted to fulfil the expectations of society by showing high nationalism, but on the other hand, they wanted to be acknowledged as cosmopolitan. This explains how consumer cosmopolitanism might have had some influence on consumer ethnocentrism, even though the relationship was not significant (H3). The respondents were highly exposed to foreign cultures and global media. They tended to associate modern lifestyles with foreign products, particularly from the

West. As a consequence, their positive perceptions of and sentiments toward local products did not necessarily make them avoid foreign products, which was reflected in the relatively low score in the behavioural component of consumer ethnocentrism.

The overall Australian destination and institution images were positive. From several personality elements measuring the destination, the respondents perceived Australia as an entertaining and organised country. Their perceptions of Australian institutions were outstanding in every feature measured.

Contrary to the proposed hypothesis (H2a), a significant positive effect of national identity on destination image was found. The effect of national identity on institution image (H2b) was insignificant. Similar to the research by He and Wang (2015) and Zeugner-Roth et al. (2015), the results of this study confirm Brewer's (1999) argument that people with strong national identification did not always have a negative stance against other countries unless the home and foreign countries were in conflict. There is the possibility that the respondents categorised Australia as an ally due to its geographical proximity and outstanding government-to-government relationship. An allied country is usually perceived as a broader home country in-group, which in this study context leads to a favourable evaluation of Australia as a preferred study destination.

The study fully supports the hypothesis of the positive relationship between consumer cosmopolitanism and destination image (H4a) and institution image (H4b). The findings are similar to those of Jin et al. (2015) and Zeugner-Roth et al. (2015), albeit in different study contexts. Cosmopolitan respondents were open-minded and appreciated cultural diversity, thus they were more willing to explore something different in their daily life. Australia and Indonesia have different cultures, economic status and lifestyles. The Australian education system is also different from that of Indonesia. As such, respondents with high cosmopolitanism traits tended to perceive Australia as an exciting place and believed that studying there might fulfil their needs for variety.

The results showed an insignificant negative relationship between consumer ethnocentrism and destination image (H5a) and institution image (H5b). As aforementioned, respondents' knowledge of and emotions toward local products did not simultaneously lead to negative behaviour with regard to foreign products. The respondents were more rational in evaluating products, including education services. Since Australia has a higher economic development status than Indonesia, they perceived Australian education to be better than the home one, which in turn makes the negative effect insignificant. These findings are in line with the studies by Guo (2013) and Jin et al. (2015).

It has been found that both destination and institution images had significant positive effects on students' intention to study in Australia (H6 and H7). This supports the findings of Basha et al. (2015),

Li et al. (2013), and Wilkins and Huisman (2011, 2014). Due to the difficulties in assessing the quality of life and education in Australia prior to the decision-making, respondents tended to evaluate the host country based on destination and institution images. They believed that the outstanding images of the host country and institutions might lower their perceived risks when studying in the country, which influenced their study destination preference.

CONCLUSIONS

This study found that students' host country selection was strongly influenced by their perceived images of the destination and institutions. Based on the findings, national identity and consumer cosmopolitanism have a positive influence on the formation of the destination image. However, only consumer cosmopolitanism has a significant effect on the institution image. Similar to studies conducted in developing countries, this research has failed to prove the negative effect of consumer ethnocentrism on students' intention to choose a host country based on their perceived image of the destination and institutions.

This pilot study involved only a small number of respondents and used partial least square-structural equation modelling to analyse the data. Future research should use a larger sample size and employ more sophisticated statistical analysis. Future studies could also test the model in other countries of origin and different study destinations.

ACKNOWLEDGEMENT

Special thanks to the IMHA 2018 committee members and UPM Pertanika Journal team, which have assisted to publish this article.

REFERENCES

Ahmad, S. Z., & Buchanan, F. R. (2017). Motivation factors in student decision to study at international branch campuses in Malaysia. *Studies in Higher Education, 42*(4), 651-668.

Ahn, T., Ekinci, Y., & Li, G. (2013). Self-congruence, functional congruence, and destination choice. *Journal of Business Research, 66*(6), 719-723.

Australian Trade & Investment Commissions. (2017). *Why study in Australia?* Retrieved September 23, 2017, from http://www.studyinaustralia.gov.au/english/why-australia

Bamber, M. (2014). What motivates Chinese women to study in the UK and how do they perceive their experience? *Higher Education, 68*(1), 47-68.

Basha, N. K., Sweeney, J. C., & Soutar, G. N. (2015). Effects of country and delivery mode on perceived risk in international higher education. *Journal of Marketing for Higher Education, 25*(2), 171-203.

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues, 55*(3), 429-444.

Carvalho, S. W., Luna, D., & Goldsmith, E. (2019). The role of national identity in consumption: An integrative framework. *Journal of Business Research, 103*(C), 310-318.

Chan, S. J. (2012). Shifting patterns of student mobility in Asia. *Higher Education Policy, 25*(2), 207-224.

Chen, C. C., Lin, Y. H., & Petrick, J. F. (2012a). Social biases of destination perceptions. *Journal of Travel Research, 52*(2), 240-252.

Chen, C. C., Lin, Y. H., & Petrick, J. F. (2012b). International stereotype and the collective construction of destination image. *Tourism Analysis, 17*(1), 55-66.

Cleveland, M., Laroche, M., & Papadopoulos, N. (2009). Cosmopolitanism, consumer ethnocentrism, and materialism: An eight-country study of antecedents and outcomes. *Journal of International Marketing, 17*(1), 116-146.

Cleveland, M., Laroche, M., & Takahashi, I. (2015). The intersection of global consumer culture and national identity and the effect on Japanese consumer behavior. *Journal of International Consumer Marketing, 27*(5), 364-387.

Cleveland, M., Rojas-Méndez, J. I., Laroche, M., & Papadopoulos, N. (2016). Identity, culture, dispositions and behavior: A cross-national examination of globalization and culture change. *Journal of Business Research, 69*(3), 1090-1102.

Conner, S. L., Reardon, J., Miller, C., Salciuviene, L., & Auruskeviciene, V. (2017). Cultural antecedents to the normative, affective, and cognitive effects of domestic versus foreign purchase behavior. *Journal of Business Economics and Management, 18*(1), 100-105.

Cubillo, J. M., Sánchez, J., & Cerviño, J. (2006). International students' decision-making process. *International Journal of Educational Management, 20*(2), 101-115.

d'Astous, A., & Boujbel, L. (2007). Positioning countries on personality dimensions: Scale development and implications for country marketing. *Journal of Business Research, 60*(3), 231-239.

Dimofte, C. V., & Zeugner-Roth, K. (2013). Consumers' global versus local brand choice in foreign context. *Advances in Consumer Research, 41*(1), 723-724.

Duarte, P. O., Alves, H. B., & Raposo, M. B. (2010). Understanding university image: A structural equation approach. *International Review on Public and Nonprofit Marketing, 7*(1), 21-36.

Fan, D. X. (2016). *The influence of ethnocentrism, tourist-host social contact and perceived cultural distance on tourists' travel attitude: Evidence from Hong Kong tourists to Mainland China* (Doctoral dissertation), The Hong Kong Polytechnic University, Hong Kong, China.

Fischer, P. M., & Zeugner-Roth, K. P. (2016). Disentangling country-of-origin effects: The interplay of product ethnicity, national identity, and consumer ethnocentrism. *Marketing Letters, 28*(1), 1-16.

Gatfield, T., & Chen, C. (2006). Measuring student choice criteria using the theory of planned behaviour: The case of Taiwan, Australia, UK and USA. *Journal of Marketing for Higher Education, 16*(1), 77-95.

Guo, X. (2013). Living in a global world: Influence of global consumer orientation on attitudes toward global brands from developed versus emerging countries. *Journal of International Marketing, 21*(1), 1-22.

He, J., & Wang, C. L. (2015). Cultural identity and consumer ethnocentrism impacts on preference and purchase of domestic versus import brands: An empirical study in China. *Journal of Business Research, 68*(6),1225-1233.

Hemsley-Brown, J. (2012). ''The best education in the world": Reality, repetition, or cliché? International students' reasons for choosing an English university. *Studies in Higher Education, 37*(8), 1005-1022.

Hosany, S., & Martin, D. (2012). Self-image congruence in consumer behaviour. *Journal of Business Research, 65*(5), 685-691.

Jalilvand, M. R., Samiei, N., Dini, B., & Manzari, P. Y. (2012). Examining the structural relationships of electronic word-of-mouth, destination image, tourist attitude toward destination, and travel intention: An integrated approach. *Journal of Destination Marketing and Management, 1*(1), 134-143.

Jin, Z., Lynch, R., Attia, S., Chansarkar, B., Gülsoy, T., Lapoule, P., … Ungerer, M. (2015). The relationship between consumer ethnocentrism, cosmopolitanism, and product country image among younger generation consumers: The moderating role of country development status. *International Business Review, 24*(3), 380-393.

Jon, J. E., Lee, J. J., & Byun, K. (2014). The emergence of a regional hub: Comparing international student choices and experiences in South Korea. *Higher Education, 67*(5), 691-710.

Kastenholz, E. (2010). 'Cultural proximity' as a determinant of destination image. *Journal of Vacation Marketing, 16*(4), 313-322.

Keillor, B. D., & Hult, G. T. M. (1999). A five-country study of national identity: Implications for international marketing research and practice. *International Marketing Review, 16*(1), 65-82.

King, V. T. (2016). Conceptualising culture, identity, and region: Recent reflections on Southeast Asia. *Pertanika Journal of Social Sciences and Humanities, 24*(1), 25-42.

Kock, F., Josiassen, A., Assaf, A. G., Karpen, I., & Farrelly, F. (2018). Tourism ethnocentrism and its effects on tourist and resident behavior. *Journal of Travel Research,* 58(3), 427-439.

Kumar, V. (2016). Examining the role of destination personality and self-congruity in predicting tourist behaviour. *Tourism Management Perspectives, 20*, 217-227.

Li, J., Liu, F., & Rojas-Méndez, J. I. (2013). How international students select offshore programs: The influence of image, attitude, subject norm, and perceived behavioral control. *Asia Pacific Educational Review, 14*(3), 381-390.

Martínez, S. C., & Alvarez, M. D. (2010). Country versus destination image in a developing country. *Journal of Travel and Tourism Marketing, 27* (7), 748-764.

Ng, S. I., Lee, J. A., & Soutar, G. N. (2007). Tourists' intention to visit a country: The impact of cultural distance. *Tourism Management, 28*(6), 1497-1506.

Nguyen-Hau, L., Hai-Minh, T. N., & Nguyen, T. V. (2013). National identity and the perceived values of foreign products with local brands: The case of local wine in Vietnam. *Asia Pacific Journal of Marketing and Logistics, 25*(5), 765-783.

Organisation for Economic Co-operation and Development. (2013). *Education indicators in focus*. Paris, France: OECD.

Organisation for Economic Co-operation and Development. (2019). *Education at a glance: OECD indicators 2019*. Paris, France: OECD.

Parts, O., & Vida, I. (2011). The effects of consumer cosmopolitanism on purchase behavior of foreign vs. domestic products. *Managing Global Transitions, 9*(4), 355-370.

Phau, I., Shanka, T., & Dhayan, N. (2010). Destination image and choice intention of university student travelers to Mauritius. *International Journal of Contemporary Hospitality Management, 22*(5), 758-764.

Riefler, P. & Diamantopoulos, A. (2009). Consumer cosmopolitanism: Literature review and investigation of the CYMYC scale. *Journal of Business Research, 62*(4), 407-419.

Riefler, P., Diamantopoulos, A., & Sigauw, J. A. (2012). Cosmopolitan consumers as a target group for segmentation. *Journal of International Business Studies, 43*(3), 285-305.

Shankarmahesh, M. N. (2006). Consumer ethnocentrism: An integrative review of its antecedents and consequences. *International Marketing Review, 23*(2), 146-172.

Sharma, P. (2014). Consumer ethnocentrism: Reconceptualization and cross-cultural validation. *Journal of International Business Studies, 46*(3), 381-389.

Shimp, T., & Sharma, S. (1987). Consumer ethnocentrism: Construction and validation of CETSCALE. *Journal of Academy of Marketing Science, 23*(1), 26-37.

Sirgy, M. J. (2018). Self-congruity theory in consumer behaviour: A little history. *Journal of Global Scholars of Marketing Science, 28*(2), 197-207.

Sobol, K., Cleveland, M., & Laroche, M. (2018). Globalization, national identity, biculturalism, and consumer behaviour: A longitudinal study of Dutch consumers. *Journal of Business Research, 82*(C), 340-353.

Strizhakova, Y., Coulter, R. A., & Price, L. L. (2008). Branded products as a passport to global citizenship: Perspectives from developed and developing countries. *Journal of International Marketing, 16*, 57–85.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & L.W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago, USA: Nelson-Hall.

Tasci, A. D. A. (2009). Social distance: The missing link in the loop of movies, destination image, and tourist behavior? *Journal of Travel Research, 47*(4), 494-507.

UNESCO Institute for Statistics. (2019). *Global flow of tertiary-level students*. Retrieved August 28, 2017, from http://uis.unesco.org/en/uis-student-flow

Vida, I., Dmitrovic, T., & Obadia, C. (2008). The role of ethnic affiliation in consumer ethnocentrism. *European Journal of Marketing, 42*(3/4), 327-343.

Visconti, L. M., Jafari, A., Batat, W., Broeckerhoff, A., Dedeoglu, A. Ő., Demangeot, C., … Wienberger, M. F. (2014). Consumer ethnicity three decades after: A TCR agenda. *Journal of Marketing Management, 30*(17/18), 1882-1922.

Wilkins, S., & Huisman, J. (2011). International student destination choice: The influence of home campus experience on the decision to consider branch campuses. *Journal of Marketing for Higher Education, 21*(1), 61-83.

Wilkins, S., & Huisman, J. (2014). Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Studies in Higher Education, 40*(7), 1256-1272.

Zeugner-Roth, K. P., & Žabkar, V. (2015). Bridging the gap between country and destination image: Assessing common facets and their predictive validity. *Journal of Business Research, 68*(9), 1844-1853.

Zeugner-Roth, K. P., Žabkar, V., & Diamantopoulos, A. (2015). Consumer ethnocentrism, national identity, and consumer cosmopolitanism as drivers of consumer behaviour: A social identity theory perspective. *Journal of International Marketing, 23*(2), 25-54.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1401 - 1413 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Exploring the Gerontological Skills Competencies of Social Workers through Vocational Education and Training in Caring for the Elderly

Khadijah Alavi*, Nur Hanis Hazlan and Sarin Johani

Psychology and Human Wellbeing Research Centre, Faculty of Social Science and Humanities, The National University of Malaysia (UKM), Bangi, 43600, Selangor, Malaysia

ABSTRACT

The profession of gerontology social work in Malaysia is not well known and is usually assumed as volunteer work without any professional certification. This study explored the competency skills and social work impact in gerontology, among the graduates in enhancing their interest in caring for the elderly. This study explored the vocational training utilization through Gerontology Social Work courses at Universiti Kebangsaan Malaysia (UKM). This study used a qualitative approach from 9 respondents who were selected through purposive sampling. The study was conducted at Rumah Ehsan Kuala Kubu Bahru, Selangor. Data were analysed in verbatim from the transcripts acquired via in-depth interviews with the respondents. The study found that Malaysian Skills Certificate (SKM) Level 3 apprentice in elderly care, felt that hands on learning in the actual setting while performing their industrial training were more meaningful and immersive compared to just learning the theories in the lecture room. Most of the respondents said their growing awareness and enthusiasm had now become the catalyst to defend the neglected senior citizens in the institutions. The three main values expressed by the respondents were patience, empathy and higher quality services should be inculcated in caring for the elderly. This study proposed better marketing at higher learning institutions and collaboration with stakeholders to improve employment opportunities among gerontology social work graduates who have the Malaysian Skills Certificate (SKM) Level 3 in elderly care.

Keywords: Competencies, elderly care, gerontology, graduates, social worker & vocational education and training

ARTICLE INFO

Article history:
Received: 30 August 2019
Accepted: 19 February 2020
Published: 26 June 2020

E-mail addresses:
khadijah@ukm.edu.my (Khadijah Alavi)
hanishazlan97@gmail.com (Nur Hanis Hazlan)
sarinjohani2@gmail.com (Sarin Johani)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

Gerontology social work refers to social workers who work with senior citizens. The main goal of gerontology social work is to maintain and improve the quality of life and well-being of senior citizens and caregivers (Milne et al., 2014). Social workers need to understand the physical and mental health problems faced by senior citizens in the economic, social and environmental context. Not only social workers work with the elderly, but they also need to work closely with the family members and the local community for better problem-solving. At present, there are 1.8 million senior citizens in Malaysia or 7% of the total population and is expected to increase to 3.4 million or 10% by the year 2020 and continue to rise to 5.1 million or 15% in 2035. The phenomenon of an increase in the aging population in Malaysia indicates that career in gerontology social work is critically needed to support and maintain the well-being of senior citizens (Holmes et al., 2013).

The rapid increase in aging population demography and changing nature of the family system have an impact on the urgent need for the workforce for short term and long term elderly care. According to Berkman et al. (2000) social work education training does not reflect the substantive contribution over the past 35 years by gerontological social work practitioners and researchers to the field of aging especially providing services to older persons, their family in the community, long term care and in the hospital setting. The main reasons enduring the workforce in this field were: identify person job-fit interest to care work, enhanced professional images, salary structures, build pay grade, developed various certificate levels and creating healthy-wellbeing care work environment (Ju-Chun, 2019). Berkman et al. (2016) recommended that there was a crucial need for collaboration creative partnership between field practice and link with an academic social work program to develop innovative models of preceptorship, integration of classroom and field learning, and web-based learning to maintain service role in the new millennium.

Preparing students for gerontology social work is moving slowly despite the recent demographic changes experienced by senior citizens. According to Brody (1970), awareness of gerontology social work is still lacking. Also, there is a shortage of students studying gerontology and elderly care. There are several factors that cause this situation to occur, i.e. faculties offering gerontology courses are insufficient (Damron-Rodriguez & Lubben, 1997), lack of interest in gerontology among students (Berenbaum, 2010; Kane, 1999; Mosher-Ashley & Pearl, 2000; Paton et al., 2001) and obstacles in the curriculum (Lubben et al., 1992). Additionally, social worker students are less keen to work with senior citizens compared to clients from other target groups. In practice, gerontology social work is in the fifth position compared to other practices such as mental health, child welfare, health, and family services (Scharlach et al., 2000).

In Malaysia, the division of social workers according to their expertise is yet to be created, especially those with specialized skills and expertise in gerontology. This suggests that Malaysian social workers' competency is not at par with their counterparts from abroad. According to Wynn (1995), social workers from abroad who are involved in geriatrics, still feel inadequate to serve the elderly. Even though they have wide knowledge of servicing senior citizens, they still face various obstacles and challenges.

Competence is the ability to apply one's skills and knowledge in new situations in the workplace. This concept includes the organization and job strategy, innovation in handling non-routine situations, the personal qualities that organizations require to deal with colleagues, managers and customers. Competence provides overview information on the individual's ability to take on any activity or participate in a group activity. The standards of competence will take into account the knowledge and skills, how well it is applied or used in the workplace. Competence is used as a principle of marking a boundary or benchmark where abilities and achievements can be evaluated (The Professional Standard Council of Australia, 2011). In this study, competence refers to the ability of social work students to apply knowledge, skills and attitudes in new situations whether during industrial training or employment. Social work graduates are expected to apply what they have learnt in lectures and fieldwork during the course of study, in their employment.

Social work profession is facing numerous challenges as the life expectancy of senior citizen increases at local and global levels. The demand for social workers in elderly care will continue to increase dramatically over the next decade as Malaysia will become an aging nation by 2035 (Wan Ibrahim, 2017). The drastic rise in aged population density should be tackled with increased efficiency among gerontology social workers to help elderly clients from various aspects of health, nutrition, psycho-social and others (Rosen et al., 2003; Scharlach et al., 2000). However, the demand for gerontology social workers is critical, as there is a lack of committed social workers attending to senior citizens in this country. Archbold et al. (1995) and Silver et al. (2004) found that most of the previous studies focused more on the knowledge, skills and duties of family members caring for their elders, and lacked research related to gerontology social work profession. Students' preparedness towards the gerontology social work profession is very slow and not given much exposure. There are several factors that cause this situation, such as inadequate faculties offering gerontology courses (Damron-Rodriguez & Lubben, 1997), lack of student interest in gerontology (Berenbaum, 2010; Kane, 1999; Mosher-Ashley & Pearl, 2000; Paton et al., 2001) and barriers to the curriculum (Lubben et al., 1992). Additionally, social worker students are less keen to work with senior citizens compared to clients from other target groups. In practice, gerontology social work is in the

fifth position compared to other practices such as mental health, child welfare, health, and family services (Scharlach et al., 2000).

In Malaysia, there is not much research involving elderly care at institutions that offer the Malaysian Skills Certificate (SKM) through Vocational Training and Technical Education. Most SKM studies focus on technical skills, engineering, hospitality, culinary and other skills (Glover & Bilginsoy, 2005) and less in the areas of community welfare such as early childhood care, disability studies or elderly care. According to Azmi (2013), Malaysian Skills Certificate (SKM) Level 3 holders can pursue university education to further enhance employment opportunities. The National Dual Training System (SLDN), initiated in 2005, is a special program designed for apprentices to undergo training at their workplace. As a result, this program has succeeded in increasing skilled manpower to meet the country's rapid development. The National University of Malaysia (UKM) a public university, is implementing the National Dual Training System (SLDN) program by joining effort with Department of Skills Development (Jabatan Pembangunan Kemahiran) and Department of Social Welfare (Jabatan Kebajikan Masyarakat), for final year social work respondents to complete their industrial training at Rumah Ehsan (Alavi & Hazlan, 2018). With such a program, apprentices have the opportunity to experience and are trained in real work settings, providing social workers with a hands-on problem-solving skill, which is missing in theoretical learning. Hence, to what extent gerontology social work students' awareness and the impact of gerontology social work courses can prepare students to meet the demands and requirements of professional elderly care.

Research Objective

The study aimed to explore incorporating vocational training in elderly care [Elderly Care Center Operations, National Dual Training Systems (NDTS)] with gerontology social work course at Faculty of Social Science and Humanities (FSSK), UKM. Also, the study examined the competence in gerontology skills to increase employment opportunities in elderly care in Malaysia.

METHODS

This study used an exploratory approach based on qualitative perspective. The survey data was collected from semi-structured interviews to seek how well UKM social workers were prepared in providing quality services to senior citizens in institutions. The study was conducted at Rumah Ehsan Kuala Kubu Bharu, Selangor. Respondents enrolled in elderly care program would learn 30% of the theoretical aspect at Faculty of Social Sciences and Humanities (FSSK), UKM and another 70% gerontology social work practice would be carried out at Rumah Ehsan Kuala Kubu Bharu, Selangor.

Respondents who registered for the SLDN industry training program at UKM between the three years from 2016 to 2018, were 44 apprentices. This study was conducted in 2019 and involved UKM

apprentices from the second cohort of 2017 which comprised 14 respondents who completed the training. 5 respondents were not reachable or declined due to personal reasons but only 9 respondents agreed to participate in the study. The samples selected were UKM apprentices undergoing industrial training holding Malaysia Skills Certificate Level 3 (Senior Citizen Care Operation Institution). The inquiry was held using semi-structure interview questions. This semi-structure question was formed after researching and screening literature reviews. Respondents were also probed to answer in-depth interviews. Prior to the interview, the researcher solicited respondents' permission to record their conversation. Interviews were recorded using digital recorders.

Data were analysed using a thematic approach whereby themes, sub-themes were extracted from interpreted verbatim transcripts and presented in writing. This process involved coordinating information from personal transcripts obtained from interviews, field notes and other useful materials during the study. Data exploration was used to identify the units analysed by comparing the meaning, feeling and behavioural aspects while integrating the codes obtained for explicit conversion in open coding. Axial coding was made to classify the data obtained in specific categories. The codes obtained during the open coding process would be reviewed through observation and relationship among the codes. Next, the researcher would make selective coding that involved selecting the core category in identifying the main themes with other themes and comparing coding schemes for improvement (Ezzy, 2002).

RESULTS AND DISCUSSIONS

The study involved 9 respondents of the Sijil Kemahiran Malaysia (SKM) who enrolled in the second cohort of the year 2017. All the respondents were Universiti Kebangsaan Malaysia (UKM) respondents and had participated in the industrial training at Rumah Ehsan Kuala Kubu Baru, Selangor. Profile of nine female respondents age between 24 and 27 years old, showed that they came from different backgrounds. All the respondents participating in this study were Malay Muslims (Table 1).

Table 1
Profile of respondents

Respondent	Age	Sex	Zone
1	24	Female	Central
2	24	Female	East Coast
3	24	Female	Southern
4	24	Female	Southern
5	26	Female	Central
6	27	Female	East Coast
7	24	Female	East Coast
8	23	Female	Southern
9	26	Female	East Coast

The National Dual Training Scheme (SLDN) is a special program for respondents undergoing training in the workplace since 2005. As a result, this program has succeeded in meeting the increased demand for skilled manpower in line with the rapid development of the country. Universiti Kebangsaan Malaysia (UKM) is one of the

public universities (UA) which provides SLDN programs in collaboration with the Department of Skills Development to prepare final year social work respondents undergo industrial training at Rumah Ehsan. Participation in such a program, allow respondents to get real experience and training, which is not attainable with learning theories only.

SKM stands for Sijil Kemahiran Malaysia (Malaysian Skills Certificate), a certificate issued by the Department of Skills Development (JPK) under the Ministry of Human Resources (Department of Statistics 2017). Malaysian Skills Certification System (SKPM) looks into the policy, mechanism, standard and procedures involved in awarding Malaysian Skills Certificate / Malaysian Skills Diploma / Malaysian Skills Advanced Diploma. There are five levels of certification namely SKM level 1, SKM Level 2, SKM Level 3, DKM Level 4 and DLKM Level 5. SKM Level 3 covers the National Dual Training Scheme (SLDN) training method which involves two areas; comprising 70-80% industrial training in organisations and 20-30% learning theory and basic skills in classrooms. SKM is a qualification awarded to candidates who can prove their skills according to the fields and levels listed in the national skills standard.

Gerontology Social Workers Awareness of Vital Values

Just like other professional professions, values provide the direction, purpose and meaning for social workers in gerontology. Value is a form of determination that are embedded in a person's belief system that directs their behaviour. The results of the study showed that respondents were aware of the key values that they should have. Seventy percent of respondents stated patience to be the key value while attending to senior citizens. Respondents should train themselves to refrain from tetchy behaviour or being emotional with the tantrum of elderly people. Patience is the key to success when dealing with senior citizens.

> *.. one has to have patience. We have to treat the elderly just like small children, the only difference is their behaviour is sometimes unpredictable.* (Respondent 4).

> *.... main value they should have is patience…there's not much problem handling the elderly whom are known to us, however not easy in dealing with elderly who are not family members.* (Respondent 5).

Another value that respondents need to have when caring for the elderly is empathy. Fifteen percent of respondents stated that as a gerontology social worker, they must have empathy. Empathy is an individual's ability to put themselves in others' shoes. When respondents of social gerontology are empathy towards senior citizens, helping them becomes easier as they are mindful of senior citizens' limitation and ability. Also, respondents should be tolerant of senior citizens.

...main value is empathy... we have to feel it happening to us, where we place ourselves in what the senior citizens go through. When we are able to feel their real situation, it will be easy for us to help them, easy to sympathise, and easy to get on with other tasks. (Respondent 2).

...the main value to have is empathy. We have to know the situation that the elderly are going through so that we don't pick out the wrong words or action. Most of the elderly have unstable emotion due to their past life (Respondent 8).

As prospective gerontology social workers, respondents need to uphold professional values while with senior citizens. A professional worker should be wise to distinguish between personal duties or official duties. In addition, professional workers should work in accordance with ethical codes set by the profession. Based on the interview, majority of the respondents stated that the main value gerontology social workers should have was professionalism. While 5 respondents considered patience, empathy and higher quality services as the main values for gerontology social workers.

.... main value is professionalism, where one should set a boundary between personal and profession.... though one may not be comfortable in the strong-smelling environment with the elders, we should look at the situation professionally (Respondent 7).

.... main value to have is professionalism. While working at the institution we hear lots of stories on the elderly.... Future social workers should be tactful in such a situation and be ready to provide solutions. (Respondent 9).

In conclusion, as a professional helping profession, social workers should perform their duties based on ethical codes and set values. The Code of Ethics is merely a guide and reference for social workers to take action. If the code of ethics and values are not used in carrying out the helping profession, there bound to be problems that will affect the social worker and the elderly.

The Impact of Technical and Vocational Education and Training (TVET) in Gerontology Course

The finding shows that gerontology course taken by the nine respondents has a positive impact on them. Prior to taking the course, respondents did not have much exposure about senior citizens or on issues relating to the elderly, especially those living in care centers. With the presence of a gerontology course, they understood the needs of the elderly from a different perspective and felt the need to protect and stand up for their rights. As a result of this course, respondents have learnt noble values and are more loving and respectful to their parents. Meeting senior citizens in person, have made the

respondents sympathized with the issues they face in Malaysia. Often, respondents deal with issues from the oppressed target groups such as children, adolescents, disabled people and women. However, they are now aware of various issues related to senior citizens who need attention and action from all parties.

> *…. I was rather touched when given the opportunity to visit a nursing home and promise to be a dutiful child…. I've learnt new things on elderly from gerontology course….* (Respondent 1).

> *…. has made an impact on me, especially getting to know the changes senior citizens go through in life. Before this, I was surprised with my grandfather's strange behavior and often question…. After taking up the course, I understand as senior citizens age, their behavior and emotion change too….* (Respondent 8).

The findings in this research conform to Deissinger (1996), who stated that the "dual system" vocational training introduced in Germany for vocational training and workplace training allowed apprentices and workers expand their skills and experience while working.

> *…we were taught about senior citizens in theory, but theory only is not enough…. The practical sessions made apprentices know more …. We follow the coach's instructions in dealing with senior citizens…on how to bathe them, to help when they choke on food, or to carry them when sick* (Respondent 1).

> *Learning theory only is not enough to care for the elders. With practical, we'll have better knowledge and new experience. Theories are more academic, while practical is more to reality to know the ups and downs. Better understanding as a whole* (Respondent 2).

> *The theories are applied while taking care of the elderly; such as changing diapers, preparing meals, feeding, and changing sheets* (Respondent 5).

> *…. the theories learnt in classrooms are unfold before my eyes… For example, I could see elders who are suffering from mental illness such as Alzheimer and Dementia. What I learn in class is just about senior citizens' characters, not the care aspect* (Respondent 7).

> *Theory application is very much dependent on the emotional state of the elderly, how we establish close rapport with them, helping them lead comfortable life through intervention, listening and*

solving their problems with the administrator's help (Respondent 6).

Based on interviews with the respondents, learning theories in the classroom alone is not enough to handle the elderly, practical training is necessary to know the real situation in caring for the elderly. However, there are some challenges in adapting to real work, especially caring for those who are bedridden. In conclusion, respondents with gerontology knowledge, have better information on senior citizens. The classroom learning together with practical experience of working with senior citizens at care centers, add value and self-awareness to respondents towards providing senior-friendly services.

Applying Social Work Knowledge on Senior Citizens

Theories and skills acquired from gerontology course is an advantage to gerontology respondents. With the knowledge gained from gerontology courses, respondents have a better understanding and are able to apply it to senior citizens. The results showed that respondents have practiced what they learnt on senior citizens. To start with, the majority of respondents share related learning outcomes on senior citizens with their immediate family members. This is a positive start where respondents try to convey the knowledge they have learnt with others. Often, the knowledge shared with family members relates to a basic and simple task.

I will practice what has been taught, but with the basic and simple ones first…my grandma, a senior citizen, speaks less, so I taught myself to initiate a conversation with her. In gerontology class, we were taught that senior citizens need attention and appreciation. In my opinion, with frequent communication, I could help her overcome loneliness…. (Respondent 3).

...I feel I've learnt more on self-control after knowing about senior citizens' behavioral changes. I rarely raise my voice now. I try to improve myself little at a time so that grandma is not upset with me. Also, I'm more mindful of senior citizens' needs… (Respondent 2).

... providing suitable activities according to their age. I used to wonder why grandma refused to go out with us. After studying about senior citizens I now understand…. (Respondent 4).

.... I always share the simple ones such as good nutrition. I cautioned a senior citizen that eating too much junk food is not healthy, after finding out that he goes out often to buy junk food. I said he can eat them but not every day... (Respondent 9).

Although respondents were unable to practice the entire knowledge of gerontology in general, their contribution brought some comfort to senior citizens' wellbeing. Also, in learning senior citizens' behavioral changes, respondents have been more tolerant and accepting, and make efforts to improve their self-control too. All respondents were looking forward to participate in the workplace, as in such fieldwork, respondents would understand the scope of work better when attending to the elderly. In addition, the plan of sending students to countries or places that have attained the status of aged-nation will enhance them to learn about senior citizens' abroad.

The respondents' duty in handling senior citizens consists of several aspects, namely physical, emotional, and interpersonal tasks. Taking care of their emotional needs is a priority in ensuring senior citizens' well-being. Among the tasks carried out to boost their emotion is by storytelling, giving simple advice and encouragements. Sometimes respondents get advice from senior citizens who are worldly-wise. Senior citizens love it when respondents give attention to their stories. This finding conforms with the study conducted by Schumacher et al. (2000) which states that caregiving skills require integration with healthcare system such as monitoring skills. For example, nurses and social workers can work together in ensuring that caregivers have the skills needed to provide better care (Archbold et al., 1995; Scherbring, 2002; Silver et al., 2004).

CONCLUSION

The findings conclude that the key value in engaging a gerontology social worker is to educate and prepare them adequately with the interests, knowledge, skills in caring for senior citizens. Respondents should also have the right values and attitude while engaging them as a gerontology social worker. The three main values expressed by the respondents are patience, empathy, and professional. When these values are used in the helping profession, caring for the elderly becomes easy. In addition, the results indicate that the majority of students are not interested to work with senior citizens upon graduation. This is because they are not interested in a career with senior citizens. Also, they are not keen to face the challenges of handling senior citizens. There are several factors why students are not interested to work with senior citizens, among them are age gaps, environments and career-related myths and stereotypes with senior citizens.

Gerontology made an impact on social worker students as majority of respondents felt the need to improve their practical knowledge with various learning and teaching methods that would enhance their skills for future career development. The proceedings of both theoretical and practical courses in gerontology social work are still lacking in the Public Universities. Overall, the majority of respondents agreed that immersive learning experience could influence their readiness in the actual work.

RECOMMENDATIONS

Based on the findings of this study the following recommendation are:

(i) The enrolment for Malaysian Skills Certificate (SKM) in elderly care should be extended to other public universities in Malaysia to produce more professionals in that area. Multi-agency collaboration should promote psycho-education on elderly care to reduce the sending of elderly to care centres through SKM (Elderly Care). This collaboration will further enhance the opportunities of education, training and employment in gerontology social work. The potential of gerontology social work profession can be extended to improve the well-being of senior citizens, families and communities.

(ii) Universiti Awam (Public colleges and universities), DSD (Department of Skills Development), JKM (Department of Social Welfare Malaysia), Malaysian Association of Social Work (MASW) and NGOs need to collaborate in improving domestic and foreign job opportunities related to elderly care (such as care managers, case managers, care workers, and volunteers) through entrepreneurship training/ development start-up programs, soft loans, post-graduation employment monitoring and exhibition centre for TVET graduates in community care fields.

(iii) The Government, in collaboration with various agencies, can introduce social entrepreneurship to graduates of Malaysian Skills Certificate (SKM) in elderly care to offer online or mobile home help services, like "Grab", to provide best quality services for those with disabilities and senior citizens; allowing flexible working hours (gig economy), generate consistent income for youth, a job in place; job matching online, such as "urbanisation of care" care known as 'Jaga Me' in Singapore; urbansitter.com; Care.com and Care flex and so on.

ACKNOWLEDGMENT

This study was fully funded by UKM Research Grant: KRA 2017:002, Universiti Kebangsaan Malaysia. Acknowledgment is also addressed to all who have been participated in this study especially Department of Skills Development, Welfare Department of Malaysia, Rumah Ehsan Kuala Kubu Bahru officers and all the informants.

REFERENCES

Alavi, K., & Hazlan, N. H. (2018). Latihan industri program kerja sosial UKM: Peranan perantis Sistem Latihan Dual Nasional (SLDN) dalam penjagaan warga emas [Industrial training for UKM social work program: The role of Sistem

Latihan Dual Nasional (SLDN) apprentices in elderly care]. *Jurnal Personalia Pelajar, 21*(1), 79-87.

Archbold, P. G., Stewart, B. J., & Miller, L. L. (1995). The PREP system of nursing interventions: A pilot test with families caring for older members. Preparedness (PR), enrichment (E) and predictability (P). *Research in Nursing and Health, 18*(1), 3-16.

Azmi, A. M. (2013, January 2). SKM tahap 3 boleh dibawa ke universiti [SKM Level 3 could be utilised at university]. *Sinar Harian.* p. 14.

Berenbaum, R. (2010). Motivating students in the helping professions to work with the aged. *Educational Gerontology, 26*(1), 83-96. doi:10.1080/036012700267411

Berkman, B., Silverstone, B., Simmons, W. J., Volland, P. J., & Howe, J. L. (2016). Social work gerontological practice: The need for faculty development in the new millennium. *Journal of Gerontological Social Work, 59*(2), 162-177. doi.org/10.1080/01634372.2016.1169845

Berkman, B., Silverstone B., Simmons, W., Volland P., & Howe, J. (2000). Social work gerontology practice. *Journal of Gerontology Social Work, 34*(1), 5-23. doi:10.1300/J083v34n0102

Brody, E. M. (1970). Serving the aged: Educational needs as viewed by practice. *Social Work, 15*(4), 42-51. doi:10.1093/sw/15.4.42

Damron-Rodriguez, J., & Lubben, J. (1997). The 1995 WHCoA: An agenda for social work education and training. In C. Saltz (Ed.), *Social work response to the 1995 White House Conference on Aging: From issues to actions* (pp. 65-77). New York, USA: Haworth. doi.org/10.1300/J083V27N03_06

Deissinger, T. (1996). Germany's vocational training act: Its function as an instrument of quality control within tradition-based vocational training system. *Oxford Review of Education, 22*(4) 317-336.

Ezzy, D. (2002). *Qualitative analysis: Practice and innovation.* Sydney, Australia: Allen & Unwin.

Glover, R., & Bilginsoy, C. (2005). Registered apprenticeship training in the U.S. construction industry. *Education & Training, 47*(4/5), 337-349. doi:10.1108/00400910510601913

Holmes, E., Miscampbell, G., & Robin, B. (2013). *Reforming social work: Improving social worker recruitment, training and retention.* London, England: Policy Exchange.

Ju-Chun, C. (2019). Influencing intention to engage in long-term care services among nursing aide trainees and the general public. *International Journal of Psychological and Behavioral Sciences, 13*(6), 884-889. doi.org/10.5281/zenodo.3299658

Kane, M. N. (1999). Factors affecting social work student's willingness to work with elders with Alzheimer's disease. *Journal of Social Work Education, 35*(1), 71-85. doi:10.1080/10437797.1999.10778948

Lubben, J. E., Damron-Rodriguez, J., & Beck, J. C. (1992). A national survey of aging curriculum in schools of social work. *Journal of Gerontological Social Work, 18*(3-4), 157-171. doi: 10.1300/J083v18n01_11

Milne, A., Sullivan, M. P., Tanner, D., Richards, S., Ray, M., Lloyd, L., Beech, C., & Phillips, J. (2014). *Social work with older people: A vision for the future*. London, England: The College of Social Work.

Mosher-Ashley, R., & Pearl, M. (2000). Factors influencing college students to choose careers working with elderly persons. *Educational Gerontology, 26*(8), 725-736. doi.org/10.1080/036012700300001386

Paton, R., Sar, B. K., Barber, G., & Holland, B. (2001). Working with older persons: Student views and

experiences. *Educational Gerontology, 27*(2), 169-183. doi.org/10.1080/03601270151075589

Rosen, A. L., Zlotnik, J. L., & Singer, T. (2003). Basic gerontological competence for all social workers: The need to 'Gerontologize' social work education. *Journal of Gerontological Social Work*, *39*(1-2), 25-36. doi:10.1300/J083v39n01_04

Scharlach, A., Damron-Rodriguez, J., Robinson, B., & Feldman, R. (2000). Educating social workers for an aging society: A vision for the 21st century. *Journal of Social Work Education, 36*(3), 521-538. doi:10.1080/10437797.2000.10779026

Scherbring, M. (2002). Effect of caregiver perception of preparedness on burden in an oncology population. *Oncology Nursing Forum*, *29*(6), 70-76. doi:10.1188/02.ONF.E70-E76

Schumacher, K. L., Stewart, B. J., Archbold, P. G., Dodd, M. J., & Dibble, S. L. (2000). Family caregiving skill: Development of the concept. *Research in Nursing & Health*, *23*(3), 191-203. doi:10.1002/1098-2440x(200006)23:3

Silver, H. J., Wellman, N. S., Galindo-ciocon, D., & Johnson, P. (2004). Family caregivers of adults on home enteral nutrition have multiple unmet task-related training needs and low overall preparedness for caregiving. *Journal of the American Dietetic Association, 104*(1), 43-50. doi:10.1016/j.jada.2003.10.010

The Professional Standard Council of Australia. (2011). *Australian qualification framework.* Adelaide, Australia: Author.

Wan Ibrahim, W. M. S. (2017). *Population and demographics of aging.* Putrajaya, Malaysia: Department of Statistics Malaysia.

Wynn, G. (1995). Addressing the educational needs of nursing home social workers. *Gerontology and Geriatrics Education, 16*(2), 31-36. doi:10.1300/J021v16n02_04

Pertanika J. Soc. Sci. & Hum. 28 (2): 1415 - 1427 (2020)

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Health Vulnerability Versus Multiple Vulnerability Factors Among Low-Income Group in Malaysia

Nora Muda*, Anisa Mohammad Azahari, Faridatulazna Ahmad Shahabuddin, Zamira Hasanah Zamzuri, Noratiqah Mohd Arif, Mohd Aftar Abu Bakar and Nur Riza Mohd Suradi

Department of Mathematical Sciences, Faculty of Science and Technology, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor

ABSTRACT

Environmentally adverse conditions, poverty, and social status can result in healthcare vulnerability. This paper aims at explaining the health-related expenditure patterns and low-income households' (B40) characteristics in Malaysia, to identify the health vulnerability factors. Descriptive analysis and k-means clustering methods were employed to obtain demographic information of the low-income group and to cluster the group with different health vulnerability factors, namely (1) medical appliances, equipment, and products, (2) outpatient services, and (3) hospital or in-patient services. Based on the cluster analysis, three groups with different health vulnerability factors were identified. Researchers studied each group's characteristics and identified that the most vulnerable group comprised those having females as the heads of household and not working (10.5%), having low or no education at all, having the lowest income of RM1027.70, and living in the rural area (59.8%). Their health expenditure was also the lowest in which the average expenditure on medication was just RM16; RM5 for outpatient services and RM1.00 for in-patient services. The other two groups with better health vulnerability were households with higher education level and working for a living. Based on the findings, the authorities should give more attention to this most vulnerable group and prioritise them for better healthcare accessibility and in policymaking.

Keywords: Cluster analysis, healthcare, poverty, social status, vulnerable

ARTICLE INFO

Article history:
Received: 14 March 2019
Accepted: 13 January 2020
Published: 26 June 2020

E-mail addresses:
noramuda@ukm.edu.my (Nora Muda)
anisazahari@yahoo.com.my (Anisa Azahari)
azna@ukm.edu.my (Faridatulazna Ahmad Shahabuddin)
zamira@ukm.edu.my (Zamira Hasanah Zamzuri)
tqah@ukm.edu.my (Noratiqah Mohd Arif)
aftar@ukm.edu.my (Mohd Aftar Abu Bakar)
nrms@ukm.edu.my (Nur Riza Mohd Suradi)
*Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

Vulnerability is the degree to which an individual, an organisation, or a population is unable to anticipate, cope with, recover from, and resist the impacts of disasters (World Health Organization [WHO], 2002). Besides, according to Grabovschi et al. (2013), a vulnerable portion of a population is those who is at risk of poor healthcare disparities and health quality. They found that low healthcare accessibility and quality result in higher healthcare needs but multiple vulnerability factors made the group of the population be in higher vulnerability state. On the other hand, high healthcare accessibility and quality result in lower healthcare needs, thus, fewer vulnerability factors categorise this group to be in lower vulnerability state. The consequences of vulnerability on poor health may result from the degraded neighbourhood, developmental problems, disadvantaged social status, environments, inadequate interpersonal networks and supports, and personal incapacities. Braveman and Gottlieb (2014) defined a social determinant of health as *"the conditions in which people are born, grow, live, work, and age"*. The finding pointed out that socio-economic aspects, such as educational attainment and family income, as the fundamental cause of wide-ranging health outcomes.

Based on the Report of Household Income and Basic Amenities Survey 2016 released by the Department of Statistic Malaysia in 2017, Malaysian household economic status is categorised into three categories. The lowest in the hierarchy is the households with a median monthly income of the bottom 40% from the overall Malaysian population, followed by the households with a median monthly income of the middle 40% and the highest in the hierarchy is the top 20%. Thus, B40 is defined as the bottom 40% of the population earning the lowest 40% from the median monthly income (Department of Statistics Malaysia, 2017). For low-income households, such as those categorised as B40 in our country, there is a concern that this group experience multiple vulnerabilities – they are growing up or living with risks that could affect their well-being and ultimately life chances due to their financial constraints.

Children, elderly people, ill or immunocompromised people, malnourished people, and pregnant women are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Indeed, poverty – and its common consequences, such as destitution, homelessness, malnutrition, and poor housing – is a major contributor to vulnerability. The vulnerability can result from a social status as vulnerable groups, people, or the surrounding population. Corrupted environment or neighbourhood, lack of social networking quality or quantity, personal inability, and poor social status are among factors affecting the vulnerability (Mechanic & Tanner, 2007).

Total health expenditure is the sum of private and public health expenditures. It covers the provision of emergency aid, family planning activities, health services

(curative and preventive), and nutrition activities designated for health but does not include the provision of sanitation and water. In 2015, health expenditure as a share of GDP for Malaysia was 4 %. Health expenditure as a share of GDP of Malaysia increased from 2.7% in 2001 to 4% in 2015 growing at an average annual rate of 3.02%. In 2017, the amount of money that Malaysia spent on healthcare, as a percentage of total government expenditure is a mere 6%. This figure is deemed low/small. Thailand allocated more than double the amount, at 13%, and Singapore and Vietnam even more, at 14%. Even many low-income countries, from Afghanistan to Zambia, earmarked relatively more funds to healthcare than Malaysia.

According to Frost & Sullivan Inc. (2016), the total Malaysian healthcare spending could reach up to USD 20 billion by 2025 following the increasing chronic disease incidences, escalating healthcare costs, particularly in Selangor and Wilayah Persekutuan due to urbanisation, and a weak ringgit. Health spending is a measure of the current health expenditure or total consumption spent on healthcare goods and services (Organisation for Economic Cooperation and Development [OECD], 2017). Collective services and personal healthcare are also included in this measure and exclude investment spending. Studies on health spending are important since the financial consequences of paying for healthcare affects both poor and rich countries (Xu et al., 2007). It is well known among health economists that health spending per capita is positively correlated to GDP per capita (Anderson et al., 2006). Based on a report by UNDP, the Malaysian Government spends 2.2% of its GDP on the public healthcare sector (Quek, 2014).

The roles of basic needs, other demographic factors, and expenditure in explaining the 'survivability' concept in Malaysia's current economic environment among Muslim B40, M40, and T20 households have been examined by Rashid et al. (2018). Different consumption behaviours and patterns among the households were observed. However, this study is associated with several limitations in which only Muslim respondents in Kelantan and Selangor were chosen. Therefore, it may affect the generalisability of the findings. To fill the gap in the survivability measurement, measuring the expenditure based on other ethnicities and in different states of Malaysia is needed.

Several studies have been reported by the Consortium of Low Income Population Research (CB40R) highlighting comprehensive health aspects, i.e. health behaviour, health financing, mental health, and physical health; and also nutrition involving all lifespan stages of the socioeconomic deprived group in Malaysia (Shahar et al., 2019). They found that the low-income population in Malaysia is facing various health challenges, particularly related to non-communicable disease (NCD) and poor mental health, nutritional, and physical function. A sustainable intervention model to tackle the issues is highly required. They

also highlighted the important issues of reducing socioeconomic status (education, income, and occupation) disparities in health requiring policy initiatives and the pathways by which these affect health. Their findings and previous research on the household expenditure on health have prompted us to continue the study by taking into account health expenditure factors among low-income households by acquiring mutually exclusive socioeconomic factors using cluster analysis so that the government can continue to provide healthcare assistance to this target group.

Therefore, this study aims to share the results of a scoping review examining the relationship between healthcare disparities and the multiplicity of vulnerability factors often clustered together. The Department of Statistics Malaysia has itemised the health spending under three groups, namely (1) medical appliances, equipment, and products, (2) hospital or in-patient services, and (3) outpatient services. The household income, as well as education levels and living location, are among the clusters used to profile the vulnerable group in focus, which is the low-income households, categorised as B40.

MATERIALS AND METHODS

Data Analyses and Statistics

The Household Income Expenditure Survey (HIES) 2016 data was obtained from Bank Data UKM, which had established an official agreement and partnership with the Department of Statistics Malaysia. According to the Report of Household Income and Basic Amenities Survey 2016, the survey was conducted by the Department of Statistics Malaysia using the personal interview approach on selected households and the sampling method used was Simple Random Sampling (SRS) method.

The variables being considered in the analysis are the household expenditure, household health item expenditure, household income, and socio-demographic characteristics of low-income households (activity status, ethnic, gender, highest education level, living location (rural and urban), and marital status). For the living location variable, the Department of Statistics Malaysia classified the location by strata; urban is an area having a population of at least 60% engaged in non-agriculture activities while the remaining are classified as rural. Briefly, in this study, the data was selected according to the head of low-income household and this research analysed health vulnerability factors among the low-income population by looking at the healthcare expenditure pattern in Malaysia without considering the states. All statistical analyses were performed using the R Project for Statistical Computing software.

Descriptive Analysis

The descriptive analysis was conducted on the entire socio-demographic factor to see the characteristics of the low-income population in this research. Each data frequency was reported in percentage for every considered factor and the measure of central tendency was measured to describe data distribution. Concerning health-related

expenditure, three items were identified and categorised into three categories; Item1 refers to medical appliances, equipment, and products, Item 2 refers to hospital or in-patient services spending, and Item 3 refers to outpatient services spending. Besides, the additional important factors in this study are the mean income, mean of total expenditure, and percentage of expenditure.

The definitions of the three additional factors are as follows:

i. Mean income: The average amount of income per household.

ii. Mean of total expenditure: The average amount of total expenditure per household.

iii. Percentage of expenditure: The percentage of difference of mean income and mean of total expenditure per mean income.

Clustering Analysis

Subsequently, to categorise the low-income population based on their health vulnerability or health multiple vulnerabilities, the multivariate analysis was carried out. Multivariate analysis can be used in data collection and evaluation to explain the relationships between different variables associated with the data being studied. There are many multivariate analyses such as cluster analysis, factor analysis, and principal component analysis. In this paper, we considered the cluster analysis that could group a set of objects in such a way that objects in the same group (called a cluster) were more similar to each other than to those in other groups.

In cluster analysis, two procedures can be used, namely hierarchical and non-hierarchical. A hierarchical procedure can be either agglomerative or divisive while non-hierarchical procedure in cluster analysis is often referred to as *k*-means clustering. The k-mean clustering was chosen as the clustering method since the data in this study was unlabelled, i.e. not defined as categories or groups. Therefore, the *k*-means clustering can group similar data and discover underlying patterns by a fixed number (k) of clusters in a data set.

To define a target number k, the k-means algorithm identifies k number of centroids, and then allocates every data point to the nearest cluster while keeping the centroids as small as possible. By using the *k*-means algorithm, the three clusters were established from four clusters when the agglomerative coefficient increased from 0.92% (4 clusters) to 99.08% (three clusters). This explains that the total within-cluster variation (error) is minimum and the within-cluster similarity is high. Thus, three factors were considered in the *k*-means clustering that are the household income, household total expenditure, and household health-related expenditure for three items, namely (1) medical appliances, equipment, products, (2) outpatient services, and (3) hospital or in-patient services. The results reported the most vulnerable group in the low-income population and the health vulnerability and multiple vulnerability factors related to the group.

RESULTS AND DISCUSSION

Statistical Analysis: Descriptive Analysis of Low-income Population

The descriptive analysis describes the socio-demographic characteristics of low-income population data used in this research. The distribution of the B40 group is described by a list of mean and median household income in the year 2016 in which the household mean income is RM2,848.00 monthly while the household median income is RM3,000. Thus, for the year 2016, the B40 group is categorised as a household group earning not more than RM2, 848.00 of household mean income.

Table 1 summarises the socio-demographic characteristics of the low-income population. A total of 2443 samples (30%) of HIES 2016 households were studied in this research. It is noted that, based on the survey, all individuals in this population were the head of the household. The majority of 1865 (76.3%) were male heads of households and 578 (23.7%) were female heads of the household. On the other hand, it was be observed that 1288 (52.7%) of the low-income household population living in the urban area and another 1155 (47.3%) living in the rural area. This number does not show a very huge difference (only 5.4% different) in which we can conclude that there is still a high number of the low-income population in the urban area. Among this low-income population, the majority of them were married with a frequency of 1724 (70.6%), 273 (11.2%) were single, 92 (3.8%) were divorced, and 354 (14.5%) were widowed.

Table 1

Descriptive analysis for the low-income population

Total sample	***n* (%)**	**Total sample**	***n* (%)**
Gender		**Highest education level**	
Male	1865 (76.3)	Primary school	1261 (51.6)
Female	578 (23.7)	Secondary school	825 (33.8)
Ethnic		Tertiary	54 (2.2)
Bumiputera	1867 (76.4)	No education	303 (12.4)
Non-Bumiputera	575 (23.5)	**Activity status**	
Living location		Employer	10 (0.4)
Urban	1288 (52.7)	Government servant	79 (3.2)
Rural	1155 (47.3)	Private sector employee	1070 (43.8)
Marital status		Self-employed	832 (34.1)
Single	273 (11.2)	Housewife	125 (5.1)
Married	1724 (70.6)	Pensioner	112 (4.6)
Divorced	92 (3.8)	Others	215 (8.8)
Widowed	354 (14.5)		

Furthermore, based on the analysis, it is a concern that half of the low-income individuals (51.6%) were reported of having primary school level as their highest education while 303 (12.4%) were reported of not having any education. Additionally, the highest number of individuals worked as private-sector employees with 43.8% (1070), followed by self-employed with 34.1% (832). A small portion of the low-income population was government servants 3.2% (79) and 4.6% (112) were pensioners, 5.1% (125) housewives, and 0.4% (10) employers. Maybe due to not having adequate qualifications, individuals from the low-income population did not manage to get a job in the government sector. Concerning 10 individuals (0.4%), who are an employer, most probably they are running a market stall, homeworker, or having other jobs not declared in the survey.

Health-Related Expenditure

In this study, the health expenditure of the low-income group in Malaysia was analysed. The health expenditure for the population was categorised into three categories, namely Item 1, Item 2, and Item 3.

The details of the three items listed in Table 2 are as follows:

1. The first item (Item 1) represents the expenditure on medical appliances, equipment, and products. For example, the items in this category are healthcare or medical products (such as a condom, first aid kit, and pregnancy test kit), pharmaceutical products (prescription medicine or without prescription medicine including traditional medicine), and therapeutic appliances and equipment (dentures, hearing aid, and spectacles).
2. The second item (Item 2) represents outpatient services such as dental services, medical services, or paramedical services (the outpatient services include treatment and medicine at both government outpatient and private clinics).
3. The third item (Item 3) represents hospital services, particularly in-patient hospitalisation. This includes the expenditure spent on hospitalisation fees at both government and private hospitals including the specialist consultation fees.

Table 2
Health expenditure items

Item 1	Medical appliances, equipment, and products
Item 2	Outpatient services
Item 3	Hospital or in-patient services

Cluster Analysis

The clustering is based on several characteristics that are household income, household total expenditure, and the expenditure spent on Item 1, Item 2, and Item 3. Based on the cluster analysis, a three-cluster k-means solution with different vulnerability factors was recorded.

Table 3

Summary of living location, mean income, mean of total expenditure, and percentage of expenditure of three clusters

	Living location			Mean income	Mean of total expenditure	Percentage of expenditure (%)
	Urban (%)	Rural (%)	Total (% across the group)	(RM)	(RM)	
Group 1	532 (51.0)	511 (49.0)	1043 -42.7	RM2,227.00	RM1,867.00	83.8
Group 2	419 (46.9)	474 (53.1)	893 -36.6	RM1,636.00	RM1,478.60	90.4
Group 3	204 (40.2)	303 (59.8)	507 -20.8	RM1,027.70	RM1,027.10	99.9

The last column of Table 3, shows the percentage of expenditure variable, explaining the percentage of total expenditure over the income earned by the groups. As reported in Table 3, group 1 cluster is the group with the highest mean income and mean of total expenditure but the lowest percentage of expenditure with 83.8% in which 51% of that group living in the urban area and another 49% living in the rural area. As for group 2 and 3 clusters, more than 50% of households in both groups living in rural areas with 53.1% and 59.8%, respectively. Moreover, the mean income earned and the mean of total expenditure spent is higher for group 2 as compared to group 3. The most unexpected result is the percentage of expenditure for group 3, which is nearly 100% indicating the expenditure spent is as much as the income earned. Individuals in group 3 consist of 20.75% of the total individuals in this research.

In conjunction with Table 3, Table 4 shows the number of individuals with the highest education level for the three group clusters. 53.8% of the total individuals (51.7% secondary school; 2.1% tertiary) completed at least their secondary school education, 33.8% only completed their primary school education, and another 12.4% did not receive any formal education. Group 1 cluster is the group with the highest number of individuals receiving all three education levels and the lowest number of individuals not receiving any formal education. Group 3 cluster is the group without individuals receiving tertiary education and recorded the highest number of individuals without any formal education. With a total of 12.4% of individuals not receiving any formal education and another 33.8% only completed their primary school education, this number raises a concern. In developing countries like Malaysia, this should not be the case. How can a number

of individuals still miss the opportunity to get their education?

The activity status in this research describes what the individuals of the low-income population do for a living. As explained earlier, all individuals in this population were the heads of households. Table 5 provides information concerning the activity status of male and female heads of households. The highest percentage of individuals in group 1 cluster was working for a living (89.1%), only 1.8% of them were housewives and 5.4% were pensioners.

Table 4

Highest education level for each cluster group

	Education			
	Primary school	Secondary school	Tertiary	No education
Group 1	309	624	37	73
Group 2	293	475	15	110
Group 3	223	162	0	120
Total (%)	852(33.8)	1261(51.7)	52(2.1)	303(12.4)

Table 5

Activity status for both male and female gender for all three-cluster groups

Activity status (%)	Group 1		Group 2		Group 3	
	Male	Female	Male	Female	Male	Female
Employer	1 (0.1)	1 (0.1)	5 (0.6)	1 (0.1)	2 (0.4)	0 (0.0)
Government servant	55 (5.3)	3 (0.3)	17 (1.9)	3 (0.3)	1 (0.2)	0 (0.0)
Private sector employee	451 (43.2)	77 (7.4)	350 (39.2)	61 (6.8)	99 (19.5)	32 (6.3)
Self-employed	263 (25.2)	78 (7.5)	255 (28.6)	61 (6.8)	126 (24.9)	49 (9.7)
Housewife	2 (0.2)	17 (1.6)	7 (0.8)	40 (4.5)	4 (0.8)	55 (10.8)
Pensioner	52 (5.0)	4 (0.4)	34 (3.8)	5 (0.6)	14(2.8)	3 (0.6)
Others	28(2.7)	11 (1.1)	34 (3.8)	20 (2.2)	65 (12.8)	57 (11.2)
Total sample	1043		893		505	

For group 2 cluster, 84.3% of the individual was working for a living, 5.3% of them were housewives or not working for a living, and 4.4% were pensioners. Concerning group 3 cluster, only 60.9% of the individuals were working for a living and a high percentage of 11.6% of the individual were housewives or heads of households not working for a living in which 10.8% were female. Thus, with a total of 125 (5.1% from the total heads of household) not working for a living, how did this small group of individuals make sure their survivability and their family? Did they just

wait for financial aid from the government? What had the government done to help this group of non-working individuals of the low-income population?

Figure 1 presents the expenditure by item for all three group clusters. The list of expenditure items is illustrated in Table 2. The expenditure of each item in all item groups is filtered from expenditure data sets and summed up according to expenditure spent for (1) medical appliances, equipment, and products, (2) outpatient services, and (3) hospital or in-patient services. From the total expenditure of 3 item groups, the mean for each item is calculated. For Item 1 (medical appliances, equipment, and products), group 1 cluster spent the highest for this item with a mean of RM25, while both group 2 and 3 clusters spending was not much different with the amount of RM17 and RM16, respectively. Concerning Item 2 (outpatient services), group 1 and 2 clusters spent nearly the same amount of RM8 and RM 7, a difference of just RM1, while group 3 cluster spent only RM5 for this item. Lastly, for Item 3 (hospital services or in-patient), the group 2 cluster recorded the highest spending on this item while group 1 and 3 clusters spent RM2 and RM1, respectively.

Why did group 1 and 3 spend less on Item 3? If we compare the education level and working sector, individuals in group 1 cluster were most likely able to get a healthy meal and having awareness concerning the importance of stay healthy, hence spending less on the hospital or in-patient services. While the low spending on Item 3 by group 3 cluster may be due to earning low income and can only afford to go to the government hospital since the registration fee is just RM1. It can be seen that, throughout this paper, the overall B40 population in Malaysia still has a low education level as half of the individuals from this population

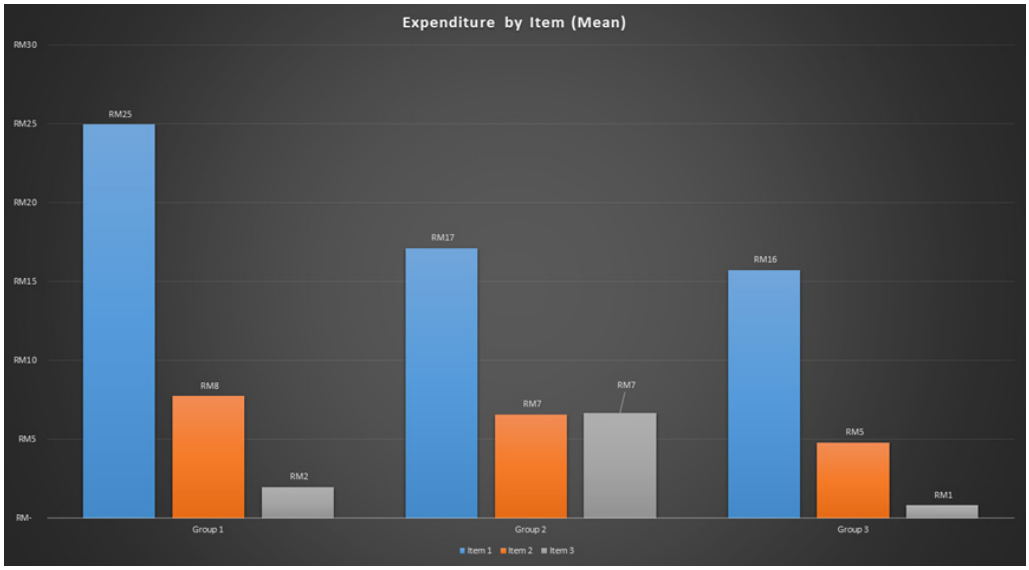


Figure 1. Graph of expenditure by item for each group cluster

only completed primary school education, and 12.4% of this population did not even have the opportunity to get a formal education. Hence, the low education levels of the low-income population may result in low quality of life, thus, put this group in the same level of life over generations. Furthermore, throughout this research, we have established a three-cluster k-means solution with different health vulnerabilities and other multiple vulnerability factors. We have determined the group 1 cluster as the less vulnerable group, group 2 cluster as the intermediate, and group 3 cluster as the highly vulnerable group.

Based on the cluster analysis, it is found that, despite having the lowest income of RM1027.70 as reported in Table 3, the group 3 cluster had the highest percentage of expenditure to the ratio of their mean income of 99.9%. This means with a mean of just RM0.60 excess of the income, they were not making any saving or the rising cost of living stopped them from having any extra money. Moreover, 120 from a total of 505 individuals in group 3 cluster did not receive any formal education and there was no individual from this group even further their study to the tertiary level. Having the highest percentage of heads of households not working for a living (11.6%) with the majority of them were female (10.8%), the group 3 cluster is the group that the government or private organisations should be focusing on. Furthermore, among the three group clusters, the group 3 cluster spent the lowest on their health expenditure item. Are the items not affordable too? Were they not receiving enough awareness concerning health issues? These findings have been supported by several actions and reports by the Malaysian government as reported by Fong (2019), Jalil (2019), and Lum (2019). Lum (2019) reported that the healthcare expenditure would continue to rise due to the ageing population, double burden of non-communicable and infectious diseases, increasing patient demands, new technologies, and unrestrained role of middlemen in healthcare. While Fong (2019) reported that the government had launched the operational test phase of health protection plan Peduli Kesihatan scheme for B40 (PeKa B40) in which the scheme would be focusing on health screening for those aged 50 and above of the B40 group receiving Bantuan Sara Hidup (BSH), including their spouses. The benefits include health screening, payment-incentive of RM1,000 upon completion of cancer treatment, purchasing of medical devices up to a maximum of RM20,000, and transport allowance of up to RM500 for Peninsular Malaysia and RM1,000 for Sabah and Sarawak.

Jalil (2019) reported that the government had increased 6.6% allocation in healthcare to RM30.6 billion from 2018's RM28.7 billion as outlined in Budget 2020 and extended to cover 45 illnesses from the existing three for the low-income groups, particularly B40 group, and upgrading the healthcare system such as mySalam's scheme.

