About the Journal

Overview

Pertanika Journal of Social Science & Humanities is the official journal of Universiti Putra Malaysia. It is an open-access online scientific journal. It publishes original scientific outputs. It neither accepts nor commissions third party content.

Recognised internationally as the leading peer-reviewed interdisciplinary journal devoted to thepublication of original papers, it serves as a forum for practical approaches to improve 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 3 journals as Pertanika Journal of Tropical Agricultural Science, Pertanika Journal of Science & Technology, and Pertanika Journal of Social Sciences & Humanities to meet the need for specialised journals in areas of study aligned with the interdisciplinary strengths of the university.

Currently, 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 within the Asia Pacific region.

Vision

To publish journals of international repute.

Mission

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 can expect to receive a decision within 120 days. The elapsed time from submission to publication for the articles averages 180 days. We are working towards decreasing the processing time with the help of our editors and the reviewers.

Abstracting and indexing of *Pertanika*

Pertanika is over 42 years old; this accumulated knowledge and experience has resulted in Pertanika Journal of Social Sciences & Humanities being abstracted and indexed in SCOPUS (Elsevier), Clarivate Web of Science [ESCI], EBSCO, DOAJ, Agricola, ASEAN CITATION INDEX, ISC, Microsoft Academic, Google Scholar, National Agricultural Science (NAL), and MyCite.

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.

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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

Originality

The author must ensure that when a manuscript is submitted to Pertanika, the manuscript must be an original work. The author should check the manuscript for any possible plagiarism using any program such as Turn-It-In or any other software before submitting the manuscripts to the *Pertanika* Editorial Office, Journal Division.

All submitted manuscripts must be in the journal's acceptable **similarity index range:**
≤ 20% – PASS; **> 20%** – REJECT

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 120 days (average). The elapsed time from submission to publication for the articles averages 180 days.

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

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words *Introduction, **M**aterials and Methods, **R**esults, And **D**iscussion*. IMRAD is simply a more 'defined' version of the "IBC" [Introduction, Body, Conclusion] format used for all academic writing. IMRAD indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: Title, Authors, Keywords, Abstract, Conclusions, References, and Acknowledgement. Additionally, some papers include Appendices.

The Introduction explains the scope and objective of the study in the light of current knowledge on the subject; the Materials and Methods describes how the study was conducted; the Results section reports what was found in the study; and the Discussion section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the journal's **Instruction to Authors** http://www.pertanika.upm.edu.my/Resources/regular_issues/Regular_Issues_Instructions_to_Authors.pdf

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 3 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 120 days 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.

As articles are double-blind reviewed, material that may identify authorship of the paper should be placed only on page 2 as described in the first-4-page format in *Pertanika*'s **Instruction to Authors**

The Journal's peer-review

In the peer review process, 2 or 3 referees independently evaluate the scientific quality of the submitted manuscripts. At least 2 referee reports are required to help make a decision.

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.

Operating and review process

What happens to a manuscript once it is submitted to *Pertanika*? Typically, there are 7 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.

   The Chief Executive Editor sends the article-identifying information having been removed, to 2 to 3 reviewers. They are specialists in the subject matter of the article. The Chief Executive Editor requests that they complete the review within 3 weeks.

2. 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 research field.

   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 Chief Executive Editor along with specific information describing how they have addressed' the concerns of the reviewers and the editor, usually in a tabular form. The authors may also submit a rebuttal if there is a need especially when the authors disagree with certain comments provided by reviewers.

5. The Chief Executive Editor sends the revised manuscript out for re-review. Typically, at least 1 of the original reviewers will be asked to examine the article.

6. When the reviewers have completed their work, the Editor-in-Chief examines their comments and decides whether the manuscript is ready to be published, needs another round of revisions, or should be rejected. If the decision is to accept, the Chief Executive Editor is notified.

7. The Chief Executive Editor reserves the final right to accept or reject any material for publication, if the processing of a particular manuscript is deemed not to be in compliance with the S.O.P. of *Pertanika*. An acceptance notification is sent to all the authors.

The editorial office ensures that the manuscript 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 editorial office. 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 manuscript appears in the pages of the journal and is posted on-line.

ABSTRACTING AND INDEXING OF PERTANIKA JOURNALS

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Foreword

Welcome to the Third 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; 47 regular articles, 2 case studies, and a short communication. The authors of these articles come from different countries namely Brunei Darussalam, China, Ecuador, India, Indonesia, Iran, Japan, Jordan, Malaysia, Philippines, Nigeria Saudi Arabia, South Africa, and Thailand.

A regular article entitled "Dynamics of Ethnic Relations in Malaysia" sought to understand and affirm key factors that helped shape ethnic relations in a multi-cultural, ethnic, and religious Malaysia. This study shows diverse results in regard to many key factors in understanding cultural or religious diversities among students in three universities. The detailed information of this article is presented on page 1959.

I Putu Indra Kusuma dissected the effects of flipped classrooms with various technology tools on students' speaking performance and self-regulated learning (SRL) in his article, entitled "The Investigation of Flipped Classrooms on Students' Speaking Performance and Self-regulated Learning". The students taught by flipped classrooms had better speaking and SRL scores than their counterparts in the control group. Besides that, the students developed their SRL through three phases, with four possible implications for English Language Teaching. Further details of the study can be found on page 2027.

A selected article from the scope of anthropology, entitled "Toponym and Evocation of Cultural Landscape Heritage: A Case of an African Community" discussed how cultural landscapes toponym are conceptualised in the non-Western landscapes of Africa. The study shows that the toponym is tied to transactions that evoke identity, power, heritage, and sense of place. The uniqueness of each cultural landscape can evoke both the tangible and intangible cultural heritage of the communities. Details of this study are available on page 2427.

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.

Role of Prior Intercultural Learning in Chinese University Students' Cross-cultural Adaptation

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ABSTRACT

With the increased prevalence of studying abroad, cross-cultural adaptation of students studying in foreign countries has become more important. How international students' experience of cross-cultural adaptation can be enhanced is thus worth exploring. Focusing on the pre-departure period, this study investigates how Chinese students in tertiary education prepare with intercultural learning before studying abroad, how their prior intercultural learning experience influences their cross-cultural adaptation, and how their perceptions of prior intercultural learning impact their experience. From qualitative interview data, this research found that 1) Chinese university students who had study abroad experience generally engaged in prior intercultural learning in many ways to varying degrees, but they were likely to overestimate the adequacy of their prior intercultural learning; 2) prior intercultural learning was necessary for international students' successful cross-cultural adaptation, but it had a limited influence and needed to be practiced in intercultural encounters to optimize such adaptation. With related suggestions for facilitating prior intercultural learning, this study offered insights into how Chinese university students and other stakeholders involved in these students' study abroad experience could take advantage of the

pre-departure period to produce better outcomes in overseas students' cross-cultural adaptation.

Keywords: Cross-cultural adaptation, intercultural learning, international students, study abroad, teaching culture

INTRODUCTION

Over the past decade, the number of university students choosing to study abroad has increased. Studying abroad has become common among tertiary-level students, regardless of whether they are enrolled in a full-time study program or an exchange study abroad program. In comparison with their counterparts studying in their home countries, international students have to deal with the additional difficulties of cross-cultural adaptation to the different living and learning environments in foreign countries. Some studies focusing on international students' study abroad experience from various contexts have found that these students are most likely to encounter some adaptation problems, such as homesickness, a lack of a sense of belonging, and an inability to integrate into local groups (Fang & Baker, 2018; Gu & Schweisfurth, 2006; Holmes et al., 2015; Yu & Wright, 2016). As Kim (2017) indicated, "many of the habitual behaviors useful in the old setting may prove ineffectual in the new setting" when people move to and live in new environments. International students who study abroad also need to adapt to a wide range of academic and sociocultural challenges to

adapt to their new environment. Therefore, the identification of these problems also suggests that more research is needed to study the situation of international students' cross-cultural adaptation (Li & Ma, 2018; Yu & Wright, 2016; Zaykovskaya et al., 2017).

One of the key aims in the internationalization of higher education is to incorporate an intercultural dimension into the learning experience (Knight, 2008; Simm & Marvell, 2017) because "through the educational programs we create, we intend to prepare students to participate as global citizens" (Coelen, 2015). Intercultural learning prior to studying abroad plays a key role in students' intercultural encounters. In the last two decades, many students have chosen to study abroad at international universities where English is the dominant language of instruction. Most international higher education students studying abroad are Chinese. According to the latest data released by the Ministry of Education of China, 660,000 Chinese students studied abroad in 2018. In China, the international mobility of students in higher education is promoted and supported by national policies to foster talent, increase academic communication among colleges and universities, and address students' individual needs for personal development (Fang & Baker, 2018; Huang & Turner, 2018; Yu & Wright, 2016). Therefore, Chinese students studying in foreign countries are important subjects from whom researchers can gain insights into the cross-cultural adaptation experience of international students.

An increasing number of studies have been conducted to investigate and explore some key issues related to international students' cross-cultural adaptation, such as the strategies they use to deal with cross-cultural adaptation problems and the factors influencing their adaptation (Medina-Lopez-Portillo, 2004; Shafaei & Razak, 2016; Wang, 2009; Yu & Wright, 2016). The outcome of international students' cross-cultural adaptation is relevant to not only the period in which they are experiencing the adaptation process but also the period before they study abroad. Many scholars have confirmed that international students can enhance their cross-cultural adaptation experience by preparing for it during the pre-departure period (Jackson, 2008, 2013; Kim, 2001; Otten, 2003). For example, as Jackson (2013) suggested, well-prepared international students can have more successful intercultural interactions and can mediate between different cultures more efficiently than those who are not prepared. Therefore, the pre-departure period is crucial because it can contribute to how well international students are prepared for their future cross-cultural adaptation.

However, while engaging in adequate preparations before departure is frequently suggested by studies concerning international students' cross-cultural adaptation, how these students maximize the pre-departure period is rarely examined. Thus, this paper investigates the general situation of how Chinese students prepare for an intercultural learning experience before they go abroad, the effects of prior intercultural learning on

their cross-cultural adaptation, and their perceptions of such adaptation. This work aims to offer valuable insights into how prior intercultural learning positively impacts their cross-cultural adaptation. Studying these issues will allow the stakeholders involved in facilitating student mobility to understand how to improve students' study abroad experience.

LITERATURE REVIEW

Cross-cultural Adaptation

According to Kim (2001, 2017), cross-cultural adaptation refers to people's attempt to build and sustain a comparatively constant, correlative, and functional relationship with an alien social and cultural milieu. One may encounter various difficulties in trying to adapt to a socially and culturally new environment. This kind of cross-cultural adaptation has two main forms: 1) "psychological adaptation", namely, individuals' "psychological well-being or emotional satisfaction", and 2) "sociocultural adaptation", which means "the ability to fit in, to acquire culturally appropriate skills and to negotiate interactive aspects of the host environment" (Ward & Kennedy, 1999). Students may often experience culture shock and acculturation challenges, while long-term sojourners may even experience "an identity transformation, a subtle and largely unconscious shift from a largely monocultural to an increasingly intercultural self-other orientation" (Kim, 2017). Traditionally, cross-cultural adaptation is investigated to understand how people deal with linguistic and cultural

issues when moving from one culture to another culture (Jackson, 2018; Kim, 2017; Lewthwaite, 1996). For instance, previous research has categorized various groups of people when investigating cross-cultural adaptation, namely, short-term travelers, sojourners, and immigrants. Cross-cultural adaptation may involve affective, social, behavioral, and cognitive aspects and should thus be regarded as a complex and dynamic process (Baker, 2015; Kim, 2017; Zhou et al., 2008). This paper views cross-cultural adaptation as a complex process by which sojourners adjust when living in a new culture that leads to a new repertoire of attitudes, thoughts, feelings, and behaviors that help them become more global, multilingual, and multicultural (Kim, 2001, 2017; Zhou et al., 2008). Therefore, it is important to explore and unpack the psychological and sociocultural adaptation of international students studying abroad to provide a better picture for intercultural teaching and learning prior to and during the students' study abroad experience. As argued, a dynamic model of understanding cross-cultural adaptation is "based on wider social, psychological and educational theories, and regards the traveler as an active agent rather than the victim of pathology" (Zhou et al., 2008).

Current studies concerning the cross-cultural adaptation of international students mainly focus on two groups: students from different countries studying in one particular foreign country (Lewthwaite, 1996; Mori, 2000; Shafaei & Razak, 2016) and students from one country studying in a foreign country (Brisset et al., 2010; Fang & Baker, 2018; Huang & Turner, 2018). As mentioned above, the factors influencing students' cross-cultural adaptation are a common research topic. These factors can be broadly divided into two categories: 1) external factors (related to the host environment), such as how much pressure people feel the host environment places on them and whether people from the host environment are friendly to foreigners, and 2) internal factors (related to an individual's personal circumstances), such as personality traits and language proficiency (Kim, 2001, 2017; Medina-Lopez-Portillo, 2004; Zhou et al., 2008).