CONCLUSIONS

This paper aims at explaining the health-related expenditure patterns and the characteristics of low-income household (B40) in Malaysia, to identify the health vulnerability factors through the k-means clustering algorithm on the three expenditure variables, namely (1) medical appliances, equipment, and products, (2) outpatient services, and (3) hospital or in-patient services; three distinct clusters are identified. Consistently in all three clusters, the highest amount of money was spent on medical products, followed by the outpatient and then the inpatient services. Group 3 cluster was identified as the most vulnerable group in which the mean value of expenditure spent was the lowest among all three variables, i.e. 99.9% (RM1027.70) spending of the income. Their health expenditure was also the lowest in which the average expenditure on medication, outpatient, and in-patient services were only RM16, RM5, and RM1, respectively. The group 3 cluster household's characteristics were the most vulnerable with the majority of them having low or no education at all, lived in rural areas, no savings, and mostly were housewives and self-employed. Group 2 cluster is the intermediate group while group 1 cluster was the least vulnerable based on the health expenditure patterns and household characteristics.

Emphasising group 3 cluster identified as the most vulnerable group, it was observed that this group is also vulnerable in other factors, for example, education and income. It was also observed that as the vulnerability factors improved, health vulnerability is also improved. These vulnerability factors are identified as activity status, education, and head of the household gender. Further analysis is required to verify the relationship between these factors and health vulnerability and to be reported in the future since all of the households are categorised as low-income earners in Malaysia. It is an alarming situation that the health vulnerability condition does exist in this country. The authorities should give more attention to these groups, particularly the most vulnerable ones, and prioritise them for better healthcare accessibility and policymaking. Perhaps, this study can contribute as an eye-opener in the economic and social status of Malaysian households to help policymakers in planning the future of our nation.

ACKNOWLEDGEMENTS

This work was funded by Research University Grant GUP-2016-052. We thanked the Department of Statistics Malaysia for providing the data.

REFERENCES

Anderson, G. F., Frogner, B. K., Johns, R. A., & Reinhardt, U. E. (2006). Health care spending and use of information technology in OECD countries: The United States is an outlier in both its health spending and its use of health information technology. *Health Affairs, 25*(3), 819-831.

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: It's time to consider the causes of the causes. *Public Health Report, 129*(2), 19-31.

Department of Statistics Malaysia. (2017). *Household income and basic amenities survey report 2016.* Retrieved January 12, 2019, from https://www.dosm.gov.my/v1/

Fong, L. F. (2019, May 2). Steady hands for nation's healthcare. *The Star Online.* Retrieved May 15, 2019, from https://www.thestar.com.my/news/nation/2019/05/02/steady-hands-for-nations-healthcare

Frost & Sullivan Inc. (2016, January 27). *Malaysia – The 20 by 2020 inevitability.* Retrieved May 15, 2019, from https://ww2.frost.com/news/press-releases/frost-sullivan-malaysia-20-2020

Grabovschi, C., Loignon, C., & Fortin, M. (2013). Mapping the concept of vulnerability related to health care disparities: A scoping review. *BMC Health Services Research, 13*(94), 1-11.

Jalil, A. (2019, October 14). Healthcare should be more than just for B40. *The Malaysian Reserve.* Retrieved December 6, 2019, from https://themalaysianreserve.com/2019/10/14/healthcare-should-be-more-than-just-for-b40/

Lum, M. (2019, January 9). An outlook on the Malaysian healthcare scene for 2019. *The Star Online.* Retrieved December 6, 2019, from https://www.thestar.com.my/lifestyle/health/2019/01/09/malaysian-healthcare-scene-2019

Mechanic, D., & Tanner, J. (2007). Vulnerable people, groups, and population: Societal view. *Health Affair, 26*(5), 1220-1230.

Rashid N. K. A., Sulaiman N. F. C., & Rahizal N. A. (2018). Survivability through basic needs consumption among Muslim households B40, M40 and T20 income groups. *Pertanika Journal of Social Sciences & Humanities, 26*(2), 985-998.

Organisation for Economic Cooperation and Development. (2017). *Health expenditure.* Retrieved December 6, 2019, from http://www.oecd.org/els/health-systems/health-expenditure.htm

Shahar, S., Lau, H., Puteh, S. E. W., Amara, S., & Norizan, A. R. (2019). Health, access and nutritional issues among low-income population in Malaysia: Introductory note. *BMC Public Health, 19*(552), 1-5. doi:10.1186/s12889-019-6852-8

Quek, D. (2014). *The Malaysian health care system: A review.* Retrieved December 6, 2019, from https://www.researchgate.net/publication/237409933_The_Malaysian_Health_Care_System_A_Review

World Health Organization. (2002). *Environmental health in emergencies and disasters: A practical guide.* Retrieved December 6, 2019, from http://www.who.int/iris/handle/10665/42561

Xu, K., Evans, D. B., Carrin, G., Aguilar-Rivera, A. M., Musgrove, P., & Evans, T. (2007). Protecting households from catastrophic health spending: Moving away from out-of-pocket health care payments to prepayment mechanisms is the key to reducing financial catastrophe. *Health Affairs, 26*(4), 972-983.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1429 - 1449 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

An Exploratory Study on Factors Influencing University Students' Intention to Patronize Food Trucks

Tan Poh Leong[1], Audrey Malenee Mariadass[2]* and Lee Boon Kai[1]

[1]Faculty of Social Science and Humanities, Tunku Abdul Rahman University College, 31900 Kampar, Perak, Malaysia
[2]Faculty of Accountancy, Finance, and Business, Tunku Abdul Rahman University College, 31900 Kampar, Perak, Malaysia

ABSTRACT

Recognising the increase of food trucks as well as the failure rate of businesses in Malaysia, this study explores the patronization intention of university students towards food trucks. The results will contribute towards an increased understanding of the food truck business potential especially for its operators by firstly understanding what influences their customers or potential customers' intention to patronize food trucks. Theory of Planned Behaviour (TPB) has been employed in this quantitative study. Systematic sampling was used and the data was collected through an online survey from 263 respondents. SmartPLS software and Variance Based Structural Equation Modelling (VB-SEM) were used to analyse the data. Overall, the findings indicated a significant relationship between all the variables studied in the TPB model; attitude, subjective norms, perceived behavioural control, convenience and product attribute with patronization intention. The outcome of this research provides information to food truck business operators which can be taken into consideration when planning ways to increase students' patronage.

Keywords: Food truck business, food truck patronization, intention, theory of planned behaviour, university students

ARTICLE INFO

Article history:
Received: 23 January 2019
Accepted: 18 December 2019
Published: 26 June 2020

E-mail addresses:
tanpl@tarc.edu.my (Tan Poh Leong)
audreymm@tarc.edu.my (Audrey Malenee)
arhkai0708@outlook.com (Lee Boon Kai)
* Corresponding author

INTRODUCTION

A food truck provides various freshly cooked food from local and western cuisine to consumers. It has been identified as a new food trend that mostly influences the younger generation (Thomas, 2016). The food truck trend may encourage the existing street food hawker stalls to be transformed

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

into food trucks (Saw, 2017). In line with this food eating trend, the Malaysian government has made a great effort into legalizing the business of food trucks by locating them at a suitable place. Besides that, the government continues to improve its policy to enable a more conducive environment for food truck operators (Kong, 2016).

With more relevant food truck policies and system provided by the government, it gives a form of security and hopes to potential food truck operators. However, the food truck business may vanish if their business fails to be patronized by customers. In the end, this will affect their food truck's return on investment (ROI). It was reported that the failure rate of entrepreneurs was extremely high at 60% which included food truck business operators in Malaysia (Ahmad & Seet, 2009; Chong et al., 2012; Rahman et al., 2014). Therefore, this alarming rate of failure makes it necessary for all food truck business operators to recognize their business potential by first understanding the factors that contribute towards people patronizing their food trucks.

There have been many previous research done related to consumers' intention to patronize the restaurant business, for instance; fast food outlets, visiting a hotel's restaurant, eco-friendly restaurants, and halal restaurants (Al-Nahdi & Islam, 2011; Chen & Huang, 2013; Kim et al., 2013).

Regrettably, very few empirical studies which directly explored intention to patronize food truck from the university students' points of view have been done by previous researchers. University students generally seek for convenience food that can be prepared in the fastest way since they may lack time for cooking and are occupied with other activities (Tan et al., 2016). Therefore, there are chances of them patronizing food stalls such as food trucks that offer convenience, food preparation speed and a variety of options to its patrons.

Despite many research on factors that influence consumers' intention to patronize a business premise, there is still a general agreement that there are other factors related to consumers patronizing food trucks which is still not well understood. Even though the food truck trend is popular nowadays, yet the university students' intention behaviour to patronize food trucks has not been fully well addressed. Hence, this gap leads to a call for further exploration for a different way to make clear about university students' intention to patronize food trucks.

The reason this study focuses on behavioural intention as it is the key determinant factor that forecasts future consumer activity such as purchasing products and patronizing a place (Ouellette & Wood, 1998). Behavioural intention is defined as a consumers' action of a purpose with a specific behaviour (Ajzen, 1991). Intention can also be classified as the person's determination to perform an action such as the purchase of certain products (Ramayah et al., 2010). Previous studies proved that behavioural intention theory was one of the top forecasting tools used in identifying consumer action or behaviour in marketing research (Jani & Han, 2013). Another study result indicated that consumer

purchase intention was positively influenced by the company's brand image which led to consumers performing specific actions (Wu, 2015).

Following that, to further explore this area in the context of food truck patronization, the Theory of Planned Behaviour (TPB) was utilized as it was the strongest predictor for the studies of consumer intention (Ajzen, 1991). Many studies found that consumer purchase intention was positively influenced by product attributes, subjective norm, perceived behaviour control, convenience and price (Suh et al., 2015). Previous studies proved that behavioural intention theory was an effective tool employed in the investigation of consumer behaviour and marketing research (Jani & Han, 2013). Hence, this study applied the Theory of Planned Behaviour (TPB) to determine university students' intention to patronize food trucks.

Hypotheses Development

Besides intention, attitude is defined as the level of positive or negative belief in a person to perform a specific action. According to Ajzen (1991), it is found that attitude can be "an educated preference towards conformity that is an unfavourable or favourable aspect of an item." In the TPB, attitude is the primary factor that interprets a consumers' intention. A consumer's decision can be led by the attitude that is judging on a specific action, object, issue and also a person, whatever is positive or, negative before making any decision to purchase (Han et al., 2010).

Attitude may lead to the individual perception of a certain object, which shows likes or dislikes and good or bad (Ajzen & Fishbein, 2000). For instance, the brand on a product label may affect the consumer's attitude towards the purchase intention. In other words, the more the consumer has a favourable preference for a certain brand; it could impact the consumer's attitude (Hidayat & Diwasasri, 2013).

Product brands could influence consumers to be loyal and more willing to pay more for their preferred brands such as that mentioned by Mokhtar et al. (2017) which found significance in the relationship between brand equity and customers' behavioural intention towards supporting food truck businesses. Han et al. (2010) discovered that attitude had a direct impact on the purchase intention towards a green food restaurant for the reason of preferring a healthy lifestyle, a friendly atmosphere and to feel socially accepted. In terms of food truck environment, the atmosphere of the food truck, layout and visible signage does have a significant influence on the attitude of patronising.

University students' attitude towards food trucks is also influenced by their preference for convenience food and food trucks certainly meet their needs because it provides quick service, varieties of food as well as a friendly environment (Habib et al., 2011). Other than that, the product that has details, labelling, reliable advertising, and certification can lead to a positive attitude on when to buy the product (Al-Swidi et al., 2014). Based on the previous research done

by Teng and Wang (2015), it was found that a person's attitude could be a major force that urged the customers' purchase. To sum up, although there are many previous studies done on attitude and the results are found to show significance with consumers' intention behaviour, there is still a need to further study its role in a different context.

In line with the previous studies, it is found that attitude has a significant effect towards intention, consequently, this study formulated the hypothesis as below:

Hypothesis 1: There is a significant relationship between attitude and university students' intention to patronize food trucks.

In the actual fact of society, individual behaviour may be influenced by social pressure to perform specific actions to compromise (Ajzen, 1991). It can be explained that a person will act upon receiving the pressure from other people to do so (Al-Nahdi & Islam, 2011). A person's behaviour may be influenced by another person's perception of the purchase decision. When a person is close to another person and their associate may share a negative perception towards a certain product, the negative sharing may influence the particular person to switch their purchase intention to another product (Al-Nahdi & Islam, 2011). The research found that Chinese people's culture was usually influenced by their close friends (Cheng & Lam, 2008).

Studies found that a person's social status among their friends would positively affect others' purchase intention (Gentina & Bonsu, 2013). A study done on healthy eating behaviour found that the government and family members played an important role to influence the younger generation on adopting a healthy eating lifestyle (Chan & Tsang, 2011). University students undergo important transitions such as leaving home and decision-making on where to have their meals are usually influenced by friends. Suh et al. (2015) research concluded that the major factor that was essential in affecting the consumers' intention was the subjective norm.

Nolan et al. (2008) discovered subjective norm was the factor that drove a consumer's intention in ways of which they were usually not aware of. This study also hypothesized that people's perceived social pressure from significant others to eat at a food truck positively influenced their attitude toward eating at the food truck. Bakar et al. (2018) found a significant positive relationship between subjective norm and Halal Compliance food trucks. Several studies provided empirical evidence of the positive relationship that subjective norm had on intention (Han & Kim, 2009). Thus, this study has formulated the following hypothesis.

Hypothesis 2: There is a significant relationship between subjective norms and university students' intention to patronize food trucks.

Furthermore, factors such as perceived behavioural control (PBC) reflects an individual's confidence with the availability of resources and the person's ability to perform a specific task (Ajzen, 1991).

PBC may also be explained as the level of control that a person's recognition has upon the behaviour (Chen, 2007). In the marketing and economic context, the PBC described the ability of control that consumers think of in their purchase decision (Hee & Jae-Eun, 2011). In other words, consumer buying decisions can be stimulated by a personal feature such as an economic condition, age level, value and personal lifestyles (Al-Nahdi & Islam, 2011; Fazakas, 2013; Goh & Sandhu, 2013). However, Tikir and Lehmann (2011) found that perceived behavioural control was not a significant factor to anticipate consumer intention. Furthermore, McEachan et al. (2010) concluded that the younger group of consumers had weak associations in perceived behavioural control if compared to the older group of consumers who tend to show higher associations between the variables.

To sum up, there are many previous researches which had discovered that perceived behavioural control factor has the most significant relationship to intention, as a delegate to personal actual control on specific actions (Dommermuth et al., 2011). There are also other researchers who found that perceived behavioural control had no significant relationship to intention. For instance, perceived behavioural control was not found to be significant to patrons' support of Halal compliance food truck (Bakar et al., 2018).

Thus, there is an inconsistency of the relationship between perceived behavioural controls to intention in relation to this particular argument. Furthermore, there is less understanding of the perceived behavioural control factor's influence on university students' intention to patronize food trucks in the existing literature. Therefore, the authors proposes the following hypothesis in this study.

Hypothesis 3: There is a significant relationship between students' perceived behavioural control and intention to patronize food trucks.

Another interesting point to note is that students usually look for food that is convenient for them. Convenience level is determined by the effort of saving time and effort for a consumer such as an easement on searching for certain products in an outlet (Yunus et al., 2016).

Food truck business is about offering the right food product at the right place that is convenient to customers, at the right time, and at the right price (Kotler & Armstrong, 2010). The hard part is doing this properly as a food truck business needs to know every aspect of customer's behaviour. As a result, convenience and product attributes were employed in the research model to understand the food truck patronization in the research model.

Previous research found that convenience can be a major influence on the consumer's food choice. This is because consumers desire to seek for food that can be prepared in the fastest way and is ready to be consumed (Habib et al., 2011). Other studies done by Zhang et al. (2015) also proved that the convenience level could be the major impact to lead a person to

perform a task. Choi et al. (2013) explained that convenience was also classified as the extrinsic advantage on the street food benefits such as accessibility and speed on the food preparation.

A food truck business providing good food service is important as students might lack the skill and time to prepare their food. Certainly, the food truck business may solve students' need to satisfy their food cravings. Food truck owners should understand what their customers look for in their service and their products. It is noted that most food truck owners decide to locate themselves closer to office areas during lunch hours and in community areas during night time (Thomas, 2016).

However, exploring the effect of convenience factors and intention to patronize food trucks among university students is still less considered in previous research in Malaysia. As a result, this study has formulated the following hypothesis.

Hypothesis 4: There is a significant relationship between convenience and intention to patronize food trucks.

Other than that, product attributes are illustrated as the aspect of the product or service and attributes may be classified into two categories which are product-related attributes (example of a brand, colour, and price) and non-product related attributes (quality, style, and service) (Keller, 1999). Products are generally indicated as a pack of attributes as there are labelling, brand name, packaging and other aspects that consumers consider before making a purchase (Mueller & Szolnoki, 2010). Attributes play a vital role in the consumer mind-set since it offers different benefits to each consumer (Soonhong et al., 2012).

In any food business, food safety should be placed as a priority. Previous studies discovered consumers' willingness to pay a higher price for safe products and of good quality (Marinelli, 2010). A study done by Lusk and Briggeman (2009) evaluated that food safety was a leading factor in the food value and which was then followed by taste and price. Besides food safety, food quality is also a product attribute focused on by consumers. Ordinarily, the price will be the key factor in the consumer purchase decision, but some of the consumers prefer to make their purchase decision based on the quality attributes that comprise the colour, cooking time, taste and others (Naidu, 2014).

Price can be defined as the amount of money that needs to be paid for any product or service being offered by the company to the consumer for the purpose of buying and selling (Kotler & Armstrong, 2010). Generally, the price is the critical factor that impacts consumers' views on the product value in relation to the total value of a particular product that the consumers exchanged (Wang & Chen, 2011). Another price factor could be the price discount or promotion that directly affects the consumers' intention to make a purchase decision (Choi et al., 2013). One of the similar studies on product attributes found that price was found to have a significant relationship towards intention to consume street food (Choi et al., 2013).

So far, however, there has been little discussion about food truck through various factors that discussed about affecting university students' intention to patronize food trucks in Malaysia. Consequently, this study has formulated the following hypothesis.

Hypothesis 5: There is a significant relationship between food truck product attributes and intention to patronize food trucks.

To conclude the review of the literature, this study has formulated the following research model with five hypotheses (Figure 1).

METHODS

Research Design

The purpose of this study was to explore the various factors influencing university students' intention to patronize food trucks; therefore, the Variance Based SEM (VB-SEM) is more appropriate compared to Covariance Based SEM (CB SEM) which is used to confirm the research model (Chin, 1998; Hair et al., 2014). This study employed a quantitative survey method. Quantitative methods are defined as useful in large and complex issues (David et al., 2016). A previous study that has employed quantitative research states that it is a competent method to gain much of the response in studies related to consumers' behaviour towards food consumption (Suh et al., 2015). The advantage of applying survey methods could better gathering of more detailed information about consumers' preferences and attitudes (Zhang et al., 2016). Since the purpose of this study was to explore the various factors influencing university students' intention to patronize food trucks; therefore, the Variance Based SEM (VB-SEM) was more appropriate compared to Covariance Based SEM (CB SEM) which was used to confirm the research model (Chin, 1998; Hair et al., 2014).

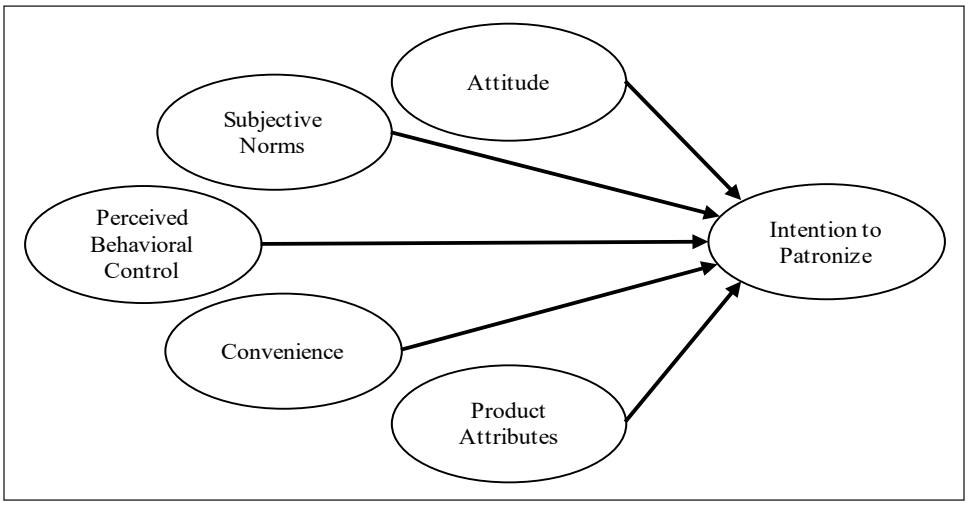


Figure 1. Research model

Population and Sampling

The target population of this research was university students. Annamdevula and Bellamkonda (2016) stated that university students played an essential role in a country's development in terms of economic, cultural and social progress. To determine the actual sample size for this study, with reference to Krejcie and Morgan's (1970) table was made as the table applies to any population of a definite size. Based on the table, when the population size, N=800, the sample size (n) = 260. Thus, the sample size for this study should be around 260 samples. Instead of using 260 samples, a total of 290 respondents from the university college were selected to participate in this study. The study employed a probability sample technique consisting of a systematic random sampling method.

The email addresses of the targeted respondents who were students were acquired from the Admissions office of a private university college located in Kampar, Perak. The students targeted as respondents ranged from first to final year students. From the list of student e-mail addresses, the researcher used systematic sampling using Microsoft Excel to select student emails to participate in the survey. All students without an email address were excluded and the researcher managed to obtain 600 email addresses. After obtaining the list of student e-mail addresses, the researcher performed a simple calculation, i.e. dividing 600 with the desired sample size, which was 290, and the answer was 2. Next, the email addresses were selected starting from email address number 2 and then followed by email address 4, 6, 8, until a total of 290 subjects were obtained. The reason 290 samples were selected was that many students or internet users had multiple e-mail addresses and may frequently change their addresses; nevertheless, the error messages for unusable e-mail addresses were taken into account as the researcher would then need to select more participants to reach the planned sample size.

Survey Instrument

The online survey questionnaire applied the adopted and adapted survey questions which were modified to suit the intent of this study. The instrument employed an online survey and it has been designed into 41 items with 6 variables. Items attitude towards the patronization of food trucks (Jiang et al., 2013; Suki & Suki, 2015), subjective norm (Tan et al., 2016), perceived behavioural control (Chung, 2016), convenience (Jiang et al., 2013; Llyod et al., 2014), intention (Chih & Yu, 2015) and food truck product attributes (Chryssochoidis et al., 2007) were adapted from previous studies and revised based on experts' opinions and after pretesting to ensure content validity.

To measure the items the survey used a 5-point Likert scale. The 5-point Likert scale is the most popular model to test the attitude scale and for the researchers to plan for the respondents to answer (Schiffman & Wisenblit, 2015). Many researchers have applied 5-point Likert scales. The scope of 5-point Likert scales ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree) and 5 (Strongly Agree)

were utilized in the questionnaire pattern. The questionnaire had been separated into three sections comprising Section A that measured Students' Intention based on Five-Likert scales, Section B that measured Attitudes, Subjective norm, Perceived Behavioural Control, Convenience, Product Attributes, and Intention, and lastly Section C that measured Demographic details through multiple-choice questions. The questionnaire was designed using simple English to suit the respondents' level of competency. Before sending the online survey questionnaires, the online survey questionnaires had been tested through a pilot test. Feedback from the pilot test indicated that the respondents really understood the instrument used and as such; the questionnaire could then be used for this study.

Data Collection

The online survey questionnaire was sent to the 290 university students' email. Internet survey has become a popular tool to collect the data because people that are interested in an internet survey have been increasing rapidly (Schiffman & Wisenblit, 2015) as there are several advantages of using an online survey method. The online survey questionnaires were sent through email and also the social network by approaching university students as respondents (Evans & Mathur, 2008). Other than that, it also speeds up the collection of respondents' feedbacks online. However, a few weaknesses on the online survey method need to consider such as; the respondents assume the questionnaire as junk mail and also some of the instructions of answering the questions may not be clear to the respondents (Evans & Mathur, 2008).

The Technique of Data Analysis

This research employed Smart Partial Least Square (SmartPLS) for the analysis purpose. The Structural Equation Modeling (SEM) was applied due to non- normality data distribution and also because the research objective is to predict the relationship between independent variables and dependent variables (Ramayah et al., 2018; Ringle et al., 2015). As a result, PLS modeling was employed to validate the model and test the hypotheses. The analysis was carried out in two stages (Wasko & Faraj, 2005): first, to examine the validity and reliability of the measurement model and second to determine the structural model.

Data Analysis

The total number of respondents who had filled in the online survey form was 263. The statistical analysis shows the frequency and percentage of the respondents' profile in Table 1. Gender shows Male was 51.3% (135) and Female 48.7% (128). Besides that, 76.1% were from age 21 - 25 years (200) and 23.9% from 26-30 years (63).

The student's education level shows that 84.9% was holding a Degree in Bachelor program (223) and only 15.1 % were Master holder students (40). Furthermore, the marital status of students been categorized as two which was 74.9% were single (197) and 25.1% were in a relationship (66).

The cost of living of the students shown 71.1% of the respondents were from RM 500 – RM1000 (187), 7.6% from RM 1001 – RM 1500 (20), 6.5% from RM 1501 – RM 2000 (17) and the 14.8% were from RM 2001 and above (39).

Data Analysis Partial Least Squares Analysis-Structural Equation Modelling (PLS-SEM). ***Instrument Validity and Reliability.*** In Table 2, the results of all the constructs are between 8.08 and 8.77 which means that it has already exceeded the suggested value of 0.70 (Nunnally & Bernstein, 1994). The result further explained that all the constructs obtained a high level of construct reliability and internal consistency. This result can be

Table 1
Demographic variables of the study

	Frequency	Percentage
Gender		
Male	135	51.3
Female	128	48.7
Age		
21-25	200	76.1
26-30	63	23.9
Education Level		
Degree in Bachelor	223	84.9
Degree in Master	40	15.1
Marital Status		
Single	197	
In a relationship	66	25.1
Cost of Living (Pocket Money)		
Rm 500 – RM1000	187	71.1
RM 1001 – RM 1500	20	7.6
RM1501 – RM 2000	17	6.5
RM 2001 and Above	39	14.8

Table 2
Internal consistency and convergent validity reporting

Construct	Item	Loading	CR	AVE	Decision
Attitude	ATT1	0.714	0.808	0.585	YES
	ATT3	0.739			
	ATT4	0.836			
Convenience	Conv1	0.827	0.877	0.589	YES
	Conv2	0.782			
	Conv3	0.780			
	Conv4	0.667			
	Conv5	0.773			
Intention	INT1	0.806	0.865	0.617	YES
	INT2	0.719			
	INT3	0.815			
	INT4	0.798			
Perceived Behavioural Control	PBC1	0.819	0.866	0.565	YES
	PBC2	0.780			
	PBC4	0.735			
	PBC5	0.721			
	PBC6	0.698			

Table 2 *(continue)*

Construct	Item	Loading	CR	AVE	Decision
Food Truck Product Attributes	PA2	0.738	0.845	0.646	YES
	PA3	0.836			
	PA6	0.834			
Subjective Norms	SN3	0.893	0.823	0.617	YES
	SN4	0.559			
	SN6	0.860			

explained as that there is a high level of convergent validity of the total six reflective constructs measurement as also shown in Table 2.

Discriminative Validity. The Fornell and Larcker criterion (1981) is an ordinary and traditional approach to evaluate discriminant validity. To create discriminant validity, the value of the average variance extracted (AVE) of each latent variable must exceed the latent variance correlations (LVC). Table 3 indicated that the discriminant validity is achieved in this research since the square foot of AVE for Attitude, Convenience, Intention to Patronize Food Truck, Perceived Behavioural Control, Product Attributes and Subjective Norms have exceeded the value the corresponding latent variance correlations.

The Heterotrait Monotrait (HTMT) Criterion for Discriminant Validity. According to Dijkstra and Henseler (2015), Heterotrait Monotrait is the most suggested method to test the discriminative validity in the variance based on SEM. Many researchers found that HTMT is a more stable and accurate outcome compared to the other two criteria which are Cross Loading (Chin, 1998) and Fornell and Lacker criterion (Dijkstra & Henseler, 2015).

With the latest of PLS-SEM publication encouraging researchers to use HTMT to find the ratio of correlations for evaluating the discriminative validity, this study

Table 3
Fornell and Larcker criterion

	Attitude	Convenience	Intention to Patronize Food Truck	Perceived Behaviour Control	Product Attributes	Subjective Norm
Attitude	0.765					
Convenience	0.657	0.768				
Intention to Patronize Food Truck	0.715	0.682	0.785			
Perceived Behavioural Control	0.439	0.486	0.525	0.752		
Product Attributes	0.582	0.459	0.591	0.295	0.804	
Subjective Norm	0.337	0.348	0.419	0.316	0.376	0.785

measures the HTMT (Ringle et al., 2014). Compeau et al. (1999) mentioned that in the discriminant validity the item should be loaded higher and stronger than the other construct in the model itself. Teo et al. (2008) suggested the correlation value of HTMT level should not exceed 0.90. Table 4 showcases the HTMT level for the variables studied in the context of food truck patronization.

Assessment of the Structural Model

Hair et al. (2014) pointed out that it was essential to evaluate the level of collinearity in the structural model before moving to the assessment part. The independent variables of β value may be partial as the level of collinearity exceeds the higher value, which makes us evaluate it before examining the structural model. To test this level of collinearity the SPSS was used for the assessment of the tolerance and VIF value was generated by the SmartPLS. Table 5 prsents that there are no multicollinearity problems, the tolerance value all exceeded the value of 0.2 and all VIF values are below 5.

RESULTS

The results of the structural model analysis were succeeded by employing a PLS method and bootstrapping technique. The hypothesis's significance levels for loadings, weights, and paths were measured through

Table 4
Heterotrait Monotrait (HTMT) criterion

	Attitude	Convenience	Intention to Patronize Food Truck	Perceived Behaviour Control	Product Attributes	Subjective Norm
Attitude						
Convenience	0.847					
Intention to Patronize Food Truck	0.840	0.838				
Perceived Behavioural Control	0.591	0.569	0.655			
Product Attributes	0.799	0.530	0.585	0.369		
Subjective Norm	0.421	0.392	0.423	0.433	0.473	

Table 5
Assessment of multicollinearity

Intention as Dependent Variable		
Construct	Tolerance	VIF
Attitude	0.509	1.966
Convenience	0.530	1.866
Perceived Behavioural Control	0.761	1.313
Product Attributes	0.729	1.373
Subjective Norm	0.607	1.647

bootstrapping. Ten thousand bootstrap samples (10000) were employed through empirically estimated standard errors and assessed statistical significance.

Based on Figure 2 and Table 6, the results show that there is a significant relationship between attitude and intention to patronize food trucks (β = 0.319, t = 4.474, P < 0.000); therefore Hypothesis 1 is supported.

This is in line with the discovery made by Quevedo-Silva et al. (2015) as well as Teng and Wang (2015) that found university students' intentions to patronize was because of their attitude. A student's intention could have an adequate positive attitude towards the food truck (Yilmaz & Aydeniz, 2012). These findings verify that attitude has a positive significant relationship with the intention to patronize a food truck. The findings results are also consistent with the previous research of Al-Swidi et al. (2014) as well as that by Han et al. (2010) which concluded that attitude positively affected the intention to patronize food trucks. As a result, to increase the university students' intention to patronize food trucks, the food truck industry must have comprehensive strategies and tactics which are needed to improve food truck's product attribute, marketing, and should constantly have a good public relation with consumers.

Hypothesis 2 found a significant relationship between the subjective norm and intention to patronize food trucks (β = 0.091, t = 1.993, P < 0.046); thus hypothesis 2 is also supported.

The results indicated that subjective norm is found to be an essential factor that influences the students' intention to patronize food trucks. This finding is identical to the previous research by Smith et al. (2008) who mentioned that subjective norm positively influenced consumers' behaviour concerning their purchase decision. Besides that, this study is also supported by Louis et al. (2007) which found the same result that showed subjective norm played an important role in consumer decision. With this finding, it is reported that a student's friend could be a major influence on them to patronize food trucks. In addition, a person's social status may possibly affect a student's intention to

Table 6
Summary of hypothesis result

Path	β	Std Error	*T* values	*P* value	Decision
H1: Attitude → Intention to Patronize Food Truck	0.319	0.071	4.473	0.000	Supported
H2: Subjective Norm → Intention to Patronize Food Truck	0.091	0.045	1.968	0.046	Supported
H3: Perceived Behavioural Control → Intention to Patronize Food Truck	0.167	0.053	3.207	0.002	Supported
H4: Convenience → Intention to Patronize Food Truck	0.269	0.061	4.411	0.000	Supported
H5: Product Attributes → Intention to Patronize Food Truck	0.199	0.045	4.429	0.000	Supported

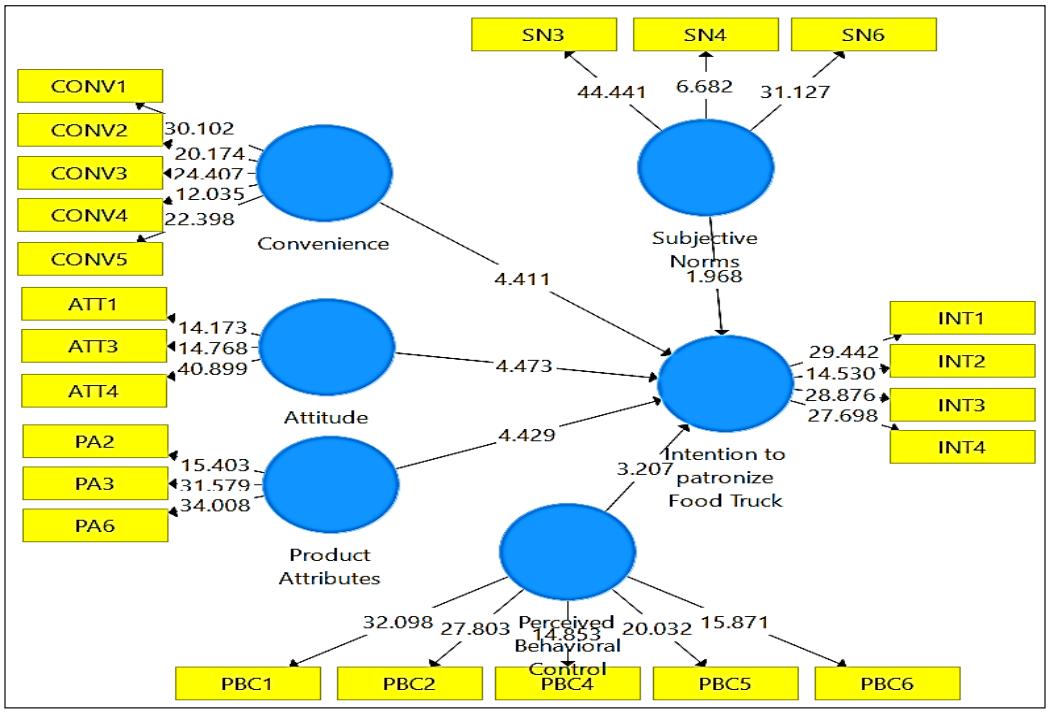


Figure 2. Direct effect structural research model

patronize food trucks too (Gentina & Bonsu, 2013).

Hypothesis 3 indicates that there is a significant relationship between perceived behaviour control and intention to patronize food truck ($\beta = 0.167$, $t = 3.136$, $P < 0.002$); as a result, the hypothesis 3 is supported as well.

The finding is consistent with Hee and Jae-Eun's (2011) research that found that the ability to control a consumer was one of the important factors to influence consumer's intention. The result is also in line with the finding by Al-Nadhi and Islam (2011) as it was found that economic conditions and personal lifestyles were the major factors that affected a consumer's intention. Other results supported in this study are related to their resources and time (Goh & Sandhu, 2013). In addition, the determination of a student which resulted in encouraging or restricting them to perform a specific action will also affect intention (Fazakas, 2013). This finding can explain that a student's intention to patronize a food truck is also influenced by perceived behavioural control factors.

Hypothesis 4 shows that there is a significant relationship between convenience and intention to patronize food trucks ($\beta = 0.269$, $t = 4.040$, $P < 0.000$); thus, this hypothesis is supported.

The finding is supported by the studies conducted by Habib et al. (2011) as well as Choi et al. (2013) that also found convenience as a major influence on customer's intention towards food choice. Based on these findings, the convenience

factor may encourage food truck owners to set up their business near the university location for the students to patronize.

Hypothesis 5 reports that there is a significant relationship between product attributes and intention to patronize food truck ($\beta = 0.199$, $t = 4.416 > 1.5$, $P < 0.000$); therefore, hypothesis 5 is supported.

This result is consistent with the findings of a study by Min et al. (2012), which found that product attributes played an important role in the consumer's mindset. Product attributes such as, food safety and price are important effects that influence students' intention to patronize food trucks (Dekhili & d'Hauteville, 2009; Lusk & Briggemen, 2009). How to attract them to patronize food trucks is important as they are most likely to search for more information which would then lead them to purchase intention. Therefore, to improve university students' intention to patronize food trucks, the food product attributes such as price and food safety should be given priority by food truck owners.

Overall Model

Chin (1998) explained that to have good predictive relevance in the model, the Q^2 value must be larger than zero (Table 7). In order to search for the strength of the relationship in the path coefficient one to another, the R^2 value is to measure and predict the accuracy (Ang et al., 2015). Table 7 presents the R^2 value as follows: for Intention to Patronize food truck, $R^2 = 0.654$. This suggests that the exogenous variables in this study, namely attitude, subjective norms, perceived behavioural control, convenience, and product attributes factors explained 65.4% of the variation in overall factors that are affecting university students' intention to patronize food trucks.

Generally, the predictive relevance Q^2 was examined by employing the blindfolding method. Table 7 indicates the Q^2 value of 0.372 predictive relevance for intention, which is larger than 0 in this research model and thus, it is more than the cut-off score recommended by Hair et al. (2014). This suggests that the attitude, subjective norms, perceived behavioural control, convenience, and product attributes factor, own a substantial predictive power over intention (Hair et al., 2014). The effect size (f^2) is a test applied to examine the relative impact of a predictor construct on an endogenous construct (Cohen, 1988). Based on this study, all the constructs found f^2 small effect sizes as seen in Table 8.

Table 7
R^2 and Q^2 value

Endogenous	R^2	Q^2
Intention	0.654	0.372

Source: Cohen (1988). Guidelines for assessing q^2 values: 0.02= small, 0.15= medium, 0.35=large

Table 8
f^2 effect value

Constructs	Intention to patronize
Attitude	0.138
Convenience	0.109
Perceived Behavioural Control	0.059
Product attributes	0.074
Subjective norms	0.070

Source: Cohen (1988). Guidelines for assessing f^2 values: 0.02= small, 0.15= medium, 0.35=large

DISCUSSION

Theory Contribution

At first, from the theoretical framework perspectives, this study has added two constructs to expand the original Theory of Planned Behaviour. The theory is appropriate to be used to explore the university students' intention to patronize food trucks. In conclusion, all constructs in the theoretical framework have been found to have a significant relationship with the university students' intention to patronize food trucks. This result shows that the theoretical framework has contributed to new findings for the food truck research field.

Practical Contribution

All the constructs were found to have a significant relationship with intention. Food truck operators are encouraged to provide sufficient and detailed information on the menu to attract the university student to patronize food trucks. In terms of food product attributes such as; quality food, price and food safety, food truck operators should place more emphasis on it in their daily operations. Furthermore, food truck operators should practice good hygiene and ensure the cleanliness of the areas in which they operate. The outcome of this research provides information to the food truck business to take into consideration in their plan's aspects of their products and services that could increase the students' patronage. On top of that, food truck operators should prepare their food quickly and efficiently as students continue to seek for convenience in their food options.

Limitations

There are a few caveats that exist in this study. Firstly, the sample of the study is delimited to university students in one local private higher institution and not all consumer groups. Secondly, the study does not study consumption frequency based on types of food trucks' product offerings. Besides that, this study only focuses on direct effect but not an indirect effect of mediating or moderating variables. Furthermore, the study does not explore consumers' patronization that could be influenced by other variables such as consumers' perception of the hygiene of food preparation, the food trucks' overall marketing mix (product, price, place, and promotion) and competitors' product offerings.

Recommendations

It is recommended that future studies explore other consumer groups such as working adults who may patronize food trucks during their lunch breaks for the convenience it offers. This would help expand the pool of knowledge surrounding patronization of food trucks by consumers from all walks of life. Furthermore, it is also suggested that in-depth research on how the different types of food sold by food trucks influence patronization behaviour. Other than that, future studies could choose to

concentrate on mediating and moderating effects of other variables such as the food trucks' promotional efforts towards the intention to patronize food trucks. It may also be helpful to study in detail how various consumers' demographics influence food truck patronization as it would give a more holistic overview of the type of consumers who are more likely to be a repeat food truck customers in the long run.

CONCLUSION

To sum up, every variable is significantly towards the intention to patronize food trucks. The relationship between attitude factors and intention to patronize food trucks has the highest effect, followed by the convenience factors, product attributes and perceived behaviour control. In contrast, the subjective norm has the lowest effect on the intention to patronize food trucks. At last, the overall model indicated the R^2 value for university students' intention to patronize food truck was 65.4% which according to Hair et al. (2014) represented the moderate strength of the relationship in the path coefficient and the prediction of the accuracy.

ACKNOWLEDGEMENT

The authors would like to take this opportunity to express their heartfelt thanks to the management and staff of Tunku Abdul Rahman University College, Perak Branch Campus for their continual support of this paper.

REFERENCES

Ahmad, N. H., & Seet, P. S. (2009). Dissecting behaviours associated with business failure: A qualitative study of SME owners in Malaysia and Australia. *Asia Social Science, 5*(9), 98-104.

Ang, M. C., Ramayah, T., & Amin, H. (2015). A theory of planned behavior perspective on hiring Malaysians with disabilities. *Equality, Diversity and Inclusion: An International Journal*, *34*(3), 186-200.

Annamdevula, S., & Bellamkonda, R. S. (2016). Effect of student perceived service quality on student satisfaction, loyalty and motivation in Indian universities: Development of HiEduQual. *Journal of Modelling in Management*, *11*(2), 488-517.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process, 50*(2), 179-211.

Ajzen, I., & Fishbein, M. (2000). Attitude and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology, 11*(1) 11-33.

Al-Nahdi, T. S. M., & Islam, A. (2011). Factors influencing Malaysian Muslims to patronage halal restaurants - Ambience as a mediator. *Business Review, 6*(2), 121-133.

Al-Swidi, A., Huque, S., Hafeez, M., & Shariff, M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal, 116*(10), 1561-1580.

Bakar, N. R. A., Shahwahid, F. M., & Eksan, S. H. R. (2018). Theory of planned behaviour and halal compliance. *International Journal of Academic Research in Business and Social Sciences, 8*(5), 816-829.

Chan, K., & Tsang, L. (2011). Promote healthy eating among adolescents: A Hong Kong study. *Journal of Consumer Marketing*, *28*(5), 354-362.

Chen, M. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits. *Food Quality and Preferences, 18*(7), 1008(41).

Chen, M. F., & Huang, C. H. (2013). The impacts of the food traceability system and consumer involvement on consumers' purchase intentions toward fast foods. *Food Control, 33*(2), 313-319.

Cheng, S., & Lam, T. (2008). The role of the customer-seller relationship in the intention of the customer to complain: A study of Chinese restauranteurs. *International Journal of Hospitality Management, 27*(4), 552-562.

Chih, C. T., & Yu, M. W. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions. *British Food Journal, 117*(3), 1066-1081.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, *295*(2), 295-336.

Choi, J., Lee, A., & Ok, C. (2013). The effects of consumers' perceived risk and benefit on attitude and behavioral intention: A study of street food. *Journal of Travel & Tourism Marketing, 30*(3), 222-237.

Choi, S., Park, S. J., Qiu, C., & Stanyer, M. (2013). The discount is unfair: Egocentric fairness in risky discounts. *Journal of Economic Psychology, 39*(C), 32-43.

Chong, A. Y., Chan, F. T. S., & Ooi, K. (2012). Predicting consumer decisions to adopt mobile commerce: Cross country empirical examination between China and Malaysia. *Decision Support System*, *53*(1), 34-43.

Chryssochoidis, G., Krystallis, A., & Perreas, P. (2007). Ethnocentric beliefs and country-of-origin (COO) effect: Impact of country, product and product attributes on Greek consumers' evaluation of food products. *European Journal of Marketing*, *41*(11/12), 1518-1544.

Chung, K. C. (2016). Exploring customers' post-dinning behavioral intentions towards green restaurants: An application of theory of planned behavior. *International Journal of Organization Innovation, 9*(1), 119-134.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, USA: Lawrence Erlbaum Associates.

Compeau, D., Higgins, C.A., & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *Journal MIS Quarterly, 23*(2), 145-158.

David, R. A., Dennis, J. S., Thomas, A. W., Jeffrey, D. C., James, J. C., Fry, M. J., & Jeffrey, W. O. (2016). *Quantitative method for business* (13th ed.). Boston, USA: Cengage Learning.

Dekhili, S., & d'Hauteville, F. (2009). Effect of the region of origin on the perceived quality of olive oil: An experimental approach using a control group. *Food Quality and Preference, 20*(7), 525-532.

Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly*, *39*(2), 297-316.

Dommermuth, L., Klobas, J., & Lappegård, T. (2011). Now or later? The theory of planned behavior and timing of fertility intentions. *Advances in Life Course Research, 16*(1), 42-53. doi:10.1016/j.alcr.2011.01.002.

Evans, J. R., & Mathur, A. (2008). The value of online survey. *Internet Research, 15*(2), 195-219.

Fazakas, O. (2013). Language shift and The Theory of Planned Behavior in the framework of Hungrarian nad Romanian bilingualism. *Revista Română de Studii Eurasiatice, 9*(1+2), 161-168.

Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Gentina, E., & Bonsu, S. K. (2013). Peer network position and shopping behavior among adolescents. *Journal of Retailing and Consumer Services, 20*(1), 87-93.

Goh, S. K., & Sandhu, M. S. (2013). Knowledge sharing among Malaysian academics: Influence of affective commitment and trust. *Electronic Journal of Knowledge Management, 11*(1), 38-48.

Habib, F. Q., Dardak, A. R., & Zakaria, S. (2011). Consumer' preference and consumption towards fast food: Evidences from Malaysia. *Business Management Quarterly Review, 2*(1), 14-27.

Han, H., & Kim, W. (2009). Outcomes of relational benefits: Restaurant customers' perspective. *Journal of Travel & Tourism Marketing, 26*(8), 820-835. doi:10.1080/10548400903356236

Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the theory of planned behaviour to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management, 31*(3), 325-334.

Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM).* Thousand Oaks, USA: CVA-SAGE.

Hee, Y. K., & Jae-Eun, C. (2011). Consumer purchase intention for organic personal care products. *Consumer Marketing, 28*(1), 41-47.

Hidayat, A., & Diwasasri, A. H. A. (2013). Factors influencing attitudes and intention to purchase counterfeit luxury brands among Indonesian consumers. *International Journal of Marketing Studies, 5*(4), 143-151.

Jani, D., & Han, H. (2013). Personality, social comparison, consumption emotions, satisfaction, and behaviour intentions: How do these and others relate in a hotel setting? *International Journal of Contemporary Hospitality Management, l25*(7), 970-993.

Jiang, L., Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management, 24*(2), 191-214.

Keller, K. (1999). Managing brands for the long run: Brand reinforcement and revitalization strategies. *California Management Review, 41*(3), 102-125.

Kim, Y. J., Njite, D., & Hancer, M. (2013). Anticipated emotion in consumers' intentions to select eco-friendly restaurants: Augmenting the theory of planned behavior. *International Journal of Hospitality Management, 34*(September 2013), 255-262.

Kotler, P., & Armstrong, G. (2010). *Principle of marketing* (13th ed.). Upper Saddle River, USA: Person Education.

Kong, S. (2016, October 16). Food trucks: Rolling with the times. *The Borneo Post.* Retrieved January 18, 2019, from http://www.theborneopost.com/2016/10/16/food-trucks-rolling-with-the-times/

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607-610.

Louis, W., Davies, S., Smith, J., & Terry, D. (2007). Pizza and pop and the student identity: The role of referent group norms in healthy and unhealthy eating. *The Journal of Social Psychology*, *147*(1), 57-74.

Lusk, J., & Briggeman, B. (2009). Food values. *American Journal of Argicultural Economics, 91*(1), 184-196.

Llyod, A. E., Chan, R. Y. K., Yip, L. S. C., & Chan, A. (2014). Time buying and time saving: Effects on

service convenience and the shopping experience at the mall. *Journal of Service Marketing, 28*(1), 36-49.

Marinelli, N. (2010). Information asymmetries and food safety in consumers' rights and the competitiveness of production system. *Italian Journal of Agronomy, 5*(4), 13-21.

McEachan, R. R., Lawton, R. J., & Conner, M. (2010). Classifying health-related behaviours: Exploring similarities and differences amongst behaviours. *British Journal of Health Psychology*, *15*(2), 347-366.

Min, S., Overby, J. W., & Im, K. S. (2012). Relationships between desired attributes, consequences and purchase frequency. *Journal of Consumer Marketing*, *29*(6), 423-435.

Mokhtar, R., Othman, Z., Arsat, A., & Bakhtair, M. F. S. (2017). Brand equity and customer behavioral intention: A case of food truck business. *Journals of Tourism, Hospitality & Culinary Arts, 9*(2), 561-570.

Mueller, S., & Szolnoki, G. (2010). The relative influence of packaging, labeling, branding and sensory attributes on liking and purchase intent: Consumers differ in their responsiveness. *Food Quality and Preference*, *21*(7), 774-783.

Naidu, G. (2014). Attributes and retail format preference for branded pulses. *South Asian Journal of Global Business Research, 3*(2), 190-208.

Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. *Personality and Social Psychology Bulletin*, *34*(7), 913-923.

Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric Theory, 3*, 248-292.

Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behaviour predicts future behaviour. *Psychological Bulletin, 124*(1), 54-74.

Quevedo-Silva, F., Lima-Filho, D., & Freire, O. (2015). The influence of environmental concern and attitudes towards sustainable consumption on beef meat purchase intention. *Brazilian Journal of Management, 8*(3), 463-481.

Rahman, N. A, Yaacob, Z., & Radzi, R. M. (2014). Determinants of successful financial management among micro entrepreneur in Malaysia. *Journal of Asian Scientific Research, Asian Economic and Social Society, 4*(11), 631-639.

Ramayah, T., Lee, J. W. C., & Mohamad, O. (2010). *The role of quality in e-learning satisfaction and usage among university students in Malaysia.* Paper presented at the International Conference on Business and Management Education, Bangkok, Thailand.

Ramayah, T., Jacky, C., Francis, C., Hiram, T., & Mumtaz, A. M. (2018). *Partial Least Square Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0.* Kuala Lumpur, Malaysia: Pearson Malaysia Sdn Bhd.

Ringle, C., Sartstedt, M., & Schlittgen, R. (2014). Genetic algorithm segmentation in partial least squares structural equation modeling. *OR Spectrum, 36*(1), 251-276.

Ringle, C. M., Wende, S., & Becker, J.-M. (2015). *SmartPLS 3. SmartPLS GmbH, Boenningstedt.* Retrieved January 27, 2019, from http://www.smartpls.com

Saw, S. F. (2017, March 1). City Hall to open six food truck sites this year. *The Malay Mail Online.* Retrieved January 18, 2019, from http://www.themalaymailonline.com/malaysia/article/city-hall-to-open-six-food-truck-sites-this-year

Schiffman, L. G., & Wisenblit, J. (2015). *Consumer behavior* (11th ed.). Harlow, England: Pearson Education Limited.

Smith, J. R., Terry, D. J., Manstead, A. S., Louis, W. R., Kotterman, D., & Wolfs, J. (2008). The attitude-behavior relationship in consumer conduct: The role of norms, past behavior, and self-identity. *The Journal of Social Psychology*, *148*(3), 311-334.

Soonhong, M., Overby, J. W., & Kun, S. I. (2012). Relationships between desired attributes, consequences and purchase frequency. *Journal of Consumer Marketing, 29*(6), 423-425.

Suh, B. W, Eves, A., & Lumbers, M. (2015). Developing a model of organic food choice behavior. *Social Behavior and Personality, 43*(2), 217-230.

Suki, N. S., & Suki, N. S. (2015). Consumers' environmental behaviour towards staying at a green hotel: Moderation of green hotel knowledge. *Management of Environmental Quality: An International Journal*, *26*(1), 103-117.

Tan, P. L, Zubir, M. H., Ibrahim, F. A., & Paim, L. (2016). An exploration of the factors influencing the intention of university students towards the consumption of instant noodles. *Journal of Advanced Research Design, 20*(1), 1-17.

Teng, C., & Wang, Y. (2015). Decisional factors driving organic food consumption. *British Food Journal, 117*(3), 1066-1081.

Teo, T., Srivastava, S., & Jiang, L. (2008). Trust and electronic government success; An empirical study. *Journal of Management Information System, 25*(3), 99-132.

Thomas, B. I. (2016). *Exploring the potential for food trucks as a culinary tourism attraction in Auckland: Through the eyes of operators and tourism professionals* (Doctoral dissertation), Auckland University of Technology, Auckland, New Zealand.

Tikir, A., & Lehmann, B. (2011). Climate change, theory of planned behavior and value: A structural equation model with mediation analysis a letter. *Climatic Change, 104*(2), 389-402.

Wang, S. J., & Chen, L. S. L. (2011). Consumers' attitudes towards different product category of private labels. *African Journal of Business Management, 5*(17), 7616-7621.

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly, 29*(1), 35-57.

Wu, C. S. (2015). A study on consumers' attitude towards brand image, athletes' endorsement, and purchase intention. *International Journal of Organisation Innovation, 8*(2), 233-253.

Yilmaz, E., & Aydeniz, B. (2012). Sensory evaluation and consumer perception of some commercial green table olives. *British Food Journal, 114*(8), 1085-1094.

Yunus, N. S. N. M., Ghani, N. M. A., & Rashid, W. E. W. (2016). The acceptance and the intention of online groceries shopping in Malaysia. *Journal of Applied Environmental & Biological Sciences*, *6*(6S), 29-34.

Zhang, D., Huang, G., Yin, X., & Gong, Q. (2015). Residents' waste separation behaviors at the source: Using SEM with the Theory of Planned Behavior in Guangzhou, China. *International Journal of Environment*, *12*(8), 9475-9491.

Zhang, T., Stonebraker, I., & Promann, M. (2016). Understanding library users' preferences and expectations of online help. *Reference Services Review, 44*(3), 362-374.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1451 - 1466 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Review Article

A Survey on Relevant Malaysian *Fatwā* about Cadaver Concerning Tissue Engineering Research

Muhammad Aa'zamuddin Ahmad Radzi[1], Munirah Sha'ban[2], Nur Syamimi Mohd. Azharuddin[1], Azran Azhim[1] and Abdurezak Abdulahi Hashi[3]*

[1]Department of Biomedical Science, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia
[2]Department of Physical Rehabilitation Sciences, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia
[3]Department of Biotechnology, Kulliyyah of Science, International Islamic University Malaysia, 25200 Kuantan, Pahang, Malaysia

ABSTRACT

The development of scientific knowledge in the healthcare setting shall be geared to improve the health conditions of society. Perhaps, this is one of the reasons why Muslim jurists (*fuqahā*`) have acknowledged the importance of biomedical practices and thus, in principle, agreed on the permissibility of its practices. However, they also raise some Islamic jurisprudence (*fiqh*) and ethical issues about the methods and implications of biomedical practices. Despite the great discovery of articular cartilage tissue engineering, harm and therapeutic uncertainties spark the bioethical concerns, including the use of biological samples from a cadaver in the experimental setting. The study was done by utilising the secondary analysis of local Muslim jurists' opinions (*fatwā*) related to the sampling of tissue from the cadaver. The scenario of cadaveric tissue sampling can be linked to the *fatwā* on the issue of (1) donating cadaver for research purpose, (2) conducting post-mortem or autopsy, (3) embalming the human cadaver, and (4) donating cadaveric organs. The current *fatwā* has shown that honouring a human body is an essential aspect of Islamic law. Thus, researchers may need to consider other options such as obtaining the biological samples from living donor as alternatives in studying the articular cartilage regeneration.

Keywords: Articular cartilage, cadaver, experimentation, *fatwā*, tissue engineering

ARTICLE INFO

Article history:
Received: 20 January 2020
Accepted: 13 March 2020
Published: 26 June 2020

E-mail addresses:
azam4z4m@gmail.com (Muhammad Aa'zamuddin Ahmad Radzi)
munirahshaban@iium.edu.my (Munirah Sha'ban)
syamimiazharuddin@gmail.com (Nur Syamimi Mohd. Azharuddin)
azranazhim@iium.edu.my (Azran Azhim)
hashi@iium.edu.my (Abdurezak Abdulahi Hashi)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

Degenerative joint disease has affected millions of people worldwide (Cross et al., 2014). To deal with this disorder, biomedical scientists have employed the concept of tissue engineering and regenerative medicine. It is a new multidisciplinary field that applies the principles of engineering and life sciences towards the development of a suitable biological substitute to restore, maintain and improve tissue or organ function (Langer & Vacanti, 1993). Scientific advances in biomaterial scaffolds, stem cells, growth factors as well as biomimetic environment have created opportunities to reconstruct a wide range of human tissues in vitro, including articular cartilage. The 3-dimensional (3D) tissue is formed and engineered using a combination of quality cell source, scaffolds and biologically active signalling molecules (Langer & Vacanti, 1993). These three main components are also known as "tissue engineering triad".

However, before the product of articular cartilage tissue engineering can be applied in human patients, it needs to go through various tests in non-clinical and clinical stages. Successful application of articular cartilage tissue engineering theoretically involves at least four different stages from the bench to bedside as shown below (Radzi & Munirah, 2016),

Stage I: In vitro phase, a non-clinical experiment in the laboratory.

Stage II: In vivo phase, an animal study or also known as pre-clinical or proof of concept experiment.

Stage III: Clinical trials, this part involves human subjects and requires several phases to complete.

Stage IV: Clinical application and regenerative medicine.

In non-clinical studies of articular cartilage tissue engineering, biological samples consisting of different types of cells have been tested to find the best cell source to develop functional articular cartilage tissue. Some of the samples are harvested from the cadaver through a medical procedure. As stated by the Cambridge Dictionary, 'sample' is defined as "a small amount of a substance that a doctor or scientist collects in order to examine it" ("Sample," n.d.). Meanwhile, the cadaver is defined as a dead human body or synonym with a corpse ("Cadaver," n.d.). Taking samples from the cadaver is also related to the term 'human biological sample' which is mentioned in the Malaysian Guidelines on the Use of Human Biological Samples for Research (National Committee for Clinical Research, 2015). The term denotes "all biological material of human origin, including organs, tissues, bodily fluids, teeth, hair, and nails; but not established cell lines" (National Committee for Clinical Research, 2015).

In the experimentation of articular cartilage tissue engineering conducted worldwide, the tissues taken from the cadaver were harvested, for instances, from the knee (Barbero et al., 2004, 2006; Biant et al., 2017; Chlapanidas et al., 2011; Cui et al., 2012; Kuiper & Sharma, 2015; Tampieri et al., 2008; Wang et al., 2011),

femur (Barandun et al., 2015; Candrian et al., 2009; Dell'Accio et al., 2003; Endres et al., 2007; Francioli et al., 2007; Krüger et al., 2014; Scotti et al., 2010; Secretan et al., 2010) and nasal septum (Candrian et al., 2008).

The procedure may be applied in the Malaysian setting, whereby local researchers have developed the platform for tissue engineering (Aa'zamuddin et al., 2018).[1] However, the procedure may raise bioethical concerns among the local Muslim scholars, whether the practices violate the Islamic law (*sharīʿah*) standards? Or, is the donation of cadaveric tissues for research purposes in articular cartilage tissue engineering research permitted in Islam? Until now, no specific *fatwā* has been given on the permissibility of using cadaveric tissue in the experimentation of articular cartilage tissue engineering. Thus, this paper presents relevant Malaysian *fatwā* related to the cells and tissues sampling from the dead human body in the research of articular cartilage regeneration.

Overview of *Fatwā* in Malaysia

The cadaveric tissue sampling in articular cartilage tissue engineering experimentation can be considered as a newly emerging issue in *fiqh al-nawāzil*,[2] a branch of Islamic jurisprudence that addresses contemporary issues. Such issues require *fiqh* reasoning (*ijtihād*) based on *uṣūl* (principles and precepts of *sharīʿah*) due to the lack of textual evidence on the upcoming issue. This *ijtihād* is conducted by *fuqahā`* or Muslim jurists who will provide the s*harīʿah* rulings (*aḥkām*) by consulting the primary sources of *sharīʿah,* which lead to the production of *fatwā*.

Fatwā can be defined as "an explanation or clarification to the problems of *sharīʿah* among the community which appears when there is no explanation or clarification clearly written in *al-Qur`ān* and *al-Sunnah*" (Buang, 2002; Khairuldin et al., 2018). Thus, the duty to produce the justification or reason for such ruling is carried out by a group of well-informed and knowledgeable scholars, i.e. *muftī* (Isa, 2016). In Malaysia[3], a *muftī* of a particular state has the authority to issue a legal opinion or *fatwā*. The *fatwā* issued by the *fatwā* committee – consisting of qualified Muslim jurists or scholars headed by a *muftī* – is considered to be the government's official view on issues

[1] In Malaysia, more than 21 research institutes are known to conduct the research and development in the tissue engineering field. The innovation, introduction, and improvement of tissue engineering are championed by five public universities which are designated by the Malaysian government as research universities. The universities are Universiti Kebangsaan Malaysia, Universiti Malaya, Universiti Teknologi Malaysia, Universiti Sains Malaysia, and Universiti Putra Malaysia.

[2] *Nawāzil* (plural form of *nāzilah*) is characterised by a set of features surrounding the issue, i.e. occurrence, novelty, significance and severity (Majd, 2015).

[3] Malaysia is headed by His Majesty the Yang di-Pertuan Agong (the King) which elected by the Conference of Rulers on every five-year term. The Conference consists of the Rulers (Sultans) of the nine states – Perlis, Kedah, Perak, Selangor, Negeri Sembilan, Johor, Pahang, Terengganu and Kelantan – in the Federation of Malaysia. Meanwhile, states of Malacca, Penang, Sabah and Sarawak are headed by the Yang di-Pertua Negeri (State Governor) appointed by the Yang di-Pertuan Agong every four-year term.

related to Islam. This is because the *fatwā* committee has been formally established under the provisions of the state law, enactment, or ordinance of Islamic Law in Malaysia according to Department of Islamic Development Malaysia (*Jabatan Kemajuan Islam Malaysia* [JAKIM]) (2017).

In the process of issuing a law or a *fatwā*, most states will generally use the final decree of *al-Shāfiʿī* school. If the final decree goes against the public interest, any final decree of *al-Ḥanafī*, *al-Mālikī* and *al-Ḥanbali* schools, or any other sect whose legal structure is close to these streams, may be referred to. If any chance, by referring to these final decrees, the *fatwā* committee is of the view that there is a conflict of interest to the public, then the *fatwā* committee may use its own *ijtihād*. The process is mentioned in the states law, enactment, or ordinance, for example, Section 54, Administration of Islamic Law Enactment (Selangor) 2003. According to JAKIM (n.d.), there is a total of fifteen official committees in Malaysia that can issue the legal view or *fatwā*. At the national level, it is known as the Consultative Committee of the National Council for Islamic Religious Affairs Malaysia (*Jawatankuasa Muzakarah Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia* [JMMKI]), and fourteen *fatwā* committees at the state level (including federal territories).[4]

METHODS

This study used mainly the library research method, a process involving identifying and locating relevant information, analysing main points, which leads to developing and expressing the ideas (Elmer E. Rasmuson Library, 2018). According to George (2008), library research method "involves identifying and locating sources that provide factual information or personal/expert opinion on a research question" which may be an important component of every other research method at a certain time. Then, the study utilised the textual analysis, a research method used by researchers in various disciplines, including communications, history, and health. The data generated from this method may come from different mediums, such as documents and web pages (Smith, 2017).

In this paper, JAKIM website of *Sumber Maklumat al-Aḥkām al-Fiqhiyyah* or Source of Information on Islamic Jurisprudence Rulings was used as the main source to screen and retrieve the relevant *fatwā*. As of May 2020, there are 604 JMMKI proceedings and 2,933 states *fatwā* that were listed on the website. General online search and websites of *Muftī* Department of each state were also scrutinised to complement the search. For the English translation of Quranic and *Sunnah* sources, Tanzil Project webpage (tanzil.net) – *Yūsuf `Alī* translation – and sunnah.com

[4] (1) Perlis *Fatwā* Committee, (2) Kedah *Fatwā* Committee, (3) Pulau Pinang *Fatwā* Committee, (4) Perak *Fatwā* Committee, (5) Selangor *Fatwā* Committee, (6) Islamic Legal Consultative Committee of Federal Territories, (7) Negeri Sembilan *Fatwā* Committee, (8) Melaka *Fatwā* Committee, (9) Johor *Fatwā* Committee, (10) Islamic Legal Consultative Committee of Pahang, (11) Terengganu *Fatwā* Committee, (12) Kelantan *Fatwā* Committee of Council of the Religion of Islam and Malay Custom, (13) Sabah *Fatwā* Council, (14) Sarawak *Fatwā* Board.

webpage were referred to, respectively. Local *fatwā* related to the sampling of tissue from the dead human body was retrieved from the abovementioned sources. The *fatwā* production, which involves the interpretation of main sources of Islamic law, was described.

RESULTS

The scenario of sampling tissue from the dead human body is related to *fatwā* of four issues, namely; (1) donation of the dead body for research purpose, (2) post-mortem or autopsy, (3) embalming the human cadaver, and (4) cadaveric organ donation. It is noted these four issues are related to the scenario of sampling from the dead body in articular cartilage tissue engineering experimentation whereby JMMKI and states *fatwā* committees gave the same rulings with either same *ṣīghah*[5] or different *ṣīghah* which are discussed below.