Current studies focusing on Chinese students studying overseas mostly explore the common patterns of their cross-cultural adaptation, the difficulties they encounter during the process, the strategies they use to resolve adaptation difficulties, or the factors influencing their adaptation; then, researchers offer advice derived from analyses of students' adaptation experience (Fang & Baker, 2018; Gu & Schweisfurth, 2006; Henze & Zhu, 2012; Huang & Turner, 2018; Yu & Wright, 2016). While previous works have extensively researched how Chinese students studying overseas can improve their cross-cultural adaptation, most elaborate on what students can do after they are in the foreign countries instead of what they can do to improve their preparation in the pre-departure period. The latter topic is the focus of this research.

Prior Intercultural Learning and Cross-cultural Adaptation

Focusing on the period prior to Chinese students' departure for studying abroad, this study investigated the relevant factors that had an impact during this preparation period, which could be summarized as prior intercultural learning. This paper views culture from a poststructuralist approach and conceptualizes it as "a complex social system, as opposed to a natural system, that emerges through individuals' joint participation in the world giving rise to sets of shared knowledge, beliefs, values, attitudes and practices" (Baker, 2015). As argued by Liu and Fang (2017), "culture should not be perceived merely as a cognitive concept, but, rather, from a critical perspective that challenges an essentialist set of cultural meanings."

From a poststructuralist perspective, it is also difficult to define intercultural learning; it can be regarded as a goal, a process, or even a special type of communication (Baker, 2015; McConachy, 2018; O'Dowd, 2003). To survey the factors contributing to cross-cultural adaptation, this paper considers intercultural learning to be a learning process (Baker, 2015; Byram, 1997, 2008). Specifically, intercultural learning denotes the process of individual learning and is defined as "acquiring increased awareness of subjective cultural context (world view), including one's own, and developing greater ability to interact sensitively and competently across cultural contexts as both an immediate and long-term effect of exchange" (Bennett, 2009). Thus, the concepts of intercultural learning and cross-cultural adaptation can be explored in different cultural contexts, and the outcomes can be applied to other cultural contexts (Bennett, 2009). In this case, intercultural learning can be viewed as the process or the outcome of improving one's intercultural competence, which covers the attitudes, knowledge, and skills that enable individuals to manage appropriate and effective interactions with people from other cultures (Deardorff, 2009). From this perspective, effective prior intercultural learning may lead to successful cross-cultural adaptation, as pre-departure intercultural learning is likely to prepare students for their future adaptation process (Jackson, 2018; Reid & Garson, 2017; Tian & Lu, 2018).

However, while prior preparation for cross-cultural adaptation is widely considered to be significant, few studies have investigated international Chinese students in the pre-departure period. In particular, Liu (2008) used a four-item questionnaire only to examine Chinese students' intercultural adaptation experience when studying abroad and to measure their prior preparedness. Liu defined prior preparedness as students' prior intercultural experience and how they prepared for their target language and culture. The study suggested that well-prepared students tended to choose assimilation and integration strategies. In Baker and Fang's (2019) study, which emphasized and investigated Chinese student sojourners' intercultural preparation in formal classroom settings, the participants were asked to evaluate their preparation in terms of whether taking English courses

equipped them with the skills they needed to succeed in their study abroad experience; most of the participants denied that their English language learning experience prepared them well for studying abroad. In general, only a few studies have explored international Chinese students' attitudes towards prior intercultural learning, and the extent to which their prior intercultural learning influences their adaptation in foreign countries.

Nevertheless, students may have different perceptions of prior intercultural learning and various ways of conducting it. Moreover, the actual effects of prior intercultural learning on cross-cultural adaptation remain to be studied. Therefore, to explore the prior intercultural learning of Chinese students studying abroad and its impact on their cross-cultural adaptation, this study attempts to address three research questions.

Q1: How do international Chinese students engage in intercultural learning before studying abroad?

Q2: To what extent does prior intercultural learning influence their on-site cross-cultural adaptation?

Q3: What is Chinese university students' perception of prior intercultural learning?

METHODS

Participants

Twelve Chinese university students who had experience studying abroad participated in this research (Table 1). All of them had taken part in a semester-long exchange study abroad program in the fourth year of their undergraduate program during the 2018-2019 academic year. The participants studied in Canada, Ireland, the UK, and the US.

Table 1

Profile of the participants

Participants	Major	Gender	Foreign country where studied	Length of stay (months)
S1	Law	Female	US	3
S2	English	Male	Ireland	6
S3	Management	Female	Canada	4
S4	Finance	Female	UK	4
S5	Management	Male	Canada	5
S6	English	Female	Ireland	4
S7	English	Male	US	6
S8	Physics	Female	Ireland	4
S9	English	Female	US	6
S10	Finance	Female	Ireland	6
S11	Accounting	Female	Canada	4
S12	English	Female	Ireland	5

Research Instruments

In addressing the research questions, this study employed qualitative approaches to investigate Chinese students' firsthand accounts of their study abroad experience. This research collected data from two periods of time: the participants' prior intercultural learning experience in the pre-departure period and their cross-cultural adaptation experience during their study abroad. Interviews and written narratives were adopted for data collection. Semi-structured interviews were chosen because they could enhance researchers' flexibility during interviews while following the interview prompt to explore in-depth and unexpected areas (Richards, 2003). Following the interview prompts, the researchers were able to ask follow-up questions and ensure more flexible discussions based on what the participants had expressed (Galletta, 2013). Being interpretive, interviews were useful for understanding the participants' cross-cultural adaption to "view knowledge as socially constructed through language and interaction, and reality as connected and known through society's cultural and ideological categories" (Tracy, 2013). Employing interviews to collect qualitative data could help the researchers collect in-depth, retrospective data and offer significant insights into international Chinese students' understanding of their prior intercultural learning process and the quality of their cross-cultural adaptation experience, thereby exploring not only "what" the participants said but also "how" they said it (Kvale, 2007). Furthermore,

written narratives enabled the participants to reflect on their study abroad experience to further develop their critical thinking skills and reflect on their thoughts regarding their participation in this study (Lin et al., 2014).

Data Collection

To obtain details of the participants' prior intercultural learning experience, the researchers conducted individual semi-structured online interviews with each participant. After the participating students went abroad and had studied for about one month, they were required to write an introspective narrative following provided guidelines about their prior intercultural learning experience. The narratives were written in Chinese and saved as Word documents for further analysis. One month after their return to China, each student was asked to participate in another round of semi-structured interviews. During the interviews, they commented on the role of their prior intercultural learning in their cross-cultural adaptation. The interview, which consisted of five questions, was divided into three main parts (see Appendix). Each interview lasted around 30 – 40 minutes and was audio-recorded for transcription and analysis purposes. All the interviews were conducted in Mandarin in order to allow the participants to flexibly express their ideas in their native language (Mann, 2011). The interviews were transcribed verbatim. During the interviews, the researchers took notes of the participants' main ideas; after that, each recording was reviewed, while key

and recurring ideas related to the research questions were identified. Relevant extracts were then translated into English.

Data Analysis

Latent content analysis was adopted for key themes related to the research aims and the issues that emerged in this study (Dörnyei, 2007; Schreier, 2012). Latent content analysis enables researchers "to explore the deeper meanings so as to add interpretive depth and breadth to the analysis" (Jenkins, 2014) through an interactive discourse. First, all the data were input into the software NVivo 11 for coding purposes. After the transcription process, the researchers read the transcripts obtained from NVivo and listened to the recordings to develop possible themes for analysis. The common aspects of prior intercultural learning that the participants focused on were also summarized. For the interviews, each participant's answers were summarized and restructured according to the research questions; recurring ideas and valuable or exceptional thoughts were noted. The narratives and interview records of each participant were reviewed and compared to see how prior intercultural learning affected their subsequent cross-cultural adaptation. After listening to the recordings again and rereading and annotating the transcripts, the researchers chose the following main themes to exemplify the participants' experience: the international Chinese students' prior

intercultural learning situation, the effects of prior intercultural learning on their cross-cultural adaptation, and the participants' perceptions of prior intercultural learning.

Validity and Reliability

The authors fully understand that findings from such a small sample size cannot be generalized, given that China has the largest number of international students studying abroad (The Organisation for Economic Co-operation and Development, 2014). However, the participants' prior intercultural learning experience and reflections on their study abroad may be transferrable to other settings (Lincoln & Guba, 1985). As this is a qualitative study, the researchers recognize the degree of subjectivity in the data collection process and interpretation of findings. Nevertheless, the interview questions and the written narrative prompts were carefully worded. The authors also established rapport with the interviewees. Finally, the transcripts were sent to the interviewees for peer-checking to ensure the accuracy of the transcription and translation processes from the researchers.

RESULTS AND DISCUSSION

The findings from the participants' narratives and interviews, and the discussion of the data are presented in terms of the three main issues associated with the three research questions.

    1. International Chinese students' prior intercultural learning situation

2. Effects of prior intercultural learning on cross-cultural adaptation

3. Participants' perceptions of prior intercultural learning

The International Chinese Students' Prior Intercultural Learning Situation

In general, the data of all the participants indicated that, to different degrees, they had all engaged in prior intercultural learning for their later cross-cultural adaptation, and they had various ways of engaging in intercultural learning. In terms of the content of their prior intercultural learning, they did not emphasize one specific culture; rather, they focused on the transferable knowledge and skills needed to interact with people from different cultures. For instance, S2 stated, "I searched online to understand some etiquette in order to communicate with people from other lingua-cultures" (written narrative). S7 mentioned, "I reflected on an intercultural communication course I took in my university. I tried to use some of the knowledge I gained to prepare for intercultural communication abroad" (interview).

Among the participants, the most common way of engaging in prior intercultural learning was searching for information online and seeking advice from students who had a study abroad experience. All of the participants searched online for information using popular websites or social platforms, such as Baidu, Zhihu, and WeChat[1], because this is one of the easiest and fastest ways to gain information.

Extract 1

I searched Zhihu to learn the culture of Ireland and YouTube to learn about its food. I also watched a BBC documentary to understand life in the country. Online information really helped me prior to my study abroad experience in Ireland because I gained not only basic cultural knowledge but also certain cultural values (S2, written narrative).

In addition to searching for information online, all the participants asked their senior schoolmates who had studied abroad for related information. Some (S2, S3, S5, S9, and S12) even directly asked foreign friends for related information.

Extract 2

I added the WeChat account of a classmate who recently returned from the US. We discussed some taboos and cultural norms. I benefited from learning about her experience as she gave me some suggestions before my trip to the US. I was initially nervous, but after hearing from her, I became more confident before my trip abroad (S9, interview).

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1 These are popular search engines and social networks in China.

Furthermore, all of the participants had previously attended at least one course or lecture about intercultural communication. Such courses/lectures were either provided by their home universities or attended by the participants as a personal initiative.

Extract 3

I attended a course on intercultural communication at my university before going to Canada. I learned some basic communication skills and foreign customs. I didn't experience too much culture shock when I first visited Canada (S5, written narrative).

S2 attended a short training course during her spare time, as mentioned in the following extract. However, he also pointed out the limitation of his training experience relative to the real experience abroad.

Extract 4

I participated in a training course on Irish culture presented by a teacher who had experience in Ireland. The course was helpful in my preparation abroad. However, one thing that I didn't learn from the course, but did from my actual experience, was the "drinking" culture. You can only experience the typical "drinking" culture when you are in Ireland (S2, interview).

Two participants (S3 and S6) watched foreign TV series or national TV programs about foreign culture. One participant (S11) also borrowed books from her university library and watched several documentaries about the country in which she was going to study. Two participants (S10 and S12) who studied in Ireland obtained information from an informative Internet application that provided a wide range of information about Ireland.

Regarding the prior intercultural learning content, the participants focused on practical information that would directly affect their cross-cultural adaptation. Some intercultural knowledge and skills were obtained but not emphasized by most of the participants. For example, they preferred to gain information such as the modes of transportation, accommodations, and cuisines of their destination countries. Given their status as students, some of the participants (S1, S4, S5, S7, S9, and S10) also inquired about the educational systems, teaching methods, and campus life at the universities they would be attending in their destination countries.

Extract 5

I am worried about my academic listening and writing skills, so I searched for information about the UK educational system and listened to BBC before studying abroad (S4, interview).

Some students (S2, S11, and S12) wanted to know the social values of the host cultures and the nature of the local people of their host countries. S11 was worried about life with a host family but felt a sense of home after meeting them abroad.