DISCUSSION

In 2014, JMMKI was briefed on the issue of the dead body donation by researchers from University of Malaya, and the committee has come out with a decision of prohibiting the donation of Muslim cadaver or dead body for research purpose. The decision (JMMKI, 2014) was in line with the *fatwā* issued by Islamic Legal Consultative Committee of Pahang (*Jawatankuasa Perundingan Hukum Syarak Negeri Pahang* [JFPahang]) (2014), Selangor *Fatwā* Committee (*Jawatankuasa Fatwa Negeri Selangor* [JFSelangor]) (2014), Kelantan *Fatwā* Committee of Council of the Religion of Islam and Malay Custom (*Jemaah Ulama' Majlis Agama Islam dan Adat Istiadat Melayu Kelantan* [JFKelantan]) (2014), and the other two *fatwā* bodies clearly mentioned the decision to accept ruling produced by JMMKI in their *ṣīghah*; Sabah *Fatwā* Council (*Jawatankuasa Majlis Fatwa Negeri Sabah* [JFSabah]) (2014) and Negeri Sembilan *Fatwā* Committee (*Jawatankuasa Fatwa Negeri Sembilan* [JFN9]) (2014).

The primary justification given by the committees for the impermissibility, or unlawful (*ḥarām*) decision is based on the principle of honouring and respecting the dead body based on the Islamic legal maxim or *fiqh* principle of *al-aṣl fi al-'irḍ al-taḥrīm* (original ruling on things which involve dignity and honour is prohibition). This general principle is based on the Prophetic *ḥadīth*:

> Verily your blood, your property and your honour are as sacred and inviolable as the sanctity of this day of yours, in this month of yours and in this town of yours. Verily! I have conveyed this message to you. (*Riyāḍ al-Ṣālihīn* [The meadows of the righteous] (n.d.), Book 18, *Ḥadīth* 1524).

The donation of the dead body for research purpose is considered as transgressing the previously mentioned *fiqh* principle as the human body needs to be honoured. There is textual evidence that highlights the need to respect for the human

[5] The way *fatwā* or verdict is expressed in words or tenses.

body whether the man is alive or dead, e.g. funeral preparation including bathing, shrouding, doing prayer for, and burying the dead body. The committees emphasised the ruling by stating that the need to use Muslim cadaver in research was not considered as a state of urgency, and there were other alternatives that could be utilised for the research purpose.

The scenario of taking samples from the dead body for research is also related to the issue of post-mortem or autopsy. The issue has been discussed twice by JMMKI (1984, 2004), JFKelantan (2006), and twice by Terengganu *Fatwā* Committee (*Jawatankuasa Fatwa Negeri Terengganu* [JFTerengganu]) (1994, 1999). The *fatwā* given by JFKelantan mentioned on the reference to the previous *fatwā* made in 1989, which the procedure was permissible under the emergency condition and the committee had come out with a guideline in conducting a post-mortem.

The guideline produced by JFKelantan is in line with the one produced by the JAKIM (2015). On the other hand, JMMKI has discussed the ruling of post-mortem on the dead body, which is not categorised as a criminal case. The committee has decided that the original law of conducting surgery procedure on the corpse is illegal, but it is permitted in the event of urgency such as studying the disease, identifying the cause of death as well as doing research and for education purpose especially in medicine:

> [Authors' translation] The original ruling of performing surgery on a deceased is prohibited; however, it is permissible in a desperate situation when it becomes a necessity such as conducting research on diseases, identifying the cause of death and in research as well as education especially in the field of medicine. (JMMKI, 2004).

As emphasised by JFTerengganu, in these recent years, the post-mortem or autopsy has been applied in hospitals which yet to be introduced during the early time of the Islamic era as the practice has not been developed. However, *al-Imām al-Nawāwī* has mentioned in his book *al-Majmū'*, which was cited by the committee as the followings (which also become part of *ṣīghah* in JMMKI legal ruling, 1984):

> [Authors' translation] If a dead person had swallowed a precious gem belonging to the other person and it is demanded by the owner, then his belly must be parted and then the gem needs to be returned to its owner; and if a pregnant woman has died and the child she conceived is still alive then it is permitted to dissect her abdomen to retrieve the child for the purpose of preserving one's life even by harming one part of the corpse. (JFTerengganu, 1994, 1999).

Both *fatwā* given by JFTerengganu in 1994 and 1999 were more focusing on the investigative aspect of post-mortem whereby the procedure was to be used for the protection of public benefit or interest

(*maṣlaḥah ʿāmmah*) in solving the criminal case. It was mentioned in its *ṣighah*, one of the objectives of the autopsy is to prevent harm (*mafsadah*) by charging the criminal based on the proof obtained from the investigation.

On the other hand, in its second *fatwā* of the post-mortem, the committee stated the permissibility to take any pieces from the dead body for research as evidence in the court or medical research with limited circumstances when the study was necessary or in an urgency by which justice could not be performed without the post-mortem, para 11:

> [Authors' translation] The taking of any of the deceased body parts for research following a post-mortem as evidence in court or for a medical research purpose is permissible in urgent situations in which the research is really needed or in a condition of necessity whereby justice cannot be upheld without the post-mortem. (JFTerengganu, 1999).

Muftī Department of Federal Territory (2015) in its official website also discussed the issue of post-mortem through the section of *irshād al-fatwā* (*fatwā* guidance) and *bayān li al-nās* (explanation for humankind). The *muftī* was invited to a conference of "Autopsy: A Choice or Necessity through Islamic Perspective" on 17th November 2015 which was also attended by forensic and medical experts in Malaysia. The *Muftī* Department was also entrusted to present two papers on "post-mortem and sampling pieces of the human organ during post-mortem for investigation and research" on 4th April 2016. They reported the issue as a new problem in *fiqh al-nawāzil* as mentioned by Dr. Abu Bakar Abu Zaid, Allah has mercy upon him, and citing *Faḍīlah Shaykh* Dr *Muḥammad Muḥammad al-Mukhtār al-Syanqitī*, Allah has mercy upon him, in *Aḥkām al-Jirāḥah al-Ṭibbiyyah* (The Regulations of Medical Surgery):

> [Author's translation] I did not find and discover any *nās* (textual proof) among the earlier jurists who talked about the permissibility of the post-mortem for learning etc. (*Muftī* Department of Federal Territory, 2016).

It was reported by *Muftī* Department of Federal Territories that there were two rulings on conducting post-mortem; permissible (*ḥalāl*) and prohibited (*ḥarām*) which had been convened by the Muslims jurists globally. Among the *fatwā* bodies and jurist figures that come out with *ḥalāl* ruling were *Hayʾah Kibār al-ʿUlamāʾ* (Council of Senior Scholars) of Saudi Arabia on 1976, *Majmaʿ al-Fiqh al-Islāmī bi al-Makkah al-Mukarramah* (Islamic Jurisprudence Academy) on 1987, *Lajnah al-Ifta'* (*Fatwā* Department) of Jordan on 1977, *Lajnah al-Ifta' al-Azhar* (*Fatwā* Department) of Egypt on 1971, *al-Shaykh al-Azhar*, *al-Shaykh Yūsuf al-Dajawī*, *al-Shaykh Hasanayn Makhlūf*, Egypt *Muftī*, *al-Shaykh Ibrāhīm al-Yaʿqūbī*, *al-Shaykh Saʿīd Ramaḍān al-Būṭī*, *al-Shaykh* Dr *Maḥmūd Nāẓim al-Nasīmī*,

and *al-Shaykh* Dr *Maḥmūd ʿAlī Sarṭāwī* (*Majallah al-Azhar*, 6/472, 1935) (*Muftī* Department of Federal Territory, 2016). Meanwhile, the jurist figures that gave the *ḥarām* ruling were *al-Shaykh al-Azhar*, *al-Shaykh Muḥammad Bakhīt al-Muṭī'ʿī*, *al-Shaykh al-ʿArabī Abū Iyād al-Tabkhī*, *al-Shaykh Muḥammad Burhān al-Dīn al-Sanbuhlī*, and *al-Shaykh Muḥammad ʿAbd al-Wahhāb al-Buḥayrī* (*Muftī* Department of Federal Territory, 2016).

The proponents of post-mortem use two methodologies on the permissibility of post-mortem. First, the use of deductive analogies (*qiyās*) of post-mortem for educational purpose with (1) the surgery to save a living fetus within a dead pregnant woman, (2) the extraction of dead fetus from the woman bodies due to safety issues, and (3) the extraction of valuable items swallowed by a dead person.

Second, the jurists use the principle of Islamic legal maxim; (1) if two *maṣlaḥah* collide, choose the stronger one, and if there is a collision between two *mafsadah*, choose with the lesser consequences to prevent more prominent harm. In this situation, the *maṣlaḥah* of education and finding evidence is more preferred than to hasten the burial and funeral preparation. (2) That without which an obligation cannot be fulfilled is an obligation (*mā lā yatim al-wājib illā bihi fahuwa wājib*). There is a need for research and study in the medical field related to post-mortem to confirm on the anonymity of the information. Thus, a post-mortem is permissible in Islam.

For the opponent of the post-mortem, they use the proof (*dalīl*) from the *Qur`ān* and the *Sunnah*. The verse in *Sūrah al-Isrā'* (*Qur`ān*, 17:70), emphasises on the honour of human being and thus, the procedure in post-mortem is considered as disrespecting the deceased by slicing and cutting the dead body. In one *ḥadīth*, Prophet *Muḥammad* P.B.U.H was advising the commander in a war to be conscious and cognizant of Allah, and also to observe the manners in war, including the prohibition to mutilate dead bodies:

> It has been reported from *Sulaymān bin Buraydah* through his father that when the Messenger of Allah P.B.U.H appointed anyone as leader of an army or detachment he would especially exhort him to fear Allah and to be good to the Muslims who were with him. He would say: Fight in the name of Allah and in the way of Allah. Fight against those who disbelieve in Allah. Make a holy war, do not embezzle the spoils; do not break your pledge; and do not mutilate (the dead) bodies; do not kill the children. (*Ṣaḥīḥ* Muslim [Authentic *Ḥadīth* Collections of Muslim] (n.d.), 1731 a, b Book 32, *Ḥadīth* 3, also mentioned in *Jāmiʿ al-Tirmidhī* [*Ḥadīth* Compilation of *al-Tirmidhī*] (n.d.b), 1617 Book 21, *Ḥadīth* 80, and *Sunan Ibn Mājah* [*Ḥadīth* Collections of *Ibn Mājah*] (n.d.), Vol. 4, Book 24, *Ḥadīth* 2858).

According to the opponents of the post-mortem, the procedure is clearly related with the general prohibition mentioned in the *ḥadīth*, plus, there are also other *ḥadīth* that mention the same prohibition to cut or slice the dead body.

The issue is then explained with the point of human honour and dignity (*karāmah insāniyyah*) which stresses on the prohibition of killing another Muslim without reason permitted by *sharīʿah*. In Islam, a Muslim's sacrosanctity is reserved even after his death. As reported by *Abū Dāwud* (3207 Book 21, *Ḥadīth* 119), The Prophet P.B.U.H said, "Breaking a dead man's bone is like breaking it when he is alive". With regards to the commentary on this *ḥadīth*, *al-Imām al-Ṭībī*, *al-Imām Ibn Mālik,* and *al-Imām Ibn Ḥajar al-ʿAsqalānī* stated that the dead should not be treated or disregarded with dishonour (Habib, 2012). *Al-Imām Ibn Ḥajar al-ʿAsqalānī* mentioned in *Fatḥ al-Bārī* (9/142), "the wisdom from this *ḥadīth* is that the honour of a believer (*mu`min*) lasts even after his death. His honour remains the same as when he was alive" (Habib, 2012). From the *ḥadīth*, the action of damaging the *mu`min*'s skeleton is prohibited, so do the post-mortem.

Subsequently, the opponents use *qiyās* of; (1) *ḥādith* stating on the prohibition to sit on a grave as the action will cause disrespect to the dead people in the grave even though the action did not involve any direct contact with the dead people (*Jāmiʿ al-Tirmidhī* [*Ḥadīth* compilation of *al-Tirmidhī*] (n.d.a), 1050, Book 10, *Ḥadīth* 86; *Sunan al-Nasā`i* [*Ḥadīth* collections of *al-Nasā`i*] (n.d.), 2045, Book 21, *Ḥadīth* 229; *Sunan Abū Dawūd* [*Ḥadīth* collections of *Abū Dawūd*] (n.d.), 3225, Book 21, *Ḥadīth* 137). Thus, it is prohibited to do any damage to the dead body or exhuming the grave, and therefore, stronger prohibition is imposed on the post-mortem as the procedure will cause more damage. (2) There are Muslims scholars that prohibit the surgery on the dead pregnant woman to save the living fetus even though it is considered as an emergency (*al-maṣlaḥah al-ḍarūriyyah*) (Abdi, 2018). Thus, the procedure of post-mortem is strongly prohibited.

The proof or *dalīl* from the principle of Islamic law is also used in prohibiting the post-mortem; (1) *al-ḍarar lā yuzāl bi al-ḍarar* (harm cannot be removed by another harm). Thus, to learn the mechanism of illness or pathology to remove the disease by inflicting harm on the dead body through post-mortem is not permissible. (2) *lā ḍarar wa lā ḍirar* (one should not cause harm, nor should he reciprocate harm with harm) taken from a *ḥadīth* (*Muwaṭṭa` Mālik* [Systematic *Ḥadīth* Collections of *Mālik*] (n.d.), Book 36, *Ḥadīth* 31). The principle is used as a reason to prohibit the post-mortem as the action will definitely cause damage or harm to the dead body even though there is benefit from the procedure.

From the above explanation, the *Muftī* Department has come out with a conclusion to allow the post-mortem on non-Muslim, but not permissible on the Muslim dead body unless there is a need to conduct the

procedure in order to solve a criminal case or to identify a disease by reiterating the legal rulings given by JMMKI in 1989 and 2004. In its website, JAKIM has produced the post-mortem guideline from an Islamic perspective with the latest update on 23rd November 2015 which acknowledges the need for post-mortem to retrieve pieces from the dead body for medical research in item 4.2 (the objective of post-mortem) and 4.4 (necessity for post-mortem).

Following the issue of post-mortem, JMMKI (1993) has decided that preserving or embalming the corpse in the case of emergency is permitted. However, if embalming the dead body is not for emergency (*ḍarūriyyah*) reason, i.e. for exhibition purpose, then the procedure is impermissible as agreed by JMMKI (2011) supported – with the same *ṣīghah* – by JFN9 (2017) and JFSelangor (2011). The committees argued that, in Islam, the deceased had the honour, value, and human rights that must be respected and preserved just like a living person. The surgical procedures and embalmment on the dead body for the purpose of exhibitions and to be demonstrated in various forms and actions are contrary to the *sharīʿah*. However, to educate the public on human anatomy, it can be done using other exhibition materials such as photographs and artificial materials without using real human bodies.

However, in the issue of organ donation from the dead person, the rulings given by the *fatwā* bodies are based on the therapeutic purpose, and not on the research purpose. These can be seen through the permissible rulings if the recipient (patient) is in the dire needs of the organs, i.e. the recipient will die if he or she did not undergo organ transplantation immediately. Different from the articular cartilage tissue engineering experimentation, the retrieved pieces of tissue will end up in the laboratory and processed gradually with multiple testing or analyses. It can be noted that, even though it is a matter of life and death of the prospective recipient, the terms and conditions stipulated by the *fatwā* bodies still can be considered strict and firm in order to protect the sanctity and honour of the dead body and the deceased family.

The *fatwā* of donating eye tissue (cornea) from the Muslim deceased was also discussed by Perlis *Fatwā* Committee (*Jawatankuasa Syariah Negeri Perlis*) (1966) on 5th June 1966.[6] In the preliminary discussion, two committee members agreed on the permissibility of eye tissue donation while two others disagreed with the donation, which finally the *muftī* (chairman) was asked to give his opinion that resulted in the permissibility of such action. The decision was forwarded in another meeting whereby the *Fatwā* Council of Perlis further discussed on the issue using the *dalīl* taken from the *Qur`ān* and *Sunnah*. The discussion finally led eight council members to agree on the permissibility while the other five members disagreed with the decision to allow the donation. Based on the votes, the donation of eye tissue is considered permissible. Meanwhile, JMMKI (1970)

[6] As requested by Ministry of Health Malaysia through a letter (KK 11031(50) dated 6th November 1965).

and JFSabah (2009) gave the same ruling (permissible) on the donation of eye tissue (including the heart) of the deceased with stipulated terms and conditions.

It can be appreciated that local Muslim scholars have tread carefully in discussing the matter related to utilising cadaver for medical purposes. The current *fatwā* produced by the *fatwā* committees has shown that honouring a human body is a very important aspect. Even though the intention of using biological samples from a cadaver is for research purpose as in articular cartilage tissue engineering experimentation, the Muslim researchers still need to consider the bioethical concerns from the Islamic perspective. The researchers may need to consider opting for other options such as using the biological samples from living donors as alternatives to obtain cell sources in studying the articular cartilage regeneration. These alternatives perhaps raised minor *fiqh* issues compared to the above scenario.

CONCLUSION

In searching for the treatment for degenerative joint diseases, the researchers of articular cartilage tissue engineering have been utilising cell sources through cadaveric tissue sampling. Thus, there is a need to screen the practices from an Islamic perspective, through the analysis of relevant local *fatwā*. Verily, the experiments are essential to developing a new treatment in the tissue engineering field to produce functional articular cartilage tissue. However, it is far more critical for Muslim researchers to ensure their conduct and practices to be in line with the *shariʿāh*. The researchers are advised to refer to the *fatwā* committees or religious bodies prior to adopting or adapting the international biomedical practices, before implementing the technology in Muslim societies, i.e. Malaysia. For instance, the researchers may search for the best alternatives of cell sources such as opting for sampling the tissue from the living donor instead of the cadaver. In general, there are relevant *fatwā* which can be linked to the practices of tissue engineering research in regenerating an articular cartilage tissue. The *fatwā* can be used as key references for the researchers in conducting their studies, to be in line with *shariʿāh*. Despite new efforts to align researches in articular cartilage tissue engineering with the *shariʿāh*, further study needs to be designed to develop a permissible (*halāl*) environment of articular cartilage tissue engineering experimentation.

ACKNOWLEDGEMENT

The authors thanked the Kulliyyah of Allied Health Sciences (KAHS), International Islamic University Malaysia (IIUM), Kuantan Campus, and Tissue Engineering and Regenerative Medicine Research Team (TERT), IIUM. The authors also expressed their gratitude to the Ministry of Higher Education for their support and for providing the Transdisciplinary Grant Scheme (TRGS/1/2016/UIAM/02/8 - TRGS16-02-003-0003).

REFERENCES

Aa'zamuddin, A. M., Nur Syamimi, M., Hashi, A., Azran, A., & Munirah, S. (2018). A review of Malaysian experience in tissue engineering research and development: An online database study using Scopus. *International Journal of Allied Health Sciences*, *2*(1), 509-518. Retrieved May 6, 2020, from http://journals.iium.edu.my/ijahs/index.php/IJAHS/article/view/119

Abdi, O. S. (2018). Muslim views on organ transplant. *IIUM Engineering Journal*, *12*(5), 203-208. https://doi.org/10.31436/iiumej.v12i5.260

Administration of Islamic Law Enactment (Selangor) 2003 s. 54.

Barandun, M., Iselin, L. D., Santini, F., Pansini, M., Scotti, C., Baumhoer, D., … Barbero, A. (2015). Generation and characterization of osteochondral grafts with human nasal chondrocytes. *Journal of Orthopaedic Research*, *33*(8), 1111-1119. https://doi.org/10.1002/jor.22865

Barbero, A., Grogan, S. P., Mainil-Varlet, P., & Martin, I. (2006). Expansion on specific substrates regulates the phenotype and differentiation capacity of human articular chondrocytes. *Journal of Cellular Biochemistry*, *98*(5), 1140-1149. https://doi.org/10.1002/jcb.20754

Barbero, A., Grogan, S., Schäfer, D., Heberer, M., Mainil-Varlet, P., & Martin, I. (2004). Age related changes in human articular chondrocyte yield, proliferation and post-expansion chondrogenic capacity. *Osteoarthritis and Cartilage*, *12*(6), 476-484. https://doi.org/10.1016/j.joca.2004.02.010

Biant, L. C., Simons, M., Gillespie, T., & McNicholas, M. J. (2017). Cell viability in arthroscopic versus open autologous chondrocyte implantation. *American Journal of Sports Medicine*, *45*(1), 77-81. https://doi.org/10.1177/0363546516664338

Buang, A. H. (2002). Analisis fatwa-fatwa semasa Syariah di Malaysia [Analysis of current Islamic Law rulings in Malaysia]. *Jurnal Syariah*, *10*(1), 39-52. Retrieved May 6, 2020, from http://www.myjurnal.my/filebank/published_article/23769/Artikel_1.pdf

Cadaver. (n.d.). In *Cambridge Dictionary*. Retrieved November 13, 2019, from https://dictionary.cambridge.org/dictionary/english/cadaver

Candrian, C., Bonacina, E., Frueh, J. A., Vonwil, D., Dickinson, S., Wirz, D., … Barbero, A. (2009). Intra-individual comparison of human ankle and knee chondrocytes in vitro: relevance for talar cartilage repair. *Osteoarthritis and Cartilage*, *17*(4), 489-496. https://doi.org/10.1016/j.joca.2008.05.023

Candrian, C., Vonwil, D., Barbero, A., Bonacina, E., Miot, S., Farhadi, J., … Martin, I. (2008). Engineered cartilage generated by nasal chondrocytes is responsive to physical forces resembling joint loading. *Arthritis and Rheumatism*, *58*(1), 197-208. https://doi.org/10.1002/art.23155

Chlapanidas, T., Faragò, S., Mingotto, F., Crovato, F., Tosca, M. C., Antonioli, B., … Torre, M. L. (2011). Regenerated silk fibroin scaffold and infrapatellar adipose stromal vascular fraction as feeder-layer: A new product for cartilage advanced therapy. *Tissue Engineering Part A, 17*(13-14), 1725-1733. https://doi.org/10.1089/ten.tea.2010.0636

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (1970). Derma organ - pemindahan jantung dan mata [Organ donation – heart and eyes transplantation]. In *Kompilasi pandangan hukum Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia* (p. 100). Retrieved July 19, 2019, from http://www.islam.gov.my/images/ePenerbitan/KOMPILASI_MUZAKARAH_MKI_2016.pdf

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (1984). Post-mortem mayat [Cadaver post-mortem].

In *Kompilasi pandangan hukum Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia* (p. 106). Retrieved July 19, 2019, from http://www.islam.gov.my/images/ePenerbitan/KOMPILASI_MUZAKARAH_MKI_2016.pdf

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (1993). Mengawet mayat [Embalming cadaver]. In *Kompilasi pandangan hukum Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia* (p. 108). Retrieved July 19, 2019, from http://www.islam.gov.my/images/ePenerbitan/KOMPILASI_MUZAKARAH_MKI_2016.pdf

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (2004). *Hukum bedah siasat ke atas mayat yang bukan dikategorikan kematian kerana kes jenayah* [The ruling on the cadaver post-mortem which is not categorised as death due to a criminal case]. 61st Conference. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/10251

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (2011). *Hukum mengadakan pameran spesimen anatomi manusia* [The ruling on holding an exhibition on human anatomy specimens]. 93rd Conference. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/10269

Consultative Committee of the National Council for Islamic Religious Affairs Malaysia. (2014). *Hukum pendermaan jasad si mati untuk tujuan penyelidikan* [The ruling on the donation of the dead body for research purpose]. 105th Conference. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/10316

Cross, M., Smith, E., Hoy, D., Nolte, S., Ackerman, I., Fransen, M., … March, L. (2014). The global burden of hip and knee osteoarthritis: Estimates from the Global Burden of Disease 2010 study. *Annals of the Rheumatic Diseases*, *73*(7), 1323-1330. https://doi.org/10.1136/annrheumdis-2013-204763

Cui, X., Breitenkamp, K., Finn, M. G., Lotz, M., & D'Lima, D. D. (2012). Direct human cartilage repair using three-dimensional bioprinting technology. *Tissue Engineering Part A*, *18*(11-12), 1304-1312. https://doi.org/10.1089/ten.tea.2011.0543

Dell'Accio, F., De Bari, C., & Luyten, F. P. (2003). Microenvironment and phenotypic stability specify tissue formation by human articular cartilage-derived cells in vivo. *Experimental Cell Research*, *287*(1), 16-27. https://doi.org/10.1016/S0014-4827(03)00036-3

Department of Islamic Development Malaysia. (2015). *Garis panduan bedah siasat mayat menurut perspektif islam* [Guidelines for cadaver post mortem from Islamic perspective]. Retrieved June 19, 2019, from http://www.islam.gov.my/rujukan/garis-panduan/53-garis-panduan-bedah-siasat-mayat-menurut-perspektif-islam

Department of Islamic Development Malaysia. (2017). *Garis panduan pengeluaran fatwa di Malaysia* [*Fatwā* production guidelines in Malaysia]. Retrieved April 15, 2019, from http://e-smaf.islam.gov.my/e-smaf/assets/files/garis_panduan/a7e239efb5ffed79171b923ee948c010.pdf

Department of Islamic Development Malaysia. (n.d.). *Institusi/organisasi* [Institution/organisation]. Retrieved June 19, 2019, from Sumber Maklumat al-Ahkam al-Fiqhiyyah website: http://e-smaf.islam.gov.my/e-smaf/index.php/main/mainv1/maklumat_fatwa/2

Elmer E. Rasmuson Library. (2018). *Library Research Process*. Retrieved March 2, 2020, from https://library.uaf.edu/ls101-research-process

Endres, M., Neumann, K., Schröder, S. E. A., Vetterlein, S., Morawietz, L., Ringe, J., … Kaps, C. (2007). Human polymer-based cartilage grafts

for the regeneration of articular cartilage defects. *Tissue and Cell*, *39*(5), 293-301. https://doi.org/10.1016/j.tice.2007.05.002

Francioli, S.-E., Martin, I., Sie, C.-P., Hagg, R., Tommasini, R., Candrian, C., … Barbero, A. (2007). Growth factors for clinical-scale expansion of human articular chondrocytes: Relevance for automated bioreactor systems. *Tissue Engineering*, *13*(6), 1227-1234. https://doi.org/10.1089/ten.2006.0342

George, M. W. (2008). *The elements of library research*. New Jersey, USA: Princeton University Press.

Habib, R. (2012). *The final journey*. Glasgow, Scotland: Central Masjid.

Isa, N. M. (2016). Darurah (necessity) and its application in Islamic ethical assessment of medical applications: A review on Malaysian fatwa. *Science and Engineering Ethics*, *22*(5), 1319-1332. https://doi.org/10.1007/s11948-015-9698-1

Islamic Legal Consultative Committee of Pahang. (2014). *Pendermaan jasad si mati untuk tujuan penyelidikan* [The donation of the dead body for research purpose]. Special Meeting No.2/2014. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/12490

Jāmiʿ al-Tirmidhī [*Ḥadīth* compilation of *al-Tirmidhī*]: The book on *janāʾiz* (funerals). (n.d.a). Retrieved May 6, 2020, from https://sunnah.com/tirmidhi/10/86

Jāmiʿ al-Tirmidhī [*Ḥadīth* compilation of *al-Tirmidhī*]: The book on military expeditions. (n.d.b). Retrieved May 6, 2020, from https://sunnah.com/tirmidhi/21/80

Kelantan *Fatwā* Committee of Council of the Religion of Islam and Malay Custom. (2006). Fatwa mengenai garis panduan bedah siasat menurut pandangan Islam [*Fatwā* on autopsy guidelines from Islamic perspective]. *Conference (21st December 2006)*. Retrieved May 6, 2020, from http://www.muftikelantan.gov.my/index.php/component/content/article/104-mufti/fatwa-kelantan/sosial-shariah/316-fatwa-mengenai-garis-panduan-bedah-siasat-menurut-pandangan-islam?Itemid=437

Kelantan *Fatwā* Committee of Council of the Religion of Islam and Malay Custom. (2014). *Hukum pendermaan jasad si mati untuk tujuan penyelidikan* [The ruling on cadaver donation for research purpose]. Retrieved May 6, 2020, from http://www.muftikelantan.gov.my/index.php/component/content/article/104-mufti/fatwa-kelantan/sosial-shariah/376-hukum-pendermaan-jasad-si-mati-untuk-tujuan-penyelidikan?Itemid=437

Khairuldin, W. M. K. F. W., Anas, W. N. I. W. N., & Embong, A. H. (2018). Experts' view within fatwa production in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, *8*(11). https://doi.org/10.6007/IJARBSS/v8-i11/4927

Krüger, J. P., Machens, I., Lahner, M., Endres, M., & Kaps, C. (2014). Initial boost release of transforming growth factor-β3 and chondrogenesis by freeze-dried bioactive polymer scaffolds. *Annals of Biomedical Engineering*, *42*(12), 2562-2576. https://doi.org/10.1007/s10439-014-1099-0

Kuiper, N. J., & Sharma, A. (2015). A detailed quantitative outcome measure of glycosaminoglycans in human articular cartilage for cell therapy and tissue engineering strategies. *Osteoarthritis and Cartilage*, *23*(12), 2233-2241. https://doi.org/10.1016/j.joca.2015.07.011

Langer, R., & Vacanti, J. P. (1993). Tissue engineering. *Science (New York, N.Y.)*, *260*(5110), 920-926. Retrieved May 6, 2020, from http://www.ncbi.nlm.nih.gov/pubmed/8493529

Majd. (2015). *Fiqh al-nawazil* [Islamic jurisprudence of the new occurrence]. Retrieved May 15,

2019, from Financial Encyclopedia website: https://www.investment-and-finance.net/islamic-finance/f/fiqh-al-nawazil.html

Muftī Department of Federal Territory. (2015). *Irsyad al-fatwa ke-94: Hukum melakukan autopsi ke atas mayat* [*Fatwā* guidance 94: Ruling on cadaver autopsy]. Retrieved April 17, 2019, from https://muftiwp.gov.my/ms/artikel/irsyad-fatwa/irsyad-fatwa-umum/1475-irsyad-al-fatwa-ke-94-hukum-melakukan-autopsi-ke-atas-mayat

Muftī Department of Federal Territory. (2016). *Bayan linnas siri 57: Post mortem mayat: Hukum Islam & pendapat ulama* [Explanation for humankind series 57: Cadaver post-mortem: Islamic ruling & scholars opinion]. Retrieved April 17, 2019, from https://muftiwp.gov.my/ms/artikel/bayan-linnas/1778-bayan-linnas-siri-57-post-mortem-mayat-hukum-islam-pendapat-ulama

Muwaṭṭa` Mālik [Systematic *ḥadīth* collections of *Mālik*]: Judgements. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/urn/414820

National Committee for Clinical Research. (2015). Malaysian Guidelines on the Use of Human Biological Samples for Research. In *Clinical Research Malaysia* (2nd ed.). Retrieved January 2, 2019, from www.clinicalresearch.my

Negeri Sembilan *Fatwā* Committee. (2014). *Pendermaan jasad atau mayat orang Islam untuk tujuan penyelidikan* [The donation of Muslim cadaver for research purpose]. Conference No.2/2014. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/12356

Negeri Sembilan *Fatwā* Committee. (2017). *Mengadakan pameran spesimen anatomi manusia* [Holding exhibition on human anatomy specimens]. Conference No. 05/2017. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/15790

Perlis *Fatwā* Committee. (1966). *Mengambil mata mayat orang islam* [The donation of eyes from Muslim cadaver]. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/11062

Radzi, M. A. A., & Munirah, S. (2016). A preliminary review on moral challenges in tissue engineering. *Revelation and Science*, *6*(1), 17-26.

Riyāḍ al-Ṣālihīn [The meadows of the righteous]: The book of the prohibited actions. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/riyadussaliheen/18/14

Sabah *Fatwā* Council. (2009). *Derma organ menurut perspektif Islam* [Organ donation from Islamic perspective]. Conference No. 2/2009. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/12146

Sabah *Fatwā* Council. (2014). *Pendermaan jasad si mati untuk tujuan penyelidikan* [The donation of the dead body for research purpose]. Conference No.1/2014. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/16058

Ṣaḥīḥ Muslim [Authentic *ḥadīth* collections of *Muslim*]: The book of *jihād* and expeditions. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/muslim/32/3

Sample. (n.d.). In *Cambridge Dictionary*. Retrieved October 9, 2019, from https://dictionary.cambridge.org/dictionary/english/sample

Scotti, C., Wirz, D., Wolf, F., Schaefer, D. J., Bürgin, V., Daniels, A. U., … Barbero, A. (2010). Engineering human cell-based, functionally integrated osteochondral grafts by biological bonding of engineered cartilage tissues to bony scaffolds. *Biomaterials*, *31*(8), 2252-2259. https://doi.org/10.1016/j.biomaterials.2009.11.110

Secretan, C., Bagnall, K. M., & Jomha, N. M. (2010). Effects of introducing cultured human chondrocytes into a human articular cartilage explant model. *Cell and Tissue Research*, *339*(2), 421-427. https://doi.org/10.1007/s00441-009-0901-z

Selangor *Fatwā* Committee. (2011). *Hukum mengadakan pameran spesimen anatomi manusia* [The ruling on holding an exhibition on human anatomy specimens]. Meeting No. 3/2011. Retrieved April 16, 2019, from http://www.muftiselangor.gov.my/fatwa-personalisation/fatwa-tahunan/keputusan-fatwa-xwarta/2010/570-hukum-mengadakan-pameran-spesimen-anatomi-manusia

Selangor *Fatwā* Committee. (2014). *Fatwa pendermaan jasad si mati untuk tujuan penyelidikan* [The ruling on the donation of the dead body for research purpose]. Meeting No.2/2014. Retrieved April 16, 2019, from http://www.muftiselangor.gov.my/fatwa-personalisation/fatwa-tahunan/keputusan-fatwa-xwarta/2010/610-fatwa-pendermaan-jasad-si-mati-untuk-tujuan-penyelidikan

Smith, J. A. (2017). Textual Analysis. In *The International Encyclopedia of Communication Research Methods*. https://doi.org/10.1002/9781118901731.iecrm0248

Sunan Abū Dawūd [*Ḥadīth* collections of *Abū Dawūd*]: Funerals. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/abudawud/21/137

Sunan al-Nasā`i* [*Ḥadīth* collections of *al-Nasā`i]: The book of funeral. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/nasai/21/229

Sunan Ibn Mājah [*Ḥadīth* collections of *Ibn Mājah*]: The chapters on *jihād*. (n.d.). Retrieved May 6, 2020, from https://sunnah.com/urn/1277070

Tampieri, A., Sandri, M., Landi, E., Pressato, D., Francioli, S., Quarto, R., & Martin, I. (2008). Design of graded biomimetic osteochondral composite scaffolds. *Biomaterials*, *29*(26), 3539-3546. https://doi.org/10.1016/j.biomaterials.2008.05.008

Terengganu *Fatwā* Committee. (1994). *Bedah siasat wanita mengikut hukum Syara* [Female autopsy according to Islamic law]. 85th Meeting. Retrieved April 16, 2019, from http://e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/11651

Terengganu *Fatwā* Committee. (1999). *Pembedahan mayat di hospital dan wang pampasan* [Autopsy in hospital and compensation]. Retrieved April 16, 2019, from e-smaf.islam.gov.my/e-smaf/fatwa/fatwa/find/pr/11750

Wang, C. Z., Ho, M. L., Chen, W. C., Chiu, C. C., Hung, Y. L., Wang, C. K., & Wu, S. C. (2011). Characterization and enhancement of chondrogenesis in porous hyaluronic acid-modified scaffolds made of PLGA (75/25) blended with PEI-grafted PLGA (50/50). *Materials Science and Engineering C*, *31*(7), 1343-1351. https://doi.org/10.1016/j.msec.2011.04.019

Pertanika J. Soc. Sci. & Hum. 28 (2): 1467 - 1484 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

The Practice of *al-Ta'awun* in the Wedding Expenditure of Malay-Muslims in Malaysia

Syh Noorul Madihah Syed Husin[1]*, Raihanah Azahari[2] and Asmak Ab Rahman[3]

[1]Department of Shariah, Faculty of Islamic Contemporary Studies, Universiti Sultan Zainal Abidin, Kuala Nerus 21300, Terengganu, Malaysia
[2]Department of Fiqh and Usul, Academy of Islamic Studies, University of Malaya, 50603 Kuala Lumpur, Malaysia
[3]Department of Shariah and Economics, Academy of Islamic Studies, University of Malaya, 50603 Kuala Lumpur, Malaysia

ABSTRACT

Al-ta'awun is a concept regarding mutual help and cooperation in Islam, which is advocated in the al-Quran and Sunnah. Its role in defraying wedding expenditure is seen as a solution to the huge budget incurred when preparing for a wedding reception. Contemporary societies are increasingly faced with the burden of costly weddings, and this can have adverse effects, especially on the Malay-Muslim community in Malaysia. This study examined the application of *al-ta'awun* to supplement wedding expenses. This qualitative study involved 30 married couples, who were selected for face-to-face interviews comprising semi-structured interviews. The results were arranged and analysed according to themes relevant to this study. Data were examined, coded and categorised based on emerging themes. The ATLAS.ti version 7.5.6 software was used for analysing data, which involved five steps, namely transcription, compilation, coding, categorisation and drawing inferences. The findings indicate that three forms of *al-ta'awun* are practised, namely monetary donations, payment for goods and services, and contributions to defray the cost of wedding arrangements. The involvement of family, neighbours, friends and the local community helps to defray the overall wedding expenses.

Keywords: Al-ta'awun, Malay-Muslim weddings, marriage expenses, wedding expenditure

ARTICLE INFO

Article history:
Received: 30 January 2018
Accepted: 18 December 2019
Published: 26 June 2920

E-mail addresses:
madihah@unisza.edu.my (Syh Noorul Madihah Syed Husin)
raihan@um.edu.my (Raihanah Azahari)
asmak@um.edu.my (Asmak Ab Rahman)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

One characteristic of many traditional societies, including Malaysia, is the exorbitant cost incurred for throwing a wedding reception. Although compulsory wedding expenses usually refer to the dower (*mahar*) and wedding feast (*walimah*), other marriage customs often lead to exorbitant expenses (Syh et al., 2014). According to Jalila (2008), Muslim wedding preparations in Morocco typically involve an expenditure of 50,000 NOK to over 80,000 NOK (5,139 USD to over 8,223 USD). Large-scale wedding events are seen as significant symbols of status. Jane (2007) explained that wedding celebrations involving the Muslim community in the United Arab Emirates required a plethora of preparations, in which a hotel wedding package typically cost up to 400 dirhams per person or a total of 400,000 dirhams (108,903 USD) for 800 guests.

Such luxurious weddings are also common among non-Muslims, like the Chinese in Hong Kong. On average, each couple spends approximately US$28,570 on a wedding. Expensive items include the banquet, furnishing for a new home, and the bride's price. These three items together account for about three-quarter of the total wedding expenses (Chan & Chan, 2002). According to Otnes and Pleck (2003), luxurious spending is a common practice among middle-class families. According to Boden (2003), those who spend on a luxurious wedding hope to ensure a memorable marriage. Francis et al. (2004) found that despite the state of poverty faced by indigenous people in India, most families tended to hold large receptions due to the influence of urban wedding practices. Tan and Mialon (2015) studied 3,000 US citizens and found that those who spent less on engagement rings were at a higher risk of divorce, compared with those who bought expensive rings.

Luxurious weddings are also common in the Malay-Muslim community. In the 1980s, the cost of a wedding ceremony was between RM 4,000 to RM 6,000 (Consumers Association of Penang, 1987). Today, costs are usually in the tens of thousands of ringgit and involve elaborate Malay customs (Fatimah, 2009). According to Fatimah et al. (2017), increasing wedding costs can be attributed to many factors such as an increase in the current cost of living due to increases in the cost of wedding materials, high demand for wedding packages, holding a high status or position in society. Couples usually begin their spending by buying rings for the initial visit and observation (*merisik*) ceremony (Karafi, 2010), the proposal (*melamar*) (Amran, 2002) and the engagement (*meminang*) (Heather, 1981). The bridegroom must also prepare a sum for the "*wang hantaran*". Raihanah et al. (2009) found that the usual expected sum among Malays was between RM 5,000 and RM 8,000. This is much higher compared to the dower, especially in states with minimum rate guidelines. Social norms also add to the cost of weddings. The location of the wedding ceremony has moved from the family yard to luxury hotels or large halls (Fatimah, 2009). Fatimah et al. (2016)

found that almost 90% of respondents chose to use a catering service for their wedding reception. This would surely add-on to the overall cost because wedding receptions are becoming ever more commercialised. (Fatimah, 2009).

The change in trend is seeing the Muslim community showing off during wedding ceremonies rather than spending based on their capability, especially if they do not have enough money to host a luxurious wedding ceremony. According to Mohd and Mohamad (2016), the perception held by the Malay community about wedding ceremonies is always changing. Current desires and wishes of couples wanting to celebrate their wedding differs drastically compared to how the Malays celebrated it at one time. He explained that humans played a role in managing a wedding ceremony; hence, the ringgit played a major role in the success of that ceremony. The influence of the mass media also adds to this issue. His study found that magazines concerning wedding ceremonies were so dominant and influential as sources of information or reference for couples who intended to get married or when consuming commodities or services related to weddings offered by the marriage-related industry.

As mentioned above, the reality of hosting a wedding today is faced with a huge expenditure. In fact, according to Nurul and Sanep (2016), marriage today is a form of *ibadah* that is becoming a burden. The burden of marriage expenses that couples and family members must bear may have negative implications on their social life and may result in a significant debt even before marriage (Fatimah et al., 2019), delays in marriage (Qurratul, 2011) and an unwillingness to marry (Al-Nawwab, 1995; Muhammad, 1981). The burden of a costly wedding reception should not be encouraged since it may discourage a young couple from intending to marry and starting a family as encouraged by Islam (Al-Asqalani, 2001).

Among the steps that could reduce the burden of marriage is to apply the concept of *al-ta'awun* (mutual assistance) by family and friends to help with marital preparations. *Al-ta'awun* is an Islamic concept meaning mutual assistance. It is part of human life (Al-Haddad, 2015) and should form the basis of behaviour for every Muslim (Muhammad, 2014). According to Zar'um (2016), *al-ta'awun* is the cornerstone of efforts at global peace, especially helping those who are facing various hardships and need assistance. The basis of *al-ta'awun* is contained in the Quran and Hadith. According to Isbindari (2010), there are ten verses in the Qur'an that talks about *al-ta'awun*, based on the noun [*a'-wa-na*]. Some refer to *al-ta'awun* in an abstract sense (*al-ma'nawi*), such as asking for help from Allah (SWT) in prayer and also in a concrete sense (*al-maddi*) when asking fellow humans for assistance in some regard.

Islam advocates the practice of *al-ta'awun* to achieve social harmony and unity amongst the ummah. It is quite an appropriate method for managing wedding expenses. The benefits of this concept are apparent as communities in China, the

Arabic Peninsula and Indonesia (Java) still practice it. Charless (2018) stated that among the type of cooperation practiced by communities in China was the willingness of parents to help prospective couples to manage their wedding expenditure by creating a special saving fund before the wedding. Sa'id (2012), in a study on the Saudi Arabian community, found that a solution to the current burden of huge marriage expenses was mass weddings (*haflat al-zifaf al-jama'i*). As for the Javanese community, Zainorinyana and Vivien (2017) found that although there were various changes due to development and modernisation, the culture of '*rewang*' or the traditional system of communal service, was still practiced by that community. Therefore, this study intended to examine the practice of the *al-ta'awun* concept to defray wedding expenses by the Malay-Muslim community in Malaysia.

METHODS

Informants and Sample Size

A total of 30 married couples, whereby one of the partners must be from Selangor, Johor, Kelantan or Kedah, were chosen as informants through a purposive sampling method. This sample size is appropriate because in qualitative studies, the size of the sample should not be too large because this would make it difficult to obtain useful data. It should not be too small to as it will not achieve a desired saturation level (Onwuegbuzie & Leech, 2007). The total number of samples for this study followed the number suggested by several researchers in order to meet data saturation. Bailey (2007) suggested that the sample size for an interview should begin with 20 individuals.

This selection was justified based on the value of the dower (*mahar*) set by the local community, which is one of the compulsory expenditures in a wedding according to Islam. Although the dower is only part of other expenditures involved in a Muslim-Malay wedding; however, the differences in value show that each individual will end up paying a different total amount. Therefore, by examining differences in the community's wedding expenditure, this study was able to evaluate the effectiveness of applying the *al-ta'awun* concept on the rate of expenditure. The four states were chosen according to various zones in Malaysia, namely north, south, east and west. Kelantan and Kedah represented the two states mentioned in a study by Zurita (2008), as states that do not have a fixed value for the dower. As for states that endorse a minimum value guideline for the dower, this study chose Selangor because its guidelines for minimum rates is the highest, which is RM 300.00 (Selangor State Department of Mufti, 2010). Meanwhile, Johor was among the two states with the lowest rates (Zurita, 2008).

Although the selection of married couples (informants) was based on where either partner originated from or where, in one of the four states mentioned, did they have their feast; however, it does not mean that all the informants originated from one of these four states. This is because they might not have married someone from the

same state. The location of the interview might not be in one of these states because it depends on the location of the informant's area of domicile after marriage.

Data Collection

This study utilised a face-to-face interview approach using semi-structured questions. The set of semi-structured questions were validated by two specialists, namely Prof. Dato' Dr. Yaacob Harun, Director for the Centre for Excellence in Malay Studies, University of Malaya, and Prof. Dr. Ramle Abdullah, Director for the Centre for Science Studies, Sultan Zainal Abidin University, was developed to guide the interviews. These interviews were conducted between May and September 2015, and the duration of each interview was between 40 and 60 minutes.

Data Analysis

The interviews were arranged and analysed using a data-classification process according to themes identified in a phenomenon. Data obtained through this method were examined, coded and categorised based on the data's characteristic themes (Bowen, 2009). It was analysed with the help of ATLAS.ti version 7.5.6 software. This analysis involved five steps, namely transcription, compilation, coding, categorisation and formulation. First, the completed interview was transcribed. Data were then compiled, arranged and labelled with specific coded numbers based on the interview date. It was then coded, which is essential for the analysis of qualitative data as it facilitates the retrieval of required data (Earl, 2005). In the fourth step, coded data were structured and categorised based on a more general theme arising from the needs of the study.

RESULTS

This section discusses findings from interviews with 30 married couples. Interviews labelled "HW" represent responses from both husband and wife. If the response is solely from the husband, then it is labelled "H", while "W" represents the findings from wives.

Findings indicate that the concept of *al-ta'awun* is present in the management of marriage expenses of informants who collaborated with family members, friends and neighbours. However, such collaboration was not experienced by all informants. This paper focuses solely on the forms of *al-ta'awun* mentioned in the interviews. Three forms of *al-ta'awun* were utilised for informal marriage expenses, such as monetary donations, contributions in the form of goods and services and helping out (mutual help or *'gotong-royong'*) with the wedding feast. These three concepts are explained below.

Monetary Donations

Many informants admitted that they had received monetary donations to help manage their wedding expenses. While the most important contribution came from their parents, others were from local community members and this helped reduce expenses.

Parental Contribution

Some parents helped allay the cost of their children's marriage. They paid the cost of the most important element in a wedding reception, which is cost of preparing meals and the banquet on the wedding day. Findings show that this type of *al-ta'awun* depends on the financial capability of parents and that of their children. This practice was carried out by informants (men or women) whose parents are financially sound, those who are still studying or those who have just entered the employment world. This means that the first type of *al-ta'awun* is not related to the informant's demographic factors, such as location and gender.

Many female informants (wives) said that their parents took care of the entire cost of the wedding feast, as explained by W-01 (personal communication, May 10, 2015), "Daddy is fully responsible for the marriage expenses. He took care of 90% of the cost of the wedding feast." W-01's parents contributed money to cover most of the cost of their child's wedding feast because she was unemployed and pursuing higher education. Parental contribution to their unemployed children's weddings is common in the Malay community.

Some male informants (husbands) also indicated that their parents donated money to cover the cost of certain elements. Informant H-05 (personal communication, May 30, 2015) acknowledged that his parents bore the cost of the wedding banquet during his wedding, "For the feast, my mother was responsible. This was the largest cost at RM 12,000."

There were also parents who donated money to cover expenses that were part of their son's marital responsibilities. Informant H-23 (personal communication, August 29, 2015) described his dower spending:

> *I'd just started working in November, meaning that I had saved money for four months and had collected less than RM 10,000 (the agreed rate of dower) to settle the expenses for dower. I had saved about RM 3,000 to RM 4,000, and the rest was topped up by my parents.*

This informant explained that he was only able to provide around RM 4,000 to meet the agreed dower of RM 10,000. The remainder was contributed by his parents.

Group Savings Fund

Group savings refers to money collected by local communities to partially defray the cost of wedding expenses. This is a form of cooperation practised by several Malay communities. This study found that this practice is only carried out by 3 communities, whereby two of them are rural communities in Kedah and one by an urban community in Selangor. Informant H-21 (personal communication, August 15, 2015) used the savings, known as '*pakat* money', which was collected from the members of his village to defray the cost of the wedding feast:

> *In Kedah, we have the concept of 'pakat money'. This 'pakat money'*

is like a mutual fund. Whenever someone wants to have a feast, all the villagers who participate will have equal rights to the money for those who want to get married. This is the practice in Kedah. The money to buy meat and the cost of cooking amounted to RM 7,000; I used the group money. It is not a monthly payment method, but when a person wants to hold a feast, then everyone pays RM 200.

Based on the above statement, informant H-21's village community, which is situated in Kedah, had practiced a planned system of collecting money aimed at helping each individual who wanted to hold a wedding ceremony. The informant stated that the '*pakat* money' concept has long been practiced by his village folks. Besides informant H-21, this method was also used in informant H-04's wedding ceremony, which was held in a rural community in Kedah. Hence, this fund is not used for the feast but rather for covering other expenses, including buying cutlery and gifts for guests. Informant H-04 (personal communication, May 19, 2015) said, "I used the group saving to hire a canopy, so I did not run out of money. '*Pakatan* money' is payable once a year. It is not expensive and is only between RM 10 and RM 20."

Next, the only informant from the state of Selangor who mentioned about being involved in the group saving fund concept was W-30. However, the fund only covered some minor expenses such as the cost of preparing the *'bunga telur'*, which is a gift for guests. Although her wedding ceremony was held at her parent's apartment in Selangor, the cooperation and understanding showed by other apartment tenants had created a harmonious atmosphere. She (W-30, personal communication, September 20, 2015) further explained:

The money for 'bunga telur' (among the forms of donation provided by the Malay community) we collect from every home in the flats where we live. We collected RM 20 from every home for the purchase of 'bunga telur'. Every time there is a feast in the flats, such a collection is performed.

What happened at the wedding preparation of the three informants mentioned above did not happen to the other 27 informants, regardless of whether they come from rural or urban areas. This shows that the practice of creating a group savings fund is a unique feature of each community.

Contribution of Goods and Paid Services

The concept of *al-ta'awun* in the management of wedding expenses also comes in the form of donations of paid goods and services by family members, friends and neighbours. Findings shows that 30 married couples (informants) from various locations admitted the existence of contributions from close family members, relatives, neighbours or even close friends of the couples or their parents. The value of the contribution was not very high and some even gave sweets and cakes, nevertheless, it is presumed to be

a form of cooperation or assistance offered by the Muslim community.

As for the rural community, especially from the East Coast and North of the Peninsula, contributions were more in material form, such as cooking materials for the wedding feast, goodies for guests and cutlery. These are elements in the traditional wedding expenditure of the Malay community. H-04 (personal communication, May 19, 2015), who hails from a village in Kedah, stated that the local community provided different forms of donations for the wedding feast, "When it's time, there's an uncle giving a few kilos of sugar. There were ten bags of rice. Besides that, the community also brings sugar."

W-25, who got married in Kelantan, said that contributions came in the form of goodies and gifts for her. She (W-25, personal communication, August 31, 2015) said, "Some door gifts were bought while some were sponsored. The door gifts for the village folks were in the form of foodstuffs, which were also sponsored together with the goodies bag." What was initiated by family members and village folks mentioned by H-04 and W-25 is actually a tradition practiced by the Malay community, which emphasises the concept of cooperation by giving assistance in the form of raw materials and necessities for the feast according to each individual's capability (Amran, 2002).

Next, the *al-ta'awun* concept in relation to contributions does exist in the urban community. This form of contribution focuses on the current wedding expenditure trend, which includes contributions for entertainment during the feast, photo booths and supplementary menu in the form of food stalls. These types of expenditure are becoming popular these days, especially for informants who are getting married in the West Coast and South of the peninsula. W-12 (personal communication, June 8, 2015), who hails from Johor, mentioned about contributions for entertainment purposes made by a relative (auntie), "My wedding ceremony included entertainment. An aunt sponsored RM 700 to cover the complete cost."

According to W-26, who had her wedding feast in one of the towns in Selangor, said that one of the contributions by her family was in the form of a photo booth. She (W-26, personal communication, September 4, 2015) said, "My auntie had sponsored the photo booth. I did not ask her to sponsor it but she wanted to do it anyway."

Among other forms of donations from family members were simple meals served as a side menu at a special booth during the banquet. W-27 (personal communication, September 5, 2015) explained, "There are brothers who support by donating food. One family provided *laksa* and another cake." What is described by W-27 is a recent trend of diversifying side dishes in the dinner menu according to the Manager of Issyaz Wedding Enterprise, Mr. Azrin, (personal communication, December 31, 2015). These side dishes are provided by neighbours and family members.

Mutual Preparation of the Wedding Feast

Preparations for a wedding feast is the costliest element of a wedding. The overall budgeted expenditure for this event is summarised in the following table:

Table 1 indicates that there were 24 wedding banquets (10 females and 14 males) costing less than RM 10,000. This differed greatly with some of the wedding feasts that reached up to RM 10,000, with some even reaching RM 20,000 for one wedding feast.

Most of the feasts costing less than RM 10,000 in some places had local community support through a practice known as *'rewang'*. The interview indicated that organising a feast through communal volunteerism (*'gotong-royong'* or *'rewang'*) frequently occurred to informants who lived in rural areas or villages, especially those from the East coast and northern areas. Out of the 8 informants (married couples) from Kelantan, 5 couples mentioned about '*gotong-royong'*, which involved village folks or family members. W-02 (personal communication, May 13, 2015), who hails from Pasir Puteh in Kelantan, explained how the concept of '*rewan*g' was applied during his wedding feast.

> *We cooked ourselves and did not order from outsiders. Such is the culture of the local community. When there is a feast, the villagers agree to assist. The host simply prepares the cooking ingredients. Usually, we pay a little wage for those who come to help.*

The same matter was mentioned by HW-23. The couple, who were Kelantanese, stated that each individual who helps in preparing the feast is given a token, either in material or monetary form. HW-23 (personal communication, August 29, 2015) explained that:

> *The feast on my side (wife) was carried out in 'gotong-royong' fashion. My mother invited her*

Table 1
Estimates of expenditure for wedding banquets

Budget	Groom's Feast		Bride's Feast	
	Frequency	Percentage (%)	Frequency	Percentage (%)
RM 4,999 and below	3 people	10.0	4 people	13.3
RM 5,000 to RM 9,999	7 people	23.3	10 people	33.3
RM 10,000 to RM 14,999	8 people	26.7	8 people	26.7
RM 15,000 to RM 19,999	3 people	10.0	2 people	6.7
RM 20,000 and above	5 people	16.7	None	0
Joint male and female event	1 person	3.3	1 person	3.3
Complete package including all elements	2 persons	6.7	5 people	16.7
No budget	1 person	3.3	None	0
Total	**30 people**	**100**	**30 people**	**100**

Source: Interviews

friends and aunties to help in the cooking. So, there was no expenses involved in preparing the food. My mother just gave a piece of 'kain sarong' and special goodies to them as a gift. The feast on my side (husband) did the same too. Mama herself was head of the cooking group because she also cooks for her small-time catering business. Mama gave some money to those who came to help out.

According to H-07 (personal communication, May 31, 2015), who comes from a village in Kedah, in order to ensure that the feast takes place, each member of the village who contributes is given a specific task, "We make a banquet like a 'gotong-royong'. We don't book a caterer. Before the banquet, we made the meeting first for the part-time work. Who's the dishwasher... who supplies the food ..."

Although the majority of informants admitted the existence of the *al-ta'awun* concept or *'gotong-royong'* practiced by those living in rural areas or villages, however, this does not mean that urban folks do not implement this concept. This was evident when two informants from Pulau Pinang and Kuala Lumpur talked about carrying out their wedding feast through '*rewang'*. The informant from Pulau-Pinang (W-04, personal communication, May 19, 2015), W-04 said:

The cost for food is RM 7,000. We cook at home by ourselves. We make crabs, 'cendol' and rice with various dishes. This cost was only for cooking materials. There were no fees for cooking because this was done in a 'gotong-royong' fashion involving my mother's siblings. There is no such thing as catering of meals.

Based on the statement by W-04 above, it is understood that the practice of '*rewang'* carried out during his wedding feast had involved only family members and not the village community. This could be because the neighbourhood living culture among the urbanites differs from the village living culture. A similar situation was explained by H-27, who was one of the informants who celebrated his wedding feast in the middle of Kuala Lumpur. He (H-27, personal communication, September 5, 2015) said:

Banquets are not catered, so we cooked ourselves. Mum's siblings came home to help in the cooking. Although my home is in Kuala Lumpur, but my mum is a Kelantanese. My mum really likes to cook and prepare a feast. The neighbours also helped, but usually only one or two.

H-27's testimony confirms the existence of *al-ta'awun* participated by immediate family members. When looking at the location of the informant's wedding reception, which was in the town area, it is difficult to hold a feast applying the '*gotong-royong'* method. However, with a strong spirit of cooperation amongst his family members, they managed to organise the feast. Organising the event was made

easier since the informant's family is from Kelantan. The Kelantanese are famous for having a well-knit familial relationship.

The cost of the feast, as mentioned above, is rarely incurred by those organising a feast using the catering method, either it is held in the West or East Coast as well as whether it's the feast on the bride or bridegroom's side. The cost is far higher compared to a feast organised using the '*gotong-royong*' method. For example, H-30 (personal communication, September 20, 2015), had celebrated his wedding feast in Selangor by using a catering service that cost him RM20,000, whereas W-17 (personal communication, July 10, 2015) from Kelantan had spent approximately RM 19,000. This case clearly shows the difference in costs when most informants who organised their wedding feasts using the *al-ta'awun* concept had accumulated costs of under RM 10,000.

DISCUSSION

Based on the findings of this study, it is evident that the concept of *al-ta'awun* affects Malay wedding preparations. Family members, especially parents, and the local community, offer assistance in the form of monetary donations to cover wedding expenses and alleviate their burden. In Islam, the surrounding community, especially family members, neighbours and friends, are encouraged to help those who wish to marry and reduce the burden of their wedding expenses (Husayn, n.d.). *Al-ta'awun* in the form of donations from parents is included in the category of charity within the family. Charity among family members is highly encouraged in Islam because its reward (*pahala*) is double compared to charity to others (Al-Nawawi, n.d.a). Abi Asma al-Rahabiyy of Thawban reported that the Prophet (PBUH) said:

> "The most excellent dinar is one that a person spends on his family, and the dinar which he spends on his animal in Allah's path, and the dinar he spends on his companions in Allah's path." (Hadis narrated by Muslim, 2000, Kitab al-Zakah, Bab Fadl al-Nafaqah ala al-Iyal wa al-Mamluk, wa Ithm Man Dhayya'uhum aw Habas Nafaqatihim anhum, no. 2310)

The above hadith encourages spending for family members. According to Al-Basyuni (1988), the call to spend on family members is *sunat* in nature, but compulsory in some situations.

A unique form of *al-ta'awun* practiced by the local community occurred to three informants. The collaboration shown by these three community groups was in the form of group savings known as '*pakat* money' or '*pakatan* money'. Every member of the community agrees to contribute money to the informant to help manage the wedding expenses. This practice focuses on village folks who still place importance on the concept of social unity, neighbourliness and Rukun Tetangga, which is a unique practice that exists in each village folk. Moreover, this study has shown that urban dwellers who live far from a village surrounding and

in multi-storey apartments can apply the *al-ta'awun* concept by collecting money for a fund. The busy schedule of an urban dweller does not stop him or her from practicing noble neighbourliness values that is encouraged in Islam.

Such monetary donations are partly intended to assist in the banquet, and partly for the provision of supplies and gifts for guests. This is a local community initiative intended to reduce marriage costs, which is consistent with the recommended practice of Islam. Islam encourages the provision of assistance to those who wish to have a wedding reception (*walimah*) (Al-Nawawi, n.d.b) and a part of the Sunnah (Al-Basyuni, 1988). Allah (SWT) mentions in Holy Quran, "Help one another in righteousness and piety, but do not help one another in sin and transgression…" (Quran, 5: 2). On this basis, aid provided by the family and community is a virtue. Such assistance not only assists fellow Muslims but also cultivates a spirit of belonging in the community.

In reality, the concept of adopting the '*pakat* money' or '*pakatan* money' practice has existed in the Malay-Muslim culture for centuries. This is evident in the practice of '*khairat kematian*', which is a periodic collection of funds by a community to be used for burial purposes. According to Nasreen et al. (2019), the traditional practice of *'khairat kematian'*, which is managed by the surau or mosque committees, has long existed in the Islamic community. Each participant and his/her family members are entitled to free burial expenses because burial costs are accrued to the '*tabung khairat*'. This practice is also enjoyed by the working community and academicians, as practiced in an Institute of Higher Learning in Malaysia. Hasan and Rawi (2015) found that university staff and their family members had enjoyed benefits when the university management had introduced the '*khairat kematian*' scheme for all staff (Hasan & Rawi, 2015). The practice of '*pakat* money', '*pakatan* money' and '*khairat kematian*' by the Malay community is seen as a noble gesture in Islam because this gesture highlights the *al-ta'awun* concept.

This study also found that the *al-ta'awun* concept had motivated people to extend help by providing such wedding necessities as cooking ingredients and side dishes for weddings. It is not just goods that are contributed but services or their costs are also sometimes defrayed, such as payment for entertainment during the feast. Although the contribution is often only a fraction of the total cost, the *al-ta'awun* initiative by family members and neighbours reflects the spirit of mutual assistance. The entertainment component usually comprises wedding-theme music played by a male deejay, karaoke sessions for guests as well as musical, *nasyid* or *qasidah* performances. Even though *al-ta'awun* can be used to defray entertainment costs, Islam only allows entertainment that is halal in nature. Hence, if the performance comprises a mix of males and females or a female singer only, then this kind of performance is prohibited, and any related cost paid towards *al-ta'awun* is also prohibited.

The practice of *al-ta'awun* is consistent with the Sunnah of the Prophet (PBUH). One of his female companions once donated a meal to celebrate the wedding reception of the Prophet (PBUH) when he married Sayyidatina Zaynab bint Jahsh RA. This was narrated by Anas bin Malik (RA), who iterated that Prophet (PBUH) contracted to marry Zaynab bint Jahsh. Anas said:

> 'My mother, Umm Sulaym prepared *hais* and placed it in an earthen vessel and said to me: "O Anas! Take it to Prophet (PBUH) and say to Him: 'My mother has sent this to you. She is sending her kindest regards to you and says that it is a humble gift for you on our behalf, O Prophet (PBUH).'" So, I went along with it to Prophet (PBUH) and said: "My mother offers you salutations and says that it is a humble gift for you on our behalf." He said to me: "Put it there!" He also said: "Go and invite Abu Bakr, Umar, Uthman and Ali and everyone you can find!"' (Hadis narrated by Muslim (2000), Kitab al-Nikah, Bab Zawaj Zaynab Bint Jahsh, wa Nuzul al-Hijab, wa Ithbat Walimat al-Urs, no. 3507).

This story illustrates how Umm Sulaym helped the Messenger of Allah (PBUH) when he wanted to hold a wedding feast for his marriage with Sayyidatina Zaynab RA. Her assistance was not rejected but was accepted. Al-Nawawi, commenting on the above narrative, stated that the companions used to offer food for wedding feasts (Al-Nawawi, n.d.b). Such aid is a symbol of compassion and sharing of joy with the newlyweds (Ulwan, 1983). Apart from the event narrated by Ummu Sulaym, the concept of *al-ta'awun* is evident in the marriage of his daughter, Sayyidatina Fatimah (RA) and Sayyidina Ali (RA). In Ibn Sa'd's book *al-Tabaqat al-Kubra*, Abu Buraydah narrates that a friend named Sa'd had given them a goat. In addition to Sa'd, other companions also donated corn flutes (Ibn Sa'd, n.d.). The surrounding communities were very helpful in assisting them in their daily activities, including practice, during the wedding feast.

This study also found that the practice of '*gotong-royong*' by the local community, as described by the informants, is a form of *al-ta'awun* modelled after the marriage of Prophet Muhammad (PBUH) and his companions. The Prophet (PBUH) indirectly invited his companions to cooperate in holding his wedding feast. In the case of the Prophet's (PBUH) marriage with Sayyidatina Safiyyah bint Huyayy (RA), Anas (RA) reported that the Prophet (PBUH) set out on an expedition to Khaybar. Thabit said to him:

> 'O Abu Hamza, how much dower did he (the Prophet) give to her?' He said: 'He granted her freedom and then married her.' On the way, Umm Sulaym embellished her and then sent her to him (the Holy Prophet) at night. The Prophet (PBUH) appeared as a bridegroom in the morning. He (the Prophet) said: 'He who has anything (to eat)

> should bring that.' Then the cloth was spread. A person came with cheese, another came with dates, and still another came with refined butter, and they prepared *hais* and that was the wedding feast of Prophet (PBUH). (Hadis narrated by Muslim (2000), Kitab al-Nikah, Bab Fadilat al-I'taqih Ammatah thumma Yatazawwajuha, no. Hadis 3497).

This hadith shows the practice of *al-ta'awun* ('*gotong-royong*') when preparing a wedding feast (Al-Nawawi, n.d.b), just like the Prophet (PBUH) who sort his companions to assist him in preparing the wedding feast. The companions brought food to be cooked and spread the mats for the feast. Although the Prophet (PBUH) was their leader, he was not reluctant to seek help from his companions. Moreover, the '*gotong-royong*' concept was also present during the marriage of Rabi'ah al-Aslami. The Prophet (PBUH) ordered the companions to help each other in meeting the wedding expenses of Rabi'ah al-Aslami, who was his personal assistant.

In reference to this story, Imam Ahmad (1978) said that Rabi'ah al-Aslami was in a sombre mood when he met the Prophet (PBUH) to talk about the '*mas kahwin*' and '*walimah*' expenses. To relieve his anxiety, the Prophet (PBUH) ordered Buraydah al-Aslami to find and collect date palm seeds as dower, as well as a goat for Rabi'ah al-Aslami's wedding feast. He also asked Rabi'ah al-Aslami to meet Sayyidatina A'ishah (RA) and request some food ration. Finally, the gold collected by Buraydah al-Aslami was handed over to Rabi'ah al-Aslami's wife as dower. Whereas food stock in the form of wheat was given by Sayyidatina A'ishah (RA) to be turned into bread by Rabi'ah al-Aslami's wife, and the goat brought by Buraydah al-Aslami was slaughtered and cooked by Rabi'ah al-Aslami, assisted by some of the Bani Aslam. This interesting story illustrates how the Prophet (PBUH) applied the concept of *al-ta'awun* ('*gotong-royong*') among his companions. The distribution of tasks to each companion alleviated the burden of marriage expenses incurred by Rabi'ah al-Aslami.