Extract 6

I was worried before going abroad because that would be my first time living with a host family. Upon my arrival, my host family gave me a warm welcome. I learned to get along well with my family, and I felt a sense of home after living with them for four months. I think that living with a host family enables one to experience the culture better when living and studying abroad (S11, interview).

In addition, all of the participants acquired intercultural knowledge from the classes they took, including information about culture shock, stereotyping, and non-verbal behaviors, which might have contributed to their understanding of the actual communication that occurs among people of different cultures. Regarding these courses, three participants (S3, S5, and S9) believed they acquired some intercultural communication skills. However, the majority noted that they did not learn much because their courses failed to provide them with systematic and detailed intercultural knowledge and corresponding activities for practicing what they had learned.

Extract 7

The course I attended at my university was too general and broad. The contents were not relevant to what I expected. I am not really interested in the history of a country (S8, written narrative).

In terms of skills and knowledge about the English language, five of the 12 participants (S3, S5, S7, S9, and S12) kept improving their English listening, speaking, reading, and writing abilities so they could study and live in foreign countries in the future. Part of their reason was the belief that doing so would facilitate their communication in English with native English speakers. Finally, one participant (S11) tried to learn about the history of her host country. She stated, "I tried to learn Canadian history before going there." She believed it would help her better understand the people living there and facilitate her communication with them. This contradicted what S8 noted, as mentioned above.

In summary, these participants' narratives about the details of their prior intercultural learning suggest that they commonly paid attention to preparing for their study abroad experience before their departure. Even though each of them engaged in prior intercultural leaning opportunities to varying degrees, they prioritized the learning of practical information needed for intercultural communication and daily life, mostly because it would have a direct effect on their sociocultural adaptation. However, many of the participants did not broadly emphasize or elaborate on the intercultural knowledge aspect of intercultural learning, such as the theories and concepts associated with intercultural communication, even though most of them attended courses on intercultural communication. This might be due to differences in the courses they attended, their personal receptivity to what was being taught, and how they applied what they learned.

The Effects of Prior Intercultural Learning on Cross-cultural Adaptation

When asked about whether prior intercultural learning influenced their cross-cultural adaptation, all of the participants acknowledged its theoretical importance in helping them adjust to new environments. However, when considering the actual situations of their cross-cultural adaptation, they admitted that the influence of prior intercultural learning was very limited.

In terms of the usefulness of prior intercultural learning, all the participants expressed that they benefited from different aspects of it during their cross-cultural adaptation. Below, S6 recounted how the intercultural knowledge she acquired from a course at her home university before studying abroad helped her understand foreigners' behaviors in her daily life in her host country.

Extract 8

I attended ELC3[2], whose main focus is intercultural communication. The textbook of this course provides lots of examples of intercultural knowledge. We learned some theories, such as insider and outsider theories. We learned about foreigners' ideas about eye contact, body language, and some other non-verbal behaviors. During my time in Ireland, I sometimes had experiences related to the knowledge I

gained, like the distance between two people and the duration of eye contact with others (S1, interview).

In the following example, S1 mentions that prior intercultural learning can also affect students' attitudes towards people from other countries.

Extract 9

I attended one course about a comparative study of Eastern and Western cultures. Because of that course, I developed the awareness that what a typical Western person will think when I communicate with them does not need to be considered. Thus, I think it is not necessary to know what countries the foreign people I encounter come from. When getting along with them, I prefer to know what kind of people they really are, or their personalities, instead of assuming what they will be like if they are from certain countries…I think I have become more tolerant and less judgmental due to that course (S1, interview).

The responses of these two participants also supported the findings of previous studies that emphasized the importance of using the pre-departure period to develop intercultural awareness (Fang & Baker, 2018; Halenko & Jones, 2017; Jackson, 2008, 2018). Nevertheless, when the participants reflected on their cross-cultural adaptation experience, all of them admitted that they encountered various sociocultural and psychological adaptation problems for a

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2   ELC3 is a mandatory English language course at this university.

period of time. The issues they encountered mainly included understanding the local vernacular, getting along with the locals, transitioning to the local cuisines, and homesickness. This indicates that they experienced various instances of culture shock but learned to adapt to their new environment (Zhou et al., 2008). About the possible reasons for having these problems, eight of the 12 participants (S2, S3, S4, S5, S6, S7, S11, and S12) mentioned that they disregarded these problems before they went abroad, partly because they did not attach much importance to these problems or expect to encounter them. As S2 mentioned, people may sometimes overestimate the status of their prior intercultural learning.

Extract 10

I was not satisfied with my cross-cultural adaptation there… because I neglected some adaptation problems, like my homesickness and the different diet there, which really affected my normal life there… I had searched for information about the food there before, and I had traveled to many places before… so I thought I would not have psychological adaptation problems and could deal with those differences easily (S2, interview).

This also confirms that the students were likely to have exaggerated judgments of their intercultural preparation and thus failed to minimize the chances of encountering problems in foreign countries (Medina-Lopez-Portillo, 2004). Thus, the effects of their prior intercultural learning were limited; the students failed to anticipate all the difficulties they may encounter during their study abroad experience, and they were likely completely unprepared or insufficiently prepared.

The Participants' Perceptions of Prior Intercultural Learning

Despite the limited effect of their prior intercultural learning, all the participants agreed that it was necessary to engage in intercultural learning before one's departure. However, they had different opinions on how it influenced their cross-cultural adaptation.

First, all of the participants recognized the necessity of prior intercultural learning, mostly because it at least helped them prepare psychologically. They all believed that prior intercultural learning might have lessened their chances of encountering insolvable adaptation problems. As much as possible, it helped them avoid most unexpected problems. With this realization, the participants had positive attitudes towards the cross-cultural adaptation process, which helped them properly address related challenges.

As discussed above, unexpected adaptation difficulties also arose despite the prior intercultural learning acquired by the participants and regardless of the degree of success. Nine of the participants (S1, S2, S3, S4, S6, S7, S8, S10, and S11) also remarked that it was impossible to exhaustively pursue prior intercultural learning. In other words, they agreed that cross-cultural adaptation difficulties are

unavoidable, and prior intercultural learning cannot solve all the challenges that arise in the adaptation process.

A common idea emerged regarding the effects of prior intercultural learning on cross-cultural adaptation: only by practicing what they learned during their prior intercultural learning could they maximize such learning for cross-cultural adaptation. Therefore, without practice, prior intercultural learning will not be considerably helpful. Similar ideas can be seen in the following examples from the participants.

Extract 11

I think some knowledge and skills, such as those related to language, lifestyles, festivals, and customs, are understood better in practice. Sometimes, you cannot learn how to swim by standing on the shore. The local cultural atmosphere and language environment matter a lot in the understanding of theoretical knowledge (S7, written narrative).

Extract 12

The differences among various cultures are displayed more in the trivial things in daily life. Information learned from others cannot cover all the knowledge you may need. Only in practice can we experience more differences… Therefore, it is important to remind yourself not to jump to conclusions when interacting with people from other cultures (S8, interview).

Both S7 and S8 emphasized that practice and experience played important roles in cross-cultural adaptation because various intricate factors might influence the actual adaptation process. S9 believed that cross-cultural adaptation was merely a process of intercultural learning and that encountering problems at this stage was perfectly normal. She also mentioned that the flexibility to deal with problems was vital. According to her, it takes time to develop this ability to react to different settings, which is also impacted by the effectiveness of students' prior intercultural learning.

Therefore, all the participants regarded prior intercultural learning as necessary, even though different factors impact cross-cultural adaptation. The phrase "Something is better than nothing" can be used to describe the participants' perceived effect of prior intercultural learning on cross-cultural adaptation. More importantly, practice, which is defined in this context as using what is learned and engaging in intercultural interactions, was considered a key factor in whether or not prior intercultural learning can influence cross-cultural adaptation.

IMPLICATIONS

This study's findings provide valuable implications for both Chinese students studying abroad and the other stakeholders facilitating these students' cross-cultural adaptation experience overseas. This study contributes to the growing body of research calling for more attention on improving international students' study abroad experience and studies on intercultural

education in general (Bennett, 2009; Fang & Baker, 2018; Jackson, 2013, 2018). It is important that Chinese students studying abroad and other stakeholders recognize the significance of prior intercultural learning in cross-cultural adaptation.

Chinese university students who will study abroad should avoid overestimating their preparation in the pre-departure period and instead maximize this time. This study's findings suggest that these students tend to be less prepared than they think they are in the pre-departure period. In terms of specific ways of conducting prior intercultural learning for successful cross-cultural adaptation, students should focus on gaining more intercultural knowledge and skills. Because it takes time for students to accumulate and practice knowledge, skills, and attitudes related to intercultural communication, they must take the initiative to learn them before they study abroad. Moreover, they should continue to practice basic language skills before and during the study abroad period because these skills are fundamental to effective intercultural communication.

While fundamental and practical information about the destination countries is also essential for these students' successful adaptation, they can obtain this information through various reliable ways, such as consulting people who have a study abroad experience and using related media resources. Moreover, it is vital for them to have tolerant and open attitudes towards other cultures when

dealing with cultural differences to facilitate mutual understanding in intercultural communication. This will also help them adapt to their situation and adjust to new environments when they encounter culture shock abroad.

To supplement students' efforts, universities can offer relevant assistance to facilitate prior intercultural learning. Providing courses about intercultural knowledge, skills, and attitudes is the most common and profound way to accomplish this goal. Baker and Fang (2019) mentioned that Chinese students primarily prepared for their study abroad through classroom learning. Thus, universities can provide more thorough and systematic intercultural courses, which should provide more opportunities for students to practice what they learn instead of merely discussing ideas and theories about intercultural communication. Furthermore, it will help ensure that these courses include international students who are studying at these universities, given that this will allow students from different cultural backgrounds to exchange ideas easily.

In addition to offering intercultural courses, universities can invite study abroad returnees to hold sharing sessions about their life abroad. These students will be able to share firsthand information and ideas about how to adapt to other cultures from Chinese students' perspective. Another possible method is inviting professors from other cultural backgrounds to present lectures on intercultural phenomena and encourage

international students to participate in local campus activities with Chinese students. This will help not only those who plan to study abroad but also those hoping to expand their intercultural competence. The primary purpose of these methods should be to increase students' direct and frequent exposure to and interactions with other cultures or people from other countries.

CONCLUSION

Before conclusions are drawn, the limitations of this study should be discussed. First, due to the time constraint and the limited availability of students with relevant study abroad experience, the number of participants in this study is relatively small (12). Moreover, the participants' educational background in the university period is not diverse enough, and the participants studied in four foreign countries only. Therefore, the research findings may not be generalizable to all Chinese students studying abroad. Second, although this study employed qualitative methods to provide an in-depth understanding of the students' prior intercultural learning and cross-cultural adaptation experience, it should be noted that the participants' recollections may not be complete or totally accurate, as they relied on their memory and their ability to relate the details (Jackson, 2013). Third, while many factors jointly affect students' cross-cultural adaptation experience, this study focused on prior intercultural learning only. It did not investigate the effects of the other factors because of the complexity of

the study abroad experience. In spite of these limitations, the authors believe that this study's findings can reflect similar settings.

In conclusion, this study investigated the general situation of how Chinese university students studying abroad experience intercultural learning in the pre-departure period, and it examined the effects of prior intercultural learning on their cross-cultural adaptation. Based on the participants' reflections on their experience in the periods preceding and during the time they studied abroad, this work also explored Chinese university students' perceptions of prior intercultural learning and its impact on cross-cultural adaptation. Thus, this study offers some suggestions on how to facilitate prior intercultural learning. The research findings call for added attention to prior intercultural learning, a vital factor contributing to students' cross-cultural adaptation. Prior intercultural learning is helpful and necessary for students' successful cross-cultural adaptation; however, on its own, such learning does not guarantee success. Prior intercultural learning can positively impact students' adaptation process only if the acquired skills, knowledge, and attitudes are put into practice. Chinese university students who plan to study abroad will commonly engage in prior intercultural learning in a variety of ways. Nevertheless, this research study's findings will provide them with more inspiration in terms of how to effectively accomplish that goal, thus helping them maximize the pre-departure period for future cross-cultural adaptation. Moreover, the

research results provide other practitioners involved in facilitating Chinese university students' study abroad experience, including educators and other staff members at educational institutions, with insights into approaches they can utilize to optimize the prior intercultural learning and enhance the cross-cultural adaptation of their prospective study abroad students.