In addition, findings that show the existence of the '*gotong-royong*' concept in some of the informant's communities also supports previous studies. According to Syed (1980), the '*gotong-royong*' concept applied during wedding receptions is a traditional practice among the Malay community. The distribution of tasks before the '*gotong-royong*' begins, as mentioned by the informant, is a method that has existed in Malay customs and culture. Amran (2002) stated that to successfully organise a wedding reception, some village heads were appointed to define the work and distribute tasks. Previous studies have also included the volunteerism concept in this practice. Amran (2002) further explained that the '*gotong-royong*' initiative carried out by the Malay community was voluntary. Those involved do not receive any wages unless it is a small amount of rice, drinks, cookies or eggs to take home.

CONCLUSION

Al-ta'awun is an Islamic concept and should be applied to defray wedding expenses and alleviate the burden of incurring huge wedding expenses by marrying couples. The findings of this study have proven that a community can realise this concept and its application has a positive impact on allaying wedding expenses. As mentioned above, by applying the '*pakat* money' concept, the bride and groom can reduce their overall wedding expenses. Its application also strengthens relationships among those who provide this assistance because they have a mutual understanding that they will help each other when they or their family members get married one day. For example, if the wedding cost, including food, entertainment and other expenses, is RM 20,000, the married couple must pay RM 10,000, whereas RM 10,000 comes from the '*pakat* money' or donations from family and friends. This would really be a relief for the marrying couple and their family because donations and contributions come collectively from many donors.

From an Islamic perspective, Muslims are a brotherhood, and thus, should be willing to help one another in times of need. Based on the Tauhidic belief regarding the Muslim brotherhood, this willingness to help and contribute is not only due to sharing a sense of human kindness but also the belief in Allah SWT. However, it should not solely be seen as a means to help people meet their marital expenses since *al-ta'awun* is a means of expressing obedience to Allah (SWT). More importantly, *al-ta'awun* should be emulated by Muslim societies from diverse backgrounds, and act as a catalyst for encouraging marriage among the young, as recommended by the Prophet (PBUH).

ACKNOWLEDGEMENT

This article is part of a PhD research entitled "Gelagat Perbelanjaan Perkahwinan Masyarakat Melayu Muslim Menurut Perspektif Syariah" (Marriage Spending Behavior among Malay Muslim Community from Shariah Perspective) submitted to University of Malaya supported by The Ministry of Higher Education (MOHE) and Universiti Sultan Zainal Abidin (UniSZA) under Higher Learning Academic Training Scheme (SLAI).

REFERENCES

Ahmad, I. H. (1978). *Musnad al-Imam Ahmad Ibn Hanbal wa bi hamishih muntakhab kanz al-ammal fi sunan al-aqwal wa al-af'al* [Musnad of Imam Ahmad Ibn Hanbal, with the margin of *muntakhab kanz al-ummal* in the sunan of words and deeds.] (Vol. 4). n.p.: Dar al-Fikr.

Al-Asqalani, A. I. A. I. H. (2001). *Fath al-Bari* [Victory of the Creator] (Abd al-Aziz ibn Baz and Muhammad Fu'ad Abd al-Baqi, Ed.) (Vol. 9). Cairo, Egypt: Maktabat al-Misr.

Al-Basyuni, S. A. A. M. (1988). *Al-hurriyyah al-iqtisadiyyah fi al-Islam wa atharuha fi al-tanmiyyah* [Economic freedom in Islam and its effects on development]. Cairo, Egypt: Dar al-Wafa'.

Al-Haddad, B. K. (2015). Qawa'id al-salam wa al-ta'awun fi al-nizam al-Islami [Method of peace and cooperation in Islamic system]. *Journal of Humanity Sciences, 19*(5), 85-102.

Al-Nawawi, A. Z. M. A. I. S. (n.d.a). *Al-Majmu'* by al-Nawawi commentary on Shirazi's Muhadhdhab, (Muhammad Najib al-Muti'i, Ed.) (Vol. 6). Mecca, Saudi Arabia: Maktabat al-Irshad.

Al-Nawawi, A. Z. M. A. I. S. (n.d.b). Sahih Muslim with the full commentary by Imam al-Nawawi (Vol. 7 & 9). Cairo, Egypt: Dar al-Taqwa.

Al-Nawwab, A. R. N. A. (1995). *Ta'akhkhur sinn al-zawaj* [Delay in marriage]. Riyadh, Saudi Arabia: Dar al-Asimah.

Amran, K. (2002). *Perkahwinan Melayu* [Malay wedding]. Kuala Lumpur, Malaysia: Dewan Bahasa dan Pustaka.

Bailey, C. A. (2007). *A guide to qualitative field research* (2nd ed.). California, USA: Pine Forge Press.

Boden, S. (2003). *Consumerism, romance, and the wedding experience.* New York, USA: Palgrave Macmillan.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27-40.

Chan, K., & Chan, S. F. (2002). Love and money: Chinese couples' decisions on wedding expenses. *Asia Pacific Advances in Consumer Research,* 5, 224-230.

Charless, S. (2018). Kin and non-kin cooperation in China. In S. Charless, J. Ellen & B. Eona (Eds.), *Cooperation in Chinese Communities: Morality and Practice* (pp. 1-18). New York, USA: Bloomsbury Academic.

Consumers Association of Penang. (1987). *Anda dan wang anda: Bagaimana menyimpan dan berbelanja dengan bijak* [You and your money: How to save and spend wisely]. Penang, Malaysia: Author.

Earl, B. (2005). *The basics of social research* (3rd ed.). USA: Thomson Wadsworth.

Fatimah, A. (2009). Dari halaman rumah ke Dewan Merak Kayangan [From home yard to Dewan Merak Kayangan]. *SARI Jurnal Alam dan Tamadun Melayu*, *27*(1), 97-107.

Fatimah, S. A. H., Mohd, Y. M. H., Fidlizan, M., Azila, A. R., & Nurhanie, M. (2019). Bank loan or financing for weddings ceremonies: Causes and reasons. *International Journal of Academic Research in Business & Social Sciences*, *9*(1), 950-958.

Fatimah, S. A. H., Mohd, Y. M. H., Fidlizan, M., Azila, A. R., Nurhanie, M., Choong, F. Y., & Mohamad, A. A. (2017). Analisis perbelanjaan perkahwinan Muslim dan bukan Muslim [Analysis of Muslim and non-Muslim marriage expenditure]. *Journal of Islamic Social, Economics and Development Academic Research in Business & Sciences*, *2*(6), 46-55.

Fatimah, S. A. H., Nurhanie, M., Fidlizan, M., Mohd, Y. M. H., Normala, Z., Norimah, R. R., & Mohamad, A. A. (2016). Analisis corak perbelanjaan perkahwinan dalam kalangan graduan [Wedding expenditure among graduates pattern analysis]. *Management Research Journal, 6*(1), 22-31.

Francis, B., Vijayendra, R., & Sonalde, D. (2004). Wedding celebrations as conspicuous consumption: Signaling social status in rural India. *Journal of Human Resources, 39*(3), 675-695.

Hasan, B., & Rawi, N. (2015). Dana khairat: Pengalaman institusi pengajian tinggi [Welfare funds: Experiences of higher education institutions]. In H. Bahrom, S. S. Suyurno, A. Q. A. Razak (Eds.), *Proceedings of the 1st International Islamic Heritage Conference* (pp. 515-519). Alor Gajah, Malaysia: Akademi Pengajian Islam Kontemporari (ACIS), UiTM Melaka.

Heather, S. (1981). *Rural Malay women in tradition and transition.* New York, USA: Praeger.

Husayn, M. Y. (n.d.). *Adab al-aqd wa al-zifaf fi al-Islam* [Etiquette of marriage contract and wedding ceremony in Islam]. Cairo, Egypt: Dar al-I'tisam.

Ibn Sa'd. (n.d.). *Al-tabaqat al-kubra* [The book of major classes] (Vol. 8). Beirut, Lebanon: Dar al-Sadir.

Isbindari, A. A. U. (2010, October). *Mafhum al-ta'awun fi daw' kuliyyat Rasa'il al-Nur li al-Nursi* [The concept of cooperation in the light of the Risale-i Nur collection by al-Nursi]. Paper presented at al-Mu'tamar al-Alami al-Tasi' li Badi' al-Zaman Sa'id al-Nursi in Istanbul, Turkey.

Jalila, H. (2008). *A Moroccan wedding ceremony between traditions and modernity: The role of women in the preparations* (Unpublished master's thesis), Universiti of Tromso, Norway.

Jane, B. R. (2007). Weddings, marriage and money in the United Arab Emirates. *Anthropology of the Middle East, 2*(1), 20-36.

Karafi, S. (2010). *Adat dan pantun perkahwinan Melayu* [Cultural norms and poem in Malay wedding]. Kuala Lumpur, Malaysia: Tinta Publishers.

Mohd, K. M. S., & Mohamad, F. S. (2016). Impian dan realiti majlis perkahwinan orang Melayu masa kini: Kajian kes di pinggir bandar Kuala Lumpur [Dreams and reality in contemporary Malay wedding ceremonies: A case study from suburban Kuala Lumpur]. *Geografia Online Malaysian Journal of Society and Space, 12*(7), 1-12.

Muhammad, I. I. (1981). *Min shari'at al-Islam wa sunnatih al-zawaj* [Marriage is part of the Islamic Law and the sunnah of the Prophet]. Cairo, Egypt: Dar al-Fikr al-Arabi.

Muhammad, S. (2014). Penegakan asas ta'awun dalam perjanjian utang piutang di pegadaian Syariah [Strengthening the foundation of cooperation in debt agreement according to Sharia pawnbroking.]. *Majalah Imliah Kultura, 15*(1), 4629-4635.

Muslim, A. A. M. I. A. I. (2000). Sahih Muslim. In S. I. A. A. Al-Shaykh (Ed.), *Mawsu'at al-Hadith al-Sharif: al-Kutub al-Sittah* (pp. 671-1218). Riyadh, Saudi Arabia: Dar al-Salam.

Nasreen, M. H. N., Maheran, K., Norajila, C. M., & Abd Halim, M. N. (2019). Social entrepreneurs' innovation in Islamic bereavement care services: issues and challenges. *Science International, 31*(3), 409-413.

Nurul, A. M. A., & Sanep, A. (2016). Skim zawaj: Produk perkhidmatan untuk perkahwinan [Zawaj scheme: Products services for marriage]. *Ulwan's Journal,* 1, 74-87.

Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling designs in qualitative research: making the sampling process more public. *The Qualitative Report, 12*(2), 238-254.

Otnes, C. C., & Pleck, E. H. (2003). *Cinderella dreams: The allure of the lavish wedding.* Berkeley, USA: University of California Press.

Qurratul, A. F. Y. (2011). Pendekatan as-Sunnah dalam menangani fenomena kahwin lewat di kalangan masyarakat Islam di Malaysia [Sunnah's approach in dealing with the phenomenon of late marriage among Muslim community in Malaysia.]. In F. Deraman, I. Suliaman, F. A. Shah (Eds.), *Sunnah Nabi: Realiti dan cabaran semasa* (pp. 291-302). Kuala Lumpur, Malaysia: Universiti Malaya.

Raihanah, A., Khairun N. S., & Raihana, A. W. (2009). Hubungan di antara faktor demografi dengan penentuan kadar hantaran: Kajian di Perlis, Kedah, Pulau-Pinang dan Perak [The relationship between demographic factors and determinants of bride price rates: A study in Perlis, Kedah, Pulau-Pinang dan Perak]. *Jurnal Fiqh,* 6, 107-124.

Sa'id, I. S. N. H. (2012). Ittijahat al-shabab nahw haflat al-zifaf al-jama'iyyah: dirasah wasfiyyah tahliliyyah ala tulab jami'ah al-Malik Khalid bi Madinah Abha – al-Mamlakah al-Arabiyyah al-Sa'udiyyah [*Young people's attitudes towards collective wedding ceremony/mass wedding ceremony:* Descriptive and analytical study on the students of King Khalid University in Abha]. *Al-Ijtima'iyyah,* 5, 10-54.

Selangor State Department of Mufti. (2010). *Government of Selangor Gazette Administration of The Religion of Islam (State of Selangor) Enactment 2003, Fatwa under Section 47.* Retrieved February 15, 2020, from http://www.muftiselangor.gov.my/awam/fatwa/fatwa-terkini/186-hukum-penetapan-kadar-maskahwin-bagi-negeri-selangor

Syed, A. S. A. (1980). *Adat resam dan adat istiadat Melayu* [Malay customs and traditions]. Kuala Lumpur, Malaysia: Dewan Bahasa dan Pustaka.

Syh, N. M. S. H., Raihanah, A., Asmak, A. R. (2014). The concept of *al-taysīr* (facilitation) in Islamic marriage expenses. *Jurnal Syariah*, *22*(3), 323-354.

Tan, A. F., & Mialon, H. M. (2015). 'A diamond is forever' and other fairy tales: The relationship between wedding expenses and marriage duration. *Economic Inquiry, 53*(4), 1919-1930.

Ulwan, A. N. (1983). *Adab al-khitbah wa al-zifaf wa huquq al-zawjain* [Etiquette of marriage contract and wedding ceremony in Islam]. Cairo, Egypt: Dar al-Salam.

Zainorinyana, J. Y., & Vivien, W. C. Y. (2017). Amalan rewang dalam masyarakat Jawa di Malaysia [The practice of rewang among Javanese community in Malaysia]. *Geografia Online Malaysian Journal of Society and Space, 13*(3), 53-64.

Zar'um, A. A. M. A. (2016, December). *Al-ta'awun bayn al-thaqafat wa al-adyan: Ru'yah Islamiyyah alamiyyah* [Cooperation between cultures and religion: A global Islamic vision]. Paper presented at al-Mu'tamar al-Dawli al-Awwal Hawl al-Islam wa al-Qadaya al-Mu'asarah fi al-Alam al-Islami: Afaq wa Tahaddiyat al-Mustaqbal, University of Malaya, Kuala Lumpur, Malaysia.

Zurita, M. Y. (2008). Amalan pemberian mas kahwin di Malaysia [The practice of giving dower in Malaysia]. *Jurnal Islam & Masyarakat Kontemporari*, 1, 43-57.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1485 - 1505 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Independent Corporate Governance Organs' Activities, Tax Avoidance, and Country Tax Environment: Evidence from ASEAN Countries

Oktavia

Department of Accounting, Faculty of Economics and Business, Universitas Kristen Krida Wacana, Jakarta 11470, Indonesia

ABSTRACT

This study aimed to examine the effect of independent corporate governance organ activities (including the busyness level and political connections of independent directors and audit committee) on the level of tax avoidance. In addition, this study also examined the effect of a country's tax environment on the relationship between independent corporate governance organ activities and the level of tax avoidance. This paper used cross-country analysis with the scope of countries in the ASEAN region, consisting of the Philippines, Indonesia, Malaysia, Singapore, and Thailand. The results of this study showed that the busyness level and political connections of independent directors and the audit committee positively affected the company's tax avoidance level in a country with an uncompetitive tax environment. On the other hand, the busyness level and political connections of independent directors and the audit committee did not affect the company's tax avoidance level in a country with a competitive tax environment. The findings prove that the relationship between independent corporate governance organ activities and company tax avoidance activities is affected by the country's tax environment. This study is the first to examine the role of a country's tax environment on the relationship between independent corporate governance organ activities and tax avoidance levels.

Keywords: Corporate governance, busyness level, political connection, tax avoidance, tax environment

ARTICLE INFO

Article history:
Received: 29 July 2019
Accepted: 10 December 2019
Published: 26 June 2020

E-mail address:
oktavia@ukrida.ac.id

ISSN: 0128-7702
e-ISSN 2231-8534

INTRODUCTION

Effective corporate governance can minimize company management behaviors that are opportunistic and may be detrimental to shareholders' interest. There is concrete evidence that management plays a role

© Universiti Putra Malaysia Press

in tax avoidance such as the Starbucks scandal. In 2012, Starbucks hit the headline of global news for its corporate tax. The sales of Starbuck were £400 million, but it reported no corporate tax paid (Barford & Holt, 2013).

The management has the power to ratify and monitor tax decisions. Several empirical research shows corporate governance affects tax avoidance (e.g., Desai & Dharmapala, 2006; Lanis & Richardson, 2011). Based on sample 32 corporations, Lanis and Richardson (2011) showed that association between the outside board of directors and tax aggressiveness was statistically negative significant.

It is necessary to develop effective corporate governance because it can enhance the monitoring of tax activities. Oktavia (2017) noted that tax avoidance activities were one of the opportunistic activities, sometimes for efficiency purposes. Companies' opportunistic undertakings such as aggressive tax avoidance activities can be harmful to shareholders because companies need to bear those losses in the form of future tax penalties, and possibly, even damaged reputations (Oktavia, 2017). High-level tax avoidance can also result in low-quality company earnings (Hanlon, 2005) which may be unfavorable to the shareholders since the information about the earnings of the companies can misinform them.

In today's corporate governance environment, the agency conflicts between shareholders and management are difficult to minimize trough conventional mechanism. Independent corporate governance organs such as independent directors and independent audit committees are employed as monitors to mitigate agency problems such as tax avoidance actions.

Hiring independent corporate governance organs as a bonding mechanism may enhance information quality and potentially provides mitigation to undertakings aggressive tax avoidance activities, which possibly, damaged corporate reputations. In this article we investigated whether corporate governance in the context of independent corporate organ's activities had an impact on companies' tax avoidance level. Based on this argument, the current study aimed to examine the effect of independent corporate governance organs' activities on the companies' tax avoidance level.

The reason behind this investigation is tax avoidance is not illegal but it is classified into two groups, acceptable tax avoidance and unacceptable tax avoidance (Santoso & Rahayu, 2013). The focus of this paper is unacceptable tax avoidance. Santosa and Rahayu (2013) also pointed out several characteristics of unacceptable tax avoidance. First, it did not have a good business purpose. Second, it was solely to avoid taxes. Third, it did not accord with the spirit & intention of parliament. Four, there was transaction manipulation that incurs costs or losses. Although tax avoidance is not illegal, the public perceives that tax

avoidance crosses a line and judges that tax avoidance is morally unacceptable (Barford & Holt, 2013).

A number of previous studies focus on the relationship between corporate governance and tax avoidance (Rajpal, 2012; Sarkar et al., 2006) or political connection and tax avoidance (Khlif & Amara, 2019), and the impact of the environment on the tax avoidance and corporate governance interplay. Jiménez-Angueira (2018) pointed out that relative to other firms, a weak-governance firm might exhibit lower tax avoidance in response to tight external oversee. Different from Khlif & Amara (2019) which used corruption level as moderating variable, and also different from Jiménez-Angueira (2018) which used external monitoring as a moderator, this paper used a tax environment level as moderating effect.

Yee et al. (2018) also examined the moderating impact of corporate governance on the relationship between tax avoidance and firm value. Based on 87 Malaysian Public Listed Companies (PLCs), tax avoidance activity would actually negatively affects firm value and corporate governance had a moderator effect on this relationship. Most importantly, this paper provides more explanation to the current stream of literature especially the relationship between good governance, tax avoidance, and the tax environment.

This study took into consideration the respective country's tax environment and its effects on the relationship between independent corporate governance organs' activities and the tax avoidance level. In addition, the current study is different from previous studies in several ways. First, previous studies examining the effect of corporate governance on tax avoidance activities had measured corporate governance by using the existence, number, or proportion of corporate governance organs in a company. This study, in contrast, measures corporate governance by using independent corporate governance organs' activities (i.e., the busyness level and the political connections of the corporate governance organs) to examine the effect of corporate governance on tax avoidance activities. Second, although Sarkar et al. (2006) and Rajpal (2012) had measured corporate governance in the context of India by using the busyness level of independent directors, their research only associated the busyness level of independent directors to earnings management activities. Unlike them, this study examines the effect of the busyness level of independent corporate governance on tax avoidance activities. Third, previous studies (Christensen et al., 2015; Kim & Zhang, 2016; Leuz & Oberholzer-Gee, 2006) may have investigated the effect of political connections on tax avoidance activities, but their research did not specifically test the effect of the political connections of the independent corporate governance organs. Fourth, corporate governance may have

been measured by the busyness level of corporate governance organs by Cashman et al. (2012), but their study only associated the activity level of corporate governance organs with company performance.

Thus, this study would be able to contribute new knowledge based on different aspects. First, this study is among the few to examine the effect of the busyness level and political connections of the independent corporate governance organs on tax avoidance activities. A review of the current literature indicates that no study has particularly linked the busyness level and the political connections of the independent corporate governance organs with tax avoidance activities. In the context of this study, the corporate governance organs being examined here only focuses on corporate governance organs from external parties. The reason is that these parties are more independent when compared to other governance organs. The existence of an independent party as a corporate governance instrument will certainly increase the effectiveness of the company's monitoring, and this, inevitably, reduces the company management's behavior which may potentially harm investors. If independent directors and the audit committee were too busy, their company monitoring duties can be neglected, and they may fail to realize that the company management is carrying out overly aggressive tax avoidance activities.

Second, this study uses a cross-country analysis of the ASEAN region. The diversity of the economic levels among countries in the ASEAN region (Singapore is a developed country while Malaysia, the Philippines, Indonesia, and Thailand are developing countries of varying degrees) as well as their diversity of tax environment characteristics (Malaysia and Singapore are countries with competitive tax environment; the Philippines, Indonesia, and Thailand are countries with less competitive tax environment), are expected to provide an interesting input on the relationship between corporate governance and tax avoidance activities in the ASEAN region.

Third, this study also focuses on the respective country's tax environment factor in examining the relationship between corporate governance and tax avoidance activities. Countries with a competitive tax environment provide a variety of tax facilities which can reduce the companies' tax burden such as exemption from tax for revenues originating from foreign countries or exemption from tax for shareholders' income that come in the form of dividends. Further to this, the compensation period of loss for companies is indefinite, hence companies have the flexibility to compensate for their fiscal losses. This study, therefore assumes that in a country with a competitive tax environment, the role of the independent governance organs can be replaced by such favorable tax facilities.

The rest of the paper is organized as follows. Section 2 critically evaluates the relationship between the busyness of independent corporate governance organs' activities and the tax avoidance level. Furthermore, this chapter also discusses the

relationship between the political connection of independent corporate governance organs' activities and the tax avoidance level. In addition, this section also provides a critical evaluation of the relationship between the country's tax environment, the independent corporate governance organs' activities, and the tax avoidance level. Section 3 provides a brief overview of the sample selection and research model. Section 4 presents the result and discussion, while section 5 summarizes the empirical result and provides conclusions and remarks.

LITERATURE REVIEW AND HYPOTHESIS

Effect of the Independent Corporate Governance Organs' Activities on the Tax Avoidance Level

Hanlon (2005) had noted that the greater the difference was between the taxable income and the accounting income, the lower the quality of the company earnings figure. As the difference between the taxable and accounting income is a measure of tax avoidance, the findings of Hanlon (2005) thus indicated that companies with high-level tax avoidance had lower earnings quality when compared to companies with low tax avoidance levels.

This study investigates the effect of corporate governance on tax avoidance activities by measuring corporate governance through the independent corporate governance organs' activities. These activities include the busyness level and the political connections of the independent corporate governance organs. The importance of measuring corporate governance from the busyness level of independent corporate governance organs is based on several reasons. First, the busyness of independent governance organs can hinder the capital market supervisor's authority in creating good corporate governance which serves as a protection mechanism for investors in the capital market. If the independent directors and audit committee have a lot of work to do outside of the companies they are attached to, their responsibility in monitoring the companies' activities tend to be neglected. This oversight can potentially cause them to be less attentive towards their duty of detecting any aggressive tax avoidance activities conducted by the company's management. Based on this argument, the following hypotheses were formulated:

H1a: The busyness level of the independent directors has a positive effect on the tax avoidance level.

H1b: The busyness level of the audit committee has a positive effect on the tax avoidance level.

Measuring corporate governance from the political connections maintained by independent corporate governance organs is equally important. This is because political connections can positively and negatively affect tax avoidance activities (Jian et al., 2012; Pranoto & Widagdo, 2016). In their study, Jian et al. (2012) argued that Chinese companies with political connections were able to conduct political lobbying for the purpose of avoiding tax audits. According to Pranoto and Widagdo (2016), when political

connections increase tax aggressiveness, the effect of the political connections on tax avoidance activities is known as "political favoritism effect". Similarly, Khlif and Amara (2019) stated that the association between political connections and tax evasion was positive. It also documented that high corrupt environment strengthened this association.

Jian et al. (2012) also contended that political connections could negatively affect tax avoidance activities since the Chinese government provided incentives in the form of rewards to the largest taxpayers, thereby encouraging companies to optimally contribute towards fulfilling their tax payments. This makes the public reacts to those companies positively. If political connections help to reduce companies' tax aggressiveness, the effect of the political connections on tax avoidance activities is known as the "bureaucratic incentive effect" (Pranoto & Widagdo, 2016).

In line with the arguments of Jian et al. (2012) and Pranoto and Widagdo (2016), this study asserts that political connections can positively and negatively affect the level of tax avoidance. Politically connected independent corporate governance organs can lobby tax authorities when their companies are facing tax audits, thereby motivating the management to be more aggressive in conducting tax avoidance activities. On the other hand, politically connected independent corporate governance organs are more likely to be careful in taking actions since they are aware that their actions are in the public's spotlight, and they also need to maintain a good public image. This occurrence is likely to motivate the companies to oppose the overly aggressive tax avoidance activities, an action which can be detrimental to both the state income and the investors. Based on this argument, the following hypotheses were formulated:

H2a: The political connections of the independent directors affect the tax avoidance level.

H2b: The political connections of the audit committee affect the tax avoidance level.

Effect of the Country's Tax Environment on the Independent Corporate Governance Organs' Activities and Tax Avoidance Level Relationship

This study assumes that a country's tax environment characteristic can affect the relationship between the independent corporate governance organs and the tax avoidance level. The more competitive a country's tax environment is, the lesser the role of the independent corporate governance organs in reducing aggressive tax avoidance activities.

Companies from a competitive tax environment have the flexibility to compensate for their fiscal losses since the compensation period for losses within those countries is indefinite (Setyowati, 2014). Based on these benefits, the current study predicts that in countries with a competitive tax environment, the role of the independent corporate governance organs in reducing aggressive tax avoidance activities can be replaced by those tax facilities that are beneficial to the companies. Also, countries

with a competitive tax environment are usually developed countries which generally also implement a much better investor protection scheme than developing countries.

Based on the previous argument, the role of the tax environment is a moderating variable on the relationship between the busyness of the independent corporate governance organs and aggressive tax avoidance activities. It means that a competitive tax environment provides a much better investor protection scheme, in turn, independent corporate governance organs and political connections have less impact on tax avoidance. Finally, the busyness of the independent corporate governance organs in order to conduct aggressive tax avoidance activities for tax payment savings is lower in the competitive tax environment. On the basis of this argument, the following hypotheses were thus formulated:

H3a: The competitive tax environment weakens the positive effect of the busyness level of the independent directors on the tax avoidance level

H3b: The competitive tax environment weakens the positive effect of the busyness level of the audit committee on the tax avoidance level

H4a: The competitive tax environment weakens the effect of the political connections of the independent directors on the tax avoidance level.

H4b: The competitive tax environment weakens the effect of the political connections of the audit committee on the tax avoidance level.

METHODS

Sample Selection

The sample population used in this study was obtained from those companies listed on the stock exchange in the ASEAN countries that have stock exchanges (i.e. the Philippines, Indonesia, Malaysia, Singapore, Thailand, and Vietnam). However, Vietnam was excluded because the majority of the companies' annual reports were in Vietnamese. The sampling criteria developed for the current study include: (i) Companies that were not part of the financial industry; (ii) Companies that calculated their taxable income normally on the basis of their net income and used normal corporate income tax rates; and (iii) Companies that have the English version of their annual reports with complete data. Table 1 presents the sample selection process.

Table 1

Sample selection process

	Philippines	**Indonesia**	**Malaysia**	**Singapore**	**Thailand**
Number of non-financial institutions listed on the Stock Exchange in 2016	214	472	884	681	669

Table 1 *(Continued)*

	Philippines	Indonesia	Malaysia	Singapore	Thailand
Companies that calculate their taxable income based on gross revenue or subject to special income tax rates	(83)	(142)	(185)	(180)	(172)
Total full samples	**131**	**330**	**699**	**501**	**497**
Number of observations for 5 years (f*ull samples* x 5)	655	1650	3495	2505	2485
Number of incomplete data	(337)	(886)	(768)	(807)	(1500)
Final observations per country	**318**	**764**	**2727**	**1698**	**985**
Final observations for all countries			**6492**		

Research Model

To examine the relationship between the independent corporate governance organs' activities (i.e. the activity level and political connections of independent directors and audit committee), and the tax avoidance level (H1a, H1b, H2a, and H2b), Equation (1) noted below, was applied. To test this equation (1), the current study used 6492 firm-year of the final observations which were obtained from all the sample countries.

$$TAXVOID_{it} = \alpha_0 + \alpha_1 BUSYDIR_{it} + \alpha_2 BUSYCOM_{it} + \alpha_3 POLDIR_{it} + \alpha_4 POLCOM_{it} + \alpha_5 SIZE_{it} + \alpha_6 ROA_{it} + \alpha_7 DTA_{it} + \alpha_8 TAXRATE_{it} + \alpha_9 COUNTRY_{it} + \alpha_{10} YEAR_i + \varepsilon_{it} \quad (1)$$

TAXVOID is the level of tax avoidance. It was measured by using the absolute value of the BTD (*Book-Tax Difference*) which was calculated by using the difference between the accounting income, and the taxable income. Hanlon (2005), Hanlon et al. (2012), and Joos et al. (2000), in their studies, had converted the absolute values into large BTD where both the negative and positive would indicate a low quality of earnings. Tang and Firth (2012) also converted the BTD into absolute values in their study, based on the grounds that large positive BTD is the result of increasing the accounting income, and the aggressive tax reporting. In contrast, the large negative BTD is the result of reducing the

accounting income, and the taxable income smoothing practices.

BUSYDIR is the busyness level of the independent directors. It was measured by using the average number of jobs or positions outside the company held by the independent directors. BUSYCOM is the busyness level of the audit committee. It was measured by the average number of jobs or positions outside the company held by the audit committee. This corporate governance measurement is consistent with Cashman et al. (2012) when investigating the association between the activity level of corporate governance organs and company performance. An Independent busy board means the independent director or audit committee hold multiple seats. Some argue that the over-busyness board is ineffective, in turn, affects company quality of managerial oversight. This measurement was also used by Ahn et al. (2010) for examining the relationship between multiple directorships and acquirer returns. In addition, Jiraporn et al. (2009) also used the busyness board as governance measures. It indicates that individuals who held multiple outside directorships seats perceived less effectively conduct monitoring function. Finally, using board busyness as the measurement is consistent with previous and recent literature.

POLDIR is the political connection of the independent director. POLDIR served as a dummy variable 1, if there was at least one independent director with a political connection, and 0 if otherwise. POLCOM acts as the political connection of the audit committee. POLCOM serves as a dummy variable 1, if there was at least one member of the audit committee with a political connection, and 0 if otherwise. SIZE is the natural logarithm of the company's total assets. ROA is the returns on the total assets ratio. DTA is the total debts to the total assets ratio. TAXRATE is a statutory corporate income tax rate applicable in each country. COUNTRY is a dummy variable for each country. YEAR is a dummy variable for the observation years.

In order to examine the role of the country's tax environment and its relationship between the independent corporate governance organs' activities and the tax avoidance level (H3 and H4), this study re-examined equation (1). The differences from the hypotheses testing of H3a, H3b, H4a, and H4b with the previous tests were then noted as follows: (i) Tests were conducted for each country; (ii) COUNTRY variables in equation (1) were not included in the hypotheses testing of H3 and H4; and (iii) Testing was done by grouping the sample countries into two groups - "countries with competitive tax environment" and "countries with less competitive tax environment".

The present study used three characteristics: **(1) T**ax basis: Tax basis in the ASEAN countries consists of two systems: "the worldwide income system" and the "territorial & remittance basis". In the worldwide income system, taxes are imposed on all incomes of the resident companies (including income obtained from foreign countries). In the territorial

and remittance basis system, the state only collects taxes on income earned within its jurisdiction (Setyowati, 2014). **(2) The imposition of income tax on the dividends**: Malaysia and Singapore grant a facility to waive income tax on dividends (Setyowati, 2014). Through the provision of the income tax exemption on dividends' facility, Singapore and Malaysia are highly competitive in terms of tax when compared to the other ASEAN countries of the Philippines, Indonesia, and Thailand. **(3) Fiscal loss compensation period**: Malaysia and Singapore offer taxpayers the flexibility of carrying-forward the compensation for losses, for indefinite periods of time (Setyowati, 2014). Table 2 further demonstrates the scenario.

The variations of the two groups of countries - "countries with competitive tax environment" and "countries with less competitive tax environment" are highlighted in Table 2. As "countries with a competitive tax environment", both Malaysia and Singapore were also deemed to be more developed, offering high levels of investor protection. In comparison, as "countries with a less competitive tax environment", the Philippines, Indonesia, and Thailand were considered to be less developed, offering low levels of investor protection (http://data.worldbank.org; www.financialfreedomindex.com).

Table 2

Countries with a competitive tax environment versus countries with less competitive tax environment

Characteristics	Malaysia	Singapore	The Philippines	Indonesia	Thailand
Tax Basis	*Territorial & remittance basis*	*Territorial & remittance basis*	*Worldwide Income*	*Worldwide Income*	*Worldwide Income*
Imposition of income tax on dividends	Exempted	Exempted	Not exempted	Not exempted	Not exempted
Fiscal loss compensation period	Indefinite	Indefinite	Definite	Definite	Definite
Country category	Countries with a competitive tax environment		Countries with less competitive tax environment		
Economic category	Developed countries		Developing countries		
Investor protection level	High		Low		

RESULTS AND DISCUSSION

Descriptive Statistics

Table 3 demonstrates the outcomes of the analysis. Here, it is noted that the TAXVOID variables have an average value of 24.1968 and a standard deviation value of 2.0178. These two statistics indicated a fairly high variation in the level of tax avoidance performed by the companies. It can be noted from Table 3 that the busyness level of the independent directors (BUSYDIR) had a minimum value of 1, and a maximum value of 31.5 while the busyness level of the audit committee (BUSYCOM) had a minimum value of 1, and a maximum value of 49.5. It was further identified that BUSYDIR and BUSYCOM were highest in the Philippines while the SIZE variables carried a fairly high variation, from the smallest value of 15.1568 to the highest of 34.4787, with an average value of 27.9440. It was further noted that ROA had an average value of 0.0211, with a standard deviation of 0.1988, and DTA had an average value of 0.4337 with a standard deviation of 0.3020. The positive average value of ROA indicated that in general, the companies sampled in this study generated profits.

Table 3

Descriptive statistics

Variable	N	Mean	Median	Min.	Max.	Std. Dev.
TAXVOID	6492	24.1968	24.1495	13.7479	31.1518	2.0178
BUSYDIR	6492	2.9327	2.5000	1.0000	31.5000	1.9951
BUSYCOM	6492	2.6126	2.0000	1.0000	49.0000	2.1991
POLDIR	6492	0.2298	0.0000	0.0000	1.0000	0.4208
POLCOM	6492	0.2425	0.0000	0.0000	1.0000	0.4286
SIZE	6492	27.9940	27.8211	15.1568	34.4787	1.7020
ROA	6492	0.0211	0.0370	-1.7016	0.9386	0.1988
DTA	6492	0.4337	0.4159	0.0045	1.5663	0.3020

Correlation Results

Table 4 is provided below to show the correlations between the variables in this study. The two variables of BUSYDIR and BUSYCOM were positively and significantly correlated with the TAXVOID variables. These results signified that the higher the busyness level of the independent directors and the audit committee was, the higher the level of tax avoidance. Further, the POLDIR and POLCOM variables were positively and significantly correlated with the TAXVOID variables while SIZE had a negative and significant correlation with TAXVOID. The ROA and DTA carried a positive and significant correlation with TAXVOID. Consequently, it can be detected that the correlation values between the independent variables did not exceed 0.8 which implied that the models used for the hypotheses testing in this study did not suffer from multicollinearity problems.

Table 4
Correlation matrix

	TAXVOID	BUSYDIR	BUSYCOM	POLDIR	POLCOM	SIZE	ROA	DTA
TAXVOID	1							
BUSYDIR	***0.1375	1						
BUSYCOM	***0.1032	***0.7433	1					
POLDIR	***0.1132	***0.1059	***-0.0375	1				
POLCOM	***0.1242	***0.0328	-0.0068	***0.7016	1			
SIZE	***-0.6749	***0.2023	***0.1727	***0.1378	***0.1681	1		
ROA	***0.0887	***0.0613	***0.0822	-0.0057	0.0125	***0.1944	1	
DTA	***0.2268	**0.0291	**0.0264	***0.0477	***0.0713	***0.1858	***-0.3194	1

Note: *) **) ***) Significant at 1%, 5%, and 10%, respectively, two-tailed test

Regression Results

Effect of the Busyness Level of the Independent Corporate Governance Organs on the Tax Avoidance Level. Table 5 shows that BUSYDIR had an insignificant coefficient when the testing was carried out by using observations from all sample countries. The findings indicated that the busyness level of the independent directors did not affect the tax avoidance level. Based on these findings, it can be concluded that hypothesis H1a was not supported. As can be noted in Table 5, BUSYCOM had a positive and significant coefficient which indicated that the busyness level of the audit committee had a positive and significant effect on the tax avoidance level. This is consistent with hypothesis H1b.

In Table 5, it can also be seen that SIZE had a negative and significant coefficient. This result is consistent with Oktavia's (2017) argument stating that bigger company size leads to greater public attention. This can consequently cause the company to be more careful in taking action. ROA was found to have a positive and significant effect on the tax avoidance level. This is consistent with the findings of Gupta and Newberry (1997). This outcome indicated that the higher the profits obtained by the company, the higher the tax avoidance level. DTA was also found to have a positive and significant effect on the tax avoidance level, hence this proved that the higher the level of debts maintained by the company, the higher its tax avoidance

level. In the results shown, it was noted that TAXRATE had no significant effect on the tax avoidance level.

The insignificance of the BUSYDIR variable can be traced to the observations used in the test, which had combined the observations of all the sample countries. Nevertheless, each country has a different tax environment characteristic with different economic levels. Therefore, the tests would seem inappropriate if they did not also consider the characteristic differences between the countries. Separate testing for each country as well as for the groups of countries sharing the same characteristics was therefore required.

Table 5

Regression results - all samples

Equation (1)

$TAXVOID_{it} = \alpha_0 + \alpha_1 BUSYDIR_{it} + \alpha_2 BUSYCOM_{it} + \alpha_3 POLDIR_{it} + \alpha_4 POLCOM_{it} + \alpha_5 SIZE_{it} + \alpha_6 ROA_{it} + \alpha_7 DTA_{it} + \alpha_8 TAXRATE_{it} + \alpha_9 COUNTRY_{it} + \alpha_{10} YEAR_i + \varepsilon_{it}$

Variables	Predicted Sign	Coefficient	t-statistic
Intercept	+/-	24.0528	***147.52
BUSYDIR	+	0.0093	0.65
BUSYCOM	+	0.0615	***4.07
POLDIR	+	0.0323	0.38
POLCOM	+	0.0355	0.45
SIZE	-	-0.8283	***-62.96
ROA	+	2.0632	***9.66
DTA	+/-	0.1870	***3.08
TAXRATE	+/-	5.5724	1.25
COUNTRY		Yes	
YEAR		Yes	
N		6492	
R Square		51.75%	
F Stat		***364.10	

Note: *) **) ***) Significant at 1%, 5%, and 10%, respectively, one-tailed test

Effect of the Political Connections of the Independent Corporate Governance Organs on the Tax Avoidance Level.

Table 5 indicates that the POLDIR and POLCOM variables had insignificant coefficients. These results indicated that the political connections held by the independent directors, and the audit committee did not affect the companies' tax avoidance level. Thus, hypotheses H2a and H2b in this study were not supported. The insignificance of POLDIR and POLCOM was most likely caused by the outcome of the observations,

which comprised the observations obtained from all sample countries where each sample country possessed different tax environment characteristics and different economic levels. In this regard, it would be quite inaccurate if the tests did not consider the differences in characteristics among the sample countries.

Table 6 presents the test results derived for each sample country while Table 7 presents the test results derived for the groups of countries (Countries with a competitive tax environment versus Countries with less competitive tax environment).

Effect of a Country's Tax Environment on the Tax Avoidance Level. Table 6 highlights that in Indonesia, the Philippines, and Thailand, BUSYDIR and BUSYCOM had a positive and significant effect on the tax avoidance level. In the case of Malaysia and Singapore, however, BUSYDIR and BUSYCOM did not affect the companies' tax avoidance level. As noted in Table 6 too, Indonesia, the Philippines, and Thailand had POLDIR and POLCOM revealing their positive and significant effect on the companies' tax avoidance level whereas, for Malaysia and Singapore, the tax avoidance level was not affected by POLDIR and POLCOM. These results indicated that hypotheses H1 and H2 were only supported for the countries of Indonesia, the Philippines, and Thailand whereas they were not supported in the case of Malaysia and Singapore. This finding further suggested that a country's tax environment has an effect on the relationship between the independent corporate governance activities and corporate tax avoidance activities.

On top of being countries with a competitive tax environment, both Malaysia and Singapore are also considered as developed countries. According to the 2017-2018 Global Competitiveness Index, Malaysia and Singapore are countries with a high level of investor protection, with Singapore ranking first and Malaysia ranking third (https://tcdata360.worldbank.org). This means that even though the independent corporate governance organs in these two countries may be significantly busy or they may have political connections with the government, their companies were well protected due to the countries' excellent investor protection (supported by strict law enforcement in the country). It was thus clear that companies operating in these two countries were more likely to monitor their own actions from being deviant because company actions that caused detrimental effects to their investors would have to bear severe legal consequences.

To further strengthen the evidence that a country's tax environment can influence the relationship between the independent corporate governance organs' activities and the corporate tax avoidance activities, this study also conducted a test with the two groups of ASEAN countries. Table 7 shows that in countries with a competitive tax environment, the busyness level of the independent directors and the audit committee did not affect the companies' tax avoidance level. In contrast, the busyness level of the independent directors and

Table 6

Regression results – each sample country

$TAXVOID_{it} = \alpha_0 + \alpha_1 BUSYDIR_{it} + \alpha_2 BUSYCOM_{it} + \alpha_3 POLDIR_{it} + \alpha_4 POLCOM_{it} + \alpha_5 SIZE_{it} + \alpha_6 ROA_{it} + \alpha_7 DTA_{it} + \alpha_8 YEAR_i + \varepsilon_{it}$

Variables	Prediction Sign	Indonesia		Philipines		Thailand		Malaysia	
		Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept	+/-	23.8376	***125.81	25.3714	***85.71	23.6066	***83.40	23.6780	***232.43
BUSYDIR	+	0.1147	***3.52	0.0662	***3.45	0.0384	**2.11	0.0382	0.97
BUSYCOM	+	0.1506	***3.56	0.0264	*1.36	0.0645	***3.42	0.0336	0.82
POLDIR	+	0.6567	***3.69	0.2032	**2.13	0.2289	*1.36	0.0761	0.21
POLCOM	+	0.2124	*1.40	0.4334	**1.70	0.1572	*1.53	0.1803	0.50
SIZE	-	-0.9090	***-24.39	-0.9396	***-21.34	-0.9518	***-22.19	-0.7889	***-38.81
ROA	+	2.5380	***3.50	2.9660	***3.10	1.8349	**2.17	3.3569	***11.35
DTA	+/-	0.2779	***3.82	0.4473	*1.48	0.3815	1.24	0.2380	**1.67
YEAR		Yes		Yes		Yes		Yes	
N		764		318		985		2727	
R Square		55.30%		70.51%		46.72%		50.00%	
F Stat		***81.81		***90.82		***77.36		***203.66	

Note: *) **) ***) Significant at 1%, 5%, and 10%, respectively, one-tailed test

Table 6 *(Continued)*

$TAXVOID_{it} = \alpha_0 + \alpha_1 BUSYDIR_{it} + \alpha_2 BUSYCOM_{it} + \alpha_3 POLDIR_{it} + \alpha_4 POLCOM_{it} + \alpha_5 SIZE_{it} + \alpha_6 ROA_{it} + \alpha_7 DTA_{it} + \alpha_8 YEAR_i + \varepsilon_{it}$

Variables	Singapura	
	Coeff.	t-stat
Intercept	24.5202	***149.46
BUSYDIR	0.0030	0.12
BUSYCOM	0.0141	0.47
POLDIR	0.0667	0.49
POLCOM	0.1084	0.78
SIZE	-0.7754	***-32.62
ROA	1.7719	***8.90
DTA	0.0458	0.33
YEAR	Yes	
N	1698	
R Square	48.16%	
F Stat	***129.38	

Note: *) **) ***) Significant at 1%, 5%, and 10%, respectively, one-tailed test

the audit committee had positively and significantly affected the corporate tax avoidance level in countries with a less competitive tax environment. These findings indicated that the positive effect of the busyness level of the independent directors and the audit committee on tax avoidance level was weaker in countries with a competitive tax environment as compared to countries with a less competitive tax environment. Based on these findings, hypotheses H3a and H3b in this study were supported.

Table 7 also shows that in countries with a competitive tax environment, the political connections maintained by the independent directors and the audit committee did not affect the tax avoidance level. On the contrary, in countries with a less competitive tax environment, the political connections of the independent directors and the audit committee positively and significantly affected the tax avoidance level. These findings demonstrated that the positive effect of the political connections held by the independent directors and the audit committee on the tax avoidance level was lower in countries with a competitive tax environment than in countries with a less competitive tax environment. Thus, hypotheses H4a and H4b were supported.

Table 7

Regression Results – Countries with a competitive tax environment versus Countries with a less competitive tax environment

$TAXVOID_{it} = \alpha_0 + \alpha_1 BUSYDIR_{it} + \alpha_2 BUSYCOM_{it} + \alpha_3 POLDIR_{it} + \alpha_4 POLCOM_{it} + \alpha_5 SIZE_{it} + \alpha_6 ROA_{it} + \alpha_7 DTA_{it} + \alpha_8 TAXRATE_{it} + \alpha_9 YEAR_i + \varepsilon_{it}$

Variables	Prediction Sign	Countries with a competitive tax environment (Malaysia & Singapore)		Countries with a less competitive tax environment (Philipines, Indonesia, & Thailand)	
		Coef.	t-stat	Coef.	t-stat
Intercept	+/-	24.0445	***295.51	24.0713	***191.87
BUSYDIR	+	0.0134	0.62	0.0280	**1.69
BUSYKOMDIT	+	0.0036	0.16	0.0516	***3.02
POLDIR	+	0.0623	0.49	0.1317	*1.29
POLKOMDIT	+	0.1199	0.93	0.1492	*1.56
SIZE	-	-0.7736	***-47.28	-0.9432	***-41.49
ROA	+	2.0054	***9.24	2.4707	***5.20
DTA	+/-	0.1051	0.96	0.2484	***3.51
TAXRATE	+/-	6.4064	***7.68	-0.5480	-0.49
YEAR		Yes		Yes	
N		4425		2067	
R Square		51.02%		53.95%	
F Stat		***302.78		***203.75	

Note: *) **) ***) Significant at 1%, 5%, and 10%, respectively, one-tailed test

Sensitivity Analysis

As a sensitivity analysis, this study measured tax avoidance using ETR (Effective Tax Rate) and CETR (Current Effective Tax Rate). The result of the sensitivity test is consistent with the main test results. In Indonesia, the Philippines and Thailand, the busyness level and political connections of independent directors and the audit committee had a negative and significant effect on both ETR and CETR. These indicate that the higher the busyness level of independent directors and the audit committee were, the lower the effective tax rates of the company were. The more government political connections maintained by independent directors or the audit committee were, the lower the company's effective tax rates were. Conversely, in Malaysia and Singapore, which are countries with a competitive tax environment, the busyness level and political connections of independent directors and the audit committee had no effect on the companies' effective tax rates (i.e. ETR and CETR).

CONCLUSIONS

Dividing the ASEAN countries into two groups – those with a competitive tax environment and those with a less competitive tax environment, this study had revealed that in the latter, both the busyness level and the political connections maintained by the independent directors and the audit committee had a positive effect on the company's tax avoidance level. Conversely, for the former, the busyness level and the political connections maintained by the independent directors and audit committee clearly, did not affect the level of the company's tax avoidance. These findings stressed that the relationship between the independent corporate governance organs' activities and the company's tax avoidance activities was affected by the country's tax environment characteristic.

In countries with a competitive tax environment (such as Malaysia and Singapore), companies were given a variety of tax facilities that benefitted them, for example, exemption from company revenues gained from abroad and the exemption for shareholders' income in the form of dividends. This phenomenon existed because these countries had employed the territorial and remittance system as part of their tax regulations. Companies operating in these two countries also had the flexibility to compensate for their fiscal losses indefinitely, as provided by the two countries' tax systems. As a result of this, the role of the independent corporate governance organs in reducing aggressive tax avoidance activities can be replaced or substituted by such beneficial tax facilities. The provision of such beneficial tax facilities can automatically enable those companies to save on their corporate tax payments, thus these companies do not need to carry out the highly aggressive tax avoidance activities in order to obtain tax savings.

Further, both Malaysia and Singapore offer high levels of investor protection as was already noted by the 2017-2018 Global Competitiveness Index. This means that investors tend to be better protected within these countries than the other ASEAN countries encompassing the Philippines, Indonesia, and Thailand. Although the independent corporate governance organs may have significantly high busyness level or strong political connections with the government, it appears that companies in Malaysia and Singapore were more likely to apply caution when taking tax avoidance actions, especially in relation to the shareholders' interests. This is attributed to the high-level investor protection provided by these two countries. Apparently, the severity of the legal consequences must be borne by the companies should they be caught conducting activities that could harm investors in the future, such as carrying out overly aggressive tax avoidance activities, which reduces the transparency of financial statements and increases information asymmetry (Balakrishnan et al., 2019). The increase of information asymmetry and tax avoidance activities provide more opportunities for managers to commit rent diversions, hide bad news, and mislead investors (Desai & Dharmapala, 2006; Kim et al., 2011).

In conclusion, the Tax environment in each country should be competitive. It means that the government should provide some facilities in which companies could catch their benefits. In this environment, the regulation provides some exemption from company revenues gained from abroad. Also, the regulation provides some exemption for shareholders' income in the form of dividends. Finally, this environment may reduce tax avoidance, in turn, strengthen the negative relationship between independent corporate governance organs and aggressive tax avoidance activities.

This study has several implications. ***First***, authorities need to oversee the capital market, particularly in countries with low investor protection. This study had revealed that the busyness level and the political connections of the independent directors and the audit committee have a positive effect on the company's tax avoidance level. If the independent corporate governance organs have many positions in other companies/ institutions, their duty of monitoring their respective companies would be neglected. The capital market supervisory authorities, in this regard, need to establish a better protection mechanism for investors in the capital market. This can be accomplished by: (i) Determining the maximum number of jobs or positions outside which can be held by the company's independent directors or audit committee. Doing so can curtail their activities and make them more effective in monitoring the companies' activities, and (ii) Determining whether the independent corporate governance organs were allowed to have political connections. ***Second***, this study is expected to provide useful information to the tax authorities for the respective countries with regards to: (i) The role of the independent corporate governance organs' activities in monitoring the company's tax avoidance activities, and (ii) The role of the competitive tax environment in minimizing aggressive tax avoidance activities. If a company is based in a country with a competitive tax environment, it is likely to obtain various tax facilities that would permit savings on tax payments, thereby motivating the companies to mitigate aggressive tax avoidance activities.

This study is also constrained by a number of shortcomings: (i) It measured the level of tax avoidance by using BTD, ETR, and CETR. Future studies may consider using other measures, such as DTAX (Discretionary measures of tax avoidance) or abnormal BTD, to measure the level of corporate tax avoidance, and (ii) It only used five countries in the ASEAN region as sample countries. Future research may consider using countries in the Asia Pacific region for comparison purposes.

ACKNOWLEDGMENT

The author thanks Dr. Dwi Martani, S.E., Ak, for her valuable comments and suggestions for this paper.

REFERENCES

Ahn, S., Jiraporn, P., & Kim, Y. S. (2010). Multiple directorships and acquirer returns. *Journal of Banking and Finance, 34*(9), 2011-2026.

Balakrishnan, K., Blouin, J. L., & Guay, W. R. (2019). Tax aggressiveness and corporate transparency. *Accounting Review, 94*(1), 45-69.

Barford, V., & Holt, G. (2013). *Google, Amazon, Starbucks: The rise of 'tax shaming*. Retrieved December 30, 2018, from https://www.bbc.com/news/magazine-20560359

Cashman, G. D., Gillan, S. L., & Jun, C. (2012). Going overboard? On busy directors and firm value. *Journal of Banking & Finance*, *36*(12), 3248-3259.

Christensen, D. M., Dhaliwal, D. S., Boivie, S., & Graffin, S. D. (2015). Top management conservatism and corporate risk strategies: Evidence from managers' personal political orientation and corporate tax avoidance. *Strategic Management Journal, 36*(12), 1918-1938.

Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics, 79*(1), 145-179.

Gupta, S., & Newberry, K. (1997). Corporate average effective tax rates after the Tax Reform Act of 1986. *Tax Notes, 55*(5), 689-702.

Hanlon, M. (2005). The persistence and pricing of earnings, accruals, and cash flows when firms have large book tax differences. *The Accounting Review*, *80*(1), 137-166.

Hanlon, M., Krishnan, G. V., & Mills, L. F. (2012). Audit fees and book-tax differences. *The Journal of the American Taxation Association*, *34*(1), 55-86.

Jian, M., Li, W., & Zhang, H. (2012). *How does state ownership affect tax avoidance? Evidence from China* (Working paper). Singapore: School of Accountancy, Singapore Management University.

Jiménez-Angueira, C. E. (2018). The effect of the interplay between corporate governance and external monitoring regimes on firms' tax avoidance. *Advances in Accounting*, *41*(1), 7-24.

Jiraporn, P., Singh, M., & Lee, C. I. (2009). Ineffective corporate governance: Director busyness and board committee memberships. *Journal of Banking & Finance*, *33*(5), 819-828.

Joos, P., Pratt, J., & Young, D. (2000). *Book-tax differences and the value relevance of earnings* (Working Paper). Cambridge, England: Massachusetts Institute of Technology, Indiana University, and INSEAD.

Khlif, H., & Amara, I. (2019). Political connections, corruption and tax evasion: A cross-country investigation. *Journal of Financial Crime*, *26*(2), 401-411.

Kim, C. F., & Zhang, L. (2016). Corporate political connections and tax aggressiveness. *Contemporary Accounting Research, 33*(1), 78-114.

Kim, J. B., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, *100*(3), 639-662.

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, *30*(1), 50-70.

Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics, 81*(2), 411-439.

Oktavia. (2017). *Penggunaan derivatif dalam aktivitas penghindaran pajak dan manajemen laba, serta dampaknya terhadap persistensi laba dan kekeliruan penilaian pasar: analisis lintas negara di ASEAN* [The use of financial derivatives in tax avoidance and earnings management activities, and its impact on earnings persistence and market mispricing: cross country analysis in ASEAN] (Unpublished doctoral thesis), Universitas Indonesia, Depok, Indonesia.

Pranoto, B. A., & Widagdo, A. K. (2016). Pengaruh koneksi politik dan corporate governance terhadap tax aggressiveness [The effect of political connections and corporate governance on tax aggressiveness]. *Proceeding of the 3rd Call for Syariah Paper* (pp. 472-486). Surakarta, Indonesia: Universitas Muhammadiyah Surakarta.

Rajpal, H. (2012). Independent directors and earnings management – Evidence from India. *International Journal of Accounting and Financial Management Research*, *2*(4), 9-24.

Santoso, I., & Rahayu, N. (2013). *Corporate tax management*. Jakarta, Indonesia: Ortax.

Sarkar, J., Sarkar, S., & Sen, K. (2006). Board of directors and opportunistic earnings management: Evidence from India. *Journal of Accounting, Auditing and Finance, 23*(4), 1-37.

Setyowati, M. S. (2014). *Fenomena persaingan pajak antara negara-negara anggota ASEAN: Suatu studi empiris tahun 2009-2012* [The phenomenon of tax competition between ASEAN member countries: An empirical study in 2009-2012] (Unpublished doctoral thesis), Universitas Indonesia, Depok, Indonesia.

Tang, T. Y. H., & Firth, M. (2012). Earnings persistence and stock market reactions to the different information in book-tax differences: Evidence from China. *The International Journal of Accounting*, *47*(3), 369-397.

Yee, C. S., Sapiei, N. S., & Abdullah, M. (2018). Tax avoidance, corporate governance and firm value in the digital era. *Journal of Accounting and Investment*, *19*(2), 161-175.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1507 - 1524 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Anticipations for and Perceived Barriers of Development among the Sarawak's Highlanders

Kuok Ho Daniel Tang

Department of Environmental Engineering, Curtin University Malaysia, 98009 Miri, Sarawak, Malaysia

ABSTRACT

There is a renewed interest of the Sarawak government to develop the highlands in the Sarawak Corridor of Renewable Energy (SCORE). However, studies on the perception of the highlanders towards development are scanty. To understand the anticipations of the highlanders and the perceived barriers of development, this study adopted a quantitative approach involving a questionnaire survey among 236 households in the Upper Baram and Mulu. The survey shows that the participants generally welcomed development but were unsure of the modes of development to adopt. In terms of the type of development, most participants preferred rice cultivation and handicraft-making. Most participants in Mulu desired to engage as entrepreneurs while those in Bario and IHAS area were keen on employment. A lack of capital and manpower was perceived as the major barrier of development at individual level. At the community level, the major barriers are remoteness of the settlements and the lack of basic infrastructure and facilities. To optimize the outcomes of development, this study calls for an in-depth understanding of the highlanders' worldview.

Keywords: Bario, development, highland, Mulu, Orang Ulu, Upper Baram

INTRODUCTION

Sarawak, located on Borneo Island, is the largest state of Malaysia with an area of 124,450km^2. The state had an estimated population of 2.79 million and a per capita gross domestic product of RM49327 in 2017 (Department of Statistics Malaysia, 2018). Kuching is the most populous district of Sarawak with approximately 684,900 residents, followed by Miri with about 342,800 residents and Sibu with about 277,700 residents (Department of Statistics Malaysia, 2018). The natives, known as the Bumiputera locally, comprising the Malay, Iban, Bidayuh, Melanau and other smaller groups, constituted approximately

ARTICLE INFO

Article history:
Received: 22 April 2019
Accepted: 10 December 2019
Published: 26 June 2020

E-mail address:
daniel.tang@curtin.edu.my

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

71% of the total population in Sarawak. The largest native group is the Iban with an estimated population size of 797,700 while Malay comes in second with a populace of approximately 639,400. The Bidayuh holds the third largest native population size of about 217,800 individuals and the Melanau fall in the fourth place with 142,200 individuals. The collective number of individuals of the other native groups is estimated at 179,000 (Department of Statistics Malaysia, 2018). These other native groups consist, among others, of the Kayan, Lun Bawang, Kelabit, Kenyah, Penan, Sebup, Bisaya which are collectively known as the Orang Ulu. Other instances of the native groups besides the Orang Ulu are the Tagal and Punan Bah (Zahari et al., 2011).

The Orang Ulu is a local term meaning people of the upriver. They make up about 5% of Sarawak's population and inhabit the interior of Sarawak, particularly the upriver and uphill areas (Zahari et al., 2011). The highlanders of Sarawak often refer to the Orang Ulu that reside in the uphill or elevated regions, particularly the Kelabit of the Bario Highland and the Lun Bawang of the Ba'Kelalan. Nonetheless, the meaning of the term has become obscure as more and more of the Kelabit and Lun Bawang migrate to the lowland and cities in the pursuit of education and jobs. The highlanders now refer to the Orang Ulu that still remain in their uphill settlements.

Development of the highlands has been embedded into the agenda of the Sarawak Corridor of Renewable Energy (SCORE), marked by the establishment of the Highland Development Authority (HDA) in 2017 (Recoda, 2017). The Federal Government of Malaysia has proposed five corridors of economic development to bring in investment which propels rural development and SCORE is one of them. SCORE extends over an area of 70,000 km^2 with an estimated population of 600,000 (Recoda, 2018). The HDA has been mandated to expedite development in the highland areas via commercial agriculture production and an ongoing project under its purview is the construction of the Integrated Highland Agriculture Station (IHAS) (Recoda, 2017). The focus of highland development is in the SCORE zone spanning from Long Lama and Upper Baram to the highlands in Limbang and Lawas (Recoda, 2017). The HDA currently endeavours to establish the necessary infrastructure and facilities to spur its highland development plan which could simultaneously promote local economic activities by providing jobs and stimulating local demands (Recoda, 2017). With the highlanders of Sarawak now in the limelight of the state's development agenda, studies of their aspiration for development is instrumental to churn up a development plan that fits the socioeconomic characteristics of the communities, rather than one that would create significant barriers for their adoption. In doing so, understanding the barriers of development currently perceived by the communities is equally important so that the barriers can be bridged (Marimuthu et al., 2018).

However, as the number of Orang Ulu in Sarawak is significantly lower

than the Dayak comprising the Iban and Bidayuh, research among the Orang Ulu is unsurprisingly less (Weinlein, 2017). Besides, the geographical distribution of the Orang Ulu in the remote parts of the state could also deter research attempts. Much research among them is disease-related for instance the investigation of rickettsial infection, prevalence of anemia and intestinal parasite infection in their remote villages (Sagin et al., 2000, 2001, 2002). Few research is political in nature examining the voting pattern among the Lun Bawang in the Ba'kelalan constituency (Puyok, 2006). Religious research among the highlanders also received particular interest because of the wide adoption of Christianity among them, especially the Kelabit and Lun Bawang, attributed to the work of the early Christian missionaries (Tan, 2008). Tan (2008) investigated the drive for and barrier of indigenous church development while discussing the mass conversion of the ethnic groups.

Researchers have also probed into the adoption of information communication technologies (ICTs) among the indigenous people of Sarawak, the barriers hampering such adoption as well as the ensuing socioeconomic impacts but it was not limited to the Orang Ulu (Walid et al., 2015). A study concentrating on bringing the ICT to the Kelabit highlanders was conducted by Bala et al. (2004) with the aim of promoting the socioeconomic and cultural development of the community via technologies. A study has been conducted to investigate the entrepreneurial intention among the Dayak but it revolved around the correlation between personality traits, social learning and the emergence of such intention without delving into the development model they desired which could further spark their entrepreneurial intention (Tateh et al., 2014). The implementation of hydropower projects in Sarawak has drawn interest to the social sustainability of such projects mainly due to the impacts of resettlement with the Bakun dam alone resettling nearly 10,000 indigenous people (Ahsan & Ahmad, 2016; Tang, 2020). The article of Aiken and Leigh (2015) on displacement and resettlement of the Malaysian indigenous due to dams warned against the lack of readiness among the indigenous for cash-based economies which resulted in high unemployment and poverty among the re-settlers.

Identity has been identified as a concern in the endeavour to develop the indigenous in Sarawak. While aiming to promote development among them via modernizing their agricultural practices and economic activities, the indigenous long for input into how this modernity could weave around their ethnicity, thus, cultural retention (Boulanger, 2010). It seems clear at this point that there is a need to carefully plan the development among the indigenous, particularly the highlanders which are already on the agenda of the state government. Development is not forcing what the decision-makers think is the best to the existing socioeconomic fabric and demanding adaptation to such plans. There have been cases of failure from such doings due to displacement and resettlement. This

study, therefore, aims to examine what the highlanders anticipate in the development plan the state government is drawing up for them and the factors that can potentially hold them back from development.

METHODS

The study adopted a quantitative method which involved the use of questionnaire in collecting data related to the anticipations for and barriers against development among the highlanders. The development in this study refers to economic development promulgated by the HDA formed under the SCORE to promote rural development (Recoda, 2017). Different from an imposed development, the development in this context is perceived as facilitated development based on the models and types of development the highlanders prefer (Aiken & Leigh, 2015). It is an initiative towards inclusive development that aligns the local economic development to the state and national economic development, thus promoting intra-generational equity (Weinlein, 2017).

The survey questionnaire consisted of three sections. The first section focused on the demographic of the sampled population, particularly the gender, age, ethnicity, education level and occupation. The second section probed the existing land ownership and use of the respondents. The third section revolved around anticipations for and perceived barriers of the survey participants on development, encompassing the models of preferred development, the types of development, the patterns of participation in development as well as the factors obstructing economic expansion at household and community levels. The questionnaire required the respondents to answer both open-ended questions such as the utilization of land and the types of development desired as well as close-ended questions such as the willingness to participate in a specific model of development and the form of participation preferred. Quantitative surveys are common in social studies.