For future research, more participants with diverse academic backgrounds and study abroad experience can be included to broaden the applicability of the research implications for students. Moreover, future research can adopt both quantitative and qualitative methods to investigate students' study abroad experience using diverse data. Concerning the research value of the preparation period in international students' study abroad experience, more longitudinal research can also be conducted to compare the pre-departure and study abroad periods and to explore the changes or long-term effects of some factor(s), such as changes in the students' intercultural competence before and after studying abroad or the effects of students' intercultural attitudes on their study abroad experience.

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APPENDIX

Appendix Semi-structured Interview Prompts

1. Influence of Prior Intercultural Learning on Cross-cultural Adaptation

1) What do you think of your cross-cultural adaptation when you studied abroad?
2) Did you encounter any adaptation problems during this process? Please give at least one example of how you solved these problems.

2. Perceptions of and Attitudes towards Cross-cultural Adaptation and Intercultural Learning

3) Generally speaking, do you think your prior intercultural learning affected your cross-cultural adaptation?
4) What is your understanding of intercultural learning and prior intercultural learning?

3. Reflections/Suggestions for Improving Prior Intercultural Learning

5) How would you suggest that individuals who are going to study abroad participate in intercultural learning in the pre-departure period?

Likert's 4-Management System Instrument Psychometric Properties - University Management -Malaysia

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ABSTRACT

This current study revitalizes the spirit of research in the field of management, especially an education setting, by using Rasch analysis and Confirmatory Factor Analysis (CFA) to determine the reliability of Likert's management 4-system to measure organizational leadership style. Likert's instrument was tested on academic staff at five public universities in Malaysia to determine their perceptions of the management style used by administrators at their institutions. The instrument was tested from 2014 to 2016, with 1114 faculty members in various disciplines participating. Results indicated that the item and person reliability were (0.99 & 0.87) and the item and person separation indexes were (12.08 & 2.62). All items for management styles yielded infit MNSQ values that ranged from 0.66 to 1.44, and outfit MNSQ values of 0.68 to 1.47 respectively. CFA was run and checked for four indexes for item goodness of fit through AMOS software. The results show good reliabilities, and the items fit the model. Therefore, it can be said that the instrument in Likert's 4-system scale can be used to measure trust and communication and to describe the characteristics of that organization, while also measuring productivity. The research also sheds new light on Likert's management 4-system instrument for use in an educational setting in nations with evolving knowledge-age economies to examine university leadership effectiveness

and characteristics and to develop methods to align the objectives of leaders and managers with those of academics.

INTRODUCTION

Higher education researchers have attempted to study campus cultures, beginning in the 1960s, by examining the student population. Later, in the early 1970s, work was conducted on colleges as culture and the role of belief and loyalty in their organizations. More recent research has focused on academic populations, leadership, and the system of higher education as a culture. Because college administrators may recognize their organization's culture only when severe conflicts occur, they often find themselves working in a heightened state of crisis management, instead of working in an atmosphere of reasoned reflection and consensual change (Tierney, 1988). Research in higher education, then, has moved toward proactive leadership, defining managerial techniques, based on strategic planning, marketing, and management control.

For two decades, the issue of management styles has topped every organizational agenda. Researchers are examining the extent to which there is a relationship between management style in the educational sector and decision-making in relation to organizational development.

To streamline the arguments and itemize the points, these issues are related to organizational leadership behaviors and characteristics. Thus, management styles are seen as the ways in which a leader or manager oversees the organization, the style(s) that he or she applies in the process, and the impacts of management styles on decisions and operations of the educational institution.

Studies on management in an organization have indicated that the styles of managers have a significant effect on the organization's efficiency (Luthans et al., 2008; Vahedi & Asadi, 2013). The dominant style that a manager uses to coordinate organizational affairs will affect how they will complete the tasks of their office. The style will also impact their relationship with and cooperation from colleagues and subordinates. Hence, or it can be said that the manager's behavior style and style of interaction with the workers play a big role in the success of the manager and the organization. Likert's management style theory and studies suggested that, in an organization, there should be mutual cooperation between a manager and subordinates and should not be a one-way relationship (Vahedi & Asadi, 2013).

The management style of educational leaders is an especially important issue in nations like Malaysia. With the country aimed at becoming a regional education hub, mountainous pressure has been put on Malaysia's educational higher institutions to make changes in the way they operate and are managed. They have been pressured

to be dynamic and progressive regarding methods of teaching, teaching technologies, and instructions (Mohamad et al., 2017). Furthermore, the government and business sectors expect universities to produce the highly skilled human capital that will serve as the nucleus of an evolved knowledge-based economy. This was emphasized in the Tenth Malaysia Plan 2011-2015 and further emphasized in the Eleventh Malaysia Plan 2016-2020 (MPRC, 2015).

The higher education institutions (HEI) in Malaysia operate under the jurisdiction of the Ministry of Higher Education (MOHE). It is a centralized system and the education sector always receives the biggest slice of the national development budget, which shows how Malaysia is committed to achieving its educational dream. To centralize university operations, Vice-Chancellors, Rectors, or Presidents are appointed by the MOHE. The appointments are between two and four years, depending on the particular university system of leadership (StudyMalaysia, 2015).

There is no one definition for leadership but leadership style can be defined as a leader behavior that used to influence people within a given context. Leadership styles are varied and change according to situation and institution. The changes in leadership styles affect the role of a manager and management (Hays, 2012). Management operates under the leadership, and the university that uses new and effective leadership styles tends to run smoothly and foster innovative management (Sart, 2014).

Sirat et al. (2012)'s study of university leadership contended that there is a crisis in the appointment of Vice-Chancellors to run higher education institutions (HEI), as there is no system that will ensure the appointment of talented and respected scholars to lead the public universities in Malaysia. They argued that the centralized appointment of Vice-Chancellors was not in line with the provision in the Universities and University Colleges Act 1971, which gives university freedom, autonomy, and independence. As a result of this, universities could be managed arbitrarily or led by a politician that did not have a very strong background in running higher institutions. Thus, different leadership or management styles is inevitable in this kind of situation.

Using an instrument developed from Likert's 4-management system could play an important role in improving the quality of education in Malaysia, and nations like it, and help faculty and staff become more effective in performing their roles. Such a study could serve as a benchmark in matching the perceptions of administrators with those of faculty and staff. In this manner, more effective ways of improving the Malaysian tertiary educational system could be developed. Reintroducing Likert's 4-management system of management style instrument would demonstrate its reliability and validity as a way to gather the information that would readjust leadership roles in Malaysia and beyond.

Numerous studies have confirmed the effect of management or managerial styles on organizational performance and the productivity of employees (Meyer, 2007). This is especially true of the Likert

participative management style, which has been shown to improve the working lives of employees and the effectiveness of the organization. According to Kim (2002), management styles can promote job satisfaction (Olmedo-Cifuentes & Martínez-León, 2014). That can stimulate intrinsic motivation, productivity, and creativity, allow initiatives and reduce conflicts among groups, and reduce staff turnover by Pérez and Velde (2005) cited in Olmedo-Cifuentes and Martínez-León (2014).

In light of its importance, it is worthwhile to study organization leadership as excellent management results in excellent decisions and the formulation of good policies. Consequently, management style in all settings, including that of educational institutions, helps determine workers' job satisfaction. Positive actions or styles of management promote employee accomplishment, which benefits the individual and organization, and are critical in sustaining work values that reduce the likelihood of turnover. Unfortunately, the management style is a variable that is frequently ignored in shaping employee attitudes in higher education but is crucial to understanding why individuals remain at or leave universities (Taplin & Winterton, 2007).

Since the 1960s, Rensis Likert's management systems have been considered the theories of leadership that best explain the dynamism of an organization and its characteristics (BusinessBalls.com, 2019). Likert has contributed to the field of human relations in the organization and in

determining organizational characteristics as well as system. His four-management system has remained useful until today, and the instrument is still the best way to measure and identify the organization's management and leadership style.

When it comes to the reliability of Likert's management styles, most studies have used Cronbach's alpha to measure internal consistency or reliability, without considering that external factors, such as the length of the scale, which normally affect this measure. Very little research has used factor analysis, the process by which the values of observed data are expressed as functions of a number of possible causes to determine which of those are the most likely to affect the outcome. Therefore, Rasch analysis, in which the total score summarizes completely a person's standing on a variable, is one of the most powerful statistical methods to help determine content, construct, and criterion validity.

Using Rasch analysis to re-determine the reliability of Likert's management system instrument could decide the contribution of the items, in addition to the total reliability of the scale. Rasch helps in knowing item reliability and person reliability. In determining the reliability and validity of Likert's management 4-management system, this current study also use the Confirmatory Factor Analysis (CFA) under the Structural Equation Model (SEM). CFA assists in gauging the reliability of items by considering model-fit indexes. Through CFA, the research could determine Composite Reliability, Discriminant and

Average Variance Extracted (AVE) to measure convergent validity.

Rasch was used in this study for construct validity and to ensure that the Likert instrument had met the fundamental requirement of accurate measurement in terms of item polarity, fit statistics, and the hierarchy of the item or precision of the measurement by looking into item infit and outfit. Item infit provides service that item response theory (IRT) has provided as infit in Rasch investigates the pattern of how a person responds to items while outfit investigates a person's item difficulty. Item response theory serves a similar purpose by analyzing the responses of latent items or manifestations for further instrument development and accuracy.

According to Wright (2009), "The diagnostic information provided by item infit is similar to that provided by conventional item biserial correlations and item response theory (IRT) item discriminations". Therefore, item fitness can be achieved without considering or looking at the response theory (IRT).

Furthermore, this study combined Rasch and CFA. Rasch Measurement Theory is reported to be valuable at the item-level, possessing a specific objectivity property to obtain consistent estimations independently of the parameters that are related to latent traits from the items as in CFA (Blanchin et al., 2019). Both Rasch and CFA were used in this study, as Rasch is considered to be unidimensional and because this study aims to achieve the psychometric properties of each factor or dimension by seeing items loading well under their respective constructs while ensuring items are naturally unidimensional. By combining Rasch and CFA, this research should identify similarity dimensional models by providing the best fit and showing comparable representations of latent variables correlations or relationships. Therefore, Likert's instrument is treated as unidimensional.

New reliability metrics are needed to test the Likert management system instrument, as Likert himself recognized that it was difficult to obtaining factors corresponding exactly to the proposed dimensions (Likert, 1967). Likert argued that the ideal or actual scores might not yield clearer factors within a single organization. Thus, Rensis Likert presumed, after much testing, that there might be a problem in the items loading under their respective constructs. Moreover, he claimed that the scores or values obtained from the factor loading of each factor might not be sufficiently high or reliable to factorize.

Hence, it is expected that researchers who use this Likert's management styles instrument should find inconsistency and cross-loading of items from one factor mentioned above to another. This is a major drawback for the instrument and the development of theory. In this study, the inconsistency of items and factors to get item fitness and high factor loading had led to the deletion of most items when applying Rasch measurement. Therefore, Principal Component Analysis (PCA) was used in this study prior to applying the Rasch Model to examine whether the items loaded

under their respective factors. In doing this, the research aims to achieve the following objectives:

1. To determine standard internal consistency reliability for the Likert management system theory instrument through CFA.
2. To determine goodness-fit covariance between Likert's factors for inter-correlatedness and construct validity through PCA and CFA.
3. To examine the psychometric properties of Likert's 4-management system instrument, using Rasch analysis, by looking at the item and person's reliability index and separation index.

Likert 4-Management Style System

Rensis Likert was an American social scientist and psychologist. Likert contributed tremendously to the field of psychology by developing scales measuring attitudes. He also introduced a 4-system for styles of management in the field of organizational psychology. System 1 was the Exploitative-authoritative Style, System 2 was the Benevolent-authoritative Style, System 3 was the Consultative Style, and System 4 was the Participative Style. This theory of management styles initially was applied to the business sector, but later was expanded to educational institutions to measure organizational management behavior. Likert's 4-management system theory has helped in measuring basic areas in management, such as trust and communication between administrators and employees (Dininni, 2011). This current study offers a contribution to Likert's work and to the field of management, especially in the educational setting. It revitalizes the spirit of research in this area by reintroducing Likert's 4-system theory for general application, as well as to measure the university leadership style.

System 1: Exploitative-authoritative Style/System

The individual using this kind of management style does not exhibit trust in subordinates. Communication and decisions always come in the form of top-down commands. The manager is not interested in incorporating the opinions of subordinates in decisions. Employees are motivated to work by means of fear, threats, and punishment. This style of management does not consider the human aspects of employees. An entity using this style typically has low productivity (Fisk et al., 2012; Gonos & Gallo, 2013).