The questionnaires were administered among 236 households residing in the Upper Baram of Bario Sub-district (Figure 2) and Mulu otherwise known as the Mulu Sub-district (Figure 2) located in the Miri Division of Sarawak (Figure 1) between January 2018 and December 2018. The survey spanned over a duration of about one year due to the remoteness of the study areas, the need for multiple visits to the study areas which are geographically apart, and time constraint which limited the duration of stay during each visit. The households surveyed were equivalent to 31.6% of the total households in the region. This confers a confidence interval of 4.91 at 95% confidence level. The sampling strategy adopted was random stratified sampling targeting at the households of three sub-populations. The households in the Upper Baram region particularly Bario and the Integrated Highland Agricultural Station (IHAS) area, as well as Mulu were the priority of the survey due to the intention of the HDA to develop the region ahead of the highlands in Limbang and Lawas. The

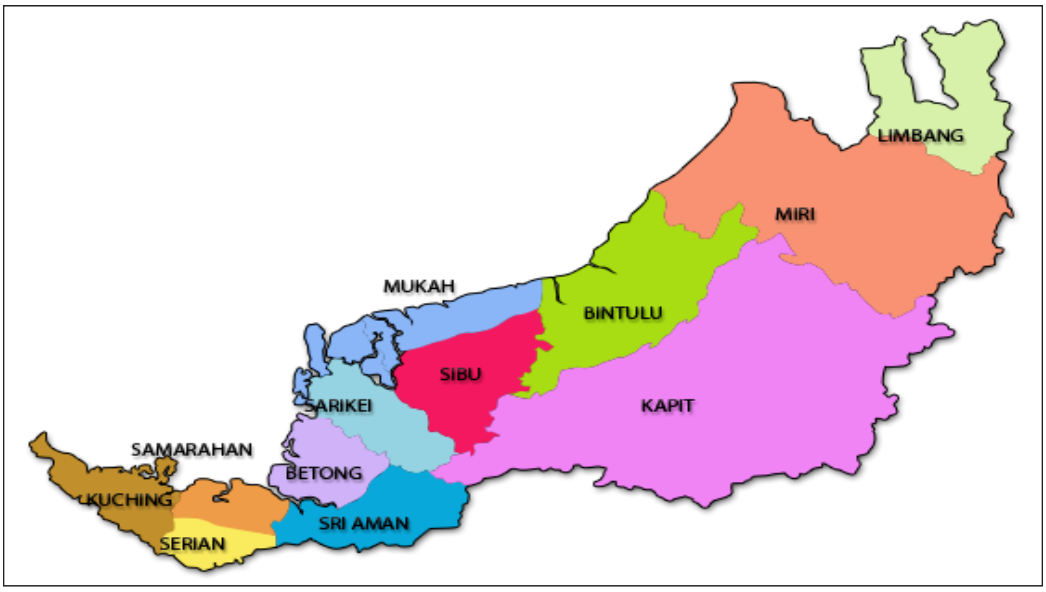


Figure 1. Divisional map of Sarawak (Jabatan Agama Islam Sarawak, 2019)

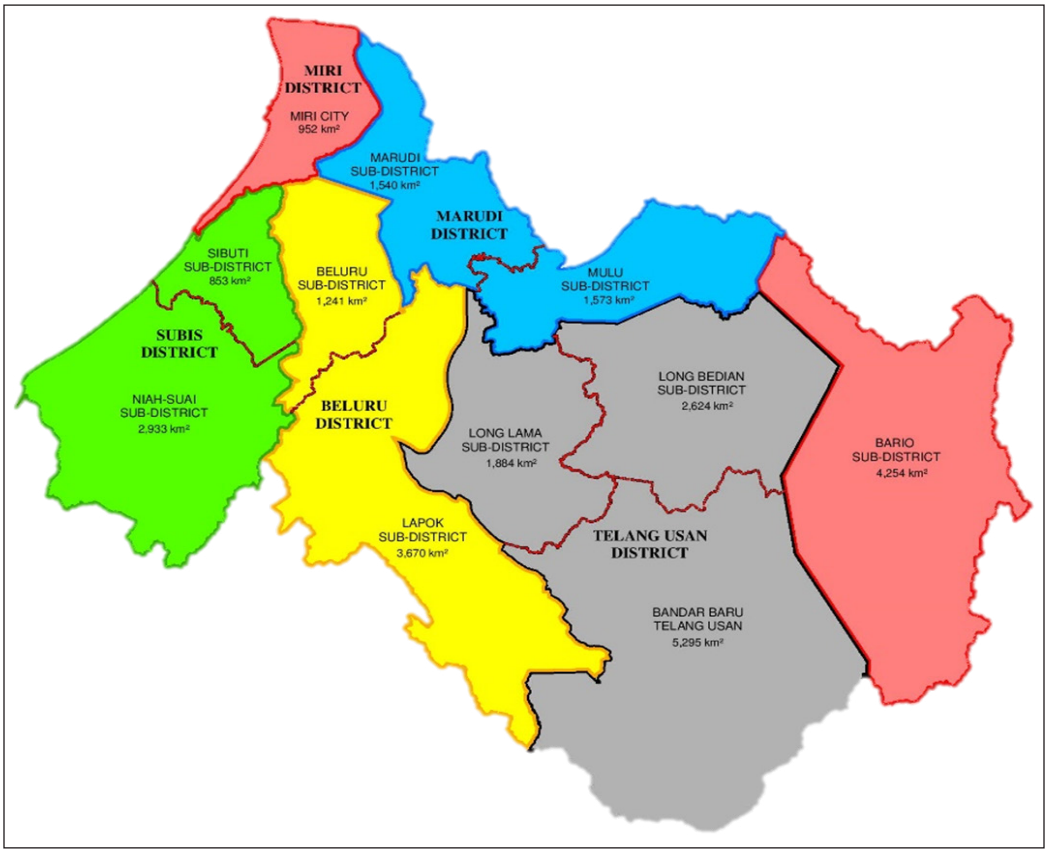


Figure 2. Districts and sub-districts of the Miri division, Sarawak (Resident and District Office Miri, 2018)

villages surveyed are shown in Table 1. The households in each of the three areas were then randomly selected for interview. The questionnaires were collected and the responses were analyzed mainly using percentage which is best-suited for the design of the survey. Certain parts of the returned questionnaires might have been incomplete. The incomplete responses would be denoted as 'percent not responded' in the results.

Table 1
Profile of villages surveyed and household sample size

No.	Villages	No. of Households	Sample Size	Population
	Bario in Bario Sub-district			
1	Bario Asal	29	9	192
2	Arur Dalan Pa Tik A	10	3	131
3	Arur Dalan Kubaan	14	6	104
4	Arur Layun	11	3	66
5	Ulong Palang A	23	7	230
6	Ulong Palang B	12	4	145
7	Pa Remapoh A	13	4	109
8	Pa Remapoh B	11	3	194
9	Padang Pasir	25	8	136
10	Pa Derong	26	8	156
11	Kpg. Baru	14	4	70
12	Pa Berang	18	1	65
13	Pa Ukat	26	8	230
14	Pa Umor	12	4	98
15	Pa Lungan	32	10	213
16	Pa Mada/ Long Dano	11	3	98
17	Pa Dalih	41	12	300
18	Batu Patong	8	2	53
19	Ramudu	18	11	87
	IHAS Area in Bario Sub-district			
20	Long Peluan	30	9	189
21	Long Beruang	40	12	250
22	Long Balong/ Puak	16	3	136
23	Long Banga	36	11	216
24	Long Pulong	12	4	260
25	Long Lamai	57	9	351
	Mulu or Mulu Sub-district			
26	Batu Bungan	36	26	250
27	Long Iman	46	15	210
28	Kpg Melinau Mulu	120	37	350

Source: Research fieldwork (2018)

RESULTS AND DISCUSSION

Demographic

The Kelabit, Saban, Penan and Berawan are the major Orang Ulu tribes in the study area. The Kelabit comprised the major population of the Bario Highland (Figure 3) and certain areas of the Integrated Highland Agricultural Station (IHAS), particularly Long Peluan. The IHAS is located at Long Bangan-Long Beruang-Long Peluan of Ulu Baram. The survey covered six villages in and around the IHAS, i.e. Long Peluan, Long Beruang, Long Balong/ Puak, Long Bangan, Long Pulong and Long Lamai where the Penan were the most abundant, followed by the Saban, the Kelabit, and the Kenyah sequentially (Figure 4). In Mulu, the Penan also constituted the largest population, followed closely by the Berawan (Figure 5). The presence of other ethnic groups in Bario and Mulu was mainly due to intermarriage. Among the surveyed population, the male was slightly higher in number than the female except for the Kenyah showing the opposite (Figures 3, 4, and 5).

The surveyed population was mostly in the economically active age of 18 to 65 (Figure 6). The economically active population is usually in the labour force, capable of producing and distributing goods and services. The IHAS region had the largest economically active population (70.8%) followed by Mulu (67.9%)

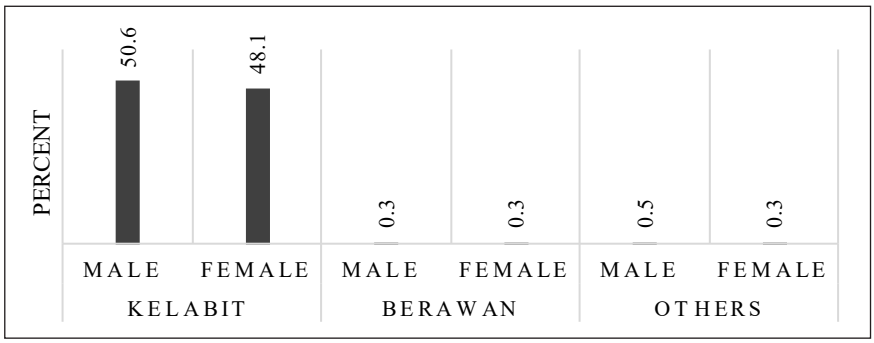


Figure 3. Sampled population by gender and ethnic group in Bario

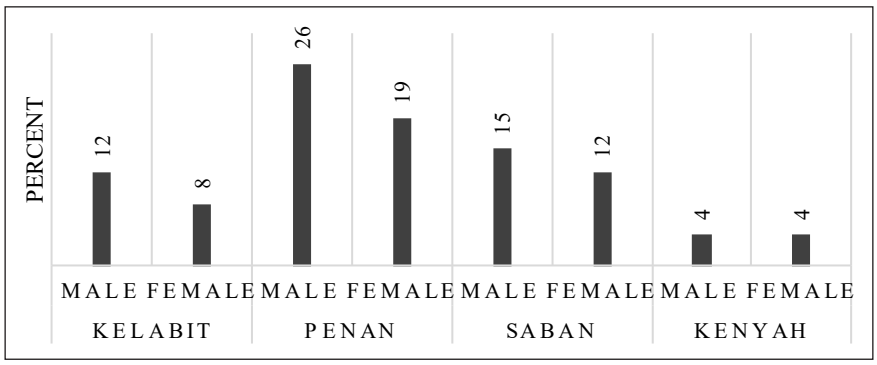


Figure 4. Sampled population by gender and ethnic group in the IHAS area

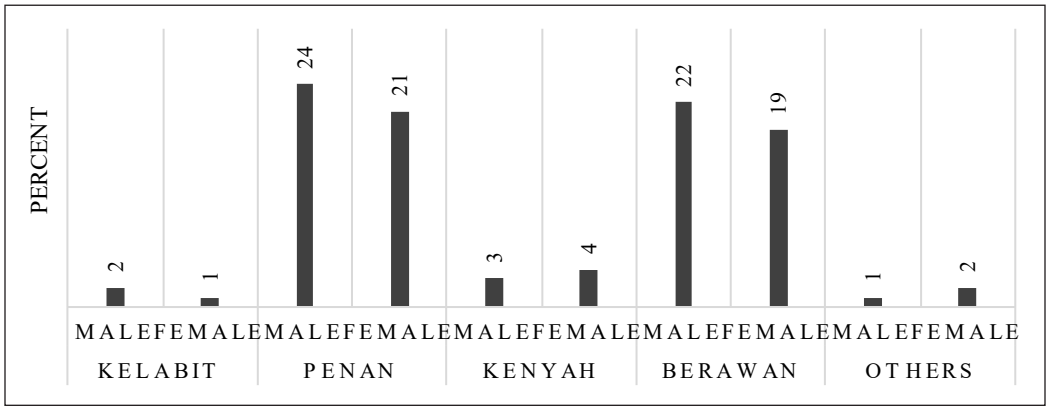


Figure 5. Sampled population by gender and ethnic group in Mulu

and Bario (59.4%) (Figure 6). This is comparable to the 65% of the state's other Bumiputera who are in economically active age (Department of Statistics Malaysia, 2018). In terms of education, most of the sampled population of the IHAS area completed primary school education though a large proportion of them did not receive any formal education (Table 2). 29% of the sampled population in the Mulu area was not formally educated while 18% was educated to lower secondary level. In Bario, though those without formal education formed the largest group, a substantial proportion of the sampled population completed lower and upper secondary education (Table 2). This shows a stark difference to the education profile of the state's population with 57.8% attaining secondary education and 20.1% attaining tertiary education (Department of Statistics Malaysia, 2018). The education attainment of the surveyed population which consisted of the households in the remote regions of the state was generally low and

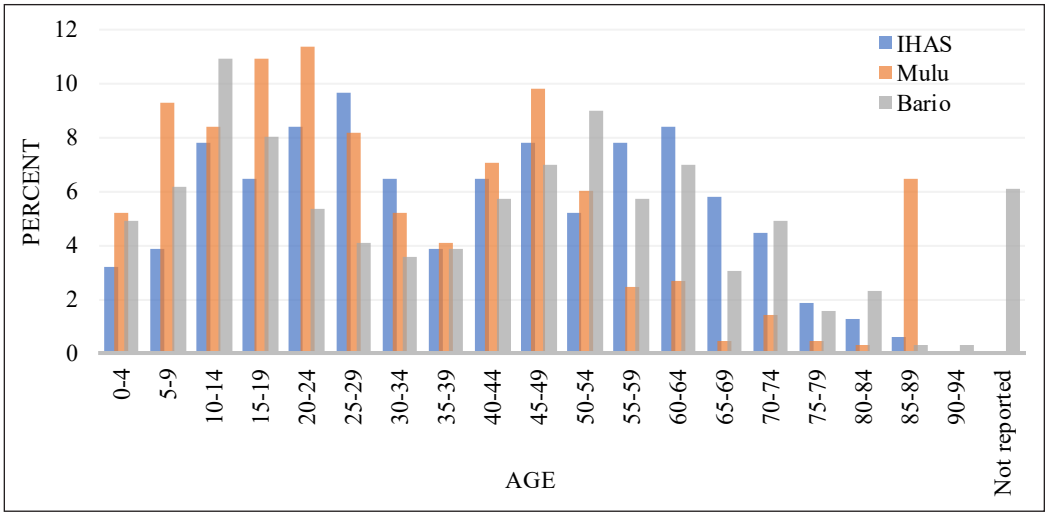


Figure 6. Age Structure of sampled population in IHAS area, Mulu, and Bario

Table 2
Education profile and employment of the sampled population

Item	Percent Sampled Population		
	Bario	IHAS Area	Mulu
1. Level of Education			
Completed (Degree)	1.8	0.0	1.0
Completed (Diploma)	5.0	2.0	3.0
Completed (Upper secondary)	19.0	6.0	9.0
Completed (Lower secondary)	15.0	11.0	5.0
Completed (Primary)	11.0	31.0	8.0
In progress (Tertiary)	1.2	1.0	2.0
In progress (Upper secondary)	7.0	7.0	11.0
In progress (Lower secondary)	8.0	11.0	18.0
In progress (Primary)	11.0	8.0	14.0
No formal education	21.0	23.0	29.0
2. Employment			
Not employed	49.1	22.0	55.8
Pastor	1.0	1.0	0.3
Construction worker	1.2	1.0	0.5
Offshore employee	1.0	2.0	0.8
Teacher	0.0	2.0	0.0
Farmer-labourer	1.5	2.0	1.1
Farmer-shopkeeper/community leader	1.5	3.0	3.0
Full-time farmer	27.7	61.0	13.4
Other	17.0	6.0	25.2

Source: Research fieldwork (2018)

this is also reflected in other remote regions of the state. The reasons could be limited access to formal education and the distance of the settlements from institutions of higher learning (Resident and District Office, 2018). However, it cannot be ruled out that the household members who had migrated to urban centers were better-educated than those who stayed in the villages.

The survey revealed a large number of respondents in Mulu (55.8%) and Bario (49.1%) was unemployed or jobless at the time of the survey (Table 2). This aligns with the percent unemployed active registrants with the Labour Department in Sarawak at 54.2%, as of 2017 (Department of Statistics Malaysia, 2018). Most of the respondents in the IHAS area identified themselves as full-time farmers and a substantial fraction of those in Bario was also full-time farmers. The respondents in Mulu engaged in full-time farming was comparatively less. They were involved in other occupations not specified in the questionnaire (Table 2).

Existing Land Ownership and Use

More than 85% of the surveyed households in the study areas claimed to own land

(Table 3). The Sarawak Land Code provides for indigenous land rights via the Native Customary Rights (NCR). The NCR to land is fundamentally the rights granted for land cultivation, collection of forest produce, hunting, and fishing, as well as burial and ceremonies on the land and such rights are transferable and inheritable (Richards, 1961). Based on the Land Code, NCR is attainable via clearing and occupying of virgin jungle, planting fruit trees on the land as well as conducting the activities mentioned previously on the land (Land Code Chapter 81 1958). Though there are different perspectives on the ability of NCR to protect indigenous land rights, the land owned by the sampled households is likely of NCR status. Few households responded that they did not have land ownership and the number was higher in Mulu. A reason could be the increasing loss of customary land to commercial plantations and other development activities due to the transfer of land ownership or conversion of land status by the government. This is particularly evident in Mulu where plantation activities have set in (Howitt & Lunkapis, 2016).

The verification of the land size was beyond the scope of this study and would involve extensive groundwork. While 48% and 36% of the respondents in the IHAS and Mulu areas respectively expressed that their land parcels were left vacant, a significant percentage of the sampled households used the land for paddy planting (Table 3). The majority (40%) of the households surveyed in Bario planted paddy on their land. Cultivation of pineapple also prevailed in Bario and IHAS area though to a much lower extent than paddy. The demands for the famed Bario rice and pineapple have bolstered the cultivation of both the crops (Chan, 2011; Nicholas et al., 2014). Thirteen (13)% of the sampled households

Table 3
Land ownership and use

Item	Percent Sampled Population		
	Bario	Mulu	IHAS Area
1. Land Ownership			
Yes	93.6	88.5	89.6
No	6.4	11.5	10.4
2. The Main Crop Planted on Land			
Paddy	40.0	25.0	40.0
Rubber	0.0	13.0	3.0
Banana	2.0	3.0	1.0
Pineapple	8.0	2.0	4.0
Coffee	4.0	1.0	2.0
Durian	2.0	6.0	1.0
Others	11.0	14.0	1.0
None	34.0	36.0	48.0

Source: Research fieldwork (2018)

in Mulu planted rubber trees on their land and 6% planted durian (Table 3). In the interview, the land-owning respondents informed that they inherited the land. Most of the Penan households sampled did not own land due to their nomadic lifestyle. They were conventionally hunter-gatherers but many of them had begun to settle from 1950 onwards due to programs by the Sarawak government and foreign Christian missionaries (Bending, 2006). The settled Penan resided in the Ulu Baram district mainly.

Surveyed households that did not carry out planting consisted of those who left their land vacant and those who did not own any land. Further conversation was conducted with the respondents who left their land vacant. The main reasons for doing so for the households in the IHAS region were due to the land being too far from their villages, the lack of manpower and the lack of capital. The lack of manpower and capital were the major concerns of the respondents in Bario while the distance from villages and flooding were the major concerns of the respondents in Mulu.

Anticipations for Development

When asked about their willingness to let government agencies develop their land, most of the respondents in Mulu and Bario expressed positivity while the majority of the respondents in the IHAS region were unsure (Table 4). In fact, 31% of the IHAS respondents did not welcome such development. In terms of development by private investors, the uncertainty among the respondents was even higher. Most respondents in Mulu and 32% of the respondents in Bario did not welcome land development by private investors (Table 4). The high uncertainty was attributed to a lack of understanding of the development model. A similar response characterized by high uncertainty was also registered when the respondents were asked of their willingness to come into joint ventures with government and private sectors in land development due to the same reason mentioned (Table 4).

With the models of development aside, the survey participants were enquired on their willingness to participate in any development projects. More than 75% of them in all survey areas expressed their willingness (Table 4). They were then enquired about their preferred type of development projects. Most respondents (37% and 42% respectively) in Bario and IHAS area preferred commercial cultivation of paddy while the majority (21%) in Mulu preferred handicraft (Table 4). 11% of the survey participants in Bario, 19% in the IHAS area and 9% in Mulu opted for the planting of suitable cash crops. The same percentage (9%) of Mulu's respondents expressed their interest in rearing livestock and providing tourism services respectively (Table 4). The increasing effort of the state government to promote ecotourism, for instance via its support of 'Visit the Heart of Borneo' campaign launched in 2017, has sparked interest among the respondents to engage in tourism-related activities such as providing homestay and tourism services, as well as producing handicrafts (Then, 2017).

Table 4
Anticipations for development

Item	Percent Sampled Population		
	Bario	IHAS Area	Mulu
1. Land Development by Government Agencies			
Yes	49.0	13.0	40.0
No	11.0	31.0	27.0
Unsure	40.0	56.0	33.0
2. Land Development by Private Investors			
Yes	16.0	6.0	26.0
No	32.0	29.0	38.0
Unsure	52.0	65.0	36.0
3. Land Development via Government-Private Joint Venture			
Yes	24.0	17.0	27.0
No	18.0	19.0	27.0
Unsure	58.0	64.0	46.0
4. Willingness to Participate in Development Projects			
Yes	82.0	88.0	78.0
No	5.0	2.0	4.0
Unsure	13.0	10.0	18.0
5. Type of Development Projects			
Tourism services	6.0	0.0	9.0
Homestay	7.0	6.0	6.0
Handicraft	2.0	0.0	21.0
Cottage industry	3.0	0.0	0.0
Planting of suitable tree species	3.0	0.0	1.0
Planting of rubber	0.0	2.0	10.0
Fisheries with 'tagang' system*	3.0	0.0	0.0
Aquaculture	14.0	6.0	4.0
Livestock farming	12.0	6.0	9.0
Cash crops cultivation	11.0	19.0	9.0
Paddy cultivation	37.0	42.0	12.0
Other	0.0	15.0	1.0
Unsure	3.0	4.0	18.0
6. Mode of Participation in Development Projects			
As worker	33.0	40.0	14.0
As operator/ manager	8.0	19.0	18.0
As entrepreneur	29.0	17.0	44.0
Offer land	8.0	13.0	3.0
Not sure	22.0	13.0	22.0

Source: Research fieldwork (2018)
Note: *The 'tagang' system is a form of control and conservation to sustainably increase freshwater fish production, promote ecotourism and reduce river pollution (Department of Agriculture Sarawak, 2019).

Other than paddy cultivation, a substantial fraction of the Bario's respondents were interested in aquaculture projects. The reason that paddy planting has received substantial interest in Bario and IHAS area is that the varieties of paddy, often collectively known as the Bario rice, planted are much sought after due to their soft texture and exquisite taste. There are four varieties of Bario rice, i.e. Adan Halus, Bario Tuan, Bario Merah and Bario Celum. Adan Halus is the most commercially grown variety (Nicholas et al., 2014). In Mulu, the planting of Bario rice is not common and the Penan comprising the largest population in the area are generally famous for their artistry which is often demonstrated via handicraft making. With the increasing inflow of tourists to Bario and Mulu, there was also increasing interest among the locals to provide homestay and tourism services (Borneo Post Online, 2016).

In addition to the mainstream development activities above, homestay, cottage industry, rubber planting, tree planting and fisheries were also mentioned as potential development. Further to the development activities, the respondents' desired modes of participation were probed. 33% and 40% of the respondents in Bario and IHAS area respectively were content with working for or finding employment with the development. 44% of the surveyed households in Mulu wanted to be involved as entrepreneurs. In Bario, 29% of the respondents desired entrepreneurship while 19% of the respondents in the IHAS area were interested to become operators or managers (Table 4). A study by Tateh et al. (2014) revealed that Dayak was generally less inclined to entrepreneurship due to personal and social factors particularly the lack of knowledge and training as well as upbringings, though their interest to involve in such endeavor is high. This could probably explain the relatively low intention to engage as entrepreneurs among the Orang Ulu highlanders in Bario and IHAS area. Nonetheless, the intention was high in Mulu.

Perceived Barriers towards Development

The majority of the sampled households in the three study areas expressed that a lack of capital was the major barrier towards expanding their economic activities and a large proportion of them also opined that the lack of manpower was a barrier (Table 5). 10% of the respondents in the IHAS area thought that frequent illness among family members slowed their economic expansion. There was a host of other problems faced by the respondents in Bario and Mulu particularly such as difficulty in product marketing, a lack of access road and transportation as well as a lack of basic facilities and amenities. This was also reflected from a newspaper article highlighting the hardship of marketing the popular Bario pineapples due to the absence of proper access road to the nearest urban centres (Chan, 2011).

At the community level, the major obstacle in Bario and IHAS was the distance from urban centres (Table 5). This obstacle also affected economic activities at

Table 5
Perceived barriers of development

Aspect	Percent Sampled Population		
	Bario	IHAS Area	Mulu
1. Barriers at Household Level			
No male member in the family	3.0	2.0	8.0
Lack of manpower	30.0	40.0	18.0
Family members are often sick	2.0	10.0	4.0
No capital	36.0	44.0	40.0
Not enough suitable land	8.0	0.0	1.0
Others	1.0	0.0	6.0
Unsure	20.0	4.0	23.0
2. Barriers at Community Level			
Distance from urban centres	76.0	96.0	32.0
No water and electricity supply	2.0	0.0	38.0
Expensive goods and supplies	0.0	0.0	5.0
Decreasing wild animals and fish	0.0	0.0	0.0
Costly and long transportation	15.0	2.0	6.0
Others	2.0	0.0	5.0
Unsure	5.0	2.0	14.0
3. Willingness to be Resettled			
Yes	21	2	15
No	56	88	55
Unsure	23	10	30

Source: Research fieldwork (2018)

household and individual levels. While Mulu also had the same obstacle, the respondents there perceived that a lack of water and electrical supplies was more pressing. 15% and 6% of the households surveyed in Bario and Mulu thought that transportation was costly and time-consuming due to the distance from urban centres (Table 5). As the distance from urban centres was raised as the main factor thwarting development, the respondents were asked if they were willing to be resettled. More than half of them in all survey areas did not welcome the idea (Table 5). The primary reason was that they felt comfortable with the present way of life. The second most important reason was their attachment to the current settlements.

The trend of out-migration to urban centres is common among the villagers in search of better education and job opportunities. Unless their homeland has better prospects of economic development to offer, the trend is not foreseen to reverse (Chan, 2011). This could probably have led to the general fluctuation of the population aged 25 to 50 in the study areas. The households sampled were those who stayed behind for various reasons, one of which was attachment. It is therefore natural that they were not receptive to the idea of

resettlement. Besides, resettlement does not always promise a better future and there have been instances of failure. The population resettled to Sg. Asap under the Bakun Resettlement Scheme faced the hardship of not having sufficient and fertile land for farming. The attempts of planting pepper, cocoa, dragon fruits and other crops by the re-settlers on land only suitable for oil palms were not fruitful. The Penan children at Sg. Asap were particularly disadvantaged as they were not as well-educated as those of other communities. Many of the Penan and Ukit were traumatized by the new life they once thought would be better. The hardship had resulted in the out-migration of the Lahanan and Ukit young adults from Sg. Asap (Rose, 2010).

Despite much research interest in the indigenous groups of Malaysia, the development outcomes are disproportionately low, pointing to a gap in understanding what the indigenous communities want for development (Marimuthu et al., 2018). The gap can only be filled with cultural knowledge of the indigenous and a shift from the mainstream perspectives (Bird et al., 2013). Foley (2007) suggested that government bodies and development organizations should listen to the opinions of the indigenous during planning and decision making. This study is an initial effort to understand the views of development among the highlanders in Sarawak. It has been reported that the indigenous will accept changes they understand through their worldview (Champagne, 2005).

Limitations

As with many studies involving surveys, this study is limited in its sample size. Though a larger sample size could be possible, the sample size of 31% households is deemed sufficient to provide a reasonably representative view of the respondents' anticipations for development and the barriers they perceived to hamper development. Another limitation of the study is the survey items. Descriptive survey items probing further into their anticipations and concerns could be included. For instance, the cultivation of paddy as an economic interest could be further probed to understand the specific aspects the respondents need to further encourage them in paddy cultivation.

CONCLUSIONS

This study concluded that the highlanders in the Upper Baram and Mulu longed for development but at the same time, feared that they were not able to cope with development especially due to the lack of capital and manpower. A large proportion of the highlanders preferred development facilitated by government agencies and is interested in rice cultivation, handicraft-making and other agricultural activities such as the cultivation of cash crops. They also perceived that inaccessibility as well as the unavailability of basic infrastructure and facilities were the major barriers to development at the community level. This study, therefore, provides valuable information to policy and plan makers who have channelled resources into developing the highlands only to

yield limited outcomes. This study also calls for a shift of perspective from the mainstream and a better understanding of the highlanders' worldview to bridge the gaps of development. This study recognises that the out-migration of the highlanders to urban centres will continue unless there is renewed development in their homelands which provides new opportunities. It advocates that facilitated and inclusive development aligning local economic growth to the state and national economic growth is crucial to social equity, hence sustainability.

ACKNOWLEDGEMENTS

The author wishes to express his deepest gratitude to the participants of the study and the enumerators who had rendered their help in collecting the data for this study.

REFERENCE

Ahsan, R., & Ahmad, M. H. (2016). Development, displacement and resettlement a challenge for social sustainability: A study on mega development project (Bakun Dam) in Sarawak. *International Journal of Advances in Agricultural & Environmental Engineering, 3*(1), 47-51.

Aiken, S. R., & Leigh, C. H. (2015). Dams and indigenous peoples in Malaysia: Development, displacement and resettlement. *Geografiska Annaler Series B Human Geography, 97*(1), 69-93.

Bala, P., Harris, R. W., & Songan, P. (2004). E Bario Project: In search of a methodology to provide access to information communication technologies for rural communities in Malaysia. In S. Marshall, W. Taylor, & X. Yu (Eds.), *Using community informatics to transform regions* (pp. 115-131). Hershey, USA: Idea Group Publishing.

Bending, T. (2006). *Penan histories: Contentious narratives in upriver Sarawak.* Leiden, the Netherlands: Brill.

Bird, D., Govan, J., Murphy, H., Harwood, S., Haynes, K., Carson, D., … & Larkin, S. (2013). *Future change in ancient worlds: Indigenous adaptation in northern Australia.* (NCCARF Publication; Vol. 117/13). Gold Coast, Australia: National Climate Change Adaptation Research Facility.

Borneo Post Online. (April 7, 2016). *Dayak Chamber of Commerce and Industries holds training programme for homestay operators.* Retrieved March 16, 2019, from https://www.theborneopost.com/2016/04/07/dayak-chamber-of-commerce-and-industries-holds-training-programme-for-homestay-operators/

Boulanger, C. L. (2010). Inventing tradition, inventing modernity: Dayak identity in urban Sarawak. *Asian Ethnicity, 3*(2), 221-231.

Champagne, D. (2005). Rethinking native relations with contemporary nation-states. In D. Champagne, K. J. Torgesen, & S. Steiner (Eds.), *Indigenous peoples and the modern state* (pp. 3-23). Walnut Creek, USA: AltaMira.

Chan, Z. (2011, November 24). Idris: New economic activities will stem tide of rural-urban migration. *The Star Online*. Retrieved March 15, 2019, from https://www.thestar.com.my/news/community/2011/11/24/idris-new-economic-activities-will-stem-tide-of-ruralurban-migration/

Department of Agriculture Sarawak. (2019). *Tagang system.* Retrieved March 16, 2019, from https://doa.sarawak.gov.my/page-0-0-196-Sistem-Tagang.html

Department of Statistics Malaysia. (2018). *Statistics yearbook Sarawak 2017.* Kuching, Malaysia: Department of Statistics Malaysia.

Foley, T. (2007). Environmental conflict resolution: Relational and environmental attentiveness

as measures of success. *Conflict Resolution Quarterly*, *24*(4), 485-504.

Howitt, R., & Lunkapis, G. J. (2016). Coexistence: Planning and the challenge of indigenous rights. In J. Hillier & P. Healey (Eds.), *The Ashgate research companion to planning theory*: *Conceptual challenges for spatial planning* (pp. 127-152). Surrey, England: Ashgate.

Jabatan Agama Islam Sarawak. (2019). *E-masjid.* Retrieved December 3, 2019, from https://emasjid.sarawak.gov.my/emasjid/emasjid/dashboard/ticket/

Land Code Chapter 81 1958 (Sarawak) (Malaysia).

Marimuthu, M., Gan, C. C., Yusof, M. A., & Karim, N. A. A. (2018). Understanding the indigenous mindsets in Malaysia: A future research agenda. *Journal of Fundamental and Applied Sciences, 10*(3S), 64-67.

Nicholas, D., Hazila, K. K., Chua, H. P., & Rosniyana, A. (2014). Nutritional value and glycemic index of Bario rice varieties. *Journal of Tropical Agriculture and Food Science, 42*(1), 1-8.

Puyok, A. (2006). Voting pattern and issues in the 2006 Sarawak State Assembly Election in the Ba' Kelalan Constituency. *Asian Journal of Political Science, 14*(2), 212-228.

Recoda. (2017). *HDA's agenda to fast track development in the highland*. Retrieved March 11, 2019, from http://www.recoda.com.my/pressrelease/hdas-agenda-to-fast-track-development-in-the-highland/

Recoda. (2018). *What is SCORE?* Retrieved March 11, 2019, from http://www.recoda.com.my/what-is-score/

Resident and District Office Miri. (2018). *Taklimat pembangunan bahagian Miri* [Miri development briefing] [PowerPoint slides]. Retrieved March 12, 2019, from https://miri.sarawak.gov.my/page-0-224-242-Penerbitan.html

Richards, A. J. N. (1961). *Sarawak land law and adat.* Kuching, Malaysia: Government Printing Office.

Rose, D. (2010, May 1). Life after Bakun. *The Star Online*. Retrieved March 16, 2019, from https://www.thestar.com.my/story/?file=/2010/5/1/business/6027520&sec=business

Sagin, D. D., Ismail, G., Fui, J. N., & Jok, J. J. (2001). Schistosomiasis malayensis-like infection among the Penan and other interior tribes (Orang Ulu) in upper Rejang River Basin Sarawak Malaysia. *The Southeast Asian Journal of Tropical Medicine and Public Health*, *32*(1), 27-32.

Sagin, D. D., Ismail, G., Mohamad, M., Pang, E. K., & Sya, O. T. (2002). Anemia in remote interior communities in Sarawak, Malaysia. *Southeast Asian Journal of Tropical Medicine and Public Health*, *33*(2), 373-377.

Sagin, D. D., Ismail, G., Nasian, L. M., Jok, J. J., & Pang, E. K. (2000). Rickettsial infection in five remote Orang Ulu villages in upper Rejang River, Sarawak, Malaysia. *Southeast Asian Journal of Tropical Medicine & Public Health*, *31*(4), 733-735.

Tan, J. H. (2008). *The Borneo Evangelical Mission (BEM) and the Sidang Injil Borneo (SIB), 1928 – 1979: A study of the planting and development of an indigenous church* (Doctoral thesis), Oxford Centre for Mission Studies, Oxford, England. (Record No. 27747749)

Tang, K. H. D. (2020). Hydroelectric dams and power demand in Malaysia: A planning perspective. *Journal of Cleaner Production*, *252*, 119795.

Tateh, O., Latip, H. A., & Marikan, D. A. A. (2014). Entrepreneurial intentions among indigenous Dayaks in Sarawak, Malaysia: An assessment of personality traits and social learning. *The Macrotheme Review, 3*(2), 110-119.

Then, S. (2017, October 1). Joint tourism initiative to focus on Heart of Borneo. *The Star Online*.

Retrieved December 4, 2019, from https://www.thestar.com.my/metro/metro-news/2017/10/11/joint-tourism-initiative-to-focus-on-heart-of-borneo-joint-effort-to-tap-tourism-potential-of-twomil

Walid, N., Ibrahim, E. N. M., Ang, C. S., & Noor, N. M. (2015, August). Exploring socioeconomic and sociocultural implications of ICT use: An ethnographic study of indigenous people in Malaysia. In *International Conference on Cross-Cultural Design* (pp. 403-413). Cham, Switzerland: Springer.

Weinlein, E. (2017). Indigenous people, development and environmental justice: Narratives of the Dayak people of Sarawak, Malaysia. *EnviroLab Asia, 1*(1), 6. doi:10.5642/envirolabasia.20170101.06

Zahari, M. S., Kamaruddin, M. S., Kutut, M. Z., & Langgat, J. (2011). The level of alteration of ethics native food: A case of Sarawak, Malaysia. *International Journal of Humanities and Social Science, 1*(6), 137-144.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1525 - 1538 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Pangandaran Batik as a Distinctive Batik Style from the East Priangan Region of West Java

Agus Nero Sofyan, Ekaning Krisnawati* and Tajudin Nur

Department of Linguistics, Faculty of Cultural Sciences, Universitas Padjadjaran, 45363 Sumedang, Indonesia

ABSTRACT

The paper discusses Pangandaran batik as a distinctive batik style from East Priangan Region, West Java Indonesia. It aims to uncover the distinctive characteristics and the local wisdom as the cultural wealth of Pangandaran. Data were collected through direct observation and interviews with the Head of Batik Kodja Craftsmen of Pangandaran and an artist of *Badud* and *Ronggeng Gunung*. It is revealed that Pangandaran batik style has several substantial differences from other batik styles in the East Priangan Region of West Java, and the local wisdom behind the Pangandaran batik style is reflected in the depiction of the *Badud* and *Ronggeng Gunung* as iconic art forms in the batik as well as in the sea-based life of Pangandaran people.

Keywords: Batik, distinctive, East Priangan, Pangandaran, style, West Java

INTRODUCTION

Culture can be understood as a set of systems that comprise ideas, symbols, and values as products of human creativity and behavior. It is therefore not an exaggeration to say that humans are "symbolic beings". In a wider dimension, culture's world is a world of symbols. As symbolic beings, humans think, feel, and act in accordance with certain symbolic expressions which carry certain meanings. This notion resonates with Cassirer (1944), who asserted that such symbolic expressions characterize humans and thus making them different from other beings. At other times humans can also be understood in terms of "animal symbolism". Humans are symbolic beings. That is, humans make use of certain symbols to create a set of cultural values in which language, myths, religion, belief, art, and knowledge reside.

ARTICLE INFO

Article history:
Received: 08 April 2019
Accepted: 19 February 2020
Published: 26 June 2020

E-mail addresses:
agus.nero@unpad.ac.id (Agus Nero Sofyan)
ekaning@unpad.ac.id (Ekaning Krisnawati)
tajudin.nur@unpad.ac.id (Tajudin Nur)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

During the development of culture, human and art become inseparable from one another. Art and human and art have always coexisted along the path of civilization. Art manifests itself or is manifested through or in verbal expressions, body movements, or physical objects. In a more complex context, art has to do not only with aesthetics but also with symbolic or non-symbolic signification.

In the context of the developing culture of a nation, crafts with all their aesthetic values contain symbols that reflect the norms and cultural values of the ethnic group to which that culture belongs. In other words, the crafts produced by a culture are among the most important elements that contribute to the construction of the identity and cultural life of the nation to which the culture belongs. In Indonesia, for example, batik is an iconic traditional craft that is known worldwide. In the past, classic batik styles were commonly used symbolically to signify people's position, class, or rank. Studying batik, therefore, means exploring how its function as a cultural signifier is understood by people.

As a part of the Indonesian national culture, batik has also become a part of the Indonesian people's daily life. Historically, batik has since the Majapahit period until today become inseparable from people's life. Factually, batik is an original cultural inheritance of Indonesia. Unfortunately, however, the lack of effort to protect and preserve this national cultural wealth has resulted in a cultural dispute that centered on a claim that batik was a part of the Malaysian culture. The matter was brought up to UNESCO, which finally came up with a settlement on 2 October 2009 that batik was an integral part of the Indonesian culture. Following the settlement, it was decided that the date 2 October was to be commemorated each year as the National Batik Day (Sunarya, 2013).

Batik has high historical, cultural, artistic and aesthetic values. Etymologically, the word 'batik' originates from the Javanese words '*amba'* meaning 'to draw' and '*titik*' meaning 'dot'. Thus, batik means pictures or patterns drawn on a piece of cloth by using dye-resistant wax (Yudoseputro in Dyna, 2010). In other words, it is a technique of applying hot wax with a pen-like tool called *canting* to form patterns from dots and lines. The syllable '*tik*' in the word batik denotes that the word deals with an activity to create delicate, intricate, detailed, and visually beautiful works of art.

As decorative cloth, batik plays an important role in traditional and national ceremonies. The role that batik plays reflects its important role as a national cultural heritage that is also widely known in the international world. There are many batik styles and motifs. The distinct characteristics of a batik style or motif serve as a marker that identifies its origin. For the Javanese batik contains ornamental visuals and depicts the life saying and values which represent cultural identity (Tresnadi & Sachari, 2015).

As explained above, batik is the art of drawing patterns on a piece of cloth using *canting* as a stylus and hot wax

as a dye-resist agent. Batik making also involves a dye-resist process in which the cloth is submerged into a dye bath. Considering the meticulous, painstaking, and seriousness required in batik making, it is understandable why batik is considered as a craft with very high aesthetic values.

A number of studies have been conducted on batik, batik motifs, meanings, and the relation between batik and the socio-cultural condition of the place from which it comes. A study by Sunarya (2010), for example, discusses the aesthetics and identities related to modern East Priangan batik style. Sunarya et al. (2011) aimed to map modern batik designs in East Priangan in the context of the creative industries in Bandung. The two studies above highlight the potential cultural values of East Priangan batik as part of West Java batik style. Another study by Krisnawati et al. (2019) elucidated the motifs of Banjar batik, which represents the identity of Banjar City. They argued that batik motifs depicted in batik cloth were a means of identity exhibition.

Our present study focuses on Pangandaran batik as a distinctive batik style from the East Priangan region of West Java. In this context, the study therefore, aims to: 1) explore Pangandaran batik motifs and how they are different from those of the other regions; 2) explore the local wisdom inherent in the Pangandaran batik art and their relation to the cultural wealth of the Pangandaran people. In this study, we focus on two scopes, namely material and spatial aspects. The material aspect includes how Sundanese people, especially those living in Pangandaran view and understand Pangandaran batik and their characteristics, and their knowledge about the specific motifs that differentiate Pangandaran batik style from those of others. With regard to its spatial aspect, the study focuses on the batik style found in Pangandaran Regency.

Conceptually, the Pangandaran batik art system is part of the Sundanese culture, particularly the culture of the Pangandaran people. Pangandaran batik art has been handed down from one generation to another by means of both oral and written transmission (Djelantik, 1999). As a result, there is an existing body of literature on the types and methods of Pangandaran batik making currently practiced. However, further studies, including ours, are still needed to fill the gaps left by previous ones.

The Pangandaran Batik: A Historical Overview

The birth of the Pangandaran batik cannot be separated from the history of the birth of Pangandaran itself as a new regency in West Java. Pangandaran Regency proliferated from Ciamis Regency, West Java. Originally, Pangandaran was one of the sub-districts under the administrative region of Ciamis Regency. Pangandaran has always been associated with Pananjung as the original birthplace of Pangandaran. Pananjung village was inhabited by fishermen that belonged to the Sunda tribe. Since the arrival of the first inhabitants, more and more fishermen moved and settled in Pananjung. Fishermen were attracted by the mild waves of the Pangandaran Sea, which made it easy

for them to catch fish. Another factor that drew people to Pananjung was the beautiful and fertile nature. As more and more people settled there, Pananjung became densely populated by people who earned their living primarily from the sea.

The motto of Pangandaran Regency is "Jaya Karsa Makarya Praja". This philosophical dictum means victory and excellent ideas in development. The word 'makarya' itself means 'to develop', 'to erect', and 'to perform' something aesthetic or grand. 'Praja' means a strong nation or country. Pangandaran Regency develops its region based on the potentials of the coastal areas it has. It adopts a coast-based development policy. In terms of culture, Pangandaran also bases its cultural development on its natural potentials. Thus, culture and nature become inseparable in the context of Pangandaran development.

Pangandaran is among the provinces in West Java with the most progressive pace of development. As one of the youngest regencies in West Java, Pangandaran struggles continuously to improve its living quality, environment, and people. Pangandaran progressiveness is reflected, as explained above, in the philosophical meaning of its motto.

METHOD

The data were obtained from fieldwork in Pangandaran, West Java Province. The study follows the following procedure:

(a) Library research. The process of the study begins with library research to obtain a holistic and comprehensive understanding of matters that are substantially related to the topic of the study. The results of the library research are then used as a basis to draw a conceptual and material framework for the study and as references for data analysis.

(b) Direct observation. Joegensen (2001) in Idrus (2009) explains that direct observation or participation can be understood as an initial foundation. Its method involves collecting data from real situations faced by informants or research subjects in the field area of a study. In the study, direct observation was paid to the motifs of Pangandaran batik in Pangandaran Regency, West Java, Indonesia from January 25-30, 2019.

(c) Interviews with key informants including key resource people, community members who are directly involved in the batik industry. Interviews are conducted by asking a set of structural, systematic, and open questions that enable the gathering of information about the underlying elements in the cultural knowledge of the informants. For the research, an interview with Mr. Rusdaya Saleh Hidayat, A. Md., K. L., 61 years old, was conducted on January 27, 2018, at his gallery at Jalan Raya Raya Cijulang Blok Garunggang RT 7 RW 1 Desa Kondangjajar Cijulang District, Pangandaran

Regency, West Java. He was the Head of Batik Kodja Craftsmen of Pangandaran. Another interview about the values of future batik motifs was conducted with Mr. Adang as an artist of *Badud* and *Ronggeng Gunung* on January 26, 2018.

The data are analyzed by using a qualitative method. In other words, the analysis focuses on the general patterns and behavior of the data, which are affected and present together with their contexts (Asher, 1994 in Arimi, 1998).

RESULTS AND DISCUSSION

Batik is an art that has been practiced and developed in Pangandaran for a long time as evident in a number of ancient manuscripts such as the "Siksa Kanda ng Karesian" manuscript (Sunarya, 2010). More investigation still needs to be conducted to search, collect, and compile more data from currently scattered sources.

Batik has been existing in Priangan since a very long time ago. It can be seen from the existence of some Sundanese words that describe the concept of batik, batik making, and batik maker. "Siksa Kanda ng Karesian", an ancient Sundanese manuscript, mentions the word *euyeuk* (batik) and *pangeuyeuk* (batik master/ artist) (Suryani & Marzuki, 2005). Yet, there has not been any clear and convincing evidence as to whether the art, style, motif, technique, and production referred to by the term *euyeuk* are similar to those of the batik art generally known today. A question also still remains whether there were once any originally Sundanese decorative motifs. Information about old Sundanese batik style is still obscure. Suryalaga (2010), however, argued that the word *euyeuk* primarily meant the best value that an object had and the motifs resulting from the creative energy of the Sundanese people.

Modern Priangan batik has developed since the 20th century in a number of batik centers, namely Ciamis (Cikoneng), Tasikmalaya (Sukaraja, Cihideung, Cipedes), and Garut (Tarogong). Each center has its own style of motifs, hence the terms such as Dermayon, Trusmian, Garutan styles (Rosidi et al., 2000). East Priangan modern batik style combines foreign decorative style and the traditional wastra motifs (Soemantri et al., 2002). Such combination is commonly found in East Priangan batik styles, including the Tasikmalaya, Garut, and Ciamis styles. Garutan batik is known for its geometric (*ceplok*) *sido* and umbrella patterns with additional stylized leaf ornaments. The two main patterns of the Garutan batik are Sidomukti Payung and Merak Ngibing. The Tasikan batik style differs in patterns from those of the Garutan style. The Tasikan batik patterns mostly feature non-geometric floral patterns, such as those found in the including Daun Sampe Cikur and Kawung Peuteuy batik patterns. The Ciamisan style also has its own distinct characteristics. It uses both geometric and non-geometric patterns, primarily stylized forms of buildings and cigars.

The Pangandaran batik products currently available are a form of cultural expression of the values of simplicity, modesty, and togetherness which Pangandaran people uphold. The Pangandaran coastal batik motifs are closely related to the nature of Pangandaran itself. The motifs are stylized from "nature and nature-related activities: the sea, fisherpeople, fishing activities, coconut trees, sea waves, fish, shrimp, squid, seaweed, sea horse, etc." (Kudiya, 2014).

The phase of the development of the Pangandaran batik style is in line with the development of Pangandaran itself as a new regency in West Java. The Pangandaran batik has undergone at least three main phases of development: (1) Ciamis batik style phase; (2) transitional phase, and (3) autonomous phase as a new regency. In the first phase, there were still no distinct characteristics. At that time Pangandaran was still an administrative part of Ciamis. The style, therefore, was still heavily influenced by the Ciamis style. In the second phase, the Pangandaran style began to take shape, departing from the Ciamisan style. This phase coincided with the process of separation of Pangandaran from Ciamis Regency. It was at the beginning of the third phase that the Pangandaran batik started to develop its distinct production method and that the name Pangandaran batik came to be used.

The Pangandaran batik was born on October 4, 2015, when a contest on Pangandaran batik design was held by the Pangandaran Regency Tourism Service Office. Twenty out of thirty designs were selected and adopted as the official batik motifs of the Pangandaran Regency. Among the 20 shortlisted designs, only three winning designs, namely the Hurang Windu, Ocean, and Sea Product motifs, qualified for product verification. The other designs were also produced industrially, though not officially, by batik makers in Kodja (Kondang Jajar), one of the existing batik centers in Pangandaran. The philosophy of the batik produced in Kodja is based on the five pillars of Islam and the five principles of the Pancasila ideology of the Indonesian state, as reflected in the five phonemes /k/, /o/, /d/, /j/, and /a/ forming the word 'Kodja'.

The Pangandaran batik style comes with several substantial characteristics that make it distinctive from the other East Priangan batik styles. The batik style is known for its emphasis on its locality as a region rich in natural resources, particularly water and marine resources. It is understandable, therefore, that the Pangandaran decorative patterns are identical with those found in its nature, sea, and beaches. Stylized forms of marine fish, coconut tree, squid, are among the recurrent patterns found in the Pangandaran batik style. It is significantly different from north coastal batik known as Dermayon and Trusmian, which are influenced by Chinese, Arabic, and European cultures (Casta & Taruna, 2008).

Local Wisdom in the Pangandaran Batik of Local Art and Culture

The local wisdom of the Pangandaran batik is reflected among others in the efforts to preserve the iconic local art and culture

in Pangandaran, including the *badud* and *ronggeng gunung* art forms. Currently, work is underway to create a special Pangandaran batik motif. The design will include stylized forms inspired by the *Badud* and *Ronggeng Gunung* art forms. The relevance of the *Badud* and *Ronggeng Gunung* art forms to the new set of Pangandaran batik patterns currently being designed shall be described briefly as follows.

Badud is the name of an art performance in which some accompanying traditional musical instruments, including *dogdog* (drums) and *angklung*, are used. *Badud* is usually performed just before harvest time comes. In its later development, however, *Badud* is also performed during circumcision, *gusaran*, and *turun mandi* ceremonies.

As one of the existing forms of art popular among the Sundanese communities in East Priangan, *Badud* continually comes into contact with elements of other forms of art. This can be seen in the introduction of the mask and magic *debus* art. Historically, such fusion has always taken place not without any aesthetic considerations. The introduction of *debus*, for example, began when *badud* artists wanted to make the art form more varied, beautiful, and attractive. This makes *Badud* more open to accept other elements of art.

The traditional art form of *Badud* began as public entertainment. *Badud* was performed during wedding, circumcision, harvest, and planting celebrations. Later, *Badud* began to be performed during public holidays, for example as part of the national Independence Day celebration. Its function as public entertainment, however, remains. Today, *Badud* has become more widely known. *Badud* artists are often invited to perform in Jakarta, Bandung, and several other cities in Indonesia. There are, however, concerns that *Badud* will lose its popularity among the younger generation because of the massive influences of more modern forms of art. Adang (personal communication, January 26, 2018), an artist of *Badud* and *Ronggeng Gunung* said, "In the beginning, *Badud* served as folk entertainment. Gradually it develops into a form of art performed in various events such as circumcision, wedding, gusaran, harvest time. This form of art gradually loses its popularity because of modern influence."

Ronggeng Gunung, as another art form to be depicted in Pangandaran batik, derives from the word *ronggeng* meaning a female with the ability to sing and dance and *gunung* meaning a high plateau. Thus, *Ronggeng Gunung* is a female singer and dancer from a high plateau. A *ronggeng* may serve as a leader in rituals requiring the existence of *ronggeng gunung* art form (Herawati, 2005, in Thresnawaty, 2016). In an interview with Adang, he explained:

> *Ronggeng Gunung* was initially performed to entertain royal guests, but now it is used as sea offerings, sea feast, Islamic New Year celebration, and cultural festival. It is depicted in batik motif to popularize and preserve Pangandaran people's culture. Motifs in Pangandaran batik consists of Pangandaran's sea products and culture.

According to Raspi as the maestro of *Ronggeng Gunung*, vocal practice with high notes and dance are essential in *Ronggeng Gunung* dance as it may last from 2 to 12 hours. Thresnawaty (2016) added that the ronggeng sang six up to eight songs in each performance, thus, good health and stamina was of importance.

Local Wisdom in the Pangandaran Batik of Sea-based Life Motifs

The local wisdom of the Pangandaran batik lies not only in the close connection between the batik motifs and the way the majority of Pangandaran people make their living as fisherpeople and farmers. This close connection has become an identity that distinguishes the Pangandaran batik from other styles of batik. The Pangandaran batik style features a nuance of locality that emerges from the cultural identity of the Pangandaran people. Another popular Pangandaran batik motif is *honjam* [abbreviation of *honje (Etlingera elatior* plant) and *jambal* (salted *manyung* or *ariidae* fish)]. While honje depicts the agrarian or farming way of living, *jambal* symbolizes the local fishing activity and economy. Rusdaya (personal communication, January 27, 2018) explained:

> *Honjam* is a popular Pangandaran batik motif. It is an acronym of *honje* tree (*kecumrang*) and *jambal* fish. This motif was designed as an appreciation form to natural resources of Pangandaran. *Honje* tree is very beneficial in improving body vitality. *Jambal* fish is a delicious and popular menu. Most importantly, no other countries should claim this, so *Honjam* is a motif of Pangandaran batik.

Being a reflection of the sea-based life of the Pangandaran people, Pangandaran batik motifs are inspired by the wealth of the local marine life. The *hurang windu* (giant tiger prawn) and sea horse motifs are some of the motifs originating from Pangandaran. In a recent Pangandaran batik design competition, the *hurang windu* motif won the first place. The second and third places were given to the *Samudra* (Ocean) motif and the Sea Product motif respectively. This, once again, affirms the fact that the Pangandaran batik style is always associated with the wealth of the region's natural resources and biodiversity.

The Pangandaran batik attire is also worn during the "Mojang and Jajaka Pangandaran" (Pangandaran Youth Pageant). Participants are required to wear Pangandaran batik clothes since the preliminary until the final stage of the contest. The batik cloths from which the contestants' clothes are made are produced by Kodja batik makers. Different Pangandaran batik motifs have also taken part in different national-level batik competitions and batik promotion events, including GBN (*Gebyar Batik Nusantara* or *Nusantara Batik Festival*) and Inaka (Indonesian National Craft Trade Fair).

Figure 1, Figure 2, and Figure 3 show some of the Pangandaran batik clothes worn by Mojang Jajaka Pangandaran contestants.



Figure 1. Pangandaran batik attire worn in Mojang Jajaka Pangandaran Youth Pageant (Source: Rusdaya's (personal communication, January 27, 2018) document)



Figure 2. Mojang Jajaka Pangandaran contestants (Source: Rusdaya's document)



Figure 3. Mojang Jajaka Pangandaran contestants (Source: Rusdaya's document)

Pangandaran Batik as a Distinctive Batik Style in East Priangan

One of the most distinctive characteristics of the Pangandaran batik that makes it different from the other East Priangan batik styles, namely the Garut, Tasik, and Ciamis styles, is the use of natural dyes. Natural dyes for Pangandaran batik are made of the following plants:

mangrove : black dye
mahogany : brown dye
jiringa : purple dye
mangosteen : green dye
jackfruit : yellow dye
coconut : red dye

Natural dyes are used to prevent allergy resulting from a chemical reaction that may happen when batik clothing are exposed to the heat of the Pangandaran weather. Tourists, especially foreign tourists, do not want this to happen to them. Rusdaya elucidated, "Natural dyes for Pangandaran batik are used considering that natural resources or trees in Pangandaran have multifunctions. The use of natural dyes distinguishes Pangandaran batik from other batiks. Natural dyes makes batik cloth comfortable to wear."

Another difference between the Pangandaran batik and other East Priangan batik styles lies in the motifs and color composition. The Ciamis batik, also known as *Ciamisan*, is characterized by the simplicity of its motifs. The simple motifs of *Ciamisan* batik are inspired by the surrounding nature or the motifs produced in other regions. The colors frequently used in *Ciamisan* batik are black, white, and yellowish-brown. *Ciamisan* decorative motifs have natural nuances, depicting the flora, fauna, and other elements of the surrounding nature. *Ciamisan* batik motifs do not symbolize any philosophical meaning or social status.

The motifs of Tasikmalaya batik style are inspired by nature (plants, animals, and (social) events) and Tasikmalaya's cultural wealth. The hand-painted motifs of Tasikmalaya batik motifs depict the flora, fauna, objects, or other elements of the surrounding nature. Some motifs, however, are based on those of Solo, Yogyakarta, Tegal, and Pekalongan batik styles. Tasikmalaya hand-painted batik motifs have nothing to do with the buyer's or wearer's social status.

Every batik style existing in East Priangan has its own aesthetic characteristics and values. Each style has certain similarities with and differences from one another in terms of philosophy, motif, and color. The Pangandaran batik is known for its close relation to and depiction of the social, economic and natural condition of Pangandaran as described by Rusdaya,

> The names of Pangandaran batik motifs are derived from nature to appreciate, popularize and preserve the richness of Pangandaran natural resources so younger generation will know them. In addition, Pangandaran batik motifs should depict local wisdom so the identity of Pangandaran can be recognized.

Hurang Adu Manis as seen in Figure 4 is among the most well-known motifs of the Pangandaran batik. The entire fabric is dominated by blue color and its lighter and darker gradations. The design consists of stylized prawns and waves that are arranged diagonally. The motif depicts prawns and the rolling sea waves, symbolizing a calm sea atmosphere. This motif is suitable to be worn as private or state organization employees. Overall, the motif symbolizes harmony and dynamism.

Another Pangandaran batik motif is called *Hurang Sagara* (Ocean Prawn) as pictured in Figure 5. As the name suggests, the motif combines stylized images of prawn and the ocean. The basic

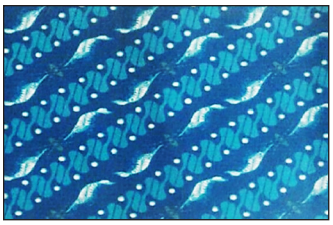


Figure 4. Hurang Adu Manis motif (Source: Rusdaya's document)



Figure 5. Hurang Sagara motif (Source: Rusdaya's document)



Figure 6. Ombak Laut Pangandaran motif (Source: Rusdaya's document)

background is black, while the prawn and ocean patterns are colored with an orange dye. The philosophy behind the motif is the energy and spirit of life. The motif symbolizes that in life one has to learn from prawns. Prawns are independent, hard-working sea animals that are always ready to face any storm in any sea. They are not afraid of being trapped among coral reefs or tossed by hostile rolling waves in the vast ocean. Like prawns, one has to learn to live together with others, no matter how hard and difficult life can be. The prawn and ocean motif symbolizes strength and togetherness and the spirit and strength to face life on a righteous path. This motif is usually worn by the head of sub-districts and regency offices.

The next motif, *Ombak Laut Pangandaran* (Pangandaran Sea Waves) as seen in Figure 6, depicts the waves of the Pangandaran Sea. The motif is also decorated with stylized images of a wave-tossed small boat and a school of small fish in the water beneath the boat. Set against a background of gradations from light to dark blue, the patterns slant in a slightly diagonal direction. The motif has a philosophy of leadership, that is, that a good leader is a leader who not only protects those he/she leads but also who has the courage to defend truth and the rights of others. The leader of a region must prioritize people's welfare and protect its rich natural resources. A good leader is also a reliable person who believes in God as the center of life and who is loved by his/her people. This motif, which suggests a power to protect, is suitable for public officials, civil servants, village officials, and community leaders.

A motif called *Hasil Laut Pangandaran* (Pangandaran sea products) as seen in Figure 7 is also common. It consists of a series of dots, each surrounded by a floral pattern. As the name suggests, the motif depicts the products of the rich Pangandaran Sea as a source of life and prosperity of the Pangandaran people. Philosophically, the motif symbolizes a strong and honest leader who mingles with the people he/she leads and is committed to promoting their welfar. Batik clothes with this motif are suitable for employees.

Ragam Hias Kuda Laut (Sea Horse Decorative Motif) as seen in Figure 8 is another popular motif. It represents sea horses. The word *ragam* (variation) refers to the different species of sea horse. The pattern consists of two sea horses surrounded by



Figure 7. Motif of *Hasil Laut Pangandaran* (Pangandaran Sea Products) (Source: Rusdaya's document)



Figure 8. Motif of *Ragam Hias Kuda Laut* (Sea Horse Decorative motif) (Source: Rusdaya's document)



Figure 9. Lereng Hurang Pejantan motif (Source: Rusdaya's document)

decorative patterns. The motif symbolizes an honest, good-hearted worker or employee who remains loyal and steadfast to the codes of his/her profession during his/her entire career. The motif suggests a sense of charisma and is, therefore, suitable to be worn by family members or married couples who have strong bond and commitment to their family or spouse.

The last motif featured in this article is *Lereng Hurang Pejantan* as seen in Figure 9. Again, as the name suggests, the motif is dominated with stylized images of prawns. The word '*pejantan*' itself means 'male', hence 'male prawns'. The motif is more suitable for men. The color reflects a good quality of leadership. Prawns are among the wealth provided by the Pangandaran Sea. There are many aquaculture farmers who prosper from prawn farming. The prosperity offered by prawn farming inspired the creation of the motif. It is believed that a man wears a *lereng hurang pejantan* batik shirt will look so charismatic that other people would love, respect, and look up to him as a hard-working role model who can teach them about goodness. The motif is suitable for public officials and school principals.

CONCLUSION

The birth of the Pangandaran batik cannot be separated from the history and establishment of Pangandaran as a new regency in West Java. Pangandaran Regency is the result of the proliferation of Ciamis Regency in West Java. The Pangandaran is substantially different from other East Priangan batik styles in several ways. The Pangandaran batik style gives more emphasis on the locality of the region as a regency with abundant natural resources, particularly aquatic and marine resources.

The local wisdom behind the Pangandaran batik style lies among others in the maintenance and preservation of the iconic cultural and art potentials existing in Pangandaran, namely *badud* and *ronggeng gunung* art forms. It is also reflected in the way the majority of Pangandaran people make their living as farmers and fisherpeople. The close connection between Pangandaran people and the activities of going to the sea and fishing is reflected in the different motifs of the Pangandaran batik style. Pangandaran batik motifs feature stylized images of marine organisms found in the Pangandaran sea, including *hurang windu* (tiger prawns) and sea horses. Another

distinctive characteristic of the Pangandaran batik style which distinguishes it from the other Batik styles in East Priangan (Garut, Tasik, and Ciamis styles) is the use of natural dyes.

ACKNOWLEDGEMENTS

The authors wish to express their gratitude to the source people, Mr. Rusdaya for his invaluable elucidation on the history of Pangandaran Batik as well as to Mr. Adang for his insight and explanation on *Badud* and *Ronggeng Gunung*. The research was fully funded by Universitas Padjadjaran under the research grant scheme of Academic Leadership Grant number 1644/UN6.H/LT/2018.

REFERENCES

Arimi, S. (1998). *Phatic in Indonesian society* (Unpublished Master's thesis), Universitas Gadjah Mada, Yogyakarta, Indonesia.

Cassirer, E. (1944). *An essay on man: An introduction to a philosophy of human culture.* Yale, USA: Yale University Press.

Casta, & Taruna. (2008). *Batik of Cirebon*. Cirebon, Indonesia: The Body of Cultural Communication and Tourism of Cirebon Regency.

Djelantik, A. A. M. (1999). *Esthetics: An introduction.* Bandung, Indonesia: MSPI.

Dyna, B. 2010. *Pengertian batik dan sejarah batik Indonesia* [Definition and history of Indonesian batik]. Retrieved July 25, 2018, from http://nesaci.com/pengertian-batik-dan-sejarah-batik-indonesia/

Idrus, M. (2009). *Methods of social sciences*. Yogyakarta, Indonesia: Erlangga.

Krisnawati, E., Sunarni, N., Indrayani, L. M., Sofyan, A. G., & Nur, T. (2019). Identity exhibition in batik motifs of Ebeg and Pataruman. *SAGE Open*, *9*(2). https://doi.org/10.1177%2F2158244019846686

Kudiya, K. (2014). *South coastal batik of West Java*. Yogyakarta, Indonesia: Yayasan Batik Jawa Barat.

Rosidi, A., Ekadjati, E. S., Djiwapradja, D., Suherman, E., Ayatrohaedi, Abdurrachman, … Sasteradipoera, K. (2000). *Encyclopedia of Sundanese, nature, humans and culture including Cirebon and Betawi cultures*. Jakarta, Indonesia: Pustaka Jaya.

Soemantri, H., Supangkat, J., & Couteau, J. (2002). *Indonesian heritage: Fine arts*. Jakarta, Indonesia: Buku Antar Bangsa and Grolier International.

Sunarya, Y. Y. (2010). *Priangan Batik: An introduction*. Paper presented at West Java Seminar on Batik. Cultural Arena, Small and Middle-scale Enterprise Service, July 3, 2010. Bandung. Retrieved July 11, 2019, from https://www.researchgate.net/publication/305881968_Batik_Priangan_Sebuah_Pengantar

Sunarya, Y. Y., Anas, B., & Syarief, A. (2011). *The design mapping of modern Priangan (West Java) batik in the context of Creative Industry in Bandung*. Paper presented at International Conference on Sundanese Culture II, Bandung, Indonesia. Retrieved July 11, 2019, from https://www.researchgate.net/profile/Yan_Sunarya/publication/305812118_Pemetaan_Desain_Batik_Priangan_Modern_Jawa_Barat_Dalam_Konteks_Industri_Kreatif_di_Bandung/links/57a3085108ae5f8b258dab73/Pemetaan-Desain-Batik-Priangan-Modern-Jawa-Barat-Dalam-Konteks-Industri-Kreatif-di-Bandung.pdf

Sunarya, Y. Y. (2013). *Batik in the context of recent design and creativity.* Retrieved July 11, 2019,

from https://www.researchgate.net/profile/Yan_Sunarya/publication/305881821_Batik_dalam_Konteks_Desain_dan_Kreatifitas_Kini/links/57a45bfa08aee07544b26cda/Batik-dalam-Konteks-Desain-dan-Kreatifitas-Kini.pdf

Suryalaga, H. (2010). *Sundanese philosophy: A glimpse of interpretation* Bandung, Indonesia: Yayasan Nur Hidayah.