System 2: Benevolent-authoritative Style/System

In the benevolent style, the manager allows minimal participation of the employees, but he/she makes the decisions. Top-down is the nature of communication between management and employees (Jalilizadeh et al., 2013). Authoritarianism is still found in this system. Although management exercises strict control, it uses rewards to spur motivation (Gonos & Gallo, 2013). System 2 is believed to have more elements of benevolence than System 1. Although

Likert reported finding increments in production in organizations using System 2, top management does not see the human component as an asset (Fisk et al., 2012).

System 3: Consultative Style/System

Managers who use this style trust subordinates to a certain extent. They accept ideas and opinions but retain total control of general policies and decisions (Gonos & Gallo, 2013). The system provides positive motivations for worker performance, allows free communication, but sometimes introduces punishment (Marshall, 2012). This system allows interaction between staff and management, but decisions are based on what the management is willing to accept from staff participation (Jalilizadeh et al., 2013).

System 4: Participative Style/System

Likert strongly recommended that institutions employ this style (Marshall, 2012). The staff has maximum participation and freedom and is fully trusted by the management. Staff or employees are equal to management in decision implementation (Jalilizadeh et al., 2013). A System 4 environment, according to Likert, is "participative" and gives high autonomy to staff and a high level of participation in decision-making. According to Antošová (2011), cited by Gonos and Gallo (2013), Likert believed that any organization using this system had the potential to be effective, successful, and productive.

METHODS

Likert's Profile of Organizational Characteristics (POC)

The Profile of Organizational Characteristics (POC) was a new version of the management system developed and modified by Likert and Likert (1976) to measure the perception of management styles by nurses in their work units. In this profile, the four management systems have been compared with one another on the basis of certain organizational variables:

- Leadership processes
- Motivational forces
- Communication process
- Interaction-influence process
- Decision-making process
- Goal-setting or ordering
- Control processes

The variables above are the seven process variables, later developed by Likert and his colleagues, that were operationalized to determine where an organization falls within the broader model (Pershing & Austin, 2015). According to Management Study Guide, these seven variables were used to compare one management system with another on the basis of certain organizational variables. Based on these variables, Likert distributed a questionnaire to workers who belonged to different organizations and managerial positions. The results indicated that the units or departments that employed System 1 and 2 management practices were less productive, while the units or departments that employed System 3 and 4 management practices tended to be most productive (Juneja, 2015).

The study measured the perception of nurses of the current and ideal future practices of their management (Nassar et al., 2011). However, the authors conducted item and construct reliability using only Cronbach Alpha Coefficient, without using factor analysis to check whether the items theoretically loaded under their respective constructs. The instrument that was used to measure Likert management systems had three versions. The initial version had 16 items, while the second had 19 items, and a third had 20 items. The latest version, however, has 19 items with 3 more added to the original 16 (Table 1).

Table 1

Items in scale

Factor	Number	Question
Leadership	1	How much confidence and trust does management show in staff?
	2	How free do staff feel to talk to management about their job?
	3	How often are staff's ideas sought and used constructively?
Motivation	4	How often are rewards and involvement used as motivational tools with staff?
	5	Where is responsibility felt for achieving organizational goals?
	6	How much cooperative teamwork exists?
	7	How much does your involvement in decision-making contribute to your motivation?
Communication	8	What is the usual direction of information flow?
	9	How is downward communication from management accepted?
	10	How accurately do you communicate with management?
	11	How well does management know the problems faced by staff?
Decision making	12	At what level are decisions made?
	13	Are staff involved in decisions related to their work?
	14	What does the decision-making process contribute to motivation?
Goal setting	15	How are organizational goals established?
	16	How much covert resistance is there to the goal of implementing evidence-based practices?

Table 1 *(Continued)*

Factor	Number	Question
Control	17	How concentrated are oversight and quality control functions?
	18	Is there an informal group resisting the formal organization?
	19	For what are productivity and performance data used?

Source: Likert (1967)

FINDINGS

The Process of Redeveloping 4-Management System

Participant. Likert's instrument was tested on full-time university academic staff in Malaysia to determine their perceptions of the management style of their institutions. The instrument was tested from 2014 to 2016 at five Malaysian public universities, three of which are research universities. The five held the top places in the nation's ranking system. Participants were 1114 academic staff from various faculties and departments of the five institutions. They were academic staff, but some of them holding or formerly held leadership posts, such as the head of the department, coordinator, deputy dean, acting deputy dean, and head of the division. They were professors, associate professors, senior lecturers or assistant professors, and lecturers, with more than five years of teaching experience.

Instrument. The study used the 19-item version. The items represent Likert's 4-management style system, which are: 1) the exploitative/authoritative management style, 2) the benevolent/authoritative management style, 3) the consultative management style, and 4) the participative management style. In measuring and comparing Likert's 4-style system, involvement in leadership, motivation, communication, decision-making, goal setting, and control were used to examine the degree of management participation. Leadership comprised three items, motivation four items, communication four items, decision making three items, control with three items, and goal setting with two items (See Table 1).

The initial four-point scales for each Likert management construct were maintained and the reliability and validity were examined. Reliability and validity were tested by computing rho of Jöreskog, also known as McDonald's omega. Jöreskog's rho, or McDonald's omega, indicates the relationship between the variance explained by a factor and the total amount of variance to be explained by that factor (Schweizer, 2011; Stone et al., 2015). It can be determined using standardized coefficients obtained from a CFA/EFA bifactor solution.

Table 2 shows that McDonald's omega or Jöreskog's rho demonstrated excellent

Table 2

Jöreskog's (Omega) and Rho vc (AVE)

Factor	Joreskog rho (Omega)	Rho vc (AVE)
Leadership	0.918	0.557
Communication	0.910	0.535
Decision-making	0.920	0.563
Motivation	0.912	0.541
Control	0.901	0.511
Goal	0.910	0.564

results in terms of reliability. In this test, reliability measures above 0.80 are considered very good, and the table shows that the reliability of the factors ranged from 0.901 to 0.920.

Moreover, this study used Average Variance Extracted (AVE) to assess convergent validity to determine the construct validity of latent variables. The rule of thumb is that the amount of variance should be >0.5. Table 2 shows that the amount of variance of each Likert's latent variable was slightly above 0.5, which indicates that the construct was fairly explained and extracted. The researchers ran CFA and checked four indexes for item goodness of fit through AMOS software. The results show good reliabilities, and the items fit the model with RMR = 0.031, AGFI = 0.908, CFA = 0.916 and RMSEA = 0.063. To determine the major reliability of items under each construct, Rasch Models were applied to establish the instrument's Item reliability and Person's reliability using Winsteps version 3.64. Joreskog rho (Omega) is considered as one of the families of internal consistency reliability

coefficients. It comes or can be determined through CFA parameter estimates.

The validity of items in the Rasch Model was assessed using two sets of general guidelines (Bond & Fox, 2001). First, validity was examined by evaluating the extent of the measurement of all items in a single construct or variable. This is indicated by item polarity (Table 3) and item fit statistics. Second, validity was examined by item order that looked for consistency between empirical item order and the theoretical for item development. Results are indicated by an Item Reliability Index and Item Separation Index. Thus, results are indicated by two indexes namely: Item Reliability Index and Item Separation Index.

Table 4 shows the calibration of the estimates of the 19 items of management style. Item Polarity is given by identification Point Measure Correlation (PTMEA CORR), which has a range of -1 to +1. The acceptable range for the PTMEA CORR fit statistic is 0.30 and above, and the directionality of items is indicated by positive values. These values indicate a better construct validity (Linacre, 2006; Wright & Stone, 1999). All

Table 3

Item polarity

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT OBS%	MATCH EXP%	ITEM

Table 4

Item fit statistics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT OBS%	MATCH EXP%	ITEM

the items for management style had positive PTMEA CORR values (0.44 to 0.63), demonstrating that all items were working in the same direction on the construct being examined. This is in line with the rule of thumb in the Rasch analysis and supported by the results (Table 4). The results of the item fit can determine the set of instruments or items without dividing the findings into sub-topics.

The contribution of the items in the Rasch Model can determine how well an instrument meets the requirement is indicated by infit MNSQ and outfit MNSQ (Bond & Fox, 2001). The rule of thumb for item fit for measurement ranges in values in infit and outfit MNSQ of 0.50 to 1.50. Table 5 shows that the means of both outfit and infit mean-square were 1.00. This is a perfect value of the mean. All items for management styles yielded infit MNSQ values that ranged from 0.66 to 1.44, and outfit MNSQ values of 0.68 to 1.47 respectively. According to Bond and Fox (2001) and Linacre (2006), all items in this measurement looked acceptable according to the Rasch Model recommendations.

The reliability and separation indexes provide information on the extent to which the items in the scale are separated to define a continuum of increasing intensity of measurement. The item reliability index is an estimate of how well an item can discriminate among items of a measured variable and how the items that are administered are comparable with each other in terms of characteristics (Wright & Stone, 1999). Table 5 shows that 1114 respondents were measured on 19 items. The item and person reliability were (0.99 & 0.87) and the item and person separation indexes were (12.08 & 2.62). These two results indicated that the items-created variables were well spread out and acceptable in measurement analysis. The separation index indicated that the measures could be classified into 12 levels in hierarchy items.

Unidimensionality refers to the extent to which a measurement instrument measures at a time a single attribute or dimension of the examinees (Bond & Fox, 2001). The measurement will be meaningful when it has one dimension, but it is never perfect. In the Rasch Model, the assessment for the dimensionality of the measurement instrument is conducted usually through Principal Component Analysis (PCA). The PCA in the Rasch Model is conducted on the residuals and aims to explain variance and examination of Dimensionality Map (Linacre 2006). Unidimensionality of Management Style (Table 6) shows that the variance explained by measures was 38.3%. This indicated a good measurement dimension because the variance explained by the measurement was close to 40%. Moreover, the variance unexplained by the first construct in the residual was less than 10% (about 7.0%). The scores for the variance explained by measures and the unexplained variance in the first contrast was in line with the recommendation by Conrad et al. (2010). The proposed PCA of standard residual guidelines for unidimensionality.

Examination of the Item Map (Figure 1) and Item Measure (Table 7) shows that

Table 5

Reliability and separation indexes

```
MANAGMENT STYLES (ALL LECTURERS) Rasch.sav
-------------------------------------------------------------------------------
| PERSON   1114 INPUT   1114 MEASURED           INFIT         OUTFIT |
|          TOTAL  COUNT  MEASURE  REALSE   IMNSQ  ZSTD   OMNSQ  ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      47.0   19.0     -.10     .37    1.00   -.1    1.00   -.2 |
| S.D.       9.1     .0    1.06     .10     .49   1.6     .49   1.6 |
| REAL RMSE  .38 TRUE SD   .99 SEPARATION  2.62 PERSON RELIABILITY  .87 |
-------------------------------------------------------------------------------
| ITEM       19 INPUT     19 MEASURED           INFIT         OUTFIT |
|          TOTAL  COUNT  MEASURE  REALSE   IMNSQ  ZSTD   OMNSQ  ZSTD |
|-----------------------------------------------------------------------------|
| MEAN    2753.8 1114.0     .00     .04    1.00   -.3    1.00   -.3 |
| S.D.     289.9     .0     .55     .00     .19   4.9     .19   4.6 |
| REAL RMSE  .05 TRUE SD   .54 SEPARATION 12.08 ITEM RELIABILITY  .99 |
-------------------------------------------------------------------------------
```

Table 6

Unidimensionality of management style

```
Table of STANDARDIZED RESIDUAL variance (in Eigenvalue units)
                                            -- Empirical --      Modeled
Total raw variance in observations     =   30.8  100.0%         100.0%
  Raw variance explained by measures   =   11.8   38.4%          38.3%
    Raw variance explained by persons  =    5.1   16.5%          16.4%
    Raw variance explained by items    =    6.8   21.9%          21.8%
  Raw unexplained variance (total)     =   19.0   61.6%  100.0%  61.7%
    Unexplned variance in 1st contrast =    2.2    7.0%   11.4%
    Unexplned variance in 2nd contrast =    1.8    5.7%    9.3%
    Unexplned variance in 3rd contrast =    1.4    4.6%    7.5%
    Unexplned variance in 4th contrast =    1.3    4.3%    6.9%
    Unexplned variance in 5th contrast =    1.2    3.9%    6.3%
```
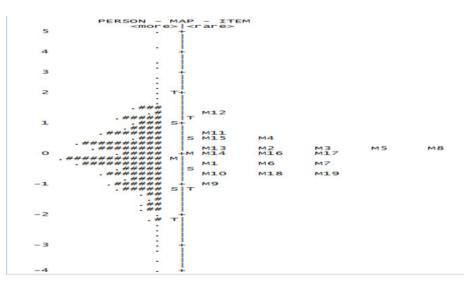
Figure 1. Item map