Suryani, N. S. E., & Marzuki, A. (2005). *Dictionary of ancient Sundanese*. Sumedang, Indonesia: Alqaprint Jatinangor.

Thresnawaty, E. (2016). Raspi maestro of ronggeng gunung. *Patanjala*, *8*(2), 235-250.

Tresnadi, C., & Sachari, A. (2015). Identification of values of ornaments in Indonesian batik in visual content of Nitiki game. *Journal of Arts and Humanities, 4*(8), 2-39.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1539 - 1551 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Determinants of Stock Splits' Ex-Date Returns: Empirical Evidence from Indonesian Stock Market

Edwin Hendra[1]*, Bambang Leo Handoko[2] and Stefanus Ariyanto[2]

[1]*Department of Management, BINUS Business School, Undergraduate Program, Bina Nusantara University, Jakarta 11480, Indonesia*
[2]*Department of Accounting, Faculty of Economics and Communication, Bina Nusantara University, Jakarta 11480, Indonesia*

ABSTRACT

This study analyzes the stock returns on the days surrounding stock split events to find whether there are price movement anomalies during the split event of Indonesian public companies and whether they follow a signalling hypothesis or a trading range/liquidity hypothesis. This study used the stock returns data for 60 days around 50 split events of publicly traded stock on the Indonesia Stock Exchange from 2010 to 2015. This study found an anomaly pattern of stock prices with the ex-date as the peak and a positive average return that could not be explained by the general market movement. The cross-sectional regression of the conservative capital asset pricing model (CAPM) and three other factors failed in explaining the ex-date return anomalies. The results of the empirical model indicate that ex-date return anomalies were not related to a firm's operating performance but were strongly related to the split factor, weakly related to trading volume, and also weakly related to the market value. Overall, these findings support the trading range/liquidity hypothesis.

Keywords: Event study, market reaction, stock split

INTRODUCTION

Stock splits are changes in the number of shares outstanding that theoretically does not change the value of a firm. Nevertheless, recent studies show that the market reacts positively to stock split announcements (Hu et al., 2017; Karim & Sarkar, 2016; Nguyen et al., 2017). Following the idea of an efficient market theory that the stock price will react to new information, the positive

ARTICLE INFO

Article history:
Received: 03 October 2019
Accepted: 12 March 2020
Published: 26 June 2020

E-mail addresses:
edwin@binus.ac.id (Edwin Hendra)
bambang@binus.ac.id (Bambang Leo Handoko)
sariyanto@binus.edu (Stefanus Ariyanto)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

reactions show that the announcement of the split also signals favourable information about the firm (Fama, 1969). Two theory versions that explain these price movements are the signalling hypothesis and the trading range/liquidity hypothesis.

According to the signalling hypothesis, the firm's management wants to convey favourable private information about the firm's prospects and therefore signals undervaluation of the splitting firms (Brennan & Copeland, 1988; Ikenberry et al., 1996). Alternatively, the trading range/liquidity hypothesis suggests that the split is an attempt to increase the liquidity or trading volume of the stock because the stock price is beyond the optimal trading range (Copeland, 1979; Lakonishok & Lev, 1987). However, these two theories have been debated for two decades (Desai et al., 1998).

The stock market of Indonesia, which is chosen as the data sample of this study, has good growth in the number of listed companies and the market capitalization during the past decade (Triady et al., 2016). While the previous stock split studies on the Indonesian stock market analyzed stock returns upon the announcement dates (Fauzi et al., 2014; Janiantari & Badera, 2014), this paper instead focuses on the ex-date returns to find whether there were stock return anomalies. Besides, this research seeked if the ex-date returns followed the prediction of the signalling hypothesis or the trading range/liquidity hypothesis. To the best of the authors' knowledge, there are limited studies regarding this context, notably that used the Indonesian stock market data.

Literature Review

The stock splits should be purely cosmetic since the multiplication of the shares numbers would not affect the firms' cash flows, proportionate shareholder ownership and the value of the firms. Nevertheless, the previous studies show that stock splits happened during the period when the stock prices increased abnormally more than would be explained by the typical relationship with the general market behaviour (Fama, 1969; Grinblatt et al., 1984; Lamoureux & Poon, 1987). The following studies were trying to find the cause of these abnormal returns using two versions of explanation.

The signalling hypothesis postulates that the abnormal returns during the stock split events are considered as signals from the firm's management that convey favourable private information about the firm's prospects. The increasing stock prices after the split are followed by increased future dividends that assume the firms had better performance (Fama et al., 1969). The favourable signals, such as changes in dividend payout from the prior cash dividends, are positively related to the abnormal return on the split events (Grinblatt et al., 1984). Splitting firms yield higher earnings growth than similar, non-splitting firms in the five years before the split (Lakonishok & Lev, 1987). Split announcements of abnormal returns are significantly correlated with split factors and with earnings forecast errors. However, the significant coefficient on the uncorrelated split factor component suggests that a signalling explanation is incomplete (McNichols & Dravid, 1990).

The trading range hypothesis suggests that there is an optimal trading range, and that splits realign share prices. At the optimal trading range, the stock will be more frequently traded, thus increasing the trading volume activity while decreasing the liquidity risk of the stock. Firms set split factors to achieve a target range for their share price, and the target range is higher for larger firms (McNichols & Dravid, 1990). Stock splits generate lower stock prices and increase brokerage fees (Brennan & Copeland, 1988). Thus it can attract the attention of security analysts who discover the good news and inform their clients through earnings forecasts (Brennan & Hughes, 1991). The abnormal returns on the ex-date of the splits are caused by a massive number of small trades (Schultz, 2000) and numbers of uninformed trades (Easley et al., 2001) immediately following the split. The increasing trading volume after the splits is mostly contributed by individual investors rather than institutional investors (Dhar et al., 2005). Stock splits improve trading continuity, alleviate liquidity risk, and give more benefit to the less liquid stocks, which is consistent with the trading/range hypothesis (Lin et al., 2009).

Other studies have alternative explanations for abnormal returns on the split events. The ex-date of the split abnormal return is explained by the announcement effect, which is related to the abnormal return on the announcement day, and the ex-date effect, which is related to the clientele shifting, the percentage change in several shareholders due to the tax option (Lamoureux & Poon, 1987). The abnormal return on split announcements is negatively related to the target share price after the split associated with trading costs, which is assumed as an increasing cost of selling the odd stocks by the investors who hold the round lots before the split (Brennan & Copeland, 1988). In the emerging market cases, the abnormal return and trading volume, even coming before the split announcement, raises strong suspicions of insider trading existence (Nguyen et al., 2017).

The following studies were more focused on a long-term investigation of stock split events. Consistent with the signalling hypothesis, splits are associated with excess returns in the three years following the announcement, which also suggests that the splitting firms perform better in the future (Ikenberry et al., 1996). Little evidence is found that stock splits signal improvement in long-run operating performance and are more consistent with the trading range/liquidity hypothesis (Huang et al., 2009). Contradictory to the signalling hypothesis, split firms are overvalued in pre-announcement years, and the overvaluation reaches its peak in the split announcement year as compared to the years surrounding the split announcements (Karim & Sarkar, 2016). However, this study has more focus on short term variables that may relate to the ex-date of stock split events.

METHODS

The data analyzed in this study was the stock prices on each stock split event of publicly traded stock on the Indonesia Stock Exchange from 2010 to 2015. The stock split dates were derived from Indonesia Stock Exchange public information. The stock and market prices were derived from Yahoo Finance. The daily stock return and market return were calculated by a simple stock return formula (adjusted with the split factors during the ex-date).

The theory of an efficient market (Fama, 1969) postulates that the stock prices have a random walk movement. Thus, if the stock returns are clustered according to the day surrounding the split events, the return average would be zero. Following Lamoureux & Poon (1987) that analyzed whether there were return anomalies on those days, this study used the one-sample t-test on each of the clusters of the days surrounding the ex-date.

Hypothesis 1: There are Non-Zero Average Returns on the Day Clusters

Following recent studies (Fama et al., 1969; McNichols & Dravid, 1990), this study also analyzed the average residuals of time-series regressions of the single-index model (Sharpe, 1964), which was empirically tested by Jensen (1968). We ignored the risk-free return (Rf) since the number was insignificant in calculating the daily excess return.

$$R_{it} - R_{ft} = \alpha_i + \beta_i\left[R_{mt} - R_{ft}\right] + u_{it}$$

Where R_{it} = daily return of stock i at day t, R_{mt} = daily return of market at day t and u_{it} = regression residual. According to the model, if the market return can explain the stock return, it may result in tiny regression errors. So if these errors are clustered according to the day surrounding the split events, the return average error will be zero. This study used the one-sample t-test on each of these error clusters to find whether the abnormal errors existed.

Hypothesis 2: There are Non-Zero Average Regression Residuals

In the first attempt, this study used the conservative cross-sectional single-index model and the single-index model with two additional factors, book-to-market, and market capitalization, proposed by Fama & French (1992) (later mentioned as the three-factor model) to explain the ex-date returns.

$$R_i - R_f = \alpha + \beta\left[R_{mt} - R_{ft}\right] + u1_i$$

$$R_i - R_f = \alpha + \beta\left[R_{mt} - R_{ft}\right] + \frac{hBE}{ME_i} + s\ln(ME)_i + u2_i$$

Where R_i = daily return of stock i at ex-date, R_m = daily return of market at ex-date, BE/ME_i = book to market ratio of stock i, $\ln(ME)_i$ = natural log of the market value of stock i, and u_i = regression residual. All book value variables were annualized and taken from the last published quarterly financial report before the ex-date.

Hypothesis 3: The Market Return, Book-to-Market, and Market Capitalization have a Significant Effect on Excess Stock Return on the Ex-Date

In identifying what hypothesis worked best in explaining the abnormal returns on the ex-date, this study built an empirical model with the regression errors from the previous regressions as the dependent variable. Then independent variables that are added might represent each hypothesis. In this case, it is expected that these independent variables might explain the part which cannot be explained by CAPM or the three-factor model. For the second empirical model, variables are added from the three-factor model as additional independent variables.

$$u_i = \beta_0 + \beta_1 PER_i + \beta_2 PM_i + \beta_3 TATO_i + \beta_4 EM_i + \beta_5 \ln(VOL)_i + \beta_6 SF_i + e_i$$

$$u_i = \beta_0 + \beta_1 \left[R_m - R_f\right] + \beta_2 \ln(ME)_i + \beta_3 BE/ME_i + \beta_4 PER_i + \beta_5 PM_i + \beta_6 TATO_i + \beta_7 EM_i + \beta_8 \ln(VOL)_i + \beta_9 SF_i + e_i$$

where PE_i = price-earnings ratio of stock i, PM_i = profit margin of stock i, $TATO_i$ = total asset turnover of stock i, EM_i = equity multiplier of stock i, $\ln(VOL)_i$ = natural log of 30 days total trading value before the ex-date of stock i, SF_i = split factor of stock i and e_i = error term. All book value variables were annualized and taken from the last published quarterly financial report before the ex-date.

Hypothesis 4: The Price-to-Earning, Profit Margin, Total Assets Turnover, Equity Multiplier, Trading Volume, and Split Factor have a Significant Effect on the Regression Residuals from Cross-Sectional CAPM and the Three Factors Model

To test the signalling hypothesis, this study used price to earnings ratio and Du Pont ratio as independent variables. The price-to-earnings ratio may act as a parameter whether the firm is considered undervalued before the split events according to its earnings. Assuming that it has a negative relation with the stock return because the investors would respond positively to the undervalued signal. To test the signalling hypothesis, following Huang et al. (2009), this study used a return on equity (ROE) variable to measure the operating performance of the firm. However, in this empirical model, the ROE was extended according to Du Pont analysis: three variables profit margin ratio as an operating efficiency measurement; total asset turnover as the asset use efficiency; and equity multiplier as a financial leverage measurement.

$$ROE = \frac{Net\ income}{Total\ equity} = \frac{Net\ income}{Sales} \times \frac{Sales}{Total\ assets} \times \frac{Total\ assets}{Total\ equity}$$

$$ROE = PM \times TATO \times EM$$

This study expects that these operating performance variables would have a positive relationship with the stock return since the investors would respond positively to the signal that the firm would have even better performance in the future.

To test the trading range/liquidity hypothesis, this study used total trading volume 30 days before ex-date (Dhar et al., 2005) and the split factors (McNichols & Dravid, 1990) as independent variables. If it follows the trading range/liquidity hypothesis, the total trading value before the ex-date would have a negative relation with the stock return. It is because investors would respond positively to the previous low trading volume stock before the split. The study also expected that the split factor would have a positive relationship with stock returns (McNichols & Dravid, 1990). It is because of the higher the split factor, the more liquidity risk reduction of the stock after the split (Lin et al., 2009).

RESULTS AND DISCUSSIONS

There were 50 events of the stock split in total during the period from 2010 to 2015. The number of stock splits in each year, and the split factors can be seen in Table 1. The daily stock return during the ex-date each year and each split factor can be seen in Table 2. Similar to findings in previous studies (Fama et al., 1969; Grinblatt et al., 1984; Ikenberry et al., 1996; McNichols &

Table 1
Number of a stock split for each split factors in 2010 - 2015

Split factor						
	2:1	4:1	5:1	10:1	>20:1	Total
2010	2	1	1	-	-	4
2011	1	3	5	-	-	9
2012	1	2	3	3	-	9
2013	2	1	5	2	2	12
2014	2	1	-	-	-	3
2015	4	1	2	4	2	13
Total	12	8	16	9	4	50

Source: Researcher processed data

Table 2
Average stock returns the ex-date for each split factors and each year

Split Factor						
	2:1	4:1	5:1	10:1	>20:1	Average
2010	-1.83%	0.43%	4.71%	-	-	0.37%
2011	3.23%	-1.12%	1.92%	-	-	1.05%
2012	-3.13%	-2.07%	-0.51%	4.55%	-	0.54%
2013	1.54%	-0.61%	3.66%	2.06%	9.82%	3.71%
2014	7.14%	-1.00%	-	-	-	4.43%
2015	0.71%	-0.91%	0.01%	6.67%	5.84%	2.65%
Average	1.39%	-1.07%	1.94%	4.29%	7.83%	2.16%

Source: Researcher processed data

Dravid, 1990), this study found that there was a 2.16% change on average on stock split event days. Confirming McNichols and Dravid (1990), price changes with stock dividend and split announcements were significantly correlated with split factors. This study also found that there was a tendency that the average return increased in higher split factors, except for the split factor of 4:1. It suggests that the liquidity of the stock increases for higher split factors.

The average stock returns were the highest on the ex-date in comparison to the other 59 days surrounding the split events and then became the lowest on day three after the split events, as can be seen in Figure 1. The curve pattern of the average stock returns was quite randomly different in comparison to the curve pattern of the average market return. To identify the price movement during the split event, this study calculated the average percentage stock price (after adjusting for the split factors) and also market price differences of surrounding days and ex-date. As can be seen in Figure 2, on average, the stock prices were slightly higher only for three days after the split. Starting on the day -24, the average price dropped at the lowest on day -12, then there were increasing patterns until day +3 before making a decreasing pattern afterwards. It was also found that the average stock price created a non-parallel curve pattern in comparison to the average market returns.

The average return on the days surrounding the ex-date is presented in Figure 3. Confirming Grinblatt et al. (1984) and (Lamoureux & Poon, 1987), this study found a significant positive difference in the ex-date, which also occured in day -30. Meanwhile, a significant negative difference was found on day -17, day -16, day -12, day three and day 14. In this case, further explanation is needed on why the return suddenly dropped on the third day after the ex-date.

The average residual of time-series regression of the single-index model indicated that there was a significant positive error on the ex-date, which could not be captured by the market return movement,

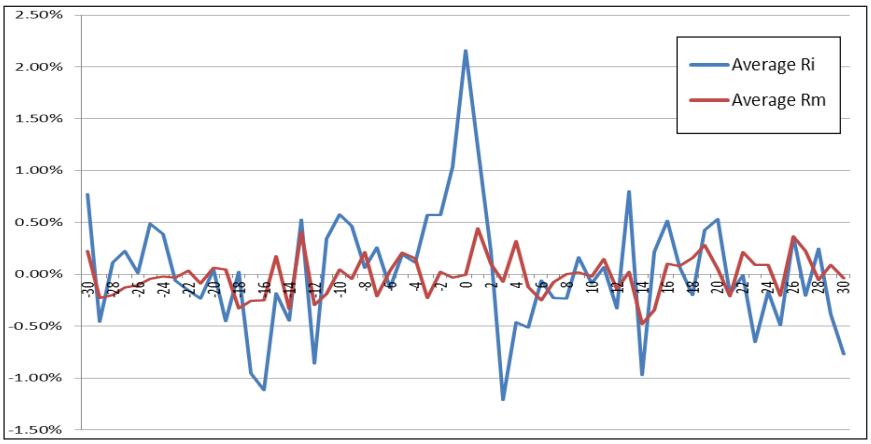


Figure 1. Average return on day surrounding the stock split

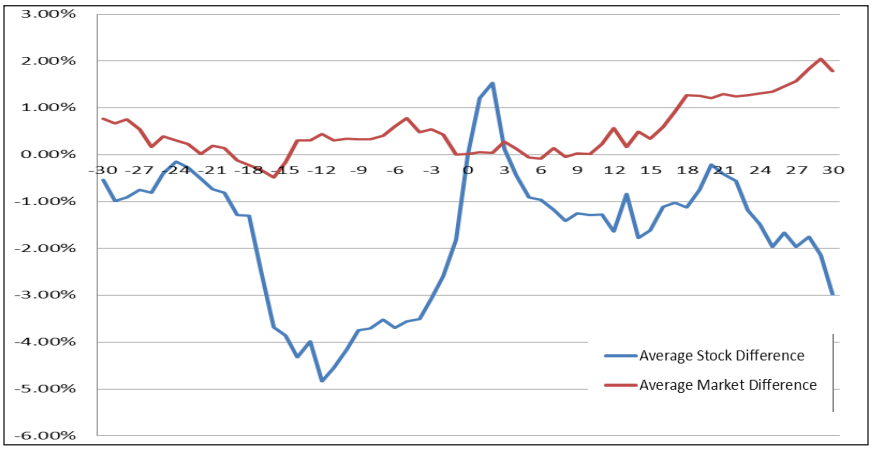


Figure 2. Average percentage price difference of surrounding days with the ex-date

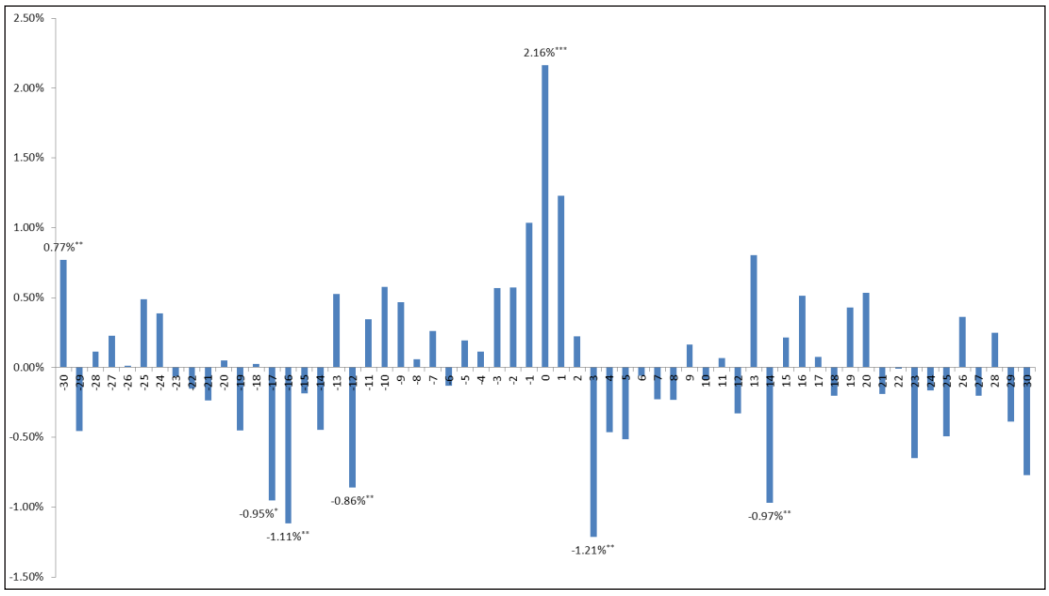


Figure 3. Average stock return
*Notes: *, **, and *** denote statistical significance at 10%, 5%, and 1% levels respectively*

as shown in Figure 4. Nevertheless, the average residual of surrounding days created a random pattern. Thus it is temporarily concluded that the market return alone could not explain the abnormal return on ex-date.

The results for cross-sectional CAPM regression and three factors model regression are presented in Table 3. Both of the models failed to explain the abnormal return on the ex-date of split events. The positively significant alpha on CAPM showed that the single market return variable could not explain the stock return. Nevertheless, the significant alpha disappeared when market value and book-to-market variables were added.

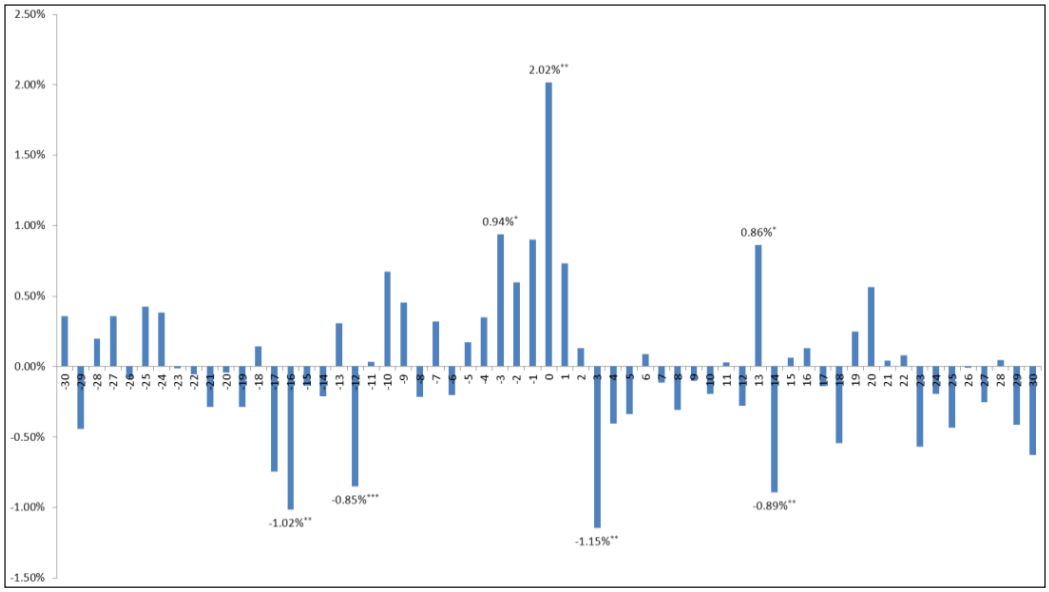


Figure 4. Average residual regression
*Notes: *, **, and *** denote statistical significance at 10%, 5%, and 1% levels respectively*

Table 3
CAPM and three factors model

Independent Variables	Expected Sign	Coefficient (CAPM)	Coefficient (3F Model)
Alpha		0.023**	-0.083
		(2.662)	(-0.653)
Rm	+	0.345	0.199
		(0.396)	(0.240)
Ln(ME)	-		0.004
			(0.903)
BE/ME	+		0.002
			(0.080)
R^2		0.005	0.017
F-statistic		0.240	0.271
Durbin-Watson stat		1.851	1.881

*Notes: *, **, and *** denote statistical significance at 10%, 5%, and 1% (p-value) levels respectively. Rm is the market return. Ln(ME) is the natural logarithmic of market capitalization. BE/ME is the book-to-market ratio* (*Source:* Researcher processed data)

Table 4 shows the results for the empirical model regressions using residual of CAPM regression as a dependent variable (Laura & Fahad, 2017). The regression output of model 1 shows that the independent variables failed to explain the dependent variable, except for the split factors with a positively strong significant explanation and equity multiplier with a weak significant explanation. The regression output of model 2 had quite similar results. Nevertheless, the market value variable had

Table 4
Results of the empirical model using CAPM regression residual as the dependent variable

Independent Variables	Expected Sign	Model 1	Model 2
Alpha		-0.018 (-0.509)	-0.269** (-2.397)
Rm	+		0.405 (0.955)
Ln(ME)	-		0.011*** (2.713)
BE/ME	+		0.011 (0.566)
PER	-	6.65×10^{-5} (0.684)	6.37×10^{-6} (0.065)
PM	+	3.81×10^{-5} (0.313)	9.24×10^{-5} (0.705)
TATO	+	4.34×10^{-4} (0.318)	-1.05×10^{-4} (-0.062)
EM	+	0.005* (1.829)	0.004 (1.441)
Ln(VOL)	-	-9.9×10^{-4} (-0.524)	-0.004* (-1.742)
SF	+	0.002*** (7.316)	0.002*** (5.746)
R^2		0.400	0.466
F-statistic		4.771***	3.885***
Durbin-Watson stat		1.941	1.959

*Notes: *, **, and *** denote statistical significance at 10%, 5%, and 1% (p-value) levels respectively. Rm is the market return. Ln(ME) is the natural logarithmic of market capitalization. BE/ME is the book-to-market ratio. PER is the price-to-earning ratio. PM is the profit margin. TATO is the total assets turnover. EM is the equity multiplier. Ln(VOL) is the natural logarithmic of the trading volume. SF is the split factor* (Source: Researcher processed data)

a positively strong significant explanation, and volume trading had a positively weak significant explanation.

Table 5 shows the results for the empirical model regressions using the residual of three-factor model regression as a dependent variable. These results are quite similar to Table 4, except for the explanatory power of the market volume variable turned into being weakly significant.

The results seem to favour the trading/range hypothesis rather than the signalling hypothesis. Confirming McNichols and Dravid (1990), the return on ex-date has a positive relationship with the split factor. This explanation of the split factor confirms Lin et al. (2009) findings that stock split gave more benefit to the less liquid stocks by decreasing the liquidity risk. The significant positive relationship on the market value indicates that the firm with more significant capitalization generates a higher return. It is contradictive with the expectation of negative relation from assuming that the split event of a more prominent firm is more positively anticipated by the stock trader,

Table 5
Results of the empirical model using the three-factor model regression residual as the dependent variable

Independent Variables	Expected Sign	Model 1	Model 2
Alpha		0.002 (0.062)	-0.164 (-1.448)
Rm	+		0.552 (1.301)
Ln(ME)	-		0.007* (1.800)
BE/ME	+		0.009 (0.472)
PER	-	4.22×10^{-5} (0.443)	6.37×10^{-6} (0.064)
PM	+	6.35×10^{-5} (0.509)	9.24×10^{-5} (0.704)
TATO	+	2.66×10^{-4} (0.191)	-1.05×10^{-4} (-0.062)
EM	+	0.004* (1.706)	0.004 (1.441)
Ln(VOL)	-	-0.002 (-1.095)	-0.004* (-1.742)
SF	+	0.002*** (7.180)	0.002*** (5.746)
R^2		0.416	0.460
F-statistic		5.114***	3.781***
Durbin-Watson stat		1.980	1.959

*Notes: *, **, and *** denote statistical significance at 10%, 5%, and 1% (p-value) levels respectively. Rm is the market return. Ln(ME) is the natural logarithmic of market capitalization. BE/ME is the book-to-market ratio. PER is the price-to-earning ratio. PM is the profit margin. TATO is the total assets turnover. EM is the equity multiplier. Ln(VOL) is the natural logarithmic of the trading volume. SF is the split factor* (Source: Researcher processed data)

compared to a smaller firm. Even though only a weak explanatory power, the study still finds a negative relation trading volume before the ex-date with the ex-date return. It shows that there is an increasing demand for less traded stock on the ex-date that may increase the stock price. On the other hand, the independent variables that act as a proxy of a firm's operating performance supporting the signalling hypothesis have no explanation for ex-date returns, except for a weak relation from the equity multiplier variable.

CONCLUSIONS

This study examines the stock return behaviour on 60 days surrounding the split events using the sample of 50 stock splits from 2010 to 2015. It finds that there is a positive abnormal return on average during the ex-date. The average of time-series regression residual of conservative CAPM also shows a similar pattern. It suggests that the stock market movement could not explain the stock price anomalies during the split event.

The cross-sectional regression of conservative CAPM and three factors fail in explaining the ex-date return anomalies. By using the regression residuals of both models as dependent variables, this study builds two empirical models with the independent variables that may represent the signalling hypothesis and trading range/ liquidity hypothesis. It is found that the PER and other proxy variables for a firm's operating performance have no relation to the regression residual. Thus, the findings do not support the signalling hypothesis. On the other hand, the split factor and the trading volume have a strong and weak relation accordingly to the regression residual, while the market value has a weak relation. It suggests that the findings support the trading range/liquidity hypothesis.

Our findings suggest that the Indonesian stock market is semi-strong efficient since the firm characteristics, other than the split factor, could not predict the ex-date returns. However, the positive ex-date returns, on average, can be considered as the anomaly puzzle. For further studies, this research can be extended using longer-term data a few years prior and after the split event in proofing the signalling hypothesis and trading range/liquidity hypothesis. Such data may include company profitability and operating performance, the number of stock analyses by stock analysts, and trading volumes.

ACKNOWLEDGEMENT

The authors would like to thank the Management Department of the Binus Business School that always gives full support in areas of research and publication, along with thanks to the Research Technological Transfer Office Department of Binus University that provided the funding for conference registration and travel accommodations.

REFERENCES

Brennan, M. J., & Copeland, T. E. (1988). Stock splits, stock prices, and transaction costs. *Journal of Financial Economics, 22*(1), 83-101.

Brennan, M. J., & Hughes, P. J. (1991). Stock prices and the supply of information. *Journal of Finance*, *46*(5), 1665-1691.

Copeland, T. E. (1979). Liquidity changes following stock split. *Journal of Finance*, *34*(1), 115-141.

Desai, A. S., Nimalendran, M., & Venkataraman, S. (1998). Changes in trading activity following stock splits and their effect on volatility and the adverse-information component of the bid-ask spread. *Journal of Financial Research*, *21*(2), 159-183.

Dhar, R., Shepherd, S., Goetzmann, W. N., & Zhu, N. (2005). *The impact of clientele changes: Evidence from stock splits*. Retrieved September 20, 2017, from https://ssrn.com/abstract=410104

Easley, David; O'Hara, M. (2001). How stock splits affect trading: A microstructure approach. *Journal of Financial and Quantitative Analysis*, *36*(1), 25-51.

Fama, E. F. (1969). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, *25*(2), 383-417.

Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International Economic Review*, *10*(1), 1-21.

Fama, E. F., & French, K. R. (1992). The cross-section of expected stock returns. *Journal of Finance*, *47*(2), 427-465.

Fauzi, S. Z., Suhadak, & Hidayat, R. R. (2014). Pengaruh pengumuman stock split terhadap likuiditas saham dan return saham [The effect of stock split announcements on stock liquidity and stock returns]. *Jurnal Administrasi Bisnis*, *38*(2), 156-162.

Grinblatt, M. S., Masulis, R. W., & Titman, S. (1984). The valuation effects of stock splits and stock dividends. *Journal of Financial Economics*, *13*(4), 461-490.

Hu, M., Chao, C. C., Malone, C., & Young, M. (2017). Real determinants of stock split announcements. *International Review of Economics and Finance*, *51*(1), 574-598.

Huang, G.-C., Liano, K., & Pan, M.-S. (2009). The information content of stock splits. *Journal of Empirical Finance*, *16*(4), 557-567.

Ikenberry, D. L., Rankine, G., & Stice, E. K. (1996). What do stock splits really signal? *Journal of Financial and Quantitative Analysis*, *31*(3), 357-375.

Janiantari, I. G. A., & Badera, I. D. N. (2014). Analisis perbedaan bid-ask spread dan abnormal return saham sebagai dampak dari pengumuman stock split [Analysis of differences in bid-ask spreads and abnormal stock returns as a result of stock split announcements]. *E-Jurnal Akuntansi Universitas Udayana*, *8*(2), 267-282.

Jensen, M. C. (1968). The performance of mutual funds in the period 1945-1964. *Journal of Finance*, *23*(2), 389-416.

Karim, M. A., & Sarkar, S. (2016). Do stock splits signal undervaluation? *Journal of Behavioral and Experimental Finance*, *9*(1), 119-124.

Lakonishok, J., & Lev, B. (1987). Stock splits and stock dividends: Why, who, and when. *Journal of Finance*, *42*(4), 913-932.

Lamoureux, C. G., & Poon, P. (1987). The market reaction to stock splits. *Journal of Finance*, *42*(5), 1347-1370.

Laura, M. R., & Fahad, N. (2017). The classical approaches to testing the unconditional CAPM: UK evidence. *International Journal of Economics and Finance, 9*(3), 220 - 232.

Lin, J. C., Singh, A. K., & Yu, W. (2009). Stock splits, trading continuity, and the cost of equity capital. *Journal of Financial Economics*, *93*(3), 474-489.

McNichols, M., & Dravid, A. (1990). Stock dividends, stock splits, and signaling. *Journal of Finance*, *45*(3), 857-879.

Nguyen, V., Tran, A., & Zeckhauser, R. (2017). Stock splits to profit insider trading: Lessons from an emerging market. *Journal of International Money and Finance*, *74*(1), 69-87.

Schultz, P. (2000). Stock splits, tick size, and sponsorship. *Journal of Finance*, *55*(1), 429-450.

Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *Journal of Finance*, *19*(3), 425-442.

Triady, M. S., Kurniasari, R., Utami, A. F., & Sofyan, M. I. (2016). Investigation of leverage effect in Indonesian stock market. *International Journal of Economics and Management*, *10*(S1), 1-17.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1553 - 1566 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Adapting to Saline Intrusion: Empirical Insights from Two Coastal Areas in the Vietnamese Mekong Delta

Van Huynh Thanh Pham[1, 2], Rudi Febriamansyah[3], Afrizal[4] and Thong Anh Tran[5, 6, 7]*

[1]*Graduate School, Andalas University, Padang 25163, West Sumatra, Indonesia*
[2]*Faculty of Agriculture and Natural Resources, An Giang University, VNU-HCM, 18 Ung Van Khiem, Long Xuyen City, An Giang, 90000, Vietnam*
[3]*Faculty of Agriculture, Andalas University, Padang 25163, West Sumatra, Indonesia*
[4]*Faculty of Social and Political Sciences, Andalas University, Padang 25163, West Sumatra, Indonesia*
[5]*Asia Research Institute, National University of Singapore, AS8, Level 7, 10 Kent Ridge Crescent 119260, Singapore*
[6]*Fenner School of Environment and Society, College of Science, The Australian National University, Canberra, ACT 2600, Australia*
[7]*Research Center for Rural Development, An Giang University, VNU-HCM, 18 Ung Van Khiem, Long Xuyen City, An Giang, 90000, Vietnam*

ABSTRACT

Saline intrusion (SI) is increasing at an accelerating rate in the coastal zones of the Vietnamese Mekong Delta (VMD). This challenges various crop production practices in these areas. Using ecological and social approaches, this paper aims to explore farmers' perceptions of SI occurring in Tra Vinh and Kien Giang provinces, and their adaptation measures to deal with the situation. A mixed-method approach was used, including in-depth interviews, focus group discussions, and household surveys. The results demonstrated that farmers have implemented various adaptation measures in tackling SI impacts. High market demand for shrimp also contributed to farmers' decisions in shifting farming practices. The study underscores the important role of the integrated shrimp-rice system as a more comparatively sustainable model to the intensive shrimp culture in the face of SI. Qualitative analysis revealed water conflicts occurring in mixed rice and shrimp farming areas driven by the poor performance of combined irrigation and drainage systems together with the undefined water demarcation zones between rice and shrimp farmers. The paper provides better insights into how farmers' adaptation

ARTICLE INFO

Article history:
Received: 03 May 2019
Accepted: 20 January 2020
Published: 26 June 2020

E-mail addresses:
phtvan@gmail.com (Van Huynh Thanh Pham)
r_febriamansyah@agr.unand.ac.id (Rudi Febriamansyah)
afrizal@soc.unand.ac.id (Afrizal)
thong.tran@nus.edu.sg (Thong Anh Tran)
* Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

strategies could facilitate decision-making processes with regard to water management and adaptation policies in the coastal areas. It calls for local governments' attention to modifying water infrastructure to better address water-related issues.

Keywords: Adaptation, climate change, farmer perception, intensive shrimp farming, saline intrusion, shrimp-rice system, Vietnamese Mekong Delta

INTRODUCTION

The Mekong River (4,400 kilometers in length) originates from the Tibetan Plateau and flows through Southern China, Myanmar, Thailand, Laos, Cambodia and the Vietnamese Mekong Delta (VMD) before it empties into the East Sea. Historically, the physical formation of the delta is linked closely to changes in sea level and hydrological effects of the Mekong River. The last 7,000 years has witnessed the expansion of the region owing to continuous alluvial deposition from the Mekong River (Climate Change-Agriculture and Food Security-Southeast Asia [CCAFSSEA], 2016). The delta was sparsely populated before the arrivals of the early Vietnamese migrants about 300 years ago (Le et al., 2007).

The hydrological systems of the VMD are characterized by flooding in the upper part, which is closely linked to water dynamics in the coastal areas (i.e. lower part) of the delta (Käkönen, 2008; Ministry of Agriculture and Rural Development [MARD], 2017a). Concerning this, SI occurs when there are no adequate river discharge[1] flows to estuaries (Vietnam Institute of Meteorology - Hydrology and Environment [VIMHE], 2010), thus leading to saline intrusion into the mainland. The long coastline (700 km) of the delta with a flat and low elevation (e.g., 0.5-1.2m above the mean sea level) and the density of canal and drainage systems (around 4 km in length/km^2) provide enabling conditions for saltwater to intrude deeply and extensively into both sides of the region (the West Sea and the East Sea) (Estellès et al., 2012; Käkönen, 2008; MARD, 2017b; Vo, 2012).

Recent reports indicated that, following natural regulations, SI occurred frequently between 1977-1996[2]. It was first recognized in 1998 as a natural hazard (Dang et al., 2007). Evidence suggests that SI correlates with environmental change and human development processes occurring not only in the VMD but also in the broader geographical scales (e.g., hydropower dam construction and land-use change in the Mekong region) (Dang et al., 2007; Nguyen, 2016a).

Saline intrusion places irrigation-based agriculture and livelihoods of coastal inhabitants at high risks (Institute of Policy and Strategy for Agriculture and Rural Development [IPSARD]), 2016; Nguyen, 2016b; Vo, 2012). Substantial evidence

[1] During the dry season from December to April, the average discharge of the Mekong River is about 6,000 m^3/s (the lowest is about 2,000 m^3/s from March to April). In the wet season, this is much higher, about 25.500m^3/s (Vo, 2012).

[2] SI has been monitored and recorded since the national unification in 1975, assisted by 75 gauging stations installed across the delta (Le, 2017).

illustrates negative impacts on coastal livelihoods over the past few decades (Renaud et al., 2015; To et al., 2003; Tran & Le, 2011; Tran et al., 2019a, 2019b). There have been multiple efforts made by both local government and farmers in responding to salinity impacts on the ground. While local governments built salinity control projects to tackle the issue across the coastal areas, farmers proactively engaged in the adaptation process by intensely shifting their farming practices and patterns (IPSARD, 2016; Nguyen, 2016c; Tran et al., 2019a). The compounding impacts climate change, upstream hydropower development, and local infrastructural development processes have made SI increasingly complex and uncertain, threatening traditional livelihoods of the majority of coastal farming inhabitants (Käkönen, 2008; Tran et al., 2019b; Vo, 2012).

Adaptation to adverse impacts of SI is therefore critically important, especially to local farmers. By definition, adaptation is a human response to environmental changes, which refers to adjustments in ecological, social, or economic systems responding to actual or expected climatic stimuli and their effects or impacts (Smit & Pilifosova, 2003). Adaptation is highly contextual and action-specific (Agrawal et al., 2009; Bowyer et al., 2014; Burton et al., 2006). Rambo (1983) mentioned that understanding of local situations, and to what extent the social-ecological systems contribute to people's adaptation was essential. This is particularly significant in the context of SI in the VMD, where the majority of inhabitants depend on agricultural and aquacultural production as the main means of livelihoods.

While most studies focus on climate-related vulnerabilities and their impacts on the agricultural systems and adaptation options associated with SI at the local level (Joint Assessment Team, 2016; Nguyen, 2016c, 2017; Nguyen et al., 2012; Vo, 2014), there remains little empirical understanding of the ways in which farmers adapt farming practices to fit with environmental change. This study aims to fill this knowledge gap by exploring farmers' adaptation dynamics associated with SI in the two coastal sides of the delta. Equally important, it attempts to understand the historical processes of SI in the study areas, and the ways they shape adaptation responses at the local level.

METHODS

Selection of Research Sites

The coastal zones of the delta are characterized by the mixed diurnal (the west) and semi-diurnal (the east) tidal effects[3] (Nguyen, 2008; Vo, 2012). This has salient impacts on SI, and how it varies accordingly (Southern Institute of Water Resources Research [SIWRR], 2015). According to the Ministry of Natural Resources and Environment (MONRE)'s report (2016), both sides of the delta have been profoundly exposed to salinity over the past few years, which is projected to be more serious in the future.

[3] The tide regime of the Vietnamese East Sea is characterized by semi-diurnal effects (amplitude about 2.5-3.0m), while that of West Sea by diurnal effects (amplitude about 0.8-1.0m).

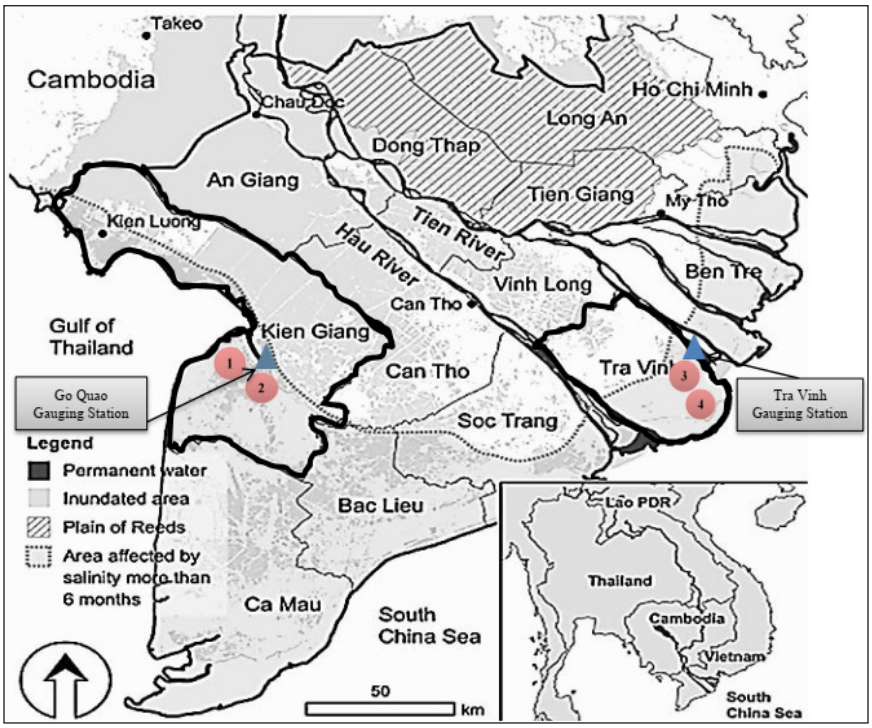


Figure 1. The maps of the VMD and the research sites: (1) Nam Yen commune, (2) Dong Thai commune, An Bien district; (3) Vinh Kim commune and (4) Hiep My Dong commune, Cau Ngang district
Sources: Mekong River Commission (2005, modified from Käkönen (2008))

Severely affected by SI in recent years, An Bien district in Kien Giang province (on the west side) and Cau Ngang district in Tra Vinh province (on the east side) were selected as the research sites. These provinces represent two different geographical zones of the delta, which are respectively influenced by the diurnal (the west) and semi-diurnal (the east) tidal systems (Figure 1). Following transects from seashores to inland zones, one commune adjacent to and one far from the coastlines in each district were selected to explore various impacts of SI. Accordingly, the study sites include Nam Yen and Dong Thai communes in An Bien district; Hiep My Dong and Vinh Kim communes in Cau Ngang district.

Data Collection and Analysis

This study employed the mixed-methods approach, using both qualitative and quantitative methods (Afrizal, 2016; Creswell & Creswell, 2017; Miller et al., 2010). Field data were collected using in-depth interviews, group meetings, and household surveys. Qualitative data included sixteen meetings held with key informants across administrative (communal, district, and provincial) levels and four group meetings in the four communes. These data were gathered to explore such key themes as farmers' perception of SI, farmers' adaptation responses, and environmental conditions of farming systems. Apart from the qualitative data, a household survey

was also administered to 280 households in the research sites (70 households in each commune). Those who have lived in the areas for more than ten years and were directly affected by SI were selected for the survey.

A stratified random sampling approach was applied to recruit participants for the survey (de Vaus, 2002; Walliman, 2006). Questionnaires were tested and revised to several randomly sampled households in the research areas before the surveys were officially administered to selected participants. The fieldwork was conducted from 2017-2018.

Qualitative data were transcribed and categorized into themes for further analysis. Quantitative data was coded and analyzed using descriptive analysis association with trend analysis (e.g., SI trend), farmer's perceptions of SI, and adaptation practices. Data on annual salt concentration levels were calculated into means to indicate the progress of SI over time.

Secondary data from local government reports were also used in the study, including SI situations, monthly data of salinity concentration (from January to April) collected at Go Quao gauging station (about 30 km inland from the West Sea) and Tra Vinh station (about 36 km inland from the East Sea) from 2002 to 2016 together with scientific reports from SIWRR. Analyses of these official documents complement the empirical findings of the study.

FINDINGS AND DISCUSSION

Salinity Situations in the Research Areas

SI occurs on both sides of the delta, but its intensity varies substantially. Data collected from the two gauging stations (Ben Trai and Tra Vinh) from 2002 to 2016 suggested that high levels of salt concentration were recorded on both sides during the dry months (Figure 2). The current climatic conditions suggested that the salinity is more likely to increase in the west.

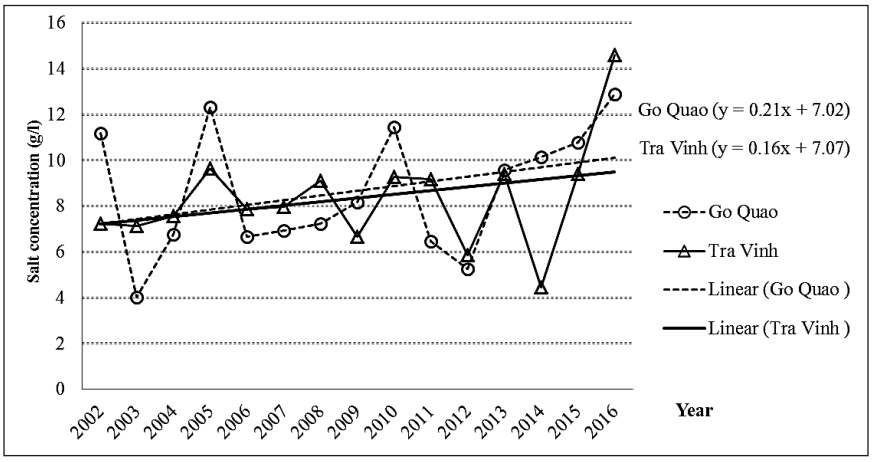


Figure 2. Levels of salt concentration in the research sites from 2002-2016
Source: SIWRR (2015, 2017). Figure created by the first author.

SI has changed across coastal areas over the past few years (SIWRR, 2015). This can be attributed to several factors. For the most part, salinity control projects[4] built in the east help mediate the SI effects (Nguyen & Huynh, 2014; Tran, 2009). This could explain why the intensity of SI in the east is lower than that in the west. As observed by an agricultural officer in An Bien district, SI has become more intense in recent years. This adversely affects the local agricultural production and coastal resource-based livelihoods.

Greater efforts to address the SI have been observed at the institutional level. For instance, the government in Cau Ngang district built a number of major sluices to protect local farming from the SI impacts (H. S. Le, personal communication, December 10, 2017). This study makes an urgent call that both non-structural and structural measures should be simultaneously undertaken to help reduce the SI impacts in the area.

[4] These include control projects in Go Cong, South Mang Thit, Quan Lo Phung Hiep and Ba Lai aimed to control saltwater from encroaching into the agricultural land area of about 926,000 ha and some 650,000 ha devoted to urban and aquacultural areas (Nguyen, 2016a; Tran, 2009; Vo, 2012).

Farmers' Perceptions of SI

Table 1 shows farmers' perceptions of SI. Farmers on both sides of the delta were aware of the change in SI, which had become more complicated in terms of frequency since the year 2000. Some 86.5% of farmers in An Bien perceived that SI affected their farms, while roughly 43.5% in Cau Ngang had a similar view. This could be generally implied that the effects of SI in the west appear to be more recognizable than in the east.

Those who have experienced natural disasters perceive that such events have significant impacts on their lives (Le et al., 2014). This is also reflected in this study. Farmers in An Bien were likely to perceive

Table 1
Farmers' perception of SI (N=280)

SI	An Bien district (%)	Cau Ngang district (%)
Conditions		
Usual	14.9	26.1
Unusual	85.1	73.9
Impacts on agricultural production		
Yes	86.5	43.5
No	13.5	56.5
Level of impact on local livelihoods		
1- Not very serious	2.9	5.7
2- Not serious	11.2	42.6
3- Do not know	2.3	0.0
4- Serious	63.4	50.0
5- Very serious	20.2	1.7

Source: Household surveys (2017-2018)

more impacts of SI than those in Cau Ngang. It could be due to the fact that farmers in the former are not well protected by local salinity control systems which were not fully implemented.

Historical analysis of rural adaptation suggests that the delta plays a key role in sustaining local inhabitants' subsistence livelihoods (CCAFSSEA, 2016; (Estellès et al., 2012). In earlier times, local inhabitants collected available resources (e.g., fish, vegetables) without much intensive labor. The prevailing climate change impacts imply that the delta is no longer a 'delicious' region offered by God (Le, 2017). As SI is getting more complex and uncertain, it is important that farmers need to increase their awareness of environmental change that affects their livelihoods. Because salinity control projects do not sufficiently deal with the impacts of SI (Nguyen & Huynh, 2014; Tran, 2009), farmers themselves in both sides of the delta need to be proactive in their adaptive actions. In this light, it is essential that farmers' and governmental efforts need to be further integrated (Pham et al., 2018). Local farmers' perceptions of the SI should be integrated into the local decision-making processes and the building of salinity control systems to deal with the issue.

Change in Farming and Water Management Practices

Various forms of adaptation have been adopted by farmers on the ground. Driven by increasing SI impacts on both sides of the delta, some farmers shifted from intensive rice production to shrimp farming[5]. This reflected that the land-use change as the result of this new farming pattern was closely linked to the level of salinity encroaching into both sides of the delta. Realizing emergent environmental conditions triggered by SI, most farmers decided to transform their traditional farming systems to ensure that they can better adapt to change (Table 2).

The results indicated that between 1954 and 1990 farming practices in the two study sites were relatively similar. However, since the 1990s there has been much divergence in ways farmers adjusted their farming systems to accommodate environmental changes. For instance, farmers in the Cau Ngang district have changed their farming patterns from rice to shrimp rice and then to intensive shrimp farming systems.

Table 3 presents the difference in farming systems farmers practiced in the two districts. While the majority adopted the extensive shrimp rice systems in An Bien (99.3%), this was not the case in Cau Ngang. Farmers in the latter preferred adopting intensive shrimp farming systems (68.2%).

The variation of shrimp farming patterns in the two areas can be attributed to several factors. First, natural conditions and market are the key factors that drive farmers to

[5] Shrimp cultivation takes two primary forms: (1) extensive (low density) and (2) intensive (high density). The former depends on saltwater available in the dry season, followed by a rice crop in the rainy season. This farming practices comes without or little feed supply with a density of 1-2 shrimp larvae/m^2; the latter includes two or more shrimp crops per year with feed supply and a density of 30-50 shrimp larvae/m^2. Highly intensive shrimp cultivation indicates higher density of shrimp larvae in the pond (around 100-150 larvae/m^2).

Table 2
Timeline of shifting farming systems in the research sites

Time	An Bien district	Cau Ngang district
1954 -1975	High coverage of wild forests (Mangrove forests) Sparse settlements Dominance of one rice crop per year with low yield (1-1.2 ton/ha) Abundant supply of natural aquatic resources in the dry season	
1975 -1990	Increased resident settlements in the coastal areas Conversion of forest areas and abandoned land into cultivated land areas First introduction of double-rice crop systems since 1978 (high-yield varieties) Expansion of the double rice crop systems Decline in aquatic resources	
1990 - 2000	Prevalence of the double-rice crop systems	Introduction of the integrated shrimp rice system since 1994
2000 - 2010	Introduction of shrimp rice system since 2003	Shift from shrimp rice to intensive shrimp farming system in 2000
2010 - Now	Shrimp rice farming practice remains until now	Prevalence of the intensive shrimp farming system Adoption of the highly intensive shrimp farming system since 2017

Source: Group discussions (2017-2018)

Table 3
Farming yystems in An Bien and Cau Ngang districts (N=280)

Farming systems	An Bien district		Cau Ngang district	
	Farm size (ha)	%	Farm size (ha)	%
Shrimp rice farming	1.8 ± 1.2	99.3	1 ± 0.6	24.1
Intensive shrimp farming	-	0.7	0.7 ± 0.7	68.2
Double rice crops	-	-	0.7 ± 0.4	1.9
Others	-	-	0.5 ± 0.3	5.8
Average farm size	1.8 ± 1.2	100	0.9 ± 0.7	100

Source: Household interviews (2017-2018)

change their decisions (Asian Management and Development Institute [AMDI], 2016; Dang et al., 2007). According to an agricultural officer in Hiep My Dong commune, Cau Ngang district, shrimp culture brings relatively better income (T. B. N. Nguyen, personal communication, January 23, 2018). Due to its low price in the market, farmers planted rice for family consumption. Farm size also contributes to the change in farming systems. For integrated shrimp-rice systems, farmlands have to be large enough because about 25-30% of their areas have to be devoted to the trench building for shrimp. It was observed that this system is mainly practiced in the west side of the delta because of its larger farmland areas (Table 1).

The majority of farmers in Cau Ngang district adopted intensive farming systems. It was because these practices could yield greater profits from smaller farm

sizes (Appendix 1). Qualitative analysis suggested that before 2008, farmers largely cultivated black tiger shrimp (*Penaeus monodon*). However, they soon shifted to the culture of white leg shrimp *(Litopenaeus vannamei)* because these species can live in higher density, and their culture period is shorter. The adoption of the intensive shrimp farming system could be seen as a game-changer. It is because farmers, when adopting the intensive shrimp system, hardly switch back to rice farming given the high salt concentration in soil.

Most farmers in An Bien district consider the shrimp rice system as a sustainable model that brings greater income and creates an environment-friendly farming practice (no pesticide used for rice as it is not suitable for the ensuing shrimp crop). This system allows efficient nutrient exchange from the preceding shrimp crop, which provides a rich source of natural fertilizer for the following rice crop. Decayed rice straws left on the field provide an important source of feed for shrimp (AMDI, 2016). Black tiger shrimps (*Penaeus monodon*) are especially dominant because they require less or no feed to be added to the farm. This enabled most farmers (96%) not to switch to intensive shrimp farming as they would face higher risks (e.g., diseases) that could be contagious from adjacent farming zones.

Farmers are found to be flexible in adjusting their farming systems to accommodate local environmental conditions. For instance, when the water is not salty enough, farmers replace black tiger shrimp with freshwater giant prawn (*Macrobrachium rosenbergii*) [6]. Such diversifications (shrimp, rice) allow farmers to deal with the instability of market prices (Pham & Febriamansyah, 2017). Roslina (2018) indicated that most brackish water farmers earn a higher profit than the fresh farmer. So, it is interesting that local farmers have recently switched back to traditional farming systems which exist more than 40 years[7] (AMDI, 2016). This study found that the shrimp rice system could be a sustainable farming system that would provide a better and more stable income for farmers.

Different from counterparts in An Bien, farmers in Cau Ngang district preferred to adopt the intensive shrimp farming system as it brings better income than the integrated shrimp-rice model. However, the former system is subject to high risks (Nguyen & Andrew, 2010). Seeing that shrimp would generate higher profit compared with rice alone, most farmers decided to convert their paddy fields to shrimp ponds. The shift from rice to shrimp was not possible for the poorer rice farmers due to the high capital investment and the cost of shrimp larvae (Tran & Le, 2011).

Qualitative analysis suggested that most farmers in Cau Ngang district earned high profits in the first few years before the shrimp yields started to decline due to diseases, unsuitable weather and chemical pollution

[6] Freshwater giant prawn (*Macrobrachium rosenbergii*) sustains well in the lower salinity level from 4-6g/l, whereas black tiger prawns are more favorable to higher salt level from 15-20g/l.

[7] Before shifting to the double rice crop model, farmers grow rice in the wet season and harvest wild aquatic species in the dry season.

(V. D. Nguyen, personal communication, January 10, 2018). Thirty-nine point four (39.4) % of farmers encountered big losses (Appendix 2). The study found that some farmers switched to other farm-based livelihoods or migrated to the urban areas in search of work.

External factors play a major role in influencing farmers' choices in which farming systems they should invest. This is related to the function of irrigation systems. Both salinity control and irrigation projects were dedicated to support rice cultivation. It is therefore important that water systems for shrimp culture need to be designed in ways that prevent the spread of diseases. The situation could become worse when water gets stagnant and leaks into shrimp ponds (Nguyen & Andrew, 2010).

CONCLUSIONS

Saline intrusion in the VMD is becoming increasingly complex, which makes rural inhabitants and water-based livelihoods exposed to higher risks. Farmers on both sides of the delta are aware of how these affect their livelihoods. The study findings suggested that farmers have proactively shifted farming systems to accommodate new environmental conditions. Crop diversification is seen as one of the most vital adaptation options in dealing with the situation.

While structural systems have been built to control SI, equal attention should be given to relations between farming groups who have encountered conflicts of interest when utilizing water systems for rice and shrimp farming during the dry season. This study calls for collaborative efforts from rice and shrimp farmers to address the issue across the coastal areas in the VMD, particularly under the accelerating impacts of SI. Open space for deliberative decision making and collaborative learning among relevant actors (farmers, extension experts, government officials) therefore needs to be enhanced, making it possible to facilitate the incorporation of farmers' innovative farming practices (successful models) into water management policies (salinity control measures) to accommodate the change.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the assistance of government officials and farmers in Kien Giang and Tra Vinh provinces for their participation in the study. We are very grateful to Andalas University and An Giang University for providing sustained support during my Doctoral study. We especially thank Dr. Charles Howie for editing the paper. Lastly, we thank the PEER-USAID projects at Andalas University that provide financial support for this study.

REFERENCES

Afrizal. (2016). *Qualitative research method encouraging the use of qualitative research in various discipline*. Jarkata, Indonesia: Rajagrafindo.

Agrawal, A., Kononen, M., & Perrin, N. (2009). Local institutions and adaptation to climate change. In *Social dimensions of climate change.* Washington, USA: World Bank.

Asian Management and Development Institute. (2016). *Development of shrimp rice system in the Mekong Delta*. Ha Noi, Vietnam: USAID MEKONG ARCC and AMDI.

Bowyer, P., Bender, S., Rechid, D., & Schaller, M. (2014). *Adapting to climate change: Methods and tools for climate risk management.* Hamburg, Germany: Climate Service Center.

Burton, I., Diringer, E., & Smith, J. (2006). *Adaptation to climate change: International policy options*. Arlington, USA: Pew Center on Global Climate Change.

Climate Change-Agriculture and Food Security-Southeast Asia. (2016). *The drought and salinity intrusion in the Mekong River Delta of Vietnam: Assessment report*. Hanoi, Vietnam: CGIAR Research Centers in Southeast Asia.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. London, England: Sage Publications.

Dang, N. K., Nguyen, B. V., & Nguyen, T. H. (2007). Water use and competition in the Mekong Delta, Vietnam. In T. B. Tran, T. S. Bach, & F. Miller (Eds.), *Challenges to sustainable development in the Mekong Delta: Regional and national policy issues and research needs* (pp. 143-188). Bangkok, Thailand: The Sustainable Mekong Research Network.

de Vaus, D. A. (2002). *Surveys in social research*. New South Wales, Australia: Allen and Unwin.

Estellès, P., Jensen, H., Sánchez, L., & Vechiu, G. (2012). *Sustainable development in the Mekong Delta*. Aarhus N, Denmark: University of Aarhus, Center for Environmental Studies.

Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD). (2016). *Drought and saline intrusion in the Mekong Delta - Adaptations from rice farmers, local goverment and solutions*. Hanoi, Vietnam: Author.

Joint Assessment Team. (2016). *Viet Nam drought and saltwater intrusion rapid assessment report*. Hanoi, Vietnam: Ministry of Agriculture and Rural Development.

Käkönen, M. (2008). Mekong Delta at the crossroads: More control or adaptation? *Ambio: A Journal of the Human Environment, 37*(3), 205-212.

Le, H. D., Li, E., Nuberg, I., & Bruwer, J. (2014). Farmers' perceived risks of climate change and influencing factors: A study in the Mekong Delta, Vietnam. *Environmental Management, 54*(2), 331-345.

Le, P. D. (2017). *Solutions to development the Mekong Delta under natural and human stresses.* Paper presented at the Conference on Sustainble and Climate change Resilience Development of the Mekong Delta of Vietnam, Can Tho city, Vietnam.

Le, T. A., Chu, H. T., Miller, F., & Bach, S. T. (2007). Flood and salinity management in the Mekong Delta, Vietnam. In T. B. Tran, T. S. Bach, & F. Miller (Eds.), *Challenges to sustainable development in the Mekong Delta: Regional and national policy issues and research needs* (pp. 18-68). Bangkok, Thailand: The Sustainable Mekong Research Network.

Miller, F., Osbahr, H., Boyd, E., Thomalla, F., Bharwani, S., Ziervogel, G., ... & Rockström, J. (2010). Resilience and vulnerability: Complementary or conflicting concepts? *Ecology and Society, 15*(3), 1-26.

Ministry of Agriculture and Rural Development. (2017a). *Strategies for water management in the Mekong Delta to adapt to climate change situation*. Paper presented at the Conference of sustainable and climate resilience development of the Mekong Delta of Vietnam, Can Tho, Vietnam.

Ministry of Agriculture and Rural Development. (2017b). *Erosion of river bank and coastline in the Mekong Delta and solutions to climate*

change. Paper presented at the Conference of sustainable and climate resilience development of the Mekong Delta of Vietnam, Can Tho, Vietnam.

Ministry of Natural Resources and Environment. (2016). *Scenarios for climate change and sea level rise in Vietnam*. Hanoi, Vietnam: Author.

Nguyen, A. N. (2017). Historic drought and salinity intrusion in the Mekong Delta in 2016: Lessons learned and response solutions. *Vietnam Science and Technology, 1*(1), 93-96.

Nguyen, B. T., Lam, H., & Thach, S. P. (2012). Participatory vulnerability analysis: A case study from saline intrusion in the Mekong Delta. *Can Tho University Scientific Journal, 24b*, 229-239.

Nguyen, D. A. (2008). *Salt intrusion, tides and mixing in multi-channel estuaries* (Doctoral thesis), UNESCO-IHE Institute for Water Education, Delft, the Netherlands.

Nguyen, P. T. M. (2016a). *Saline intrusion in the Mekong Delta: Causes, impacts and adaptive solutions*. Hanoi, Vietnam: Ministry of Science and Techology of Vietnam.

Nguyen, T. C. (2016b). Saltwater intrusion – An evident impact of climate change in the Mekong and propose adaptable solutions. *American Journal of Environmental and Resource Economics, 1*(1),1-8.

Nguyen, T. H. (2016c). *Vulnerability to saline intrusion and adaptation options for rice and fish farming households in the Mekong Delta of Vietnam* (Doctoral thesis), Mahidol University, Nakhon Pathom, Thailand.

Nguyen, T. T., & Andrew, F. (2010). Learning from the neighbors: Economic and environmental impacts from intensive shrimp farming in the Mekong Delta of Vietnam. *Sustainability, 2*(7), 2144-2162.

Nguyen, V. D., & Huynh, T. N. (2014). Research to adjust Nam Mang Thit salinity control project to achieve criteria for buidling new rural region in Tra Vinh province. *Journal of Water Hydrology and Technology, 20*, 1-27.

Office of Agriculture and Rural Development in Cau Ngang. (2016). *Report for end of year 2015 and strategy for next year 2016 in Cau Ngang district.* Tra Vinh, Vietnam: Author.

Office of Agriculture and Rural Development in Cau Ngang. (2017). *Report for end of year 2016 and strategy for next year 2017 in Cau Ngang district.* Tra Vinh, Vietnam: Author.

Pham, V. H. T., & Febriamansyah, R. (2017). *Exploring forms and factors affecting collective adaptation to salt water intrusion in the Mekong delta of Vietnam.* Paper presented at the The XVI Biennial IASC Conference - Practicing the commons: self-governance, cooperation, and institutional change, Utrecht University, the Netherlands. Retrieved May 17, 2017, from http://dlc.dlib.indiana.edu/dlc/handle/10535/10412

Pham, V. H. T., Febriamansyah, R., Afrizal, & Tran, T. A. (2018). Government intervention and farmers' adaptation to saline intrusion: A Case study in the Vietnamese Mekong Delta. *International Journal on Advanced Science, Engineering and Information Technology, 8*(5) 2142-2148.

Rambo, A. T. (1983). *Conceptual approaches to human ecology*. Hawaii, USA: East-West Environment and Policy Institute.

Renaud, F. G., Le, T. T. H., Lindener, C., Guong, V. T., & Sebesvari, Z. (2015). Resilience and shifts in agro-ecosystems facing increasing sea-level rise and salinity intrusion in Ben Tre Province, Mekong Delta. *Climatic Change, 133*(1), 69-84.

Roslina, K. (2018). Contribution of brackish and freshwater aquaculture to livelihood of small-scale rural aquaculture farmers in Kedah, Malaysia. *Pertanika Journal of Social Sciences & Humanities, 26*(3), 1301-1321.

Smit, B., & Pilifosova, O. (2003). Adaptation to climate change in the context of sustainable development and equity. *Sustainable Development, 8*, 879-912.