Table 7

Item measure

Item No	Scale Items	Item	(Code)	Measure
1	How much confidence and trust does management show in staff?	12	(M12)	1.28
2	How free do staff feel to talk to management about their job?	11	(M11)	0.74
3	How often are staff's ideas sought and used constructively?	15	(M15)	0.56
4	How often are rewards and involvement used as motivational tools with staff?	4	(M4)	0.50
5	Where is responsibility felt for achieving organizational goals?	13	(M13)	0.25
6	How much cooperative teamwork exists?	3	(M3)	0.23
7	How much does your involvement in decision-making contribute to your motivation?	5	(M5)	0.20
8	What is the usual direction of information flow?	2	(M2)	0.20
9	How is downward communication from management accepted?	8	(M8)	0.10
10	How accurately do you communicate with management?	16	(M16)	0.07

Table 7 *(Continued)*

Item No	Scale Items	Item	(Code)	Measure
11	How well does management know the problems faced by staff?	14	(M14)	-0.02
12	At what level are decisions made?	17	(M17)	-0.06
13	Are staff involved in decisions related to their work?	7	(M7)	-0.26
14	What does the decision-making process contribute to motivation?	1	(M1)	-0.37
15	How are organizational goals established?	6	(M6)	-0.41
16	How much covert resistance is there to the goal of implementing evidence-based practices?	18	(M18)	-0.59
17	How concentrated are oversight and quality control functions?	10	(M10)	-0.69
18	Is there an informal group resisting the formal organization?	19	(M19)	-0.74
19	For what are productivity and performance data used?	9	(M9)	-0.98

the most difficult item to endorse was Item number M12 (At what level are decisions made?), with the item measure on the logit scale of 1.28. The easiest item in the measurement to endorse was item number M9 (How is downward communication from management accepted?), with a logit scale of -0.98. This is an indication that, when it comes to university management decision-making, the respondents, who were university faculty, were reluctant to answer, finding such decision-making to be "top secret," perhaps even threatened, and were silent when questioned about the level at which decisions are made in their institution.

DISCUSSION AND CONCLUSION

This study shows very good reliability for the instrument of Likert's 4-system management scale, and the findings are summarized below:

The Rasch measurement performed here indicates very good reliability of Likert's Management Styles instrument. It shows great reliability of the Items and Persons. The Person's Separation shows that Person's reliability could yield similar results if given to three different groups. The item also could yield the same result, according to the Separation, if run twelve times.

The reliability and validity obtained through Rasch Model serve as an indication

of Likert's 4-management system fitness not only in the business sector but also in the educational sector.

The application of Rasch analysis in this study contributes to an understanding of the psychometric quality and properties of a scale for measuring Likert's organization management system, specifically management style in a university context. In terms of item reliability and construct validity, the findings of this study indicate that the scale is appropriate for use and could be utilized in measuring organizational management and characteristics in the context of Malaysian educational institutions. This suggests that the Likert 4-management system model could be applied to universities in nations that face the same pressure to produce the human capital needed in a 21st-century knowledge-based economy.

Since the psychometric properties of the Likert 4-management system instrument have yielded or reported acceptable reliability and validity, the instrument can be used and adapted to determine organizational management style in Malaysia and similar countries. Looking at CFA good-ness fit indexes, this research has achieved minimum index required by CFA and as a result, we can conclude that the model fits the data. This also achieved the minimum requirement for Rasch Analysis by looking at the Item Reliability Index and Item Separation Index.

This current study has shed new light on the ability of the instrument in Likert's 4- management system scale to measure trust and communication and to describe the characteristics of that organization, while also measuring productivity. The research also reveals that Likert's management 4-system instrument can be used in an educational setting to examine school or university leadership effectiveness and characteristics and to develop methods to align the objectives of leaders and managers with those of academics. Such alignment seems a necessary function of the growth and development of the Malaysian tertiary education system. Higher education in Malaysia has witnessed dramatic changes since the launching of the National Higher Education Strategic Plan in 2007. This plan proposed to develop human capital and make Malaysia a regional educational hub, calling for establishing research universities by reducing undergraduate intakes and increasing postgraduates. The goal was to revitalize the spirit of research and publication among students and lecturers at stated in the National Higher Education Action Plan, 2007-2010 (Ministry of Higher Education, 2007)

Leadership is among the pillars of this educational development plan. While leadership specifications in the plan addressed hard skills, metrics for judging the performance of the leaders, and the need for continuing education, the plan says very

little about soft skills inherent in leadership and management styles. Such skills are necessary to motivate faculty members to achieve their best and create what some describe as a "community of scholars."

This oversight is unfortunate because maintaining a successful educational institution requires a delicate balance between management and employees, particularly because faculty members typically view tertiary education as less top-down and more participatory in nature. In no small measure, faculty members are critical to the success of institutions of higher education (Cordeiro, 2010). Maintaining good relationships with faculty through good management accrues many benefits. Among those benefits are increased job satisfaction that, in turn, leads to greater institutional stability and higher retention (Froeschle & Sinkford, 2009). Such increased retention has resulted in substantial growth of productivity, in terms of teaching, research, and service, among faculty in Malaysia (Wong & Heng, 2009).

Managing educational institutions in periods of change, such as that of the present day, Malaysia, and other similar nations are subject to difficulties. As Easterby-Smith et al. (2004) noted, common barriers to success faced by educational organizations in turbulent times include inefficient leadership and leadership strategies, ineffective communication, unclear processes and procedures concerning specific and general goals, lack

of involvement of all parties concerned or involved in change management, employee resistance, and improper or ineffective resource management. Thus, misaligned management practices damage the ability of the organization to move forward to achieve the desired goal (Allen, 1998).

Guiding an educational organization through the change process is about motivating employees to achieve organizational objectives, and maintaining regular, open communication. Accordingly, a major part of educational leadership is discovering innovative means to explain existing problems and allowing faculty the leeway to deal with situations (Allen, 1998; Bateman & Snell, 2007). A key element for successfully facilitating organizational change is the type of climate or culture being developed (Hall & Hord, 2001). This is because organizational culture comprises values, management style, organizational communication patterns, human resources, and context. The responsibility of management during a change process is to consult with and involve individuals, who are affected by the changes, and to direct and lead the process (Kotter & Cohen, 2005; Uys & Sieverts, 2001).

Unfortunately, studies have found that a schism often exists between university management and faculty (Times Higher Education, 2015). Some of the factors that create this schism are 1) the differing views of academics and administrators about work-life, 2) disregard for the opinions of

academics, 3) distrust by academics of the institution's senior management team, and 4) the perception among faculty members that they are unable to make their voices heard in their institution (Times Higher Education, 2015). These are among the issues that threaten to derail the continued development of higher education in Malaysia and other countries evolving into a knowledge-based economy.

To bridge the gap between administrators and faculty, universities must begin to study the alignment of each constituency's perspectives by utilizing different ways of thinking about management in the context of higher education. These could include leadership styles, like those outlined by Likert. Regardless of perspective, human elements in the educational management process are crucial to securing the successful implementation of any plan. Managing change is a multi-dimensional task that must consider various aspects of technology, culture, and leadership style. Handling such complex and interrelated issues requires suitable models by which the entire process of change management moves step by step towards achieving an objective in a systematic, sustainable manner (Ghavifekr et al., 2013).

It is clear that the objectives of educational reform, delineated by government policy, are laudable. However, the way in which they will be achieved remains critical to social stability (Campbell, 2011). Thus, it is necessary to match the management styles of educational administrators with the perceptions of the educators who must

achieve these educational objectives. Likert's 4-style management instrument, which this study has shown to be valid and reliable in the Malaysian educational context, can be used in future benchmark and longitudinal research to enable nations and their universities to transition to 21st-century economies.

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A Challenge Made Easy: Contributing Factors for Successful Multigrade Teaching in a Small School

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ABSTRACT

The purpose of this case study is to investigate the factors that contributed to the success of multigrade teaching in a small school in Maldives. Data were collected using semi-structured one-to-one interviews, observation of classroom teaching, and field notes. The interview was conducted with the principal of the school and four teachers who taught in multigrade classes while classroom teaching of three of the teachers were observed. Content analysis of the data revealed four major factors that contributed to successful multigrade teaching; leadership, professional development, structural support, and parent awareness. These factors could be considered to enable multigrade teaching in schools.

Keywords: Leadership, multigrade teaching, parents, professional development, small school

INTRODUCTION

In schools where the student population is relatively small, Multigrade Teaching (MGT) often becomes the only possible means of formal education (Berry & Little, 2006; Birch & Lally, 1995). MGT refers to two or more grades being combined and taught by a single teacher delivering instructions of multiple curriculum grades simultaneously (Litte, 2006). While MGT may provide certain administrative advantages in small schools, it is also done due to pedagogical choice rather than the

conditions of necessity (Little, 2001). In most cases, classes are merged for two reasons; (i) to address the fluctuating enrolment in large urban or semi-urban schools, and (ii) to organize instruction for students in small schools with fewer teachers than grade levels (Berry, 2001).

In Maldives, where the research was conducted, many of the schools are located in small, scattered islands with very less population. Provision and management of education in these rural islands are challenged by a lack of essential infrastructure and human resources (Ali, 2006). The small number of students in each class makes it difficult for teachers to conduct necessary teaching and learning activities, while students display a lack of motivation and interest in their learning. In response to these concerns, in 2017, the Ministry of Education officially introduced the concept of MGT (Ministry of Education, 2017).

According to Little (2001), MGT is not always easy, and despite its pervasiveness, in many educational systems, the practice of MGT remains extremely limited (Little, 2001). There is limited literature on evidence-based research that is related to the execution of MGT both locally and globally. For the successful enactment of MGT, it is essential to understand the factors that facilitate its implementation. Understanding such factors would assist teachers to create and adopt instructional strategies that are effective and suitable for the curriculum content and the diverse needs of students in multigrade classes. Hence, the purpose of this case study is to investigate factors that contribute to the successful implementation of MGT in a small school located in one of the islands of Maldives. Identification of these factors could enable the execution of MGT in both small and large schools.

Multigrade Teaching in Different Contexts

In different parts of the world, classes are combined in various ways and for varied reasons. For instance, in the Australian education system, these classes are defined in three main ways: 'composite' classes, 'multigrade' classes, and 'multi-age' classes (Cornish, 2006). 'Composite' classes often consist of a student population comprising more than one grade because the division of students into even-sized classes cannot occur. These classes with 'left-over' children from different grades are established for reasons of administrative and financial expedience. On the other hand, 'multigrade' refers to small rural schools or classes combined with more than two grades, rather than to composite classes in larger schools. 'Multi-age' usually describes larger classes containing several grades formed by choice and on the basis of the type of learning which occurs when children of different stages of development learn together (Cornish, 2006).

In most countries, MGT generally happens to be a forceful reality based on economic and geographic necessity (Miller, 1989). For instance, in developing countries like Myanmar, the prevalence of MGT is so high that half of the primary schools are estimated to have multigrade classes with teachers responsible for more than one grade

at a time (Hardman et al., 2014). Similar to the context of Myanmar, in Bhutan, since MGT was introduced in 1991, a drastic expansion of MGT occurred throughout the country's very remote areas (Kucita et al., 2012). As confirmed by UNESCO (2015), in many cases of these developing countries, MGT is a means of schooling for children who otherwise would not be able to have an education. For this reason, many teachers and even parents often perceive MGT as "second class" instead of quality education. Consequently, countries often try to build more classrooms and hire more teachers, or in worst-case scenarios, the small schools are closed and children are forced to go long distances to attend larger schools (UNESCO, 2015).

In contrast to the tenets of the "second class" label, some developed countries have a long tradition of MGT. In countries like Scandinavia and the United Kingdom (Kvalsund & Hargreaves, 2009), Australia (Cornish, 2006), Austria and Finland (Hyry-Beihammer & Hascher, 2015a), and some American states (Hoffman, 2003), MGT is common not only in rural areas but also in highly populated and developed regions. In most of these contexts, MGT enables the stabilization of student enrolment especially in areas in which birth rates have declined and out-migration has increased (Hyry-Beihammer & Hascher, 2015b). Reasons for the establishment of multigrade systems in these contexts include possibilities for quality education that promotes cohesiveness, cooperation, and healthy competition by strengthening

interpersonal and leadership skills, teacher efficiency, and possibilities for a variety of teaching practices that contributes to students' cognitive development (UNESCO, 2015).

Factors Affecting Implementation of Multigrade Teaching

Numerous factors that enable the successful implementation of MGT are reported in the literature. For instance, a wide-range of literature accentuates the role of schools' leadership and its prominence in enhancing teaching and learning in multigrade schools (Kucita et al., 2012, 2013; Miller, 1989). In addition to the leadership aspect, studies highlighted factors such as teacher training and professional development (Benveniste & Mcewan, 2000; Lingam, 2007; Little, 2001; Miller, 1989; Mulryan-Kyne, 2007; Nawab & Baig, 2011), supervision and monitoring (Kucita et al., 2012; Lingam, 2007; Little, 2001; Mason & Burns, 1997; Miller, 1989; Mulryan-Kyne, 2007), and the instructional and organizational structure of schools (Cornish, 2006; Hyry-Beihammer & Hascher, 2015a; Little, 2001; Mason & Burns, 1997) as crucial elements necessary for the implementation of multigrade teaching.

Teacher training and professional development are important because studies show that teachers trained in multigrade teaching perform better in multigrade classes than untrained teachers or those who are trained only for single-grade education (Brown, 2010). Because of the training, teachers gradually change their perceptions and show readiness to bring a change to the

teaching and learning of small rural schools and their community (Vithanapathirana, 2010). In the same manner, for advancement in the quality of multi-grade schooling, it requires close monitoring and supervision too (Kucita et al., 2013). With clear guidance and close monitoring, teachers can ask questions when they are not clear in their knowledge and practice. Additionally, the instructional and organizational structure established in the school is also important as they have a direct or indirect effect on the processes of teaching and learning (Mason & Burns, 1997). Generally, in schools, classes are structured as combined classes, single-grade classes, or multiage/nongraded classes. However, unlike single-grade classes, in combined and multiage or multigrade classes, a single teacher has the responsibility of delivering the curriculum of two or more grades simultaneously (Veenman, 1995).

After reviewing research concerning the cognitive and non-cognitive effects of the multigrade classroom, Veenman (1995) identified four key factors that might have contributed to the outcomes of MGT: (a) teachers' instructional practices, (b) bias in the composition of multigrade classes, (c) teacher-preparations, and (d) teachers' negative beliefs. These negative beliefs include views such as multigrade classes imposing a greater workload with more preparation time and demanding better classroom management skills. Besides, Veenman (1995) highlighted the importance of spending more time on the organization and planning of the instructional process too.

Given the range of educational contexts in which MGT is attempted, it is likely that organizational structures and instructional practices will vary across the contexts. Nevertheless, global literature on MGT reveals limited empirical evidence explaining what works well in multigrade classrooms and what needs more attention to make it successful. In the same manner, there is a scarcity of studies both globally and locally which investigated the specific roles of school leadership and their impact on the implementation of MGT. Further, there is a shortage of research investigating specific factors that contribute to the successful implementation of MGT, and this research is an attempt to fill in this gap.

METHODS

This case study employed three types of data collection. These were - semi-structured interviews, classroom observations, and field observation of in-school activities. The aim of using these methods was to seek multiple sources of evidence to explore and interpret the practices of MGT in the context of the study (Merriam, 2009). The interviews would yield detailed information about teachers' first-hand experiences regarding how MGT was implemented in the school. Similarly, classroom observations and field observation of school activities would help to develop a better understanding of what was happening in the school context.

The context of the current study was one small school located in Maldives. To date, there were only a few schools that initiated multigrade classes in the country. The specific school was selected for this study because unlike most of the other schools which reverted back to single graded classes after some time, the school had been continuing the setup to date.

The selected school had grades 1 to 10, and at the time of the study, the student population was 97, with class sizes ranging from 6 to 12 students. Because of the small student population, the Ministry of Education had requested the school to combine grades – subsequently, the school combined Grades 2 and 3, as well as Grades 4 and 5, and initiated MGT in 2016. At the time of the research, these combined classes had 21 and 22 students, and they were in heterogeneous groups. All the teachers working in the school ($N = 22$) had a minimum of a Diploma related to various areas of teaching. In the multigrade classes, a master teacher together with an assistant managed the students, while the rest of the classes were handled by single teachers. In multigrade classes, the assistant teacher plays more of a trivial role compared to the master teacher who takes most of the responsibilities for the instruction. Compared to the assistant teacher, the master teachers are well qualified and experienced, hence, the assistant teacher's role was often to lend a hand in managing the teaching and learning of the students.

The focus of this research is MGT. Consequently, all the participants were selected based on their experiences in MGT as these were the individuals who could provide more relevant data on MGT. Hence, all the participants of this study were purposively selected, and they included – the school principal, four teachers who were working in the multigrade classes, and one teacher from the mono-grade classes. The mono-grade teacher was selected because she had experiences of teaching a multigrade class for two consecutive years.

Semi-structured interviews and observation of classroom teaching sessions were employed as means for data collection. Additionally, field observations of a professional development session and a staff meeting conducted by the school principal were observed and anecdotal notes were recorded. Once all the raw data were ready for the analysis, the method of thematic analysis (Braun & Clarke, 2016) was adopted to analyze the interview transcripts, and the observation recordings and field notes. Once the initial codes were decided, they were cross-checked for the congruence between the codes and their associated extracts. Following that scrutiny, final codes were deliberated. Next, codes that fitted together were combined and named with appropriate themes. Later, the emerged themes were reviewed and refined.

FINDINGS AND DISCUSSIONS

Analysis of the data from all three sources elicited interesting factors that facilitated the successful implementation of MGT in the selected school. These factors are subsequently presented under four

broad themes; leadership, professional development, structural support, and parent awareness.

Principal's Leadership

Results of the current investigation discovered some leadership practices and beliefs which could be attributed to the successful implementation of MGT in the present case. The most significant among them are (i) a positive attitude towards change, (ii) advocacy, and (iii) monitoring and guidance.

Positive Attitude towards Change. Despite the principal's initial rejection of the idea of MGT, by the time policy directives came from the authorities, the principal not only acquainted himself quickly with the change but also anticipated the resistance that might be faced in the process of transformation from mono-grade to multigrade. The principal's expression that he "was directly opposing that notion of combining grades" clearly illustrated what ensued during the initial stage of the MGT setup. His prompt adjustment to the situation was evident when he said that he "had to open [his] mind to this [new] system" and in doing so he "found [himself] interested in the area" of MGT. As the transition from mono-grade to multigrade was inevitable, the principal expected his school to assimilate without much difficulty: "I wanted our school to be within the comfort zone for experiencing the new setup". Furthermore, the principal's positive attitude towards change was noticed when he emphasized and encouraged teachers to be open-minded and to be

updated with new developments in the field. For instance, "once we took it as a challenge, I told teachers that our school should be the benchmark or the model school in Maldives to have multi-grade teaching", reiterated the principal. Teachers' response to the principal's advice proved that what he uttered was not a one time show off, but rather a repeated reminder.

Conner (1993) pointed out five stages that might accompany change; denial, anger, bargaining, depression, and acceptance. In the present study too, the principal initially rejected the idea of MGT when it was suggested by the seniors. This is evident when he recalled his conversations with seniors, "… during these conversations, I was directly opposing that notion of combining grades. My justification was that such systems were established in poor areas where there were no resources and just for the sake of providing education to the citizens." Nonetheless, by the time it came as a policy directive, he had changed his views which enabled him to present the idea to the teachers and parents in a more convincing manner. As reported by the principal, he has gone through lots of reading on various other countries which detailed their experiences in those respective contexts. Furthermore, the fact that the principal accepted it as a challenge demonstrated his proactive thinking. "I told teachers that our school should be the benchmark or the model school in Maldives to have multi-grade teaching", reiterated the principal. Hence, the principal's decision and effort in establishing MGT in the school

cannot be considered as a mere attempt to follow the system directives, but a more well informed and enthused decision.

Advocacy. Despite the welcoming attitude of the principal, resistance to change from teachers and other staff was still expected. It is because, generally, people have a fear of change as they might have conflicting perspectives between the change and the daily routines or simply feel burdened by the change (Evans, 1996). The attitude of teachers towards the process was clearly indicated when Teacher A said, "Actually before we started multigrade teaching, we were not very much mentally prepared for it. So we had a kind of negative perception." However, the principal and the school were successful in altering such negative ideas by educating the teachers with the new concept and explaining clearly what the change was all about. The principal explained how he went about in doing so in the following excerpt taken from his interview:

> … with the new knowledge, I myself immediately started campaigning for the model of multigrade teaching. I started advocating the ideas to my staff explaining the experiences of these successful countries, presenting the studies and their findings. I tried to convince them based on the light of literature. Before the envoy of MoE came here, I had advocating sessions with the staff and made them aware of the model.

As a result, the efforts of the principal were indeed paid off as exclaimed by Teacher A, "But now [MGT is] very interesting". Furthermore, observation of the field notes revealed teachers portraying positive behavior about the new setup. Teachers' engagement in the principal's professional development (PD) session by responding to various learning activities demonstrated their knowledge about current instructional strategies such as Differentiated Instruction (DI), formative assessment, and use of Individualized Educational Plan (IEP) in addressing student needs in multigrade classes.

The strategies used by the principal in facilitating the change are in line with various suggestions in the literature on change management. For instance, Glickman et al. (2010) suggested a list of things school leaders could do in facilitating the change including building capacity, and provision of necessary support. The efforts exerted by the principal in advocating, educating, and increasing awareness about the change are parallel with this advice. Furthermore, resistance to change can be viewed as a resource for change if the resistance can be reconstructed (Ford et al., 2008) so that the causes for resistance can be appropriately addressed as was successfully done by the principal in the present case.

Monitoring and Guidance. Regular monitoring of practice and providing the necessary professional guidance to the staff are recognized as significant factors in the implementation of MGT in the present case.

Interestingly, teachers perceived the very act of supervision and monitoring in the school very positively as expressed by Teacher B, "our classes are observed and they help us to improve." The principal explained the monitoring and guidance process as follows:

> I focused on all these areas and monitored everything very closely... Our LTs (Leading Teachers) also monitor the lessons regularly. They would try to observe how much DI model is implemented in the classes. And if they happen to witness any mismatch in the teaching, they would directly come to me and give details. And ask for the remedies. For that again, I would prepare a 30 min or one-hour [PD] session.

Staff also expressed their satisfaction with the kind and amount of professional support rendered by the leadership. "Our principal is very helpful. He teaches and guides us a lot", said teacher C. Teacher B also agreed to this by stating "the management is very supportive". Moreover, the nature of the support provided by the leadership was explicated by teacher B as follows:

> We have weekly PD sessions on various topics. In these PD sessions, the most relevant and immediate topics are presented. All new techniques and strategies were immediately explained and taught to us. In that regard, the management is very cooperative and supportive.

Evidence for monitoring and guidance was also noticed from the field notes. On one occasion, a leading teacher was having a professional dialogue with the principal regarding the areas in which support was needed for teachers which he had identified from his classroom observations.

The literature emphasizes the importance of ongoing support for teachers in terms of training, experience, and technical expertise which may be very context-specific (Mulryan-Kyne, 2007). The findings of this study indicated that addressing these professional needs of teachers facilitated the implementation of MGT. Furthermore, while teachers generally have a negative perception regarding supervision in schools (Glickman et al., 2010), teachers in the present school perceive it positively. The school's supervision practices were consistent with the developmental supervision approach where supervision was regarded as a means to help teachers grow professionally (Glickman et al., 2010).

With regard to the leadership aspect, it is reported that educational leaders perceived the quality of instruction in multigrade schools lower than in mono-grade schools (Kucita et al., 2013) indicating a generally negative attitude towards MGT, unlike the case of the present study. However, other studies that were focused on the importance of leadership on managing change and innovation in schools are in support of

the present findings as they emphasize the significant role of leadership in promoting and sustaining change (Hoşgörür, 2016; Kucita et al., 2012; Pashiardis & Kafa, 2015).

Effective Professional Development

Analysis of data revealed that a high emphasis was placed on teachers' professional development in the case investigated. Few notable characteristics were identified from the school-based professional development program that was carried out in the school; (i) on-going, (ii) relevant, and (iii) practical.

On-going Professional Development. The school conducts professional development every week on a continuous basis. The professional development is continuous not only on the basis of the regularity and frequency of the PD sessions but also by being part of everyday conversations among teachers in the school as explicated by the principal. "Whenever I entered the staffroom also, we will be having discussions about topics like five dimensions of the pedagogy, or how to cater to individual needs, or how to differentiate instructions."

Teacher A confirmed the claim made by the principal when she said, "Our principal talks a lot about differentiating instructions… pedagogies and those techniques". Despite the frequency of professional development activities there is still a desire to learn more among the staff as expressed by Teacher C, "But I do believe we still have a lot to improve. We may not be doing it in the best

way. But I am happy that we got the initial training".

Evidence for weekly professional development sessions was found from the records of field observations. In these sessions, teachers shared their experiences and were engaged in interactive discussions.