Southern Institute of Water Resources Research. (2015). *Report on saltwater intrusion situations in the Mekong Delta*. Retrieved May 10, 2016, from www.vncold.vn/Modules/CMS/Upload/10/.../150420/ManDBSCLToadam6415.pdf

Southern Institute of Water Resources Research. (2017). *Saltwater intrusion forecast at estuaries in coastal areas of the Mekong delta and suggested solutions*. Ho Chi Minh, Vietnam: Author.

To, P. T., Kam, S. P., Chu, T. H., Le, C. D., Nguyen, T. K., Barr, J., & Ben, D. C. (2003). Impact of seawater intrusion control on the environment, land use and household incomes in a coastal area. *Paddy and Water Environment, 1*(2), 65-73.

Tran, D. H. (2009). *Finding solutions for water irrigation in the Mekong Delta of Vietnam*. Retrieved February 20, 2018, from http://www.khoahoc.net/

Tran, T. A., & Le, P. T. (2011). *Impacts of saline intrusion on poor households'livelihoods in coastal areas of Ben Tre province*. A research report for RDViet program. Thừa Thiên Huế, Vietnam: Hue University of Agriculture and Forestry.

Tran, T. A., Nguyen, T. H., & Vo, T. T. (2019a). Adaptation to flood and salinity environments in the Vietnamese Mekong Delta: Empirical analysis of farmer-led innovations. *Agricultural Water Management*, *216*, 89-97.

Tran, T. N., Vo, L. P., Vu, V. N., & Ho, Q. B. (2019b). Salt intrusion adaptation measures for sustainable agricultural development under climate change effects: A case of Ca Mau Peninsula, Vietnam. *Climate Risk Management, 23*, 88-100.

Vietnam Institute of Meteorology - Hydrology and Environment. (2010). *Climate change effects on water resource and adaptation in the Mekong Delta of Vietnam*. Hanoi, Vietnam: Author.

Vo, D. T. (2014). Evaluate community adaptive capacity indices to salinity to agricultural production activities at coastal areas in Tra Vinh province. *Can Tho University Scientific Journal, 36*, 64-71.

Vo, T. K. (2012). Hydrology and hydraulic infrastructure systems in the Mekong Delta, Vietnam. In F. G. Renaud & C. Kuenzer (Eds.), *The Mekong Delta system: Interdisciplinary analysis of a River Delta* (pp. 49-81). Dordrecht, The Netherlands: Springer.

Walliman, N. (2006). *Social research method*. London, England: Sage Publications.

APPENDICES

Appendix 1

Profit from integrated shrimp rice and intensive shrimp system (N=235)
Unit: 1,000 Dong/ha

	Integrated shrimp rice system	Intensive shrimp system
Turnover	81,144	654,921
Cost (*)	16,584	324,316
Profit	64,559	330,605

Source: Household interviews (2017-2018);
Note: (*): Including family labour
1USD = 23,160 VN Dong, (exchange rate on 18th March 2019)

Appendix 2

Profit rate of black tiger shrimp in Cau Ngang district from 2015-2017

Year	Rate of profit (%)		
	Profit earning	Break-even	Loss
2015	39.6	8.7	51.7
2016	59.6	7.1	33.3
2017	63.1	3.6	33.3
Average	54.1	6.5	39.4

Source: Office of Agriculture and Rural Development in Cau Ngang district (2016, 2017)

Pertanika J. Soc. Sci. & Hum. 28 (2): 1567 - 1579 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Introducing Automatic Control Method of Safety Standards in Horizontal Curves by Processing Images Taken by Mobile Mapping System

Mohammadreza Koloushani[1]*, Ali Fatemi[2], Masoud Tabibi[3] and Eren Erman Ozguven[1]

[1]Department of Civil and Environmental Engineering, Florida A&M University-Florida State University College of Engineering, 32310 Florida, USA
[2]Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, 7491 Trondheim, Norway
[3]Road Traffic Injury Research Center, Faculty of Health, Tabriz University of Medical Sciences, 5166615731 Tabriz, Iran

ABSTRACT

The Mobile Mapping System is a trend that provides a comprehensive database of information including video images. The goal of this paper is to introduce an image processing method that could be integrated with GPS data to automatically control the road safety standards for speed limit signs before horizontal curves and identify the problems. The proposed method introduced a new trend in the area of image processing and pattern recognition. The results substantiated a high percentage of success in identification and accuracy in sign distinction. Application of support vector machine led to 92% accuracy in the identification of the signs and 97% accuracy in speed limit distinction.

Keywords: Horizontal curve, image processing, mobile mapping system (MMS), road safety audit, speed limit sign, Support Vector Machine (SVM)

ARTICLE INFO

Article history:
Received: 26 April 2017
Accepted: 21 January 2020
Published: 26 June 2020

E-mail addresses:
mk18h@fsu.edu (Mohammadreza Koloushani)
ali.fatemi@ntnu.no (Ali Fatemi)
masuod.tabibi@gmail.com (Masoud Tabibi)
eozguven@fsu.edu (Eren Erman Ozguven)
* Corresponding author

INTRODUCTION

Safety is a fundamental element whose unceasing presence guarantees the fruitfulness of road life. Safety inspection standards and identification of the causes related to the road in the chain of the factors of accidents is one of the main goals of safety inspection and a preventive method based on field observations; which is a major

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

method of identification, based on physical specifications of the road and identification of the safety defects.

MMS (Mobile Mapping System) as one of the identification methods consists of specific components including an imaging system, rangefinder, positioning, and surveying. Its main output includes geographical data, digital maps, and different types of imaging and video formats. This paper focuses on visual data for image processing. In a previous study, MMS had been widely used as a three-dimensional scanning technology using Lidar (Florkova et al., 2018). In this research rain, fog or shiny surfaces reduced the reflectivity of LIDAR (Light Detection And Ranging) beams. But the method proposed in this study did not require Lidar data. Gathering Lidar data requires substantial more cost and effort to be integrated into the automated method to do road safety audits. While in this research we did not necessarily need 3D visualization.

The main purpose of this paper is to present a new method to automatically identify the safety defects and problems based on visual data processing and maintain accuracy in controlling the safety standards to save time and cost. The signs and safety equipment on the roads are exposed to damages resulting from environmental unfavourable factors, a collision of transit traffic, and social anomalies. The performance of continuous and regular inspection operations by MMS to control the appropriate functioning of their physical conditions is essential.

The data collected by the MMS presents the latest safety condition of the road so that the required decisions can be made at appropriate junctures of time. In addition to the analysis of the data in this paper, the control of the safety standard is also taken into consideration. For this purpose, the safety standards of the speed limit signs before the horizontal curves on intercity roads are taken into consideration. Due to the priority for the observation of safety standards on intercity roads, speed limit signs on these routes are taken into consideration. It is worth mentioning that these signs are both in Farsi and English language.

Previous studies on subjects such as locating the road features like guard rails, horizontal and vertical signs with 0.3-meter precision (Ishikawa et al., 2007), fast and cheap collection of geographical and dimensional data of the road network (Tao, 2009), and collection of precise details without causing any danger for the users and interference in traffic current while inspecting road pavement (France & Glennie, 2011) had introduced the MMS as a well-established technology.

In this paper, the analysis and processing of the data were done by MATLAB software. The efficiency of this software has been substantiated in the analysis of the data related to the absolute or relative dimensions and specifications of objects appearing in the images (with 40 centimetres measuring accuracy for a dimension of 0.6 to 3 meters within a distance of 35 meters) (Madeira et al., 2010).

The horizontal curves are of the most significant road safety issues (Bhatnagar, 1994) and their importance in the rate of rural road accidents is more than the lane width and the sight distance (Gupta & Jain, 1975). The presence of each sharp curve in each kilometre leads to a 34% increase in the statistics of single-vehicle accidents (McDonald, 2004). The presence of such perceptional signs and symbols such as speed limit signposts in a safe and clear distance before the curve plays a significant role in the reduction of the number of accidents and their severity (Charlton, 2007).

The risk factors involved in horizontal curves are the inattention or failure of concentration and attention to the curve (McDonald & Ellis, 1975) as well as lack of understanding and awareness to adjust speed to the road curvature (Johnston, 1982). The rate of attention and the required concentration for driving at 64 kilometres per hour for a 17-degree curve is 42%, while it is 23% for straight sections of the road (McDonald & Ellis, 1975). Speed limit signs as warning parameters are of the most important factors for the increase of attention and concentration of drivers (Knowles & Tay, 2002); the presence of these signs before the curve is also the sign for the curve sharpness inducing a suitable understanding of the grade of curvature to drivers (Retting & Farmer, 1998). The requirement for passing over the curve is in time warning and awareness of the change of the direct path to predict the required standards such as speed reduction at a safe distance before the curve (Reymond et al., 2001). The speed limit signposts suggested being placed at suitable distances before the curves are the most important factors for the determination of the speed of driving over the curve by law-abiding drivers guarantee the safe passage over the curve (Charlton, 2004).

The above issues justify the necessity for an intelligent system of automatic identification of safety standards related to the presence or absence of speed limit signpost at a safe distance before the horizontal curve and distinction of the speed limit on the signpost as well as speed control proportional to the radius of the horizontal curve. Implementation of such a system requires the definition of two separate phases.

The first phase identifies the curve, determines the radius, and calculates the speed proportional to the obtained radius. The required data for this phase are the coordinates obtained by GPS (Global Positioning System) installed on the vehicle (Koloushani et al., 2014). Based on the image processing method proposed in this research, the simple video image data and the image processing outputs could be combined with GPS analysis to develop a more comprehensive approach to do road safety audits regarding horizontal curves. We examined the efficiency of the GPS processing phase in our previous research (Koloushani et al., 2014).

The second phase is the processing of images to identify the speed limit signposts. This phase is divided into two stages: in

the first stage, the initial identification is done and the presence or absence of the speed limit signpost at a safe distance from the curve is specified and in the second stage, the speed limit on the signpost is determined. Ultimately, the speed limit, proportional to the curve radius (obtained in the first phase) is compared with the speed limit on the signpost (obtained in the second phase) and the result of the control of the safety standards related to the rate of the speed limit and the place of the signpost is presented to the user.

So far, to distinguish the horizontal curves on the road, the method of optic flow study of video frames has been used (Eichner & Breckon, 2008), but the radius of the curve is not determined and only the deviation from the straight path is taken into consideration. Also, another research conducted by Gao et al. (2017), used Lidar to extract pavement marking in an automated way.

The main focus of this paper is on the processing of video images obtained from the MMS. Fast and cheap collection of video images to capture precise details without causing any danger for the users and interference in the traffic flow while inspecting the roadway pavement is among the most distinguishing advantage of this image processing method. In continuation explanations on the second phase will be provided. Based on previous studies, numerous methods have been used to identify and distinguish traffic signposts. For example, by examining the colour of the traffic signposts in HSV space, the specifications of the Haar wavelet transform and six neural networks have classified the signposts into six groups (Chen et al., 2011). Also, to identify the traffic signposts, their geometrical shapes (without considering colour) are used and to distinguish the speed limit, separation of the numbers on the signposts as well as neural networks are employed (Moutarde et al., 2007).

A method has also been proposed for the distinction of different types of traffic signposts by the use of SVM (Support Vector Machine) which enjoys colours and geometrical shapes to classify the signposts (Maldonado-Basco & Gomez-Moreno, 2007). Also, YCbCr colour space and Hough transform were used to identify the signposts, and 4 neural networks (LVQ, RBF, MLP, Hopfield) were employed for the distinction of the speed limit on the signpost, while the whole signpost was considered as the network input (Damavandi & Mohammadi, 2004). In other studies, the YCbCr colour space and the MLP neural network were used for the identification and distinction, respectively (Eichner & Breckon, 2008). In the identification phase of the frames consisting of the traffic signposts, YCbCr colour space, as well as the geometrical shape of speed limit (red circle), was used and for the distinction of the amount of speed limit on the signposts, separation of the numbers (Moutarde et al., 2007) and extraction of suitable specifications of the existing numbers on the signposts along with a classifier system of SVM (Heydari et al., 2013) were proposed in the system presented in this paper.

To sum up, in this paper, we intend to propose a low-cost image processing method as a part of a more complicated automated methodology to improve road safety in horizontal curves. To do so, we would be integrating it with the GPS analysis phase. We previously examined the effectiveness of the GPS phase in another research (Koloushani et al., 2014).

MATERIALS AND METHODS

Classification into seven groups is sufficient concerning the goal the system is defined in its direction. These groups include limits of 30 to 90 kilometres an hour (the sharp curves have a radius of fewer than 300 meters and the equivalent speed is less than 90 kilometres an hour). The above classification has been done based on the separation and extraction of suitable specifications of the numbers on the signposts along with a classifying system of the SVM. Extraction of the suitable specification of the numbers and their use as the input for the SVM in place of the number itself reduces the number of the samples required for training, leading to better results (Burges, 1998).

Collection of the Required Data

In this first stage, there is a need for a sample of video data to define, train, and test the intelligent system of image processing. To have access to the data, one stage of image taking was performed. For this purpose, a 1536 × 2048 pixel digital colour film recorder with the capture rate of 15 frames a second was installed on a vehicle (moving at 40 Km/hr.). The film recorder had the variable capability of changing the shutter speed. By selecting small values for the time (1/15000 seconds), the problem of motion blurring of the video frames due to the movement was removed.

Concerning the goal of distinguishing the signposts in this paper which is to control the safety standards by video images obtained from the MMS, there is no need for immediate processing of the data by the system, since it is possible to record the path at specific hours of the day when there is enough light and we do not face a wide spectrum of light when filming which leads to better results.

Identification of the Frames of Traffic Signposts

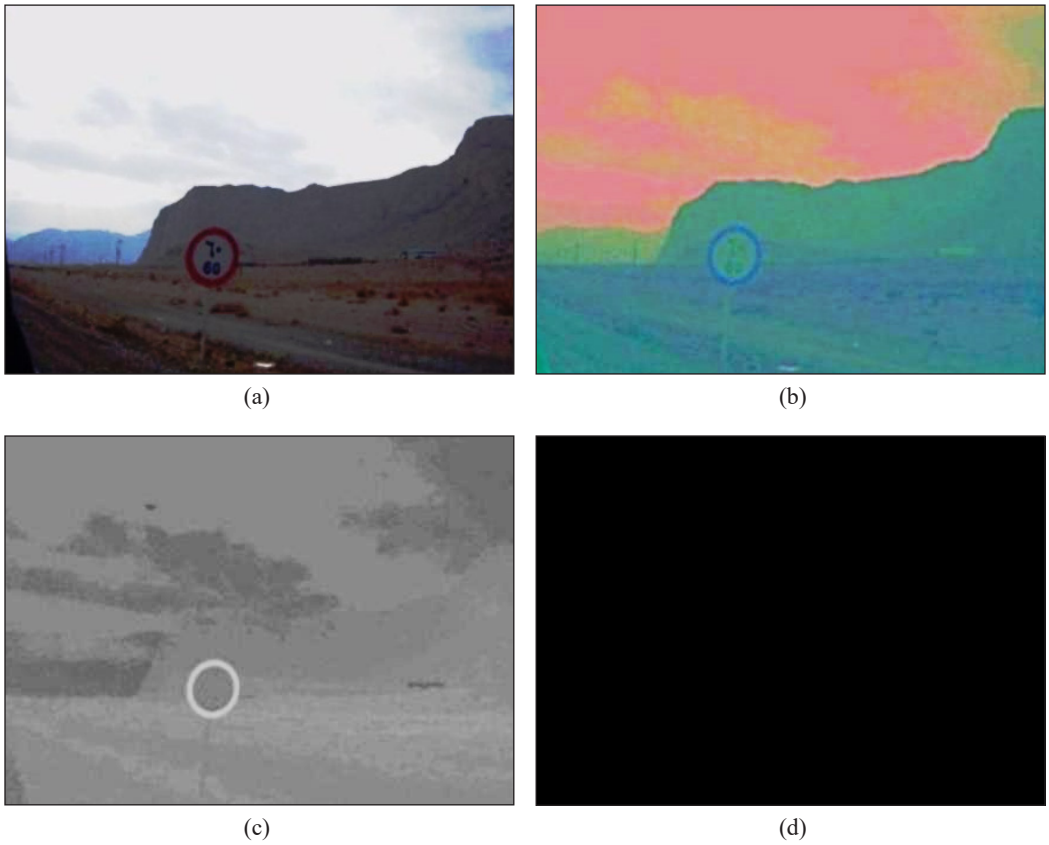
To identify the speed limit signposts by the image data taken by the MMS cams, the frames should be processed first and those containing the signposts should be separated. At this stage, all the signposts with red margin (including triangle, circle, square, rectangle, and hexagon) were identified. To study the first condition of the presence or absence of a signpost in one frame, the red margin is used. To identify the red colour, a sample frame of the signpost was transferred to different colour spaces like RGB, HSL, and YCbCr and the triple components in each image are studied. Ultimately, based on visual observations, the third component of the YCbCr colour space was selected as the best state to distinguish the red colour (Cr). The desired frame was transferred from the RGB colour space to the YCbCr space and the values of

the pixels of the third component (YCbCr) were studied. After performing the local averaging operation on the Cr component and comparison of the obtained image with the value of a suitable threshold, a binary image was produced to separate the red margin of the signpost. The values higher than the threshold value were the signpost margin and the values lower than that were assumed to be the background or the inner part of the signpost. The above stages are depicted in Figure 1.

The Distinction between Speed Limit Signposts and Other Identified Signposts with Red Margins

To distinguish the speed limit signposts and other identified signposts with red margins, the binary image obtained from the previous stage was used.

First, a standard was introduced for the control of the object to be circular as in Equation 1. By determining the value of the above standard for each object and its comparison with a standard threshold value, the non-circular objects obtained from the image were deleted. The value of the standard threshold was considered to be 0.8



(a) (b)

(c) (d)

Figure 1. (a) Speed limit sign in an RGB colour space; (b) Transferred to YCbCr; (c) The third component of YCbCr; (d) A binary image of speed limit sign.

and values higher than the threshold value were considered to be circular (the value of this standard is equal to one for a circle).

$$metric = \frac{4 \times \pi \times A}{P^2} \qquad \text{Equation 1}$$

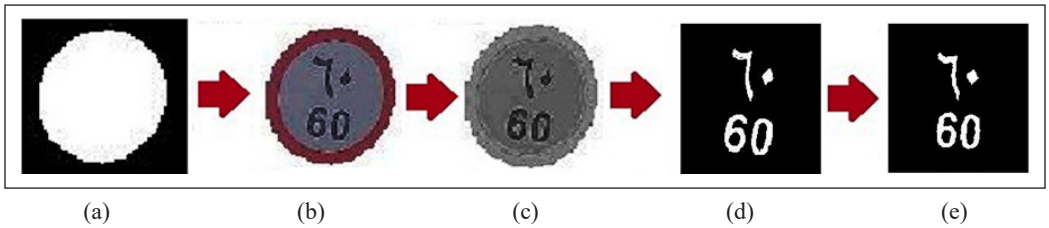
In Equation 1, A is the area and p is the circumference of the geometrical shape. Then, for the deletion of the non-speed-limit signposts from among other signposts with circular shapes, the number of the independent objects inside the circle was counted. If four black independent objects were identified inside the obtained circle, the desired frame was classified among the frames with speed limit signposts. At the stage of the training the SVM, those signposts without speed limit but with four objects identified on them (like height limit signpost), were separately classified.

To define and extract the features of the identified numbers and also their distinction (at the next stage), after the identification stage and before the stage of the separation of the numbers and extraction of the features, a suitable rotation was performed on the images of the signposts so that the numbers were arranged vertically relative to the horizon level because when video images were taken, the speed limit signposts are at different angles relative to horizon. In this case, it is possible to compare the features defined for the numbers on all the signposts at different angles at the time of imaging in a similar condition. This stage is depicted in Figure 2.

The Distinction of Speed on the Speed Limit Signpost

To distinguish the speed on the speed limit signpost, first, the two Farsi and Latin numbers on the signpost were extracted and each was placed in a 10*20 pixel window for normalization. Then, to distinguish each of the extracted numbers, six unique features of each of the numbers and an SVM classifying system were employed.

As it was mentioned above, the main goal of this research was to control the safety standards of the speed limit signposts before sharp horizontal curves (with a radius of fewer than 300 meters) and the speed appropriate with these curves at 30 to 90 kilometres an hour. As a result, seven-speed limit signposts (30 to 90 kilometres an hour) were selected with 30 sample images of the above signposts (210 in totals) and the SVM was trained by these 210 samples. The twelve-fold features (six features of each decimal) for distinction are:



(a) (b) (c) (d) (e)

Figure 2. (a) Speed limit signs in an RGB colour space; (b) Transferred to YCbCr; (c) The third component of YCbCr; (d) A binary image of speed limit sign; (e) Rotated sign.

(1) The number and location of the peaks in the vector resulting from the sum of the rows of pixels

To extract these features for a number, first, the values of the lit pixels of the i^{th} row of the 10*20 image were added together which replaced the i^{th} array of a 1*20 vector. This sum was calculated in the same manner for all the rows of the 10*20 image. Then, to delete the high frequencies, the resulted vector was passed through a low pass filter. Now, the number of the obtained vector peaks was counted and stored as a feature of the desired number. In continuation, the number of the row where the peaks were produced (location of the peaks) were added together and divided by the number of the peaks and considered as another feature of the desired number. The above two features were calculated for the two Farsi and Latin numbers (four features in total).

(2) The number and location of the peaks in the vectors resulted from the column addition of the pixels

To extract this feature, it was acted as the precious case too, except that the lit pixels of the columns were counted. First, for each number, the values of the lit pixels of the j^{th} column of 10*20 images were added together which replace the j^{th} array of a 1*10 vector. The resulted vector was passed through a low pass filter and then the number and location of the peaks were determined as before. These two features were also defined for each of the two Farsi and Latin numbers (four features in total).

(3) Geometrical specifications of numbers

As the fifth feature, the area (the number of lit pixels in the 10*20 image) and as the sixth feature, the area of the obtained number were calculated (the number of pixels around the light part in the 10*20 image). These two features were also defined for each of the two Farsi and Latin numbers (four features in total).

Comparison of the Rates of the Speed Limit on the Signposts with the Speed Rates Proportional to the Curve Radius

At this stage, the speed limit on the speed limit signpost before the horizontal curve as the output of the image processing section of the system was compared with the speed proportional to the curve radius. Based on the analysis of the coordinates of the points collected by a GPS receiver in the MMS, it is possible to automatically calculate the radius of the curve. According to the obtained radius and (2), it is possible to determine the speed proportional to the curve and ultimately, identify the safe distance before the curve for the installation of speed limit signpost about the existing safety standards in the road geometric design code.

Ultimately, based on the value of the obtained speed and the safe distance before the curve, it is possible to identify the safety condition of the curve concerning the speed limit signpost. If the distinguished speed limit signpost is installed at the suitable

distance before the curve according to the proper speed on it, the above safety standards are verified, otherwise, an appropriate message concerning the inappropriate speed limitation or wrong location of the signpost is provided for the user.

$$\frac{V^2}{127(e+f)} \qquad \text{Equation 2}$$

In Equation 2, R is the radius of the curve in terms of meter, V is the speed in terms of kilometre per hour, e is the superelevation, and f is the coefficient of transverse friction.

RESULT AND DISCUSSION

The employment of MMS as one of the path safety inspection methods provides accurate and complete image data of the side features of the path and presents the physical position of the signs and signposts. In this paper, by concentrating on the section of the processing of the image by this system, a new method was presented for automatic control of safety standards related to the speed limit signposts before the horizontal curves. Based on the obtained results, the rate of accuracy at the identification phase (presence or absence of the signpost) was estimated to be 92% and at the pattern recognition phase (determination of the value of limitation on the signpost) it was 97%. The results obtained from the processing of the video images of MMS for identification and the distinctions of speed limit signpost are presented in Table 1. The reason for the difference in the rate of accuracy between the two phases is the more significant effect of factors such as the angle of taking images, weather conditions, and the physical situation of the signpost on the frame understudy at the identification phase relative to the distinction phase.

Other safety standards such as the condition of the margin of the path can also be automatically evaluated within the framework of the intelligent systems, but the ultimate goal is not limited only to the detection of the safety defects whether existing or potential, but the required efforts should also be made to find safety

Table 1
Result of the identification and determination of the speed limit signs via the proposed method

Duration of the film (min)	The total number of speed signs (between 30-90 km/hr.)	No. of valid identification of presence or absence of the signpost		No. of valid determination of the value of limitation on the signpost		
					%	
		No.	%	No.	To the number of identified signs	To the total number of speed sign
24	7	7	100	7	100	100
18	12	11	91.7	11	100	91.7
33	16	14	87.5	13	92.9	81.3
12	9	8	88.9	8	100	88.9
27	14	13	92.9	12	92.3	85.7

improvement opportunities for the black spots.

Based on the acceptable accuracy obtained using the proposed method, Mobile Mapping Systems (MMS) can be successfully employed for road safety inspection purposes to capture video images. The main output captured by MMS includes geographical data and different types of imaging and video formats. By recording and registering image and geographical data of the roadway, this system can present the latest safety situation on the roadway, which can facilitate the safety auditing process to make informed decisions timely. Note that there is no need for immediate processing of the data for the quality control of the safety standards by the video images obtained from the MMS. It is possible to record the roadway at specific hours of the day when there is enough light, and we did not face a wide spectrum of light when filming, which leads to better results.

The MMS-based image processing method presented in this paper is capable of being used in other private and public vehicles as operating in-vehicle active systems so that by installing a system in the vehicles based on the proposed method and processing the road images and identifying the value of the speed limit on the sign within the framework of in-vehicle active system it is possible to reduce the speed automatically. The proposed method in this research could be used in other types of roads and also other road users to prevent roll-over accident accidents using the identification of speed limit signs. It also could be used for other road users to prevent non-motorized accidents using the identification of speed limit sign (Shirani et al., 2018) and improving connected vehicles technologies for the safety of aging population (Kidando et al., 2018).

CONCLUSION

Due to the centrifugal force imposed on the vehicle, confusing the driver to predict the situation of the path ahead, the horizontal curves of the path which are more dangerous relative to other linear sections of the path impose more responsibility upon the driver. Accordingly, the study of the safety situation of the horizontal curves has always been one of the major areas of the activity of specialists and road engineers to improve the safety situation of the network of the roads.

In this paper, by concentrating on the section of the processing of image by this system, a new method was presented for automatic control of safety standards related to the speed limit signposts before the horizontal curves. On the basis of the results obtained from the application of the automatic method in controlling the safety standards related to speed limit signs before the horizontal curves in the image processing phase and on the basis of processing the road video images (recorded by the cameras installed on MMS vehicles) the rate of precision in the identification section (presence or absence of sign) was estimated to be 92% and in the distinction section (determination of the limit value on the sign) it was 97%. The output results of the proposed method within the framework

of the maps and comprehensible values in the area of the identification of the black spots can be useful for the road engineers and the designers. The introduced intelligent system is able to automatically control the safety standards related to the proposed speed value on them saving time and cost compared with other field methods of road safety auditing. The sign and safety equipment on the roads are exposed to damages resulting from environmental unfavorable factors, collision of transit traffic, and social anomies. Performance of continuous and regular inspection operations by MMS to control the appropriate functioning of their physical conditions is essential. Of course, the ultimate goal is not only limited to detect the safety defects, but the required efforts should also be taken to find chances for the improvement of the safety of the road and the elimination of the black spots.

LIMITATION AND FUTURE RESEARCH

It is worth mentioning that based on some studies conducted on the speed limit signs, the effect of the signs and warnings of the danger of the curve on the perceptional system of drivers has been evaluated to be negligible (Jorgensen & Wentzel-Larsen, 1999). It also revealed that the warning signs before the curves had very little effect on the reduction of entering speed of drivers to the curves (Shinar et al., 1980). Therefore, in addition to the speed limit signs, perceptual and concentration-enhancing factors are also required (Recarte & Nunes, 1996). Of these perceptual factors, one can point to pavement signs including rumble strips in the middle on the sides of the road (Rasanen, 2005).

We intend to utilize the result of the previous study related to GPS analyzing (Koloushani et al., 2014) and integrate the outputs with image processing results to propose a new concept that could automatically evaluate the safety condition before horizontal curves. The before-mentioned GPS analyzing phase could provide guidelines in determining the speed limit values based on the curve radius, identify a safe and appropriate location for the speed limit sign before the curve based on the speed limit on the straight roadway segment, and compares the speed value and sign location given the existing conditions. We plan to expand this research in this direction soon. Additionally, it would be a valuable extension if the application of this image processing method is considered in the connected vehicle field.

ACKNOWLEDGEMENT

This project was supported by Isfahan Science and Technology Town (ISTT), by providing the required equipment for data collection. We also appreciate the efforts made by Isfahan Road and Urban Planning Office, for providing a suitable situation in the area of studies on traffic signs. The opinions, results, and findings expressed in this manuscript are those of the authors and do not necessarily represent the views of the Isfahan Road and Urban Planning Office, The Isfahan University of Technology, or the Isfahan Science and Technology Town.

REFERENCES

Bhatnagar, Y. S. (1994). Observations on the use of chevron alignment markers. *Proceedings of 17th Australian Road Research Board Ltd (ARRB) Conference, 17*(5), 65-81.

Burges, C. J. (1998). A tutorial on support vector machines for pattern recognition. *Data Mining and Knowledge Discovery, 2*(2), 121-167.

Charlton, S. G. (2004). Perceptual and attentional effects on drivers' speed selection at curves. *Accident Analysis and Prevention, 36*(5), 877-884.

Charlton, S. G. (2007). The role of attention in horizontal curves: A comparison of advance warning, delineation, and road marking treatments. *Accident Analysis and Prevention, 39*(5), 873-885.

Chen, L., Li, Q., Li, M., & Mao, Q. (2011). Traffic sign detection and recognition for intelligent vehicle. In *IEEE Intelligent Vehicles Symposium IV* (pp. 908-913). https://doi.org/10.1109/IVS.2011.5940543

Damavandi, Y. B., & Mohammadi, K. (2004). Speed limit traffic sign detection & recognition. In *IEEE Conference on Cybernetics and Intelligent Systems 2004* (pp. 797-802). https://doi.org/10.1109/ICCIS.2004.1460690

Eichner, M. L., & Breckon, T. P. (2008). Integrated speed limit detection and recognition from real-time video. In *2008 IEEE Intelligent Vehicles Symposium* (pp. 626-631). https://doi.org/10.1109/IVS.2008.4621285

Florkova, Z., Duris, L., Veselovsky, M., Sedivy, S., & Kovalova, D. (2018). Three-dimensional mobile mapping system and its use in road engineering. *MATEC Web Conference, 196,* 1-7. https://doi.org/10.1051/matecconf/201819604082

France, J., & Glennie, C. (2011). A step-by-step description of a mobile mapping project reveals the tricks of the trade. *Earth Imaging Journal,* (7), 28-30.

Gao, Y., Zhong, R., Tang, T., Wang, L., & Liu, X. (2017). Automatic extraction of pavement markings on streets from point cloud data of mobile LiDAR. *Measurement Science and Technology, 28*(8), 1-13.

Gupta, R. C., & Jain, R. P. (1975). Effect of certain roadway characteristics on accident rates for two-lane, two-way roads in connecticut (abridgment). *54th Annual Meeting of the Transportation Research Board* (pp. 50-54). Washington, USA: Transportation Research Board (TRB).

Heydari, M., Amirfattahi, R., Nazari, B., & Bastani, A. (2013). Iron ore green pellet diameter measurement by using of image processing techniques. In *2013 21st Iranian Conference on Electrical Engineering (ICEE)* (pp. 1-6). https://doi.org/10.1109/IranianCEE.2013.6599563

Ishikawa, K., Amano, Y., Hashizume, T., & Takiguchi, J. (2007). A study of precise road feature localization using mobile mapping system. In *2007 IEEE/ASME International Conference on Advanced Intelligent Mechatronics* (pp. 1-6). https://doi.org/10.1109/AIM.2007.4412541

Johnston, I.R. (1982). Modifying driver behaviour on rural road curves: a review of recent research. *Proceeding of the 11th Australian Road Research Board (ARRB) Conference*, *11*(4),115-124.

Jorgensen, F., & Wentzel-Larsen, T. (1999). Optimal use of warning signs in traffic. *Accident Analysis and Prevention, 31*(6), 729-738.

Kidando, E., Moses, R., Ghorbanzadeh, M., & Ozguven, E. E. (2018). Traffic operation and safety analysis on an arterial highway: Implications for connected vehicle applications. In *2018 21st International Conference on Intelligent Transportation Systems (ITSC)*

(pp. 2753-2758). https://doi.org/10.1109/ITSC.2018.8569636

Knowles, D., & Tay, R. S. (2002). Driver inattention: More risky than the fatal four? In *2002 The Road Safety, Policing, and Education Conference*, (pp. 107-111). Available from http://eprints.qut.edu.au/

Koloushani, M., Fatemi, A., & Tabibi, M. (2014). Application of global positioning system data collected by mobile mapping system for automatic control of safety standards in horizontal curves. *The 93rd Annual Meeting of the Transportation Research Board* (pp. 1-13). Washington, USA: Transportation Research Board (TRB).

Madeira, S., Goncalves, J., & Bastos, L. (2010). Photogrammetric mapping and measuring application using MATLAB. *Computers and Geosciences, 36*(6), 699-706.

Maldonado-Basco, S., & Gomez-Moreno, H. (2007). Road-sign detection and recognition based on support vector machines. *IEEE Transaction on Intelligent Transportation Systems, 8*(2), 264-278.

McDonald, L. B., & Ellis, N. C. (1975). Driver workload for various turn radii and speeds. *Transportation Research Record: Journal of the Transportation Research Board, 530*(1), 8-30.

McDonald, N. (2004). Look and learn: capitalizing on individual responsibility in speed management. In *The Australian Institute of Traffic Planning and Management (AITPM) National Conference* (pp. 73-83). Toombul, Queensland, Australia: AITPM.

Moutarde, F., Bargeton, A., Herbin, A., & Chanussot, L. (2007). Modular traffic signs recognition applied to on-vehicle real-time visual detection of American and European speed limit signs. In *2007 IEEE Intelligent Vehicles Symposium* (pp. 1122-1126). Beijing, China: ITS America.

Rasanen, M. (2005). Effects of a rumble strip barrier line on lane keeping in a curve. *Accident Analysis and Prevention, 37*(3), 575-581.

Recarte, M. A., & Nunes, L. M. (1996). Perception of speed in an automobile: estimation and perception. *Journal of Experimental Psychology, 2*(4), 291-304.

Retting, R. A., & Farmer, C. M. (1998). Use of pavement markings to reduce excessive traffic speeds on hazardous curves. *ITE Journal, 68*(9), 30-36.

Reymond, G., Kemeny, A., Droulez, J., & Berthoz, A. (2001). Role of lateral acceleration in curve driving: Driver model and experiments on a real vehicle and a driving simulator. *Human Factors, 43*(3), 483-495.

Shinar, D., Rockwell, T. H., & Malecki, J. A. (1980). The effects of changes in driver perception on rural curve negotiation. *Ergonomics, 23*(3), 263-275.

Shirani, N., Doustmohammadi, M., Haleem, K., & Anderson, M. (2018). Safety investigation of non-motorized crashes in the city of Huntsville, Alabama, using count regression models. *The 97th Annual Meeting of the Transportation Research Board* (pp. 1-17). Washington, USA: Transportation Research Board (TRB).

Tao, C. V. (2009). Mobile mapping technology for road network data acquisition. *Journal of Geomatics Engineering, 2*(2), 1-13.

Pertanika J. Soc. Sci. & Hum. 28 (2): 1581 - 1598 (2020)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Comparing Official Tourism Twitter Accounts: The Case of Four Major Tourist Destinations in Southeast Asia

Imam Syafganti[1,2]* and Michel Walrave[1]

[1]Department of Communication Sciences, Faculty of Social Sciences, University of Antwerp, 2000 Antwerpen, Belgium
[2]Department of Business Administration, Politeknik Negeri Jakarta, 16424 Depok, Indonesia

ABSTRACT

This study evaluated the performance of the official tourism Twitter accounts of the four major tourist destinations in Southeast Asia namely, Indonesia, Malaysia, Singapore, and Thailand. By using a data analytical software, the study collected data related to the number of tweets, number of interactions, engagement rate, number of followers, number of potential reaches and viral reach from the accounts during an observation of one month of the observation period. A series of correlation analyses was conducted in order to reveal associations among the variables with tourism performance indicators namely, the amount of receipt and also the travel and tourism competitiveness index. The results of the study show that Thailand's official Twitter account generates the highest number of tweets and interactions, while Singapore's account was found to be the least productive account. Despite the low level of productivity, the account recorded the highest number of engagement rates. Moreover, Indonesia's account was found to be the account with the highest number of followers, potential reach, and viral reach. Results of correlation tests revealed that the number of interactions was significantly associated with the number of international receipts while engagement rates correlated significantly with the travel and tourism competitiveness index. Finally, conclusions for scientific and practical purposes are proposed.

ARTICLE INFO

Article history:
Received: 19 September 2018
Accepted: 26 February 2020
Published: 26 June 2020

Keywords: Competitiveness index, evaluation, social media, Southeast Asia, tourism, Twitter

E-mail addresses:
imam_syafganti@yahoo.com (Imam Syafganti)
michel.walrave@uantwerpen.be (Michel Walrave)
*Corresponding author

ISSN: 0128-7702
e-ISSN 2231-8534

© Universiti Putra Malaysia Press

INTRODUCTION

The proliferation of social media use provides a meaningful opportunity for destination marketing organizations (DMO) and marketers in conducting marketing campaign activities (Popesku, 2014). Such online communication platforms enable marketers to conduct valuable promotion activities to their target markets (Kiráľová & Pavlíčeka, 2015; Leung et al., 2013). By using social media as vehicles to convey marketing-related messages, promotional activities from destinations are now no longer constricted by time and space (Pike & Page, 2014). Additionally, such activities also allow marketers to disseminate the messages in the form of text, picture and video (Appel et al., 2019), whenever they want to without worrying about the cost (Yang & Wang, 2015).

From the consumers' point of view, destinations' promotional messages exposed through social media platforms could aid them in their decision-making process (Hudson & Thal, 2013). Furthermore, the use of social media as promotional vehicles also generates interactions between destinations and tourists and also among tourists (Kiráľová & Pavlíčeka, 2015). More particularly, social media allow tourists to share their previous experiences, formulate travel advice, and make recommendations for other (potential) visitors (Xiang & Gretzel, 2010).

Realizing the above-mentioned advantages, most DMOs today maintain official social media accounts in various platforms to communicate directly and effectively with their existing and potential tourists (Roque & Raposo, 2016). Consequently, managing official destination social media accounts is considered as a necessity rather than a choice for destinations (Hays et al., 2013).

One of the most prevalent social media platforms utilized by destinations in reaching their potential target groups is Twitter (Popesku, 2014; Yang & Wang, 2015). Previous studies revealed that most of the leading destinations across the world also used Twitter to communicate with their target markets (Mariani et al., 2016). Moreover, other studies also confirmed that the use of Twitter could benefit destinations especially in disseminating promotional messages (Gibbs & Dancs, 2013), as an effective destination branding tool and medium to engage with target groups (Bokunewics & Shulman, 2017), and could be associated with the number of tourists visit and the amount of international receipt (Antoniadis et al., 2014).

Although studies concerning the use of Twitter within the context of destination marketing were carried out in regions across the world (Cheng & Edwards, 2015; Christensen, 2013; Mariani et al., 2016; Sevin, 2013), the number of studies that specifically address the use of Twitter by destination marketers in the region of Southeast Asia remains limited (Nugroho, 2017). The situation is certainly very

surprising given that tourism is one of the important sectors that could generate foreign exchange income for countries in the region.

As countries in Southeast Asia start utilizing various social media platforms (especially Twitter) as an official communication medium, a periodic evaluation of the platform use has become indispensable. However, there are some limitations when performing such evaluation. First, the number of data collected in evaluating communication on Twitter can be relatively huge and unstructured. The second problem is due to Twitter's nature as a microblogging site, where a tweet produced by an account can elapse quickly. Consequently, a conventional way for evaluating a Twitter account's performance can be time-consuming and difficult to perform.

Considering the importance of an effective and precise evaluation of social media use as destination promotional media, this study proposes the utilization of data analytical software in conducting such an assessment. Building upon a study conducted by Antoniadis et al. (2014), about the association between a destination's official Twitter account performance and a country's tourism performance, this study aims to evaluate the use of official Twitter accounts of four major tourist destinations within the context of Southeast Asia by using a data analytical software. Additionally, this study also analyses the sentiment of the conversations (comments or tweets posted) related to the tweets produced by the official Twitter accounts. Ultimately, the relationship between the destinations' Twitter accounts performance and several tourism performance indicators namely the number of visits, amount of international receipt, and a destination's score on a travel and tourism competitiveness index, are also examined.

Literature Review

The Internet and Social Media Development in Tourism. The rapid development of digital media has changed the way tourism stakeholders communicate and interact with each other (Hernández-Méndez et al., 2015). Moreover, it also changes the way tourism information is distributed by marketers and consumed by travellers. Furthermore, marketers now tend to rely on the Internet to disseminate information and also promotional messages concerning destinations (Xiang & Gretzel, 2010). On the other side, consumers also increasingly turn to the Internet and its application (including social media) for their travel decision-making activities namely, searching for information about destinations (Kang & Schuett, 2013), planning their trip (Fotis et al., 2011), and booking (Hudson & Thal, 2013).

Social media can be defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan & Haenlein, 2011). Another definition that emphasizes the importance of users' interaction defines social media as web applications that enable

the process of sharing information, and encourage participation and collaboration among its users (Steenkamp & Hyde-Clarke, 2014). Such activities are possible due to an important characteristic of social media that encourages interaction among users across different levels of closeness (Ariel & Avidar, 2015).

Social media enables its users to conduct information exchange activities and engage in word of mouth communication electronically (Tham et al., 2013). Moreover, current developments show that social media are gaining increasing acceptance both from individuals and organizations (Chung & Koo, 2015). The evidence of such acceptance is reflected by the number of social media users, which currently around 2.95 billion users across all social has media platforms around the world in 2019 (Clement, 2020).

The Use of Twitter by DMOs. One of the most popular social media platforms is Twitter (Bokunewics & Shulman, 2017). According to Omnicore (2020), currently, Twitter has around 330 million active users with 500 million of tweets sent per day. Compared to other social media platforms, Twitter is a text-based microblogging platform with a relatively limited number of characters (Uşaklı et al., 2017). It is perceived as more conversational in nature (Hvass & Munar, 2012) and provides communication features for its users such as tweets (status update), retweets (redistribution of a tweet), mentions (notifying the particular user by mentioning the name of their account), and hashtags (grouping tweets based on a specific issue) (Alhabash & Ma, 2017). The variety of features provide real-time interaction and communication services that could be used by destination marketers to inform about their destination and convey promotional messages to their online audience (Kiráľová & Pavlíčeka, 2015).

Within the context of scientific research, the adoption of social media platforms, in particular Twitter, as a marketing communication tool is a phenomenon that is increasingly examined. More particularly, research on the effectiveness of using Twitter as a promotional tool for destination emerges. One of the earliest studies was conducted by Hay (2010), on the use of Twitter as a tourism marketing tool. The study concluded that Twitter could potentially provide a useful communication platform for DMOs and consumers. However, as the use of Twitter was in an early phase, both parties were still attempting to find a suitable way to utilize this social media platform. Sevin (2013), revealed that the communication activities conducted by the DMOs' Twitter account were mostly about disseminating information and events taking place in their destination. Similarly, a content analysis of Canadian DMO's Twitter accounts revealed that DMOs mostly used Twitter as a vehicle for distributing information and initiating discussion with their followers (Gibbs & Dancs, 2013). Another study evaluating destinations' official Twitter account and relation between the accounts and several tourism indexes revealed that, the use of the official Twitter account by

destinations aligned with destinations' tourism achievements, more particularly, in terms of the number of international visits and number of foreign exchange (Antoniadis et al., 2014). Despite the fact that the above-mentioned studies were conducted in a variety of different contexts, the results of the studies have one similar finding namely, that Twitter was mostly utilized by destination marketers as a medium to convey information and promotional messages related to destinations.

Text Mining and Sentiment Analysis. The dramatic change in the communication technology environment has stimulated the need for new methods in many fields of studies (Burgess et al., 2013). Such methods are particularly needed to accommodate the abundance of digital data available in online environments (Lewis et al., 2013). These data are very diverse, and can be in textual form, images, numbers and may consist of structured or unstructured data.

One of the techniques that can be used in order to collect the data is text mining. Text mining refers to a specific technique that can be used to collect unstructured data based on specific patterns in an online environment. According to Feldman and Sanger (2007), "text mining can be broadly defined as a knowledge-intensive process in which a user interacts with a document collection over time by using a suite of analysis tools". Similarly, de Fortuny et al. (2012), combined several related aspects of text mining and concluded that text mining was a method to reveal knowledge by applying a computerized process to extract new information from unstructured text documents. Moreover, they also argued that the scope of text mining was ranging from document categorization, encapsulation, grouping, extraction, to sentiment analysis.

The application of this technique in destination marketing studies has been carried out by many researchers in the field. Choi et al. (2007) applied the method to discover the image of a specific destination, namely Macau, and how this country was represented on the Internet. Another study examined travel blogs by using text mining to discover the delight of hotel clients in the hospitality industry (Magnini et al., 2011). Likewise, Park et al. (2016) performed text mining analysis to collect data from Twitter (tweets) about cruise travels.

In order to be able to go beyond the data (conversations on the Internet), sentiment analysis can be performed to reveal the propensity and attitude (emotion) of the conversation (Duan et al., 2013). Sentiment analysis refers to a specific computation application based on the propensity of the communicator's attitude toward a particular issue (Li & Wu, 2010). Correspondingly, Liu (2010) proposed that sentiment analysis or opinion mining was a computerized calculation that examined opinions, sentiments, and emotions expressed in texts. In general, sentiment analysis works based on emotional tendencies contained

in a single phrase, sentence, or particular paragraph.

As the use of the Internet and social media platforms for tourism purposes increases drastically, the availability of online data (unstructured data in the form of text) on the Internet rises exponentially (Li & Wu, 2010). Consequently, text mining and sentiment analysis become valuable tools for scholars who analyse the immense number of data available online related to tourism (Liu et al., 2013).

Research Questions

Based on the above-mentioned discussion, the present study proposes the following research questions:

Research question 1: How do the destinations' official Twitter accounts of Indonesia, Malaysia, Singapore, and Thailand perform in terms of (a) the number of tweets, (b) the number of interactions, (c) engagement rates, (d) the number of followers, (e) number of potential reach, (f) number of viral reach?

Research question 2: Which official Twitter account is the most productive in terms of generating tweets?

Research question 3: Which official Twitter account gets a higher level of interactions?

Research question 4: Which official Twitter account scores the highest engagement rates?

Research question 5: Which official Twitter account gets the highest number of followers?

Research question 6: Which official Twitter account gets the highest number of potential reach?

Research question 7: Which official Twitter account gets the highest number of viral reach?

Research question 8: Is there a significant relationship the performances of official Twitter accounts with the countries' tourism performances in terms of (a) the number of visits, (b) amount of international receipt, (c) travel & tourism competitiveness index (TTCI)?

METHODOLOGY

This study monitored the official tourism Twitter accounts of 4 major tourists' destination countries in Southeast Asia (Indonesia, Malaysia, Singapore, and Thailand, namely, @indtravel, @TourismMalaysia, @visitsingapore, and @ThailandFanClub). The countries were chosen because they represent the four destinations with the highest tourist visits in the region and manage the official Twitter account as a means of destination communication. The data collection process conducted for 30 days, from 10 August 2016 until 8 September 2016. During this period, data analytical software was used to record and monitor the communication activities from the above-mentioned Twitter accounts. The recorded activity was limited to the tweets posted by the accounts and interactions (more particularly, retweets and likes generated by other accounts) that appeared as responses to the tweets.

Furthermore, the software also calculated other important aspects of social media communication, namely potential reach and viral reach. Potential reach referred to the total number of accounts that were potentially exposed to the tweets produced by the destinations' official Twitter accounts. Viral reach means the total number of accounts exposed to retweets produced by accounts related to the destinations' official Twitter accounts. In addition, the software also takes into account the engagement rate of each account during the observation period. Engagement rates are calculated by dividing the number of interactions (in terms of retweets and likes) with the number of tweets produced by the accounts. As the engagement rate reflects the level of interactivity of an account, ideally the number of interactions (in terms of retweets and likes) should be higher than the number of tweets. Consequently, the higher the score of the engagement rate, the better the interactivity level of the Twitter accounts. Therefore, ideally, the score of the engagement rate should be 1 or higher than 1.

Another analysis that was performed was sentiment analysis. This analysis was conducted by assessing emotions/attitudes and the tendency of the text posted or written by the destinations' official Twitter accounts with respect to a specific topic. The result of this analysis classified the text of the posts based on three categories of sentiments: a positive sentiment, a negative and a neutral sentiment.

In general, the steps taken in the data collection process can be sorted as follows, first, identifying the official twitter accounts that will be examined. The second, inputting the accounts to the software administrator, and finally, applying several relevant analyses. The data gathered were downloaded through the dashboard of the software.

This study further took into account several important indicators in tourism namely, the number of visits, the number of international receipts, and the score on the travel and tourism competitiveness index. The data was gathered from various official sources such as the official tourism websites of the countries and the UNWTO tourism highlight 2016. Data about the travel and tourism competitiveness index was generated from the travel and tourism competitiveness report of 2015 provided by the World Economic Forum. Subsequently, a series of correlation tests was conducted in order to discover associations among these variables with the performances of the destinations' official Twitter accounts.

RESULTS

The results of the analysis of collected data during the observation period showed that Thailand's official Twitter account produced more tweets than the other accounts, with a total of 153 tweets. The second position was held by Indonesia's account with 95 tweets, followed by Malaysia's and Singapore's accounts with 46 and 14 tweets respectively. Similar results were found when the software monitored the interaction

level of each Twitter account observed in this study. Thailand's official Twitter account had the highest number of interactions with 81 interactions (in terms of retweets and likes), while Malaysia's account reached 22 interactions, Indonesia's account generated 13 interactions and Singapore's account 12 interactions. Table 1 below summarizes all the results concerning the official Twitter accounts' performances in this study.

Furthermore, the tool also calculates the engagement rate of the examined Twitter accounts. The results of this calculation show that Singapore's Twitter account had the highest engagement score, namely 0.86. Thailand's Twitter account recorded the second highest score with 0.53, while Malaysia's and Indonesia's Twitter accounts followed respectively with 0.48 and 0.14.

As far as the number of followers is concerned, Indonesia's Twitter account was identified as an account with the highest number of followers (551,041 followers). Singapore's official Twitter account possesses 42,667 followers (the lowest). Other accounts, namely Malaysia's and Thailand's accounts recorded 222,076 and 71,313 followers respectively.

Another aspect that is also considered in this study is the potential reach of the tweets produced by the accounts. It was discovered that Indonesia's Twitter account had the highest reach with 75,502,184 potential reaches, while Thailand's account had the second position with a 19,249,612 potential reach. The next positions were filled by Malaysia's and Singapore's Twitter accounts with 18,488,524 and 2,810,751 potential reaches.

In addition, the viral reach of the tweets expressed by the four accounts studied was also calculated. The output of this process indicates that Indonesia's official Twitter account recorded the highest number with 17,923.890 viral reaches. The second highest number of viral reach was held by Malaysia's Twitter account with 3,434,624 viral reaches. Furthermore, Thailand's

Table 1

The performance of the official twitter accounts

Official Twitter account	Tweet	Interaction	Engagement rate	Followers	Potential reach	Viral reach
@indtravel	95	13	0.14	551,041	75,502,184	17,923,890
@TourismMalaysia	46	22	0.48	222,076	19,249,612	3,434,624
@visitsingapore	14	12	0.86	42,667	2,810,751	1,705,963
@ThailandFanClub	153	81	0.53	71,313	18,488,524	2,702,179

official Twitter account got 2,702,179 viral reaches and Singapore's official Twitter account obtained 1,705,963 viral reaches.

Furthermore, the data analysis software used in this study also takes into account the sentiments of the tweets produced by the official Twitter accounts. Table 2 presents the sentiment of tweets produced by the investigated Twitter accounts. A sentiment mining was performed and shows that the official Twitter account of Malaysia had the highest percentage of positive sentiment (47.82%). While Indonesia's official account noted the lowest one, with 28.42% of positive sentiment. Other Twitter accounts, namely Singapore's and Thailand's accounts were booked with 42.86% and 30.06% positive sentiments.

Next to the analysis on the Twitter accounts' performances and sentiment analysis toward the tweets produced, this study also collected other data related with tourism performance namely the number of visits, the amount of international receipt, travel and tourism competitiveness reports as presented in Table 3. Data from this table show that Thailand was the country with the highest number of international visits and receipt, while Malaysia, Singapore and Indonesia followed respectively.

Table 2

Sentiments percentage the official twitter accounts' tweet

Official Twitter account	Positive	Neutral	Negative
@indtravel	28.42	66.31	5.26
@TourismMalaysia	47.82	47.82	4.35
@visitsingapore	42.86	42.86	14.28
@ThailandFanClub	30.06	66.01	3.92

Table 3

Number of visits, amount of receipt and travel & tourism competitiveness index

Country	Number of visits (September-October 2016)	Amount of receipt (2015) US$ Million	Travel & tourism competitiveness index
Indonesia	2,098,754	10,761	4
Malaysia	4,444,854	17,597	4.4
Singapore	2,381,714	16,743	4.9
Thailand	4,663,698	44,553	4.3

Despite its high achievements in international visits and the amount of receipt, Thailand only scored 4.3 in the travel and tourism competitiveness index. Such score is lower than Singapore and Malaysia that scored 4.9 and 4.4 respectively. As for Indonesia, the data showed consistent results where the poor achievements in international visits, and the amount of receipt was also reflected in the low travel and tourism competitiveness index (4.0).

After analysing the primary data gathered through the data analysis software and collecting secondary data from various sources, this study performed a series of correlational analyses in order to reveal associations among performance variables. Table 4 summarizes the results of Pearson correlations applied among the examined variables. The results indicate that there was a positive, strong, and significant correlation between interactions and the amount of international receipt, $r = .98$, $p < .05$. Such result indicates that the number of interactions of a destinations' official Twitter account had a positive relationship with the amount of international receipt.

Moreover, the results of the correlation analyses also reveal a strong and significant correlation between engagement rates and travel/tourism competitiveness, $r = .97$, $p < .05$. The result shows that engagement rates as an interactivity score of official destinations' Twitter accounts related positively to the travel/tourism competitiveness level of countries. Other variables that were found to be positively and significantly correlated were the number of followers and the potential reach, $r = .96$, $p < .05$. As followers in this study refer to the number of followers of the destination's official Twitter accounts, the increase in the number of followers is obviously associated with the number of accounts who are potentially exposed to the tweets from the official Twitter account. Furthermore, the correlation coefficient also exhibits a strong relationship between these two variables.

Similarly, the number of followers is also strongly and significantly associated with viral reach, $r = .96$, $p < .05$. The result indicates that the greater the number of followers of the official Twitter account, the greater the number of Twitter accounts that disseminate a particular tweet of the official Twitter accounts. A significant association was confirmed between the potential reach and viral reach, $r = .98$, $p < .05$. Besides showing a positive direction, the coefficient also indicates a strong correlation between the two variables. As the potential reach of the official Twitter accounts grows, the viral reach of the tweets produced by the accounts also grows correspondingly.

DISCUSSION

The findings of this study indicate that Indonesia's official Twitter account recorded the highest number of followers, potential reach and viral reach. However, it scored the lowest within the context of interactions and engagement rates. Thus, it is proper to say that the account was somewhat productive in generating tweets and could reach a larger public due to its large number of followers.

Table 4

Correlation coefficients among variables

	Interaction	Engagement	Number of followers	Potential reach	Viral reach	Number of visits	Amount of receipt	TTCI
Interaction	1							
Engagement	0.045	1						
	0.955							
Number of followers	-0.436	-0.91	1					
	0.564	0.09						
Potential reach	-0.246	-0.932	.967*	1				
	0.754	0.068	0.033					
Viral reach	-0.364	-0.867	.965*	.987*	1			
	0.636	0.133	0.035	0.013				
Number of visits	0.726	0.1	-0.464	-0.446	-0.58	1		
	0.274	0.9	0.536	0.554	0.42			
Amount of receipt	.985*	0.219	-0.584	-0.401	-0.504	0.722	1	
	0.015	0.781	0.416	0.599	0.496	0.278		
TTCI	-0.197	.971*	-0.788	-0.856	-0.763	-0.076	-0.023	1
	0.803	0.029	0.212	0.144	0.237	0.924	0.977	

*(*p < .05)*

Nevertheless, the tweets produced by the account are lacking responses and feedback from the users of Twitter. Similarly, results from the sentiment analysis also confirm the tweets are dominated by a neutral sentiment. The inadequate number of responses, denotes the lack of success of this account in communicating promotional messages that relate the destination with the Twitter users and also signifies the limited impact of the account (Sevin, 2013).

Different results were observed for Malaysia's official Twitter account. Overall, for this account we recorded a less prominent performance in all aspects assessed. Fortunately, some aspects of the account showed better performance in particular in terms of the number of interactions, number of followers, potential reach and viral reach. Moreover, the results of the sentiment analysis show that tweets produced by the account received the highest positive sentiment percentage compared to tweets of other investigated DMO Twitter accounts. As the positivity of tweets determined by the use of positive adjectives that create a positive statement and meaning in its message, such favourable sentiment is made possible by the selection of appropriate words and contains positive adjectives that could attract other Twitter accounts. Although considered as an account with a less prominent performance, Malaysia's account was able to utilize the positive sentiment of the tweets to get more positive responses (in terms of retweets and interactions) from Twitter users (Dang-Xuan et al., 2013).

A less satisfactory performance was obtained by Singapore's official Twitter account. There was only one particular aspect that reached the highest score, namely the engagement rate. The number of tweets, interactions, followers, potential reach, and viral reach achieved the lowest number or score compared to other accounts. Furthermore, results from the sentiment analysis also noted the highest percentage of negative sentiment on the tweets produced by the account of Singapore. Based on the results, it is proper to say this account is less productive in initiating contact with Twitter users. However, the high score in the engagement rate indicates that this account is fairly successful in generating interaction with the public. Based on the experience from Sweden's Twitter account, success achieved by an account in interactions could affect the number of bookings and stimulates a large number of conversations on Twitter (Christensen, 2013).

On the contrary, Thailand's official Twitter account was observed as the most productive account in terms of producing tweets. In line with its productivity, the account also records the highest number of interactions and a relatively high score in engagement rate. As both aspects reflect the level of participation from the public, such achievements signify the account is the most communicative account compared to others. On the contrary, results in terms of the number of followers, potential reach, and viral reach end up in a different way, as the account obtains unfavourable results. Moreover, results of a sentiment analysis

conducted on the tweets produced showed that Thailand's official Twitter account is the account with the lowest percentage of negative sentiment.

In addition to the performance analysis, a series of correlational tests were also performed in order to discover associations among the analysed variables. The results show that interactions associated strongly and positively with the amount of receipt, while engagement rates are associated strongly and positively with the travel/tourism competitiveness. The positive correlation signifies that a higher level of interaction is associated with a higher amount of international receipt. Similar results also apply for other variables, where the increase of engagement rates is positively related to the increase of travel/tourism competitiveness. These results correspond with Antoniadis et al. (2014), who also found positive associations among these variables when conducting similar analyses concerning European destinations. Moreover, the findings also indicated that Twitter (to a greater or lesser extent) contributed to providing persuasive information to attract tourists' visits.

Other variables that were found to be significantly associated were followers with potential reach, followers with viral reach, and potential reach with viral reach. These results indicate that the number of followers is an important variable that is closely related to potential reach and viral reach. It represents the ability of an account in reaching a broader public on Twitter and other online environments. Moreover, potential reach and viral reach were also found to be significantly associated. Therefore, the efforts to increase the number of followers – that in turn could augment the potential reach and viral reach, should become one of the main priorities in improving the overall performance of a destination's Twitter account. Such results were also confirmed by Antoniadis et al. (2015), who studied followers of European countries' tourism accounts and revealed that followers could play an important role in augmenting the impact of reach in communication through Twitter.

CONCLUSION

This paper assessed the performance of the official Twitter account of four major destinations in Southeast Asia and conducted a series of correlational analyses in order to reveal any possible relationships between the use of such social media and general tourism performance. It can be concluded that the official destination's Twitter accounts examined in this study recorded a varied performance level. One account tends to have a higher number/score on followers and reach but gets a lower number/score when it comes to interactions and engagement rates. Other accounts face an opposite situation, where they tend to score high on interactions and engagement rates but maintain lower scores on followers and reach (potential and viral). Despite the diversity of these results, a series of correlational tests conducted among

the performances with existing tourism indicators brings more interesting outcomes in this study. The results demonstrated that interactions and engagement rates are the two important aspects that relate to destination competitiveness performance.

The two facets of Twitter performance measurements represent the importance of the interaction between the destination account holders with Twitter users. Consequently, it is important for the account managers to create and produce tweets that relate to its potential and existing publics and, in turn, stimulate a response from them. Stimulating more dialogue with as many possible Twitter users could encourage trust, public agreement, and the creation of understanding between the destination and its market. Furthermore, the improvement of the interaction process apparently can be associated with the increase in the number of international receipts and a destination's score on the travel/tourism competitiveness index.

The significant results of the correlational test toward the interactions and engagement rates in this study also have implications for the measurement of a destination's official Twitter performance. In addition to the existing performance measurements, future studies evaluating Twitter accounts could take into account the number of interactions and engagement rates as two additional variables to integrate into such assessment.

Another aspect that also needs to be considered to improve the performance of a destination's official Twitter account is its number of followers. This variable could play an important role in leveraging the potential reach and viral reach of tweets that are produced by a destination's official Twitter account. When the tweets reach a larger Twitter audience the message can go viral, it means the promotional messages conveyed have spread to a large number of users and become a primary topic of conversation among them.

Within the context of tourism in Southeast Asia countries, findings in this study also indicate that proper execution of social media communication with potential target markets can increase opportunities to attract more visits from tourists. Furthermore, countries in the region (also different regions across the world) need to continue their investment in social media to be able to communicate with their target audience rapidly and effectively.

In addition to the previously discussed results, this study is also characterized by some limitations concerning the measurement of the official Twitter accounts' performance. The first limitation of this study is that it does not take into account the number of tweets that are formulated in the native language about the destinations. Moreover, future research can investigate which topics of the post (picture and caption) can lead to more positive responses. This could inspire marketers who are responsible for the Twitter account of a destination to formulate Tweets that generate more positive responses among their followers. Additionally, future investigations in this field should take into account the proportion

between tweets produced in a destination's native language and English.

Next to the language factor, future research is also needed to take into account the followers of the destination's official Twitter account. More particularly, the identity of followers, namely country of origin, gender, and whether the account is real or fake, should be investigated. Another aspect that also needs to be considered in future studies is assessing the hashtags produced by the official Twitter account in terms of their popularity, potential reach, and viral reach. By incorporating these three aspects in forthcoming studies, researchers in this field could get a more genuine and comprehensive insight into the performance of destinations' official Twitter accounts.

ACKNOWLEDGEMENT

The authors would like to thank the Directorate General of Higher Education, Ministry of Education and Culture the Republic of Indonesia.

REFERENCES

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students. *Social Media + Society, 3*(1). https://doi.org/10.1177/2056305117691544

Antoniadis, K., Vrana, V., & Zafiropoulos, K. (2014). Promoting European countries' destination image through Twitter. *European Journal of Tourism, Hospitality and Recreation, 5*(1), 85-103. Retrieved December 25, 2016, from http://www.ejthr.com/ficheiros/2014/Volume5/EJTHR_Vol5_1_Art4_Konstantinos.pdf

Antoniadis, K., Zafiropoulos, K., & Varna, V. (2015). Communities of followers in tourism Twitter accounts of European countries. European *Journal of Tourism, Hospitality and Recreation, 6*(1), 11-26.

Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2019). The future of social media in marketing. *Journal of the Academy of Marketing Science, 48,* 79-95. https://doi.org/10.1007/s11747-019-00695-1

Ariel, Y., & Avidar, R. (2015). Information, interactivity, and social media. *Atlantic Journal of Communication, 23*(1), 19-30. https://doi.org/10.1080/15456870.2015.972404

Bokunewics, J. F., & Shulman, J. (2017). Influencer identification in Twitter networks of destination marketing organizations. *Journal of Hospitality and Tourism Technology, 8*(2), 205-219.

Burgess, J., Bruns, A., & Hjorth, L. (2013). Emerging methods for digital media research: An introduction. *Journal of Broadcasting & Electronic Media, 57*(1), 1-3. https://doi.org/10.1080/08838151.2012.761706

Cheng, M., & Edwards, D. (2015). Social media in tourism: A visual analytic approach. *Current Issues in Tourism, 18*(11), 1080-1087. https://doi.org/10.1080/13683500.2015.1036009

Choi, S., Lehto, X. Y., & Morrison, A. M. (2007). Destination image representation on the web: Content analysis of Macau travel related websites. *Tourism Management, 28*(1), 118-129. https://doi.org/10.1016/j.tourman.2006.03.002

Christensen, C. (2013). @Sweden: Curating a nation on Twitter. *Popular Communication, 11*(1), 30-46. https://doi.org/10.1080/15405702.2013.751855

Chung, N., & Koo, C. (2015). The use of social media in travel information search. *Telematics and Informatics, 32*(2), 215-229. https://doi.org/10.1016/j.tele.2014.08.005

Clement, J. (2020, April 1). *Number of global social network users 2010-2023.* Retrieved April 30, 2020, from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Dang-Xuan, L., Stieglitz, S., Wladarsch, J., & Neuberger, C. (2013). An investigation of influentials and the role of sentiment in political communication on Twitter during election periods. *Information, Communication & Society, 16*(5), 795-825. https://doi.org/10.1080/1369118X.2013.783608

de Fortuny, E. J., De Smedt, T., Martens, D., & Daelemans, W. (2012). Media coverage in times of political crisis: A text mining approach. *Expert Systems with Application, 39*(14), 11616-11622. https://doi.org/10.1016/j.eswa.2012.04.013

Duan, W., Cao, Q., Yu, Y., & Levy, S. (2013). Mining online user-generated content: Using sentiment analysis technique to study hotel service quality. *2013 46th Hawaii International Conference on System Sciences,* 3119-3128. https://doi.org/10.1109/HICSS.2013.400

Feldman, R., & Sanger, J. (2007). *The text mining handbook: Advanced approaches in analysing unstructured data* (Vol. 1). New York, USA: Cambridge University.