One of the significant characteristics of effective professional development in schools, as stated in the literature, is that it has to be continuous and on-going. Professional development activities that require active, collaborative participation over time have been found to be particularly effective (Porter et al., 2003). Moreover, research has reported that the amount of time, albeit continuity, is positively associated with teaching practice regardless of the type of activities conducted (Quick et al., 2009). Evidence for frequency, continuity, and extension of PD to classroom practice is illustrated by teacher A as follows: "Whenever, we need any help, with regard to classroom teaching we get help, and the principal will help us. And in the PD we have every week, we focus on multi-grade teaching."

Some researchers argue that lasting change in teacher practices requires months or even years of continued professional development especially when a transition to a new set of practices – like the changing to MGT in the present case – is involved (Loucks-Horsley & Stiegelbauer, 1991). Continuity could also mean extending learning on the same topic for broader understanding allowing teachers to experiment and review new practices in

the classroom (Garet et al., 2001). The following excerpt from teacher C shows that the PD allowed teachers to practice their learning and that the PD was continued from the beginning and throughout.

> I believe it is done very well at this school. Because, before starting the model here, we were given the adequate training… And we were made to identify and distinguish the differences and similarities of the syllabus, and were taught about how to join them together. We were also taught how to make a scheme of work and prepare lessons based on that. How to prepare the work… We were made to do it practically before the beginning of everything.

Professional Development Activities are Relevant. Besides being continuous, professional development in the observed school is also found to be relevant; it is not merely a load of information. Conversely, it is related to the content that is to be delivered in the classroom in terms of curriculum and syllabi as Teacher C confirmed that "…the most relevant and immediate topics are presented" in the PD sessions.

In addition to the above, professional development is also relevant to the teaching practices – in terms of delivering the curriculum – that is expected of teachers. The principal related how he had reacted when he knew that teachers were facing difficulties in applying what they learned from the workshops to the classroom activities. "Once, I noticed it (teachers

lacking knowledge on a topic), what I did was prepare some presentations and conduct training sessions for teachers on each of the topic", said the principal. This 'willing to help' attitude of the principal was acknowledged by Teacher A in her statement, "Whenever, we need any help, with regard to classroom teaching we get help, and the principal will help us".

There is a strong emphasis on the existing literature that effective professional development should be relevant to the daily responsibilities of teachers in schools (Hunzicker, 2011). Teachers perceive these activities relevant to them when those activities directly address their specific professional needs and concerns (Guskey, 1995). Evidence of prompt response to teachers' professional needs was apparent in the present case. Furthermore, teachers also view professional development relevant when they see a connection between what is learned and their daily responsibilities (Tate, 2009). The findings of the study showed that professional development was purely focused on implementing the curriculum which is the primary duty of teachers. Thus, professional development activities carried out in the school are relevant and "job embedded" (Hunzicker, 2011) thereby facilitating effective implementation of MGT.

The Professional Learning is Practical.

Everything that is relevant may not necessarily be feasible. For instance, using a variety of information technology resources to cater for a diversity of learners

may be relevant to MGT, and advocated too; whereas it is feasible only if the required resources are made available. The professional development carried out, in the present case, was found to consider its practicality. For instance, Teacher C explained her experience in one of the professional development workshops that were carried out in the following terms, "We were made to do it practically before the beginning of everything". The principal described the approach he used in a different PD session, "I carried out the sessions like teaching classroom lessons… by showing models". In this second instance, the principle demonstrated, using concrete examples, how to apply the learning into practical work done by teachers. This shows that what was taught in theory sessions was turned into practical pieces of work that are feasible to be carried out in teaching. The best evidence for the practicality of the PD provided was realized when it was found from the classroom observations that teachers were really using DI (which was the instructional strategy adopted in the multigrade classes) in their actual teaching.

Literature posits a close relationship between relevancy and practicality of professional development activities; the terms 'relevant' and 'authentic' are frequently used together in which authentic refers to being practical (Hunzicker, 2011). Tate (2009) argued that whatever form the professional development activities might take, if they were extended to follow up activities such as job-embedded projects, then teachers tended to perceive that the activities were more authentic. As such, the PD activities conducted in the present case are considered as authentic learning activities because there is enough evidence for those learning being applied in teachers' daily work. Under the best circumstances, teacher learning through professional development is made authentic through the smooth integration of those learning into their daily work (Fullan, 1995).

Existing literature stresses the importance of training and the professional development of teachers for MGT. The provision of special training to teachers of multigrade classes has been found effective (Nawab & Baig, 2011). Moreover, teachers' failure to use appropriate teaching strategies in multigrade classes is linked to the lack of professional preparation (Lingam, 2007). Finally, while the need for initial teacher preparation for successful MGT is acknowledged, the need for on-going professional support that is specific to multigrade teachers is emphasized (Mulryan-Kyne, 2007). As the teachers in the present school had been trained to teach in mono-grade classes, they were in need of rigorous in-service training and development. The professional development carried out at the school, in this regard, is considered effective as it has entrenched the most important characteristics of successful professional development for teachers as highlighted in the existing literature.

Structural Support

Data analysis of the present study discovered several structural factors that enabled

the effective implementation of MGT in the present case. The most significant among them were; (i) physical setup, (ii) instructional setup, and (iii) administrative and material support.

Physical Setup. As the term implies, multigrade means to accommodate two or more grades in the same physical classroom. Teachers highlighted that initially, it was merely a physical change whereby students of two grades were seated within a single classroom. However, they sat separately as two groups and were instructed by two different teachers. "It's like two separate classes in one classroom", added Teacher B; as if they were in two physical rooms. As such, there was no real MGT happening. However, the school's decision to mix them up to form heterogeneous groups whereby students of two grades were seated together as a thoughtful structural change which allowed MGT in its real meaning.

The immediate effect of this change was the increase in class size. This very fact of increasing the number of students in the classroom was advantageous in a number of ways. For instance, it paved ways for improved student interaction and increased classroom activities so that learning became more lively and interesting for the students. The situation was clearly depicted in the following excerpt from the interview with Teacher B:

Before combining the classes, the total number of students in each class was comparatively less. As a result, students' interest was very low. Sometimes the

number was about three or four in each class. And they lacked interest and motivation. They did not show many corporations too. But when changed to multigrade classes, there was a tremendous change in students' attitudes towards their studying.

Additionally, as highlighted by Teacher A, the combination of the grades resulted in academic benefits for students of both grades. It served as a revision for the higher grade students and as a foreshadow for the lower graders while at the same time covering up the content of their respective grade levels. "For grade three students, they always get the chance to recall what they have learned in the previous year. And for grade two, they will know what they are going to learn next year", said Teacher A. Further, during the classroom observations, it was discovered that students in the multigrade classes were seated in mixed groups and attempting tasks that were relevant to their academic ability level, rather than their respective grade levels.

Previous studies reported certain benefits of MGT that can be related to an increase in class size. They include psychological benefits like improved social interaction among students (Proehl et al., 2013); and improved learning as a result of increased possibilities for classroom activities (Ong et al., 2000). Had the school decided to stick to the initial setup, it would not have been possible to enjoy most of the said benefits. This is evident in such descriptions as a lack of interest and cooperation from students when there were

fewer students in each class before merging the grades. Hence, proper organization and planning of the instructional process are important (Veenman, 1995).

Instructional Setup. The change in the physical setup was followed by a critical change in the instructional setup. The instructional arrangement at the onset of MGT in the present school was explicated by teacher B as follows; "Earlier what we did was we divide the students into two groups and the two teachers work separately with these two groups of students. It's like two separate classes in one classroom." As evident from the excerpt, initially, there was no MGT happening at all, apart from keeping the students in the same physical classroom. However, when it was decided to mix-up the student as explained above, the instructional arrangement was changed accordingly so that one teacher would lead the instruction while the other would act as an assistant.

This change was well received by the teachers as stated by teacher B; "Initially, after that change, it was really difficult to follow the setup. But now it isn't an issue." The benefit of this change was acknowledged by Teacher A when she stated, "it's easier when you have an assistant in the class." Additionally, the role of the assistant teacher was detailed by Teacher C as "she [the assistant] will help when students are engaged in the task. She will monitor, and provide support and guidance to them. And she helps in preparing materials too." Teacher B added, "After that, the master

teacher conducts the lesson, and the assistant offers the help needed". Hence, the change in the instructional arrangement, arguably, facilitated MGT in the school.

The findings also indicated that the key instructional strategy employed by the teachers – and that which is advocated by the school leadership – is differentiated instruction. The process of doing this was explicated by Teacher A in the following extract:

> In the multigrade class, there are some indicators that are similar to both the grades. In those lessons, I don't differentiate much from both the grades. But I differentiate into three levels. For the common indicators also, like today, I make sure I differentiate. Almost in every lesson, I tried to differentiate as much as I can.

Evidence for instructions carried out as above was obvious from the field observations. It was discovered that teachers reviewed and adapted curricular materials as an ongoing process. Teachers identified topics that could be integrated and based on that integration, lessons were conducted. It was also found that teachers' instructional activities were planned to achieve the curriculum indicators that are common to both grades considering students' levels and abilities. Because of this prudent planning, students were observed to be engaged in the activities, regardless of the grades the materials are suitable to.

The literature on MGT in other countries report the use of teacher assistants (or two

teachers) as identified from the present study. For instance, in Australia, two teachers are involved in teaching to multigrade classes while in Finland an assistant is available to help individual students who require help (Hyry-Beihammer & Hascher, 2015a). Similarly, the availability of full-time aide and other part-time support staff who teach in 'multi-age', inclusive classes was identified in a study conducted in the USA (Hoffman, 2003). Despite the limited literature on MGT and differentiated instruction, there have been reports where teachers teaching one heterogeneous group with the same teaching content and then address the differences in curricula with homogenous groups (Hyry-Beihammer & Hascher, 2015a) which is similar to the case of the present school.

Administrative and Material Support. Analysis of data from the present case informs that teachers were given sufficient support in terms of materials and administrative arrangements. For instance, teacher A related her satisfaction in terms of teaching-related resources and facilities, "Most of the resources are actually available here. And we don't have any issues in printing". Previous studies reported that an insufficient amount of teaching resource materials available to teachers as a factor inhibiting MGT in those cases (Benveniste & Mcewan, 2000; Kucita et al., 2012). In case such resources are not readily available, teachers can be encouraged to be innovative in using materials that are locally available (Nawab & Baig, 2011).

In addition to that, the management of the present school has arranged administrative staff to help teachers in many of the additional duties of teachers. The field notes provided evidence for administrative staff assuming such responsibilities as executing works related to co-curricular activities which are generally viewed as an extra burden to teachers. MGT requires additional time for preparation and planning (Veenman, 1995), and as such high workload and lack of preparation times are reported as challenges to proper implementation of MGT (Hyry-Beihammer & Hascher, 2015a; Nawab & Baig, 2011). Support from the school administration, as in the present case, reduced the adverse influence of such factors thereby facilitating the smooth operation of the setup.

Awareness of Parents

The final, yet a very critical factor for MGT identified from the present study was parents' awareness. It is found that, unless provided with proper information, parents could exert a detrimental influence on MGT. In fact, there have been reports from fellow principals that, in Maldives, some schools had to abandon MGT set up due to increased pressure from parents. In the present case, the school management was proactive and reached to parents in time with the right information as explicated by the principal; "Assuming that people might not accept this model, before the beginning of multigrade teaching, I had well-prepared meetings with influential parents and tried to make them

aware about policies, and how the model works in other countries".

Indeed, parents had some negative perceptions regarding the changes associated with MGT as expressed by Teacher A, "Parents' perceptions were also like ours. They also had some negative perception before." As such, parent awareness programs were conducted and their concerns were taken into consideration. Occasions on which the principal talked and interviewed parents regarding MGT were also found from the field observation notes. Furthermore, the materials prepared by the principal for awareness programs had evidence of his efforts for advocacy.

Existing literature suggests that parents have a mixed perception of MGT (Kucita et al., 2013). While some parents are happy that their children are at least going to school because of the special arrangement, others are skeptical about the effectiveness of the approach in terms of learning for their children. Kucita et al. (2013) argued that "if parents are not aware of the benefits or importance of multigrade schooling, they may not support such schools or take their children to them". Hence, more effort should be exerted in convincing parents and community that MGT is necessary (at times) and legitimate and also proven effective when done properly (Kucita & Maxwell, 2016)

In the present case, the school's efforts to bring the parents on-board were worth it. "So due to these efforts of advocacy, we did not experience many challenges from the parents… there wasn't much of tension to accept multigrade teaching", stated the principal. Teacher A also related parents' expression towards the initiative as follows: "But now some parents during PTS (parent-teacher-student) meeting