Fotis, J., Buhalis, D., & Rossides, N. (2011). Social media impact on holiday travel planning. *International Journal of Online Marketing, 1*(4), 1-19. https://doi.org/10.4018/ijom.2011100101

Gibbs, C., & Dancs, A. (2013). *Understanding destination management organizations use of Twitter: A content analysis of tweets.* Paper presented at Proceedings of the Travel and Tourism Research Association Conference, Ottawa, Canada.

Hay, B. (2010). Twitter twitter – But who is listening? A review of the current and potential use of twittering as a tourism marketing tool. *Tourism,* 1-13. Retrieved February 19, 2020, from https://core.ac.uk/download/pdf/141195401.pdf

Hays, S., Page, S. J., & Buhalis, D. (2013). Social media as a destination marketing tool: Its use by national tourism organisations. *Current Issues in Tourism, 16*(3), 211-239. https://doi.org/10.1080/13683500.2012.662215

Hernández-Méndez, J., Muñoz-Leiva, F., & Sánchez-Fernández, J. (2015). The influence of e-word-of-mouth on travel decision-making: Consumer profiles. *Current Issues in Tourism, 1*8(11), 1001-1021. https://doi.org/10.1080/13683500.2013.802764

Hudson, S., & Thal, K. (2013). The impact of social media on the consumer decision process: Implications for tourism marketing. *Journal of Travel & Tourism Marketing, 30*(1-2), 156-160. https://doi.org/10.1080/10548408.2013.751276

Hvass, K. A., & Munar, A. M. (2012). The take off of social media in tourism. *Journal of Vacation Marketing, 18*(2), 93-103. https://doi.org/10.1177/1356766711435978

Kang, M., & Schuett, M. A. (2013). Determinants of sharing travel experiences in social media. *Journal of Travel & Tourism Marketing, 30*(1-2), 93-107. https://doi.org/10.1080/10548408.2013.751237

Kaplan, A. M., & Haenlein, M. (2011). The early bird catches the news: Nine things you should know about micro-blogging. *Business Horizons, 54*(2), 105-113. https://doi.org/10.1016/j.bushor.2010.09.004

Kiráľová, A., & Pavlíčeka, A. (2015). Development of social media strategies in tourism destination. *Procedia - Social and Behavioral Sciences, 175,* 358-366. https://doi.org/10.1016/j.sbspro.2015.01.1211

Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). Social media in tourism and hospitality: A literature review. *Journal of Travel & Tourism*

Marketing, 30(1-2), 3-22. https://doi.org/10.1080/10548408.2013.750919

Lewis, S. C., Zamith, R., & Hermida, A. (2013). Content analysis in an era of big data: A hybrid approach to computational and manual methods. *Journal of Broadcasting & Electronic Media, 57*(1), 34-52. https://doi.org/10.1080/08838151.2012.761702

Li, N., & Wu, D. D. (2010). Using text mining and sentiment analysis for online forums hotspot detection and forecast. *Decision Support Systems, 48*(2), 354-368. https://doi.org/10.1016/j.dss.2009.09.003

Liu, B. (2010). Sentiment analysis and subjectivity. In N. Indurkhya & F. J. Damerau (Eds.), *Handbook of natural language processing* (2nd ed.) (pp. 1-38). New York, USA: CRC Press.

Liu, S., Law, R., Rong, J., Li, G., & Hall, J. (2013). Analyzing changes in hotel customers' expectations by trip mode. *International Journal of Hospitality Management, 34*(1), 359-371. https://doi.org/10.1016/j.ijhm.2012.11.011

Magnini, V. P., Crotts, J. C., & Zehrer, A. (2011). Understanding customer delight: An application of travel blog analysis. *Journal of Travel Research, 50*(5), 535-545. https://doi.org/10.1177/0047287510379162

Mariani, M. M., Di Felice, M., & Mura, M. (2016). Facebook as a destination marketing tool: Evidence from Italian regional destination management organizations. *Tourism Management, 54,* 321-343. https://doi.org/10.1016/j.tourman.2015.12.008

Nugroho, A. (2017). ASEAN tourism marketing communication attribute: An exploratory research at Goaseantv. *European Research Studies Journal, 20*(3), 383-395.

Omnicore. (2020, February 10). *Twitter by the numbers: Stats, demographics & fun facts*. Retrieved February 19, 2020, from https://www.omnicoreagency.com/twitter-statistics/

Park, S. B., Ok, C. M., & Chae, B. K. (2016). Using Twitter data for cruise tourism marketing and research. *Journal of Travel & Tourism Marketing, 33*(6), 885-898. https://doi.org/10.1080/10548408.2015.1071688

Pike, S., & Page, S. J. (2014). Destination marketing organizations and destination marketing: A narrative analysis of the literature. *Tourism Management, 41,* 202-227. https://doi.org/10.1016/j.tourman.2013.09.009

Popesku, J. (2014). Social media as a tool of destination marketing organisations. In *Proceedings of the 1st International Scientific Conference - Sinteza 2014* (pp. 715-721). https://doi.org/10.15308/sinteza-2014-715-721

Roque, V., & Raposo, R. (2016). Social media as a communication and marketing tool in tourism: An analysis of online activities from international key player DMO. *Anatolia, 27*(1), 58-70. https://doi.org/10.1080/13032917.2015.1083209

Sevin, E. (2013). Places going viral: Twitter usage patterns in destination marketing and place branding. *Journal of Place Management and Development, 6*(3), 227-239. https://doi.org/10.1108/JPMD-10-2012-0037

Steenkamp, M., & Hyde-Clarke, N. (2014). The use of Facebook for political commentary in South Africa. *Telematics and Informatics, 31*(1), 91-97.

Tham, A., Croy, G., & Mair, J. (2013). Social media in destination choice: Distinctive electronic word-of-mouth dimensions. *Journal of Travel & Tourism Marketing, 30*(1-2), 144-155. https://doi.org/10.1080/10548408.2013.751272

Uşaklı, A., Koç, B., & Sönmez, S. (2017). How "social" are destinations? Examining European DMO social media usage. *Journal of Destination Marketing & Management, 6*(2), 136-149. https://doi.org/10.1016/j.jdmm.2017.02.001

Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management, 31*(2), 179-188. https://doi.org/10.1016/j.tourman.2009.02.016

Yang, X., & Wang, D. (2015). The exploration of social media marketing strategies of destination marketing organizations in China. *Journal of China Tourism Research, 11*(2), 166-185. https://doi.org/10.1080/19388160.2015.1017071

REFEREES FOR THE PERTANIKA
JOURNAL OF SOCIAL SCIENCE AND HUMANITIES

VOL. 28 (2) JUN. 2020

The Editorial Board of the Journal of Social Science and Humanities wishes to thank the following:

Abba Suganda Girsang
(BINUS, Indonesia)

Abd Ghani Abu
(UPSI, Malaysia)

Abdolmohammad Movahhed
(Persian Gulf University, Iran)

Abdul Halim Abdul Majid
(UUM, Malaysia)

Abdul Razak Abd Manaf
(UUM, Malaysia)

Abdussakir
(UIN Malang, Indonesia)

Abu Hanifah Haris
(UM, Malaysia)

Adilla Anggraeni
(BINUS, Indonesia)

Adler Manurung
(BINUS, Indonesia)

Adnan Trakic
(Monash University, Malaysia)

Affizal Ahmad
(USM, Malaysia)

Afida Mastura Muhammad Arif
(UPM, Malaysia)

Agnes Advensia Chrismastuti
(Soegijapranata Catholic University, Indonesia)

Agustinus Handrimurtjahjo
(BINUS, Indonesia)

Ahmad Bazli Shafie
(UniSZA, Malaysia)

Ahmad Fajar
(BINUS, Indonesia)

Ahmad Fauzi Mohd Ayub
(UPM, Malaysia)

Ahmad Munir Mohd Salleh
(UMT, Malaysia)

Ahmad Sanusi Hassan
(USM, Malaysia)

Ahmad Thamrini Fadzlin Syed Mohamed
(UPNM, Malaysia)

Ahmad Zabidi Abdul Razak
(UM, Malaysia)

Aidi Ahmi
(UUM,Malaysia)

Ajah, Benjamin
(UNN, Nigeria)

Ali Badeen Mohammed Al-Rikaby
(Mustansiriyah University, Iraq)

Ali Nawab
(Sukkur IBA, Pakistan)

Amalia Maulana
(BINUS, Indonesia)

Amily Fikry@Aziz
(UiTM, Malaysia)

Ana Jiménez-Zarco
(Open University of Catalunya, Spain)

Ang Pei Soo
(UM, Malaysia)

Arbaayah Ali Termizi
(UPM, Malaysia)

Aries Susanty
(UNDIP, Indonesia)

Arif Zulkarnain
(BINUS, Indonesia)

Armanurah Mohamad
(UUM, Malaysia)

Asna Atqa Abdullah
(UPM, Malaysia)

Asnarulkhadi Abu Samah
(UPM, Malaysia)

Astari Retnowardhani
(BINUS, Indonesia)

Asyraf Isyraqi Jamil
(UM, Malaysia)

Athapol Ruangkanjanases
(CU, Thailand)

Aye Aye Khin
(UTAR, Malaysia)

Azira Abdul Adzis
(UUM, Malaysia)

Azizah Omar
(USM, Malaysia)

Azlin Shafinaz Mohamad Arshad
(UiTM, Malaysia)

Azlinzuraini Ahmad
(UMT, Malaysia)

Bachtiar Simamora
(BINUS, Indonesia)

Bahtiar Saleh Abbas
(BINUS, Indonesia)

Bambang Pratama
(BINUS, Indonesia)

Barbara Blundell
(Curtin, Australia)

Bidayatul Akmal Mustafa Kamil
(UUM, Malaysia)

Chan Mei Yuit
(UPM, Malaysia)

Che Aleha Ladin
(UM, Malaysia)

Che Aniza Che Wel
(UKM, Malaysia)

Che Supian Mohamad Nor
(USM, Malaysia)

Chew Fong Peng
(UM, Malaysia)

Chinedu Ernest Dinne
(UI, Nigeria)

Chong Pei Pei
(Taylor's, Malaysia)

Chong Wu Ling
(UM, Malaysia)

Chonticha Kaewanuchit
(ARU, Thailand)

Chu Ei Yet
(USM, Malaysia)

Chua Yan Piaw
(UM, Malaysia)

Davoud Amini
(Azerbaijan University, Iran)

Derweanna Bah Simpong
(UMK, Malaysia)

Dewi Fitriasari
(BINUS, Indonesia)

Dezie Warganegara
(BINUS, Indonesia)

Dhirapat Kulophas
(CU, Thailand)

Diah Ariani Arimbi
(UNAIR, Indonesia)

Diana Sari
(UNPAD, Indonesia)

Diego Fossati
(CityU, Hong Kong)

Doris Toe Hooi Chyee
(UTM, Malaysia)

Dyah Budiastuti
(BINUS, Indonesia)

Edhie Setiawan
(Trisakti Institute, Indonesia)

Edi Abdurachman
(BINUS, Indonesia)

Elia Ardyan
(STIE Surakarta, Indonesia)

Elida
(UNP, Indonesia)

Elistina Abu Bakar
(UPM, Malaysia)

Elsayed Mohamed Salem Elawadi
(UniSZA, Malaysia)

Ena Bhattacharyya
(UTP, Malaysia)

Engkos Kuncoro
(BINUS, Indonesia)

Eta Wahab
(UTHM, Malaysia)

Faizahani Ab Rahman
(UUM, Malaysia)

Fakhri Hasanov
(KAPSARC, Saudi Arabia)

Fakhrul Anwar Zainol
(UniSZA, Malaysia)

Farid Sufian Shuaib
(IIUM, Malaysia)

Faridah Ibrahim
(IUKL, Malaysia)

Farideh Alizadeh
(UM, Malaysia)

Fatimah Zailly Ahmad Ramli
(UUM, Malaysia)

Fazleen Abdul Fatah
(UiTM, Malaysia)

Fazlin Ali
(UPM, Malaysia)

Fergyanto Gunawan
(BINUS, Indonesia)

Fides A. del Castillo
(DLSU, Philippines)

Florence Toh
(UPM, Malaysia)

Ghada Sasa
(YU, Jordan)

Ghazali Ab. Rahman
(UUM, Malaysia)

Ghazali Bello Abubakar
(SSU, Nigeria)

Grace Chin Voon Sheong
(USM, Malaysia)

Habsah Hussin
(UPM, Malaysia)

Hafiza Aishah Hashim
(UMT, Malaysia)

Hairul Anuar Hashim
(USM, Malaysia)

Hakimah Yaacob
(UNISSA, Brunei)

Halimahton Borhan
(UiTM, Malaysia)

Hamdy Hady
(Universitas Persada Indonesia, Indonesia)

Hamimah Hassan
(UPM, Malaysia)

Hanafi Hussin
(UM, Malaysia)

Hani Salwah Yaakup
(UPM, Malaysia)

Hanudin Amin
(UMS, Malaysia)

Hardev Kaur Jujar Singh
(UPM, Malaysia)

Hardijanto Saroso
(BINUS, Indonesia)

Hari Mulyadi
(UPI, Indonesia)

Hariharan N. Krishnasamy
(UUM, Malaysia)

Haris Abd Wahab
(UM, Malaysia)

Harisno
(BINUS, Indonesia)

Hartoyo
(IPB, Indonesia)

Haryadi Sarjono
(BINUS, Indonesia)

Haslinah Muhamad
(UPM, Malaysia)

Haslinda Abdullah
(UPM, Malaysia)

Haslinda Abdullah
(UPNM, Malaysia)

Haslinda Hashim
(UPM, Malaysia)

Hasnah Haron
(UMP, Malaysia)

Hazlina Shaik Md Noor Alam
(UKM, Malaysia)

Hazliza Haron
(UiTM, Malaysia)

Hazrina Ghazali
(UPM, Malaysia)

Hendi Yogi Prabowo
(UII, Indonesia)

Hendry Hartono
(BINUS, Indonesia)

Hendun Abd Rahman Shah
(USIM, Malaysia)

Hicham Lahlou
(USM, Malaysia)

Hijattulah Abdul-Jabbar
(UUM, Malaysia)

Hossein Aliakbari Harehdasht
(PGU, Iran)

Huam Hon Tat
(PBS, Malaysia)

Husaina Banu Kenayathulla
(UM, Malaysia)

Husniyah Abdul Rahim @ Abdul Wahab
(UPM, Malaysia)

Ibrahim Fathi Huwari
(ZU, Jordan)

Idris Gautama So
(BINUS, Indonesia)

Ignatius Setyawan
(UNTAR, Indonesia)

Ilhaamie Abdul Ghani Azmi
(UM, Malaysia)

Innocentius Bernarto
(UPH, Indonesia)

Intan Hashimah Mohd Hashim
(USM, Malaysia)

Irwan Mohd Subri
(USIM, Malaysia)

Irzan Ismail
(UiTM, Malaysia)

Ishak Ismail
(UMP, Malaysia)

Iveta Hamarneh
(VŠO, Czech Republic)

Ivette Cejas
(U Miami, USA)

Jacqueline Pugh-Kitingan
(UMS, Malaysia)

Jalila Johari
(UPM, Malaysia)

Jarot S. Suroso
(BINUS, Indonesia)

Jasmin Arif Shah
(UPM, Malaysia)

Jasni Sulong
(USM, Malaysia)

Jeannet Stephen
(UMS, Malaysia)

Jennifer Tunga Janang
(UiTM, Malaysia)

Jerome Collin
(UNIMAS, Malaysia)

Jonathan Rigg
(University of Bristol, UK)

Joseph Lo Bianco
(University of Melbourne, Australia)

Joyce Nga Koe Hwee
(Sunway, Malaysia)

Juhaida Abu Bakar
(UUM, Malaysia)

Julia Wirza Mohd Zawawi
(UPM, Malaysia)

Juliana Abdul Wahab
(USM, Malaysia)

Junaidah Yusof
(QIUP, Malaysia)

Juniati Gunawan
(Trisakti University, Indonesia)

Jusang Bolong
(UPM, Malaysia)

K. A. S. P. Kaluarachchi
(UOC, Sri Lanka)

Katarzyna Piotrowska
(Kozminski University, Poland)

Kenny Cheah Soon Lee
(UM, Malaysia)

Khairol Anuar Ishak
(UUM, Malaysia)

Khatai Aliyev
(UNEC, Azerbaijan)

Khoo Suet Leng
(USM, Malaysia)

Koo Ah-Choo
(MMU, Malaysia)

Ku Hasnita Ku Samsu
(UPM, Malaysia)

Labby Ramrathan
(UKZN, South Africa)

Lai Siow Li
(UM, Malaysia)

Larisa Nikitina
(UM, Malaysia)

Law Chee Hong
(USM, Malaysia)

Lee Yok Fee
(UPM, Malaysia)

Lehman B.Fletcher
(ISU, USA)

Lena Sastradinata
(UPI, Indonesia)

Liew Yueah Cin
(YZU, Taiwan)

Lilliati Ismail
(UPM, Malaysia)

Lim Chee Chee
(UUM, Malaysia)

Lim Ghee Thean
(USM, Malaysia)

Lim Sanny
(BINUS, Indonesia)

Logasvathi Murugiah
(UUM, Malaysia)

Loi Chek Kim
(UMS, Malaysia)

Lukas Tanutama
(BINUS, Indonesia)

M Sultana Alam
(UTAR, Malaysia)

Mahmood Momin
(AUT, New Zealand)

Maisarah Ahmad
(UKM, Malaysia)

Maisarah Mohamed Saat
(UTM, Malaysia)

Maizaitulaidawati Md Husin
(UTM, Malaysia)

Maizaitulaidawati Md Husin
(UTM, Malaysia)

Malini Ganapathy
(USM, Malaysia)

Mani Manimangai
(UPM, Malaysia)

Maria Justine @ Stephany
(UiTM, Malaysia)

Mariny Abdul Ghani
(UUM, Malaysia)

Mark A. Gregory
(RMIT, Australia)

Mark Loo
(Concordia University of Edmonton, Canada)

Marko Hermawan
(BINUS, Indonesia)

Marschall Sabine
(UKZN, South Africa)

Masoumeh Pourrajab
(UM, Malaysia)

Mazlini Adnan
(UPSI, Malaysia)

Mazni Mustapha
(UMS, Malaysia)

Md Azalanshah Md Syed
(UM, Malaysia)

Md. Zahidul Islam
(IIUM, Malaysia)

Md. Zulfikar Rahman
(BAU, Bangladesh)

Miriam R. Nguyen
(UP, Philippines)

Mohamad Fleih Hassan
(UOANBAR, Iraq)

Mohamad Hashim Othman
(USM, Malaysia)

Mohamad Ibrani Shahrimin Adam Assim
(UPM, Malaysia)

Mohamad Rashidi Mohd Pakri
(USM, Malaysia)

Mohamad Zaidi Abdul Rahman
(UM, Malaysia)

Mohamed Ali Al-Khairy
(TU, Saudi Arabia)

Mohamed Nor Azhari Azman
(UPSI, Malaysia)

Mohamed Zain
(SQU, Oman)

Mohammad Tahir Sabit Haji Mohammad
(UTHM, Malaysia)

Mohd Armi Abu Samah
(IIUM, Malaysia)

Mohd Azmir Mohd Nizah
(USIM, Malaysia)

Mohd Faizal Kasmani
(USIM, Malaysia)

Mohd Farid Mohd Sharif
(USM, Malaysia)

Mohd Hafiz Mohd Hanafiah
(UiTM, Malaysia)

Mohd Hasrul Yushairi Johari
(UiTM, Malaysia)

Mohd Hilmi Hamzah
(UUM, Malaysia)

Mohd Isha Awang
(UUM, Malaysia)

Mohd Mansor Ismail
(UPM, Malaysia)

Mohd Nizam Osman
(UPM, Malaysia)

Mohd Normani Zakaria
(USM, Malaysia)

Mohd Rizal Palil
(UKM, Malaysia)

Muhamad Azahar Abas
(UMK, Malaysia)

Muhamad Azwan Abd Rahman
(UUM, Malaysia)

Muhamad Nadzri Mohamed Noor
(UKM, Malaysia)

Muhammad Alif K. Sahide
(UNHAS, Indonesia)

Muhammad Aras
(BINUS, Indonesia)

Muhammad Ariono Margiono
(BINUS, Indonesia)

Muhammad Danial Azman
(UM, Malaysia)

Muhammad Danial Azman
(UM, Malaysia)

Muhammad Febriansyah
(USM, Malaysia)

Muhammad Fuad Othman
(UUM, Malaysia)

Muhammad Shahrim Ab Karim
(UPM, Malaysia)

Muhibuddin Fadhli
(UMPO, Indonesia)

Murali Raman
(MMU, Malaysia)

Naziyah Shaban Mustafa
(IIUM, Malaysia)

Ngo Sheau Shi
(USM, Malaysia)

Nguyen Van Sang
(UDN, Vietnam)

Nik Rafidah Nik Muhammad Affendi
(UPM, Malaysia)

Nkaepe E. E. Olaniyi
(KAPLAN, UK)

Noel Scott
(Griffith University,Australia)

Noor Azlin Ismail
(UPM, Malaysia)

Noor Syamilah Zakaria
(UPM, Malaysia)

NoorAni Ahmad
(MOH, Malaysia)

Nooreen Noordin
(UPM, Malaysia)

Noorshella Che Nawi
(UMK, Malaysia)

Nor A'tikah Mat Ali
(UUM, Malaysia)

Nor Azrina Mohd Yusof
(UiTM, Malaysia)

Nor Fahimah Mohd Razif
(UM, Malaysia)

Nor Hafizah Selamat
(USM, Malaysia)

Nor Hashima Hashim
(UiTM, Malaysia)

Nor Khasimah Aliman
(UiTM, Malaysia)

Nor Shafrin Ahmad
(USM, Malaysia)

Nor Wahiza Abdul Wahat
(UPM, Malaysia)

Nora Azureen Abdul Rahman
(UUM, Malaysia)

Norasmah Othman
(UKM, Malaysia)

Normah Abdul Latip
(USM, Malaysia)

Normala Othman
(UPM, Malaysia)

Norshafizah Hanafi
(UUM, Malaysia)

Norzuwana Sumarjan
(UiTM, Malaysia)

Nugroho Setiadi
(BINUS, Indonesia)

Nur Aira Abd Rahim
(UPM, Malaysia)

Nur Dalilah Dahlan
(UPM, Malaysia)

Nur Fatihah Abdullah Bandar
(UNIMAS, Malaysia)

Nur Hafidzah Idris
(UiTM, Malaysia)

Nur Zainatul Nadra Zainol
(UTHM, Malaysia)

Nurazzura Mohamad Diah
(IIUM, Malaysia)

Nursyazwani Mohd Fuzi
(UTM, Malaysia)

Nurul Hamiruddin Salleh
(IIUM, Malaysia)

Omar Belkhodja
(AUS, UAE)

Onapajo Hakeem
(Nile University, Nigeria)

Ong Tze San
(UPM, Malaysia)

Opim Sitompul
(USU, Indonesia)

Paramjit Kaur Karpal Singh
(UUM, Malaysia)

Paul Steel
(Total Quality Incorporated, USA)

Peeranart Kiddee
(TSU, Thailand)

Pradono
(ITB, Indonesia)

Primidya Soesilo
(BINUS, Indonesia)

Quah Cheng Sim
(IAB, Malaysia)

R. S. Ajin
(KSDMA, India)

R.A. Aryanti Puspokusumo
(BINUS, Indonesia)

Rabia Ali
(IIUI, Pakistan)

Rabiatul-Adawiah Ahmad Rashid
(USM, Malaysia)

Radin Firdaus Radin Badaruddin
(USM, Malaysia)

Raghabendra Chattopadhyay
(IIMCAL, India)

Rahimah Embong
(UNISZA, Malaysia)

Rahimah Ibrahim
(UPM, Malaysia)

Raja Noriza Raja Ariffin
(UM, Malaysia)

Rajab Ritonga
(University of Prof. Dr. Moestopo Beragama, Indonesia)

Ramesh Kumar Moona Mohamed
(UTAR, Malaysia)

Ramiza Darmi
(UPM, Malaysia)

Ratih Hurriyati
(UPI, Indonesia)

Renu Pandey
(BBAU, India)

Respati Wulandari
(BINUS, Indonesia)

Reza Kafipour
(SUMS, Iran)

Rika Ratna Permata
(UNPAD, Indonesia)

Rilla Gantino
(Esa Unggul University, Indonesia)

Rinda Hedwig
(BINUS, Indonesia)

Rindang Widuri
(BINUS, Indonesia)

Rini Setiowati
(BINUS, Indonesia)

Rini Sudarmanti
(Paramadina University, Indonesia)

Rohaizat Baharun
(UTM, Malaysia)

Rohana Ngah
(UiTM, Malaysia)

Rojanah Kahar
(UPM, Malaysia)

Romeo B. Lee
(DLSU, Philippines)

Rosylin Mohd Yusof
(UUM, Malaysia)

Rozaidy Mahadi
(UMS, Malaysia)

Rozanah Ab. Rahman
(UPM, Malaysia)

Roziah Mohd Rasdi
(UPM, Malaysia)

Rudy Aryanto
(BINUS, Indonesia)

Rudy Harjanto
(University of Prof. Dr. Moestopo Beragama, Indonesia)

Ruhanita Maelah
(UKM, Malaysia)

Rusdi Omar
(UUM, Malaysia)

Ruzita Jusoh
(UM, Malaysia)

Ruzita Selamat
(UTM, Malaysia)

Sabarina Mohammed Shah
(UPM, Malaysia)

Saddhono K.
(UNS, Indonesia)

Samah Mofreh
(USM, Malaysia)

Sani Susanto
(UNPAR, Indonesia)

Saralah Devi Mariamdaran
(UUM, Malaysia)

Sasmoko
(BINUS, Indonesia)

Sevenpri Candra
(BINUS, Indonesia)

Shaheen Mansori
(MUST, Malaysia)

Shahreen Mat Nayan
(UM, Malaysia)

Shaidatul Akma Adi Kasuma
(USM, Malaysia)

Shaidatul Akma Adi Kasuma
(USM, Malaysia)

Shaikh Mohd Saifuddeen Shaikh Mohd Salleh
(IKIM, Malaysia)

Sharifah Fazliyaton Shaik Ismail
(UUM, Malaysia)

Sharul Effendy Janudin
(UPSI, Malaysia)

Shazida Jan Mohd Khan
(UUM, Malaysia)

Sheat Fun Chow
(USM, Malaysia)

Sheriff Folarin
(Covenant, Nigeria)

Sherin Sherif
(ALEXU, Egypt)

Shida Irwana Omar
(USM, Malaysia)

Shidarta
(BINUS, Indonesia)

Siaw Yan-Li
(UM, Malaysia)

Siew Pei Hwa
(UTAR, Malaysia)

Sim Joong Hiong
(UM, Malaysia)

Siti Aisyah Panatik
(UTM, Malaysia)

Siti Ezaleila Mustafa
(UM, Malaysia)

Siti Jamilah Bidin
(UUM, Malaysia)

Siti Rahayu Hussin
(UPM, Malaysia)

Sivamurugan Pandian
(USM, Malaysia)

Soaib Asimiran
(UPM, Malaysia)

Sofiah Kadar Khan
(QUIP, Malaysia)

Soon Singh Bikar Singh
(UMS, Malaysia)

Sri Vandayuli Riorini
(Trisakti University, Indonesia)

Stephen Chia Ming Soon
(USM, Malaysia)

Stephen J. Hall
(Sunway, Malaysia)

Stewart Manley
(UM, Malaysia)

Subramaniam Sri Ramalu
(UUM, Malaysia)

Suffian Mansor
(UKM, Malaysia)

Sugiarto
(STIE Wiyatamandala, Indonesia)

Sugiharto
(Budi Luhur University, Indonesia)

Suharjito
(BINUS, Indonesia)

Suraiya Ishak
(UKM, Malaysia)

Suraya Mansur Amin
(Paramadina University, Indonesia)

Suresh Kumar N Vellymalay
(USM, Malaysia)

Suryadiputra Liawatimena
(BINUS, Indonesia)

Suwinto Johan
(STIE Wiyatamandala, Indonesia)

Syamsir Abduh
(Trisakti University, Indonesia)

Sylvia Nabila Azwa Ambad
(UiTM, Malaysia)

Syuhaily Osman
(UPM, Malaysia)

Syuhaily Osman
(UPM, Malaysia)

Tai Mei Kin
(UPSI, Malaysia)

Taufik R. Sahroni
(BINUS, Indonesia)

Tengku Sarina Aini Tengku Kasim
(UM, Malaysia)

Tey Nai Peng
(UM, Malaysia)

Tirta Mursitama
(BINUS, Indonesia)

Togar Napitupulu
(BINUS, Indonesia)

Toshiko Yamaguchi
(UM, Malaysia)

Ulani Yunus
(BINUS, Indonesia)

Ulf Richter
(Tongji University, China)

Uma Chandrasekaran
(PONDIUNI, India)

Umi Kartini Rashid
(UTHM, Malaysia)

Ummu Atiyah Ahmad Zakuan
(UUM, Malaysia)

Vitria Ariani
(BINUS, Indonesia)

W. A. Amir Zal
(UMK, Malaysia)

Wan Edura Wan Rashid
(UiTM, Malaysia)

Wan Mazwati Wan Yusoff
(IIUM, Malaysia)

Wendy Hiew
(UMS, Malaysia)

Xiaomei Wang
(XMU, Malaysia)

Yadollah Abolfathi Momtaz
(USWR, Iran)

Yong Chen Chen
(UM, Malaysia)

Yothin Sawangdee
(Mahidol University, Thailand)

Yusa Djuyandi
(UNPAD, Indonesia)

Zahidah Ab-Latif
(UPSI, Malaysia)

Zaimah Ramli
(UKM, Malaysia)

Zainor Izat Zainal
(UPM, Malaysia)

Zalfa Laili Hamzah
(UM, Malaysia)

Zalfa Laili, Hamzah
(UM, Malaysia)

Zalina Zakaria
(UM, Malaysia)

Zariyawati Mohd Ashhari
(UPM, Malaysia)

Zeti Zuryani Mohd Zakuan
(UiTM, Malaysia)

Zetty Nurzuliana Rashed
(KUIS, Malaysia)

Zul Ariff Abdul Latiff
(UMK, Malaysia)

Zulhamri Abdullah
(UPM, Malaysia)

Zuraina Dato Mansor
(UPM, Malaysia)

Zuraini Mat Issa @ Zakaria
(UiTM, Malaysia)

Zurinawati Mohi@Mohyi
(UiTM, Malaysia)

ALEXU	*– Alexandria University Economics and Agribusiness*
ARU	*– Phranakhon Si Ayutthaya Rajabhat University*
AUS	*– American University of Sharjah*
AUT	*– Auckland University of Technology*
Azerbaijan University	*– Azarbaijan Shahid Madani University*
BAU	*– Bangladesh Agricultural University*
BBAU	*– Babasaheb Bhimrao Ambedkar University*
BINUS	*– Bina Nusantara University*
CityU	*– City University of Hong Kong*
Covenant	*– Covenant University*
CU	*– Chulalongkorn University*
CU	*– Chulalongkorn University*
Curtin	*– Curtin University Perth*
DLSU	*– De La Salle University*
IAB	*– Institut Aminuddin Baki*
IIMCAL	*– IIM Calcutta*
IIUI	*– International Islamic University Islamabad*
IIUM	*– International Islamic University Malaysia*
IKIM	*– Institut Kefahaman Islam Malaysia*
IPB	*– Institut Pertanian Bogor*
ISU	*– Iowa State University of Science and Technology*
ITB	*– Institut Teknologi Bandung*
IUKL	*– Infrastructure University Kuala Lumpur*
KAPSARC	*– King Abdullah Petroleum Studies and Research Center*
KSDMA	*– Kerala State Disaster Management Authority*
KUIS	*– Kolej Universiti Islam Antarabangsa Selangor*
MMU	*– Multimedia University*
MOH	*– Ministry of Health*
MUST	*– Malaysia University of Science and Technology*
PBS	*– Putra Business School*
PGU	*– Persian Gulf University*
PONDIUNI	*– Pondicherry University*
QUIP	*– Quest International University Perak*
RMIT	*– Royal Melbourne Institute of Technology*
SQU	*– Sultan Qaboos University*
SSU	*– Sokoto State University*
STIE Surakarta	*– Sekolah Tinggi Ilmu Ekonomi Surakarta*
STIE Wiyatamandala	*– Sekolah Tinggi Ilmu Ekonomi Wiyatamandala*
Sukkur IBA	*– Sukkur IBA University*
SUMS	*– Shiraz University of Medical Sciences*
Sunway	*– Sunway University*
Taylor's	*– Taylor's University*
TSU	*– Thaksin University*
TU	*– Taif University*
U Miami	*– University of Miami*
UDN	*– The University of Da Nang*
UI	*– University of Ibadan*
UII	*– Universitas Islam Indonesia*
UIN Malang	*– Universitas Islam Negeri Maulana Malik Ibrahim Malang*
UiTM	*– Universiti Teknologi MARA*
UKM	*– Universiti Kebangsaan Malaysia*
UKZN	*– University of KwaZulu-Natal*
UM	*– Universiti Malaya*
UMK	*– Universiti Malaysia Kelantan*
UMP	*– Universiti Malaysia Pahang*
UMPO	*– Universitas Muhammadiyah Ponorogo*
UMS	*– Universiti Malaysia Sabah*
UMT	*– Universiti Malaysia Terengganu*
UNAIR	*– Universitas Airlangga*
UNDIP	*– Universitas Diponegoro*
UNEC	*– Azerbaijan State University of Economics*
UNHAS	*– Universitas Hasanuddin*
UNIMAS	*– Universiti Malaysia Sarawak*
UNISSA	*– Universiti Islam Sultan Sharif Ali*
UNISZA	*– Universiti Sultan Zainal Abidin*
UNN	*– University of Nigeria Nsukka*
UNP	*– Universitas Negeri Padang*
UNPAD	*– Universitas Padjadjaran*
UNPAR	*– Universitas Katolik Parahyangan*
UNS	*– Universitas Sebelas Maret*
UNTAR	*– Universitas Tarumanagara*
UOANBAR	*– University of Anbar*
UOC	*– University of Colombo*
UP	*– University of the Philippines*
UPH	*– Universitas Pelita Harapan*
UPI	*– Universitas Pendidikan Indonesia*
UPM	*– Universiti Putra Malaysia*
UPNM	*– Universiti Pertahanan Nasional Malaysia*
UPSI	*– Universiti Pendidikan Sultan Idris*
USIM	*– Universiti Sains Islam Malaysia*
USM	*– Universiti Sains Malaysia*
USU	*– Universitas Sumatera Utara*
USW	*– University of Social Welfare and Rehabilitation Sciences*
UTAR	*– Universiti Tunku Abdul Rahman*
UTHM	*– Universiti Tun Hussein Onn Malaysia*
UTM	*– Universiti Teknologi Malaysia*
UTP	*– Universiti Teknologi PETRONAS*
UUM	*– Universiti Utara Malaysia*
VŠO	*– Vysoká Škola Obchodní v Praze (University of Business in Prague)*
XMU	*– Xiamen University*
YU	*– Yarmouk University*
YZU	*– Yuan Ze University*
ZU	*– Zarqa University*

While every effort has been made to include a complete list of referees for the period stated above, however if any name(s) have been omitted unintentionally or spelt incorrectly, please notify the Chief Executive Editor, *Pertanika* Journals at executive_editor.pertanika@upm.edu.my

Any inclusion or exclusion of name(s) on this page does not commit the *Pertanika* Editorial Office, nor the UPM Press or the University to provide any liability for whatsoever reason.

Pertanika Journals

Our goal is to bring high quality research to the widest possible audience

INSTRUCTIONS TO AUTHORS

(REGULAR ISSUE)

-- Manuscript Preparation & Submission Guide --

Revised: March 2020

Please read the Pertanika guidelines and follow these instructions carefully. The Chief Executive Editor reserves the right to return manuscripts that are not prepared in accordance with these guidelines.

MANUSCRIPT PREPARATION

Manuscript Types

Pertanika accepts submission of mainly **four** types of manuscripts
- that have not been published elsewhere (including proceedings)
- that are not currently being submitted to other jounals

1. Regular Article

Regular article is a full-length original empirical investigations, consisting of introduction, methods, results and discussion. Original research work should present new and significant findings that contribute to the advancement of the research area. Analysis and Discussion must be supported with relevant references.

Size: Generally, it is expected **not to exceed 6000 words** (excluding the abstract, references, tables and/or figures)**,** a maximum of **80 references**, and **an abstract of less than 250 words.**

2. Review Article

A review article reports critical evaluation of materials about current research that has already been published by organizing, integrating, and evaluating previously published materials. It summarizes the status of knowledge and outline future directions of research within the journal scope. A review article should aim to provide systemic overviews, evaluations and interpretations of research in a given field. Re-analyses as meta-analysis and systemic reviews are encouraged.

Size: Generally, it is expected **not to exceed 6000 words** (excluding the abstract, references, tables and/or figures), a maximum of **80 references,** and **an abstract of less than 250 words.**

3. Short Communications

Each article should be timely and brief. It is suitable for the publication of significant technical advances and may be used to:

(a) reports new developments, significant advances and novel aspects of experimental and theoretical methods and techniques which are relevant for scientific investigations within the journal scope;

(b) reports/discusses on significant matters of policy and perspective related to the science of the journal, including 'personal' commentary;

(c) disseminates information and data on topical events of significant scientific and/or social interest within the scope of the journal.

Size: It is limited to **3000 words** and have a maximum of **3 figures and/or tables, from 8 to 20 references, and an abstract length not exceeding 100 words.** Information must be in short but complete form and it is not intended to publish preliminary results or to be a reduced version of Regular or Rapid Papers.

4. Others

Brief reports, case studies, comments, concept papers, letters to the editor, and replies on previously published articles may be considered.

Language Accuracy

Pertanika **emphasizes** on the linguistic accuracy of every manuscript published. Articles must be in **English** and they must be competently written and presented in clear and concise grammatical English. Contributors are strongly advised to have the manuscript checked by a colleague with ample experience in writing English manuscripts or a competent English language editor.

Author(s) **may be required to provide a certificate** confirming that their manuscripts have been adequately edited. **All editing costs must be borne by the author(s)**.

Linguistically hopeless manuscripts will be rejected straightaway (e.g., when the language is so poor that one cannot be sure of what the authors really mean). This process, taken by authors before submission, will greatly facilitate reviewing, and thus publication.

MANUSCRIPT FORMAT

The paper should be submitted in one column format with at least 4cm margins and 1.5 line spacing throughout. Authors are advised to use Times New Roman 12-point font and *MS Word* format.

1. Manuscript Structure

Manuscripts in general should be organised in the following order:

- **Page 1:** ***Running title***

This page should **only** contain the running title of your paper. The running title is an abbreviated title used as the running head on every page of the manuscript. The running title **should not exceed 60 characters, counting letters and spaces.**

- **Page 2:** ***Author(s) and Corresponding author's information***

General information: This page should contain the **full title** of your paper **not exceeding 25 words**, with name(s) of all the authors, institutions and corresponding author's name, institution and full address (Street address, telephone number (including extension), hand phone number, and e-mail address) for editorial correspondence. **The corresponding author must be clearly indicated with "*".**

Authors' name: The names of the authors should be named **in full without academic titles.** For Asian (Chinese, Korean, Japanese, Vietnamese), please write first name and middle name before surname (family name). The last name in the sequence is considered the surname.

Authors' addresses: Multiple authors with different addresses must indicate their respective addresses separately by superscript numbers.

Tables / figures list: A **list** of number of **black and white / colour figures and tables** should also be indicated on this page. See ***"5. Figures & Photographs"*** for details.

Example (page 2):

***In vivo* Fecundity Evaluation of *Phaleria macrocarpa* Extract Supplementation in Male Adult Rats**

Sui Sien Leong[1]* and Mohamad Aziz Dollah[2]

[1]Department of Animal Sciences and Fishery, Universiti Putra Malaysia, 97008 Bintulu, Sarawak, Malaysia
[2]Department of Biomedical Sciences, Universiti Putra Malaysia, 43400 Serdang, Malaysia

leongsuisien@upm.edu.my (Sui Sien Leong), Contact number
azizdollah@gmail.com (Mohamad Aziz Dollah), Contact number
**Corresponding author*

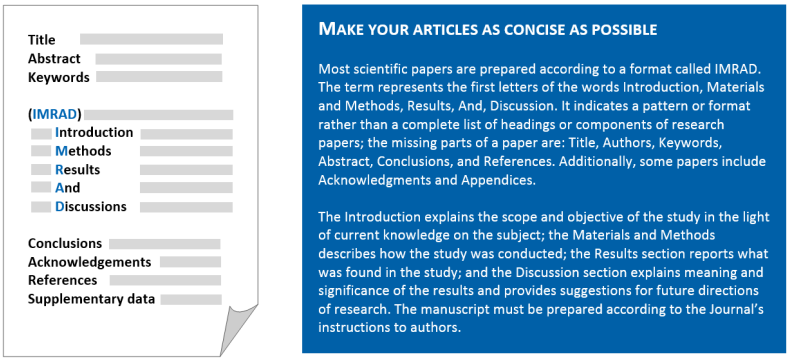
- **Page 3: *Abstract***

This page should **repeat** the **full title** of your paper with only the **Abstract**, usually in one paragraph and **Keywords.**

Keywords: **Not more than 8 keywords in alphabetical order** must be provided to describe the contents of the manuscript.

- **Page 4: *Text***

A regular paper should be prepared with the headings *Introduction, Methods, Results and Discussions* in this order. The literature review maybe part of or separated from Introduction. A conclusion maybe embeded or separated from Results and Discussions.



2. *Levels of Heading*

Level of heading	Format
1st	**LEFT, BOLD, UPPERCASE**
2nd	**Flush left, Bold, Capitalise each word**
3rd	**Bold, Capitalise each word, ending with .**
4th	***Bold italic*, Capitalise each word, ending with .**

3. *Equations and Formulae*

These must be set up clearly and should be typed double spaced. Numbers identifying equations should be in square brackets and placed on the right margin of the text.

4. *Tables*

- All tables should be prepared in a form consistent with recent issues of Pertanika and should be numbered consecutively with Roman numerals (Table 1, Table 2).
- A brief title should be provided, which should be shown at the top of each table **(APA format):**

Example: Table 1

PVY infected Nicotiana tabacum *plants optical density in ELISA*

- Explanatory material should be given in the table legends and footnotes.
- Each table should be prepared on a new page, embedded in the manuscript.
- Authors are advised to keep backup files of all tables.

***** Please submit all tables in Microsoft word format only - because tables submitted as image data cannot be edited for publication and are usually in low-resolution.***

5. *Figures & Photographs*

- Submit an **original** figure or photograph.
- Line drawings must be clear, with high black and white contrast.

- Each figure or photograph should be prepared on a new page, embedded in the manuscript for reviewing to keep the file of the manuscript under 5 MB.
- These should be numbered consecutively with Roman numerals (Figure 1, Figure 2).
- Provide a brief title, which should be shown at the bottom of each table **(APA format):**

  Example: Figure 1. PVY-infected *in vitro* callus of *Nicotiana tabacum*

- If a Figure has been previously published, acknowledge the original source and submit written permission form the copyright holder to reproduce the material.
- Authors are advised to keep backup files of all figures.

***** Figures or photographs must also be submitted separately as TIFF, JPEG, because figures or photographs submitted in low-resolution embedded in the manuscript cannot be accepted for publication. For electronic figures, create your figures using applications that are capable of preparing high resolution TIFF files.***

6. Acknowledgement

Any individuals and entities who have contributed should be acknowloedged appropriately.

7. References

References begin on their own page and are listed in alphabetical order by the first author's last name. Only references cited within the text should be included. All references should be in 12-point font and double-spaced.

NOTE: When formatting your references, please follow the ***Pertanika*-APA-reference style** (6th Edition) *(refer to examples)*. Ensure that the references are strictly in the journal's prescribed style, failing which your article will **not be accepted for peer-review**. You may refer to the *Publication Manual of the American Psychological Association* for further details https://apastyle.apa.org/

Examples of reference style are given below:

Books

Books	Insertion in Text	In Reference List
Book with 1-2 authors	**Information prominent' (the author's name is within parentheses):** … (Cochrane, 2007) … Or **'Author prominent' (the author's name is outside the parentheses):** Cochrane (2007) …	Cochrane, A. (2007). *Understanding urban policy: A critical approach.* Malden, United States: Blackwell Publishing.
Book with 3 or more authors (Pertanika's format)	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Seeley et al., 2011) … Or **'Author prominent' (the author's name is outside the parentheses):** Seeley et al. (2011) …	Seeley, R., VanPutte, C., Regan, J., & Russo, A. (2011). *Seeley's anatomy & physiology*. New York, United States: McGraw-Hill.

Books	Insertion in Text	In Reference List
Book with 6-7 authors	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Bulliet et al., 2011) … Or **'Author prominent' (the author's name is outside the parentheses):** Bulliet et al. (2011) …	Bulliet, R. W., Crossley, P. K., Headrick, D. R., Hirsch, S. W., Johnson, L. L., & Northrup, D. (2011). *The earth and its peoples: A global history* (5th ed.). Boston, United States: Wadsworth.
Book with more than 8 authors	*For all in-text references, list only the first author's family name and followed by* 'et al.' A recent study (Edge et al., 2011) concluded that… Or Edge et al. (2011) concluded that **….**	For books with eight or more authors, please follow the guidelines for journal articles with eight or more authors.
Chapter in edited book	**Information prominent' (the author's name is within parentheses):** … (Richards, 1997) … Or **'Author prominent' (the author's name is outside the parentheses):** Richards (1997) …	Richards, K. C. (1997). Views on globalization. In H. L. Vivaldi (Ed.), *Australia in a global world* (pp. 29-43). Sydney, Australia: Century.
e-book/online book	**Information prominent' (the author's name is within parentheses):** … (Niemann et al., 2004) … Or **'Author prominent' (the author's name is outside the parentheses):** Niemann (2004) …	Niemann, S., Greenstein, D., & David, D. (2004). *Helping children who are deaf: Family and community support for children who do not hear well.* Retrieved June 1, 2019, from http://www.hesperian.org/ publications_download_deaf.php Schiraldi, G. R. (2001). *The post-traumatic stess disorder sourcebook: A guide to healing, recovery, and growth* [Adobe Digital Editions version]. doi:10.1036/0071393722
Editor	**Information prominent' (the author's name is within parentheses):** … (Zairi, 1999) … Or **'Author prominent' (the author's name is outside the parentheses):** Zairi (1999) …	Zairi, M. (Ed.). (1999). *Best practice: Process innovation management.* Oxford, United Kingdom: Butterworth- Heinemann.

Books	Insertion in Text	In Reference List
Several works by same author in the same year	**Information prominent' (the author's name is within parentheses):** … (Fullan, 1996a, 1997b) … Or **'Author prominent' (the author's name is outside the parentheses):** Fullan (1996a, 1996b) …	Fullan, M. (1996a). Leadership for change. In *International handbook for educational leadership and administration.* New York, United States: Kluwer Academic. Fullan, M. (1996b). *The new meaning of educational change.* London, United Kingdom: Casell.
Several authors, different years referred to collectively in your work	**List sources alphabetically by family name in the in-text reference in the order in which they appear in the Reference List.** The cyclical process (Carr & Kemmis, 1986; Dick, 2000) suggests…	Carr, W., & Kemmis, S. (1986). *Becoming critical: Education knowledge and action research.* London, United Kingdom: Falmer Press. Dick, B. (2000). *A beginner's guide to action research.* Retrieved June 1, 2019, from http://www.scu.edu.au/schools/gcm/ar/arp/guide.html

Journals

Journals	Insertion in Text	In Reference List
Journal article with 1-2 authors	**Information prominent' (the author's name is within parentheses):** … (Kramer & Bloggs, 2002)… Or **'Author prominent' (the author's name is outside the parentheses):** Kramer and Bloggs (2002) …	Kramer, E., & Bloggs, T. (2002). On quality in art and art therapy. *American Journal of Art Therapy*, *40*, 218-231.
Journal article with 3 or more authors (Pertanika's format)	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Erlo et al., 2008) … Or **'Author prominent' (the author's name is outside the parentheses):** Erlo et al. (2008) …	Elo, A., Ervasti, J., Kuosma, E., & Mattila, P. (2008). Evaluation of an organizational stress management program in a municipal public works organization. *Journal of Occupational Health Psychology*, *13*(1), 10-23. doi: 10.1037/1076-8998.13.1.10

Journal article with 6 - 7 authors	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Restouin et al., 2009) … Or **'Author prominent' (the author's name is outside the parentheses):** Restouin et al. (2008) …	Restouin, A., Aresta, S., Prébet, T., Borg, J., Badache, A., & Collette, Y. (2009). A simplified, 96-well–adapted, ATP luminescence–based motility assay. *BioTechniques, 47*, 871–875. doi: 10.2144/000113250
Journal article with more than 8 or more authors	**Information prominent' (the author's name is within parentheses):** … (Steel et al., 2010).. Or **'Author prominent' (the author's name is outside the parentheses):** Steel et al. (2010) …	Steel, J., Youssef, M., Pfeifer, R., Ramirez, J. M., Probst, C., Sellei, R., ... Pape, H. C. (2010). Health-related quality of life in patients with multiple injuries and traumatic brain injury 10+ years postinjury. *Journal of Trauma: Injury, Infection, and Critical Care, 69*(3), 523-531. doi: 10.1097/TA.0b013e3181e90c24
Journal article with DOI	**Information prominent' (the author's name is within parentheses):** … (Shaw et al., 2005).. Or **'Author prominent' (the author's name is outside the parentheses):** Shaw et al. (2005) …	Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2005). Psychological interventions for overweight or obesity. *The Cochrane database of systematic reviews* (2). doi:10.1002/14651858.CD003818.pub2

Newspapers

Newspapers	Insertion in Text	In Reference List
Newspaper article – with an author	… (Waterford, 2007)...	Waterford, J. (2007, May 30). Bill of rights gets it wrong. *The Canberra Times*, p. 11.
Newspaper article – without an author	… ("Internet pioneer", 2007) …	Internet pioneer to oversee network redesign. (2007, May 28). *The Canberra Times*, p. 15.
Article in an newsletter	... ("Australians and the Western Front", 2009) ...	Australians and the Western Front. (2009, November). *Ozculture newsletter*. Retrieved June 1, 2019, from http://www.cultureandrecreation.gov.au/ newsletter/

Conference / Seminar Papers

Conference / Seminar Papers	Insertion in Text	In Reference List
Print – *If the paper is from a book, use the book chapter citation format. If it is from regularly published proceedings (e.g. annual), use the Journal article citation format.*	… (Edge, 1996) … Or Edge (1996) …	Edge, M. (1996). Lifetime prediction: Fact or fancy? In M. S. Koch, T. Padfield, J. S. Johnsen, & U. B. Kejser (Eds.), *Proceedings of the Conference on Research Techniques in Photographic Conservation* (pp. 97-100). Copenhagen, Denmark: Royal Danish Academy of Fine Arts.
Online	… (Tester, 2008) … Or Tester (2008) …	Tester, J. W. (2008). The future of geothermal energy as a major global energy supplier. In H. Gurgenci & A. R. Budd (Eds.), *Proceedings of the Sir Mark Oliphant International Frontiers of Science and Technology Australian Geothermal Energy Conference*, Canberra, Australia: Geoscience Australia. Retrieved June 1, 2019, from http://www.ga.gov.au/image_cache/ GA11825.pdf

Government Publications

Government Publications	Insertion in Text	In Reference List
Government as author	**First in-text reference: Spell out the full name with the abbreviation of the body.** … (Department of Finance and Administration [DOFA], 2006) … **Subsequent in-text reference/s:** **Use the abbreviation of the body.** … (DOFA, 2006)…	Department of Finance and Administration. (2006). Delivering Australian Government services: Managing multiple channels. Canberra, Australia: Author.
Government report - online	**First in-text reference: Spell out the full name with the abbreviation of the body.** … (Department of the Prime Minister and Cabinet [PM&C], 2008) … **Subsequent in-text reference/s:** **Use the abbreviation of the body.** … (PM&C, 2008)…	Department of the Prime Minister and Cabinet. (2008). *Families in Australia: 2008.* Retrieved June 1, 2019, from http://www.....

9. General Guidelines

Abbreviations: Define alphabetically, other than abbreviations that can be used without definition. Words or phrases that are abbreviated in the introduction and following text should be written out in full the first time that they appear in the text, with each abbreviated form in parenthesis. Include the common name or scientific name, or both, of animal and plant materials.

Authors' Affiliation: The primary affiliation for each author should be the institution where the majority of their work was done. If an author has subsequently moved to another institution, the current address may also be stated in the footer.

Co-Authors: The commonly accepted guideline for authorship is that one must have substantially contributed to the development of the paper and share accountability for the results. Researchers should decide who will be an author and what order they will be listed depending upon their order of importance to the study. Other contributions should be cited in the manuscript's Acknowledgements.

Copyright Permissions: Authors should seek necessary permissions for quotations, artwork, boxes or tables taken from other publications or from other freely available sources on the Internet before submission to Pertanika. Acknowledgement must be given to the original source in the illustration legend, in a table footnote, or at the end of the quotation.

Footnotes: Current addresses of authors if different from heading may be inserted here.

Page Numbering: Every page of the manuscript, including the title page, references and tables should be numbered.

Spelling: The journal uses American or British spelling and authors may follow the latest edition of the Oxford Advanced Learner's Dictionary for British spellings. Each manuscript should follow one type of spelling only.

SUBMISSION OF MANUSCRIPTS

All submissions must be made electronically using the **online submission system ScholarOne™**, a web-based portal by Clarivate Analytics. For more information, go to our web page and click "**Online Submission**".

Submission Checklist

1. **MANUSCRIPT**:

   Ensure your MS has followed the Pertanika style particularly the first four pages as explained earlier. The article should be written in a good academic style and provide an accurate and succinct description of the contents ensuring that grammar and spelling errors have been corrected before submission. It should also not exceed the suggested length.

2. **DECLARATION FORM:**

- Author has to sign a declaration form. In signing the form, authors declare that the work submitted for publication is orginal, previously unpublished, and not under consideration for any publication elsewhere.

- Author has to agree to pay the publishing fee once the paper is accepted for publication in Pertanika.

Note:

COPYRIGHT FORM: Author will be asked to sign a copyright form when the paper is accepted. In signing the form, it is assumed that authors have obtained permission to use any copyrighted or previously published material. All authors must read and agree to the conditions outlined in the form, and must sign the form or agree that the corresponding author can sign on their behalf. Articles cannot be published until a signed form *(original pen-to-paper signature)* has been received.

Visit our Journal's website for more details at http://www.pertanika.upm.edu.my/

ACCESS TO PUBLISHED MATERIALS

Under the Journal's open access initiative, authors can choose to download free material (via PDF link) from any of the journal issues from Pertanika's website. Under "**Browse Journals**" you will see a link, "*Regular Issue*", "*Special Issue"* or "*Archives*". Here you will get an access to all current and back-issues from 1978 onwards. No hard copy of journals or off prints are printed.

Visit our Journal's website at
http://www.pertanika.upm.edu.my/regular_issues.php for "Regular Issue"
http://www.pertanika.upm.edu.my/cspecial_issues.php for "Special Issue"
http://www.pertanika.upm.edu.my/journal_archives.php for "Archives"

PERTANIKA
JOURNALS

PUBLICATION CHARGE

Upon acceptance of manuscript, a processing fee of RM 750 / USD 250 will be imposed on authors; RM 750 for any corresponding author affiliated to an institution in Malaysia; USD 250 for any corresponding author affiliated to an institution outside Malaysia. Payment must be made online at https://paygate.upm.edu.my/action.do?do=

Any queries may be directed to the **Chief Executive Editor's** office via email to executive_editor.pertanika@upm.edu.my

Technology Management

Introducing Automatic Control Method of Safety Standards in Horizontal Curves by Processing Images Taken by Mobile Mapping System 1567
Mohammadreza Koloushani, Ali Fatemi, Masoud Tabibi and Eren Erman Ozguven

Tourism

Comparing Official Tourism Twitter Accounts: The Case of Four Major Tourist Destinations in Southeast Asia 1581
Imam Syafganti and Michel Walrave

An Exploratory Study on Factors Influencing University Students' Intention to Patronize Food Trucks 1429
Tan Poh Leong, Audrey Malenee Mariadass and Lee Boon Kai

Religious Studies

Review Article
A Survey on Relevant Malaysian *Fatwā* about Cadaver Concerning Tissue Engineering Research 1451
Muhammad Aa'zamuddin Ahmad Radzi, Munirah Sha'ban, Nur Syamimi Mohd. Azharuddin, Azran Azhim and Abdurezak Abdulahi Hashi

The Practice of *al-Ta'awun* in the Wedding Expenditure of Malay-Muslims in Malaysia 1467
Syh Noorul Madihah Syed Husin, Raihanah Azahari and Asmak Ab Rahman

Accounting

Independent Corporate Governance Organs' Activities, Tax Avoidance, and Country Tax Environment: Evidence from ASEAN Countries 1485
Oktavia

Anthropology

Anticipations for and Perceived Barriers of Development among the Sarawak's Highlanders 1507
Kuok Ho Daniel Tang

Arts and Culture

Pangandaran Batik as a Distinctive Batik Style from the East Priangan Region of West Java 1525
Agus Nero Sofyan, Ekaning Krisnawati and Tajudin Nur

Finance/Investment

Determinants of Stock Splits' Ex-Date Returns: Empirical Evidence from Indonesian Stock Market 1539
*Edwin Hendra, Bambang Leo Handoko**2** and Stefanus Ariyanto*

Geography

Adapting to Saline Intrusion: Empirical Insights from Two Coastal Areas in the Vietnamese Mekong Delta 1553
Van Huynh Thanh Pham, Rudi Febriamansyah, Afrizal and Thong Anh Tran

Master-Slave Dialectics and the Evolution of the Self in Bulosan's *America is in the Heart* 1277
Met'eb Ali Alnwairan

Media and Communication Studies

Keyboard Warrior, Online Predator or Cyber Bully? The Growing Menace of Child Exposure to Internet Harm based on Research Evidence 1291
Sarina Yusuf, Khairuddin Idris, Asnarulkhadi Abu Samah, Adamkolo Ibrahim, Nor Sabila Ramli, Muhamad Shamsul Ibrahim and Nur Atikah A Rahman

Framing Analyses of Malaysia's Media Outlets and Editorial Decisions Concerning Frame Preferences after the 2008 General Election 1311
Muhammad Izawan Baharin, Moniza Waheed, Akmar Hayati Ahmad Ghazali, and Abdul Mua'ti @ Zamri Ahmad

Chinese Cultural Preservation, Identity and Community: Examining the roles of *Sin Chew Daily* in Bridging Chinese Education, Cultural and Religious Rights of the Chinese Community in Malaysia 1335
Miew Luan Ng and Yuen Beng Lee

Psychology

Psychometric Study of Bar-On Emotional Quotient Inventory: Youth Version in Malaysian Sample 1357
Chua Bee Seok, Shazia Iqbal Hashmi, Lailawati Madlan and Jasmine Adela Mutang

Multicultural Competency, Spirituality and Self-Efficacy in Dealing with Legal and Ethical Issues 1371
Neerushah Subarimaniam, Noor Syamilah Zakaria and Wan Marzuki Wan Jaafar

Sociology

The Effect of Sociocultural Identities on Study Destination Choice 1387
Evelyn Hendriana, Khairil Wahidin Awang, Raja Nerina Raja Yusof and Jamil Bojei

Exploring the Gerontological Skills Competencies of Social Workers through Vocational Education and Training in Caring for the Elderly 1401
Khadijah Alavi, Nur Hanis Hazlan and Sarin Johani

Consumer and Family Economics

Health Vulnerability Versus Multiple Vulnerability Factors Among Low-Income Group in Malaysia 1415
Nora Muda, Anisa Mohammad Azahari, Faridatulazna Ahmad Shahabuddin, Zamira Hasanah Zamzuri, Noratiqah Mohd Arif, Mohd Aftar Abu Bakar and Nur Riza Mohd Suradi

Educational Researchers in Malaysia – Who They Conduct Their Research for? 1083
Amrita Kaur, Abdul Hamid Busthami Nur, Yoppy Wahyu Purnomo, Mohd Zailani Mohd Yusof and Suswandari

Mathematics Pre-service Teachers' Learning Experiences of International Teaching Practicum in Indonesia 1105
Chew Cheng Meng, Wun Thiam Yew, Nahlia Rakhmawati and Puput Suriyah

Developing Intercultural Communicative Competence through Telecollaborative Modules Integrated in Foreign Language and Intercultural Communication University Courses 1125
Agnes Loch and Agnes Pal

Economics

Foreign Trade and Economic Growth in sub-Saharan African Countries: Dynamic Common Correlated Effects Estimator (CS-ARDL) 1143
Shuaibu Sidi Safiyanu and Soo Yean Chua

Household Indebtedness: Economic Determinants of the Malaysian Residential Properties Nonperforming Loans 1163
May Jin Theong, Ahmad Farid Osman and Su Fei Yap

Determinants of Natural Rubber Price Instability for Four Major Producing Countries 1179
Yi Chiun Fong, Aye Aye Khin and Chee Seong Lim

Law

Harmonization of Law in the Application of Legal Metrology 1199
Muldri Pudamo James Pasaribu and Ningrum Natasya Sirait

Legal Protection of the Constitutional Rights of the Indigenous Faith Believers in Indonesia 1215
Muhammad Yusrizal Adi Syaputra and Mirza Nasution

Plea Bargaining in Corruption Cases: A Solution for the Recovery of Financial Losses by Indonesia? 1233
Febby Mutiara Nelson and Topo Santoso

Literature

Deconstruction of Lord Shiva in the Era of Post-Truth: A Study of Amish Tripathi's *The Immortals of Meluha* 1249
S. Karthik and Sangeeta Mukherjee

'Inscription' as Speaking for Women: African Women Writers and their Writing Form 1263
Shalini Nadaswaran

Does the Social Exchange Theory (SET) Work Effectively for New Employees? An Empirical Study of Contingent Worker in Indonesia 883
Jati Waskito, Asri Laksmi Riani, Joko Suyono and Ahmad Ikhwan Setiawan

Exploring Hipness and its Influence on Women Entrepreneurship 901
Norela Ahmad, Khairul Akmaliah Adham and Nur Sa'adah Muhamad

Implementation of NAMS Cycle Model – A Continuous Improvement Model from an Islamic Perspective 921
Afroza Bulbul Afrin, Rafikul Islam and Md. Yousuf Ali

Language and Linguistics

Translation Strategies of Humor in Subtitling 939
Mozhgan Ghassemiazghandi and Tengku Mahadi Tengku-Sepora

The Importance of Japanese Language Skills Proficiency among Malaysian Graduates in Japanese-based Companies 957
Yeoh Lee Su, Kaur Manjet and Tengku Mahadi Tengku-Sepora

Language and Social Identity: Language Choice and Language Attitude of Diaspora Communities in Bali 979
Ni Made Dhanawaty, Ni Luh Nyoman Seri Malini, Ni Made Wiasti and Ida Bagus Putra Yadnya

Iran's Nuclear Programme: An Analysis of Face in Political Interviews 995
Zuraidah Mohd Don and Masoumeh Bahman

The Realization of Experiential Meaning in Indonesian Subtitles of *The Kingdom* (2007): Cases of Transitivity System Clausal Constituents Reduction 1015
Romel Noverino, Mangatur Rudolf Nababan, Riyadi Santosa and Djatmika

The Fall of Egyptian President Morsi and the Media Representation: A Critical Discourse Analysis of *Kompas* Daily Newspaper 1035
Nuruddin, Yayan Nurbayan, Hanik Mahliatussikah, Sri Harini Ekowati, Hanip Pujiati and Syarfuni

Education

Review Article
Academic Stress among Faculty and Students in Higher Institutions 1055
Dickson Adom, Joshua Chukwuere and Mavis Osei

Lecturers' Perceptions of English Medium Instruction (EMI) Practice at a University in Indonesia 1065
Nurmala Elmin Simbolon, Rhonda Oliver and Paul Mercieca

Pertanika Journal of Social Sciences & Humanities
Vol. 28 (2) Jun. 2020

Contents

Foreword i
Abu Bakar Salleh

Management Studies

Firm Characteristics, Corporate Governance and Management Compensation Disclosure: Evidence from Indonesia 745
Ersa Tri Wahyuni, Asangki Nindya, Gatot Soepriyanto, Ilya Avianti and Zubir Azhar

Examining the Effect of Persuasive Message of Beauty Vloggers on Information Acceptance of eWOM and Purchase Intention: The Study of Consumers of Beauty Products in Jabodetabek, Indonesia 763
Sari Ramadanty, Alex Maulana Muqarrabin, Wulandari Ayu Nit and Imam Syafganti

Effect of Functional Convenience and Representational Delight on Positive Emotional Affect and Impulse Buying of Discount Group Site Users in Indonesia 777
Aryo Bismo, Sukma Putra, Haryadi Sarjono and Lessya Nasrul

Participative Decision-Making, Psychological Empowerment and Job Performance: Evidence from the Malaysian Electrical and Electronic Manufacturing Firms 791
Jeniboy Kimpah and Hazril Izwar Ibrahim

Project Managers' Leadership Styles and Their Effects on Project Management Performance 803
Nurianna Thoha and I Made Ngurah Wahyu Avandana

Mainstreaming Disability in the Workplace in Myanmar: Preliminary Study Findings 817
Sanjukta Choudhury-Kaul

Fostering Project Delivery Capabilities in Indonesian Commercial Banks 827
Mohammad Ichsan and Jimmy Sadeli

Disruptive Business Model Innovation in Indonesia Digital Startups 847
Kurnadi Gularso, Tirta Nugraha Mursitama, Pantri Heriyati and Boto Simatupang

Present Working Conditions in Slaughterhouses and Meat Selling Centres and Food Safety of Workers in Two Districts of Bangladesh 867
Mohammad Khurshed Alam, Yoshino Keiko and Mohammad Mujaffar Hossain

Pertanika Editorial Office, Journal Division
Putra Science Park
1st Floor, IDEA Tower II
UPM-MTDC Technology Centre
Universiti Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan
Malaysia
http://pertanika.upm.edu.my
E-mail: executive_editor.pertanika@upm.edu.my
Tel : +603 9769 1622

PENERBIT UPM PRESS
http://penerbit.upm.edu.my
E-mail: penerbit@upm.edu.my
Tel : +603 9769 8855 / 8854

ISSN 0128-7702
06>
9 770128 770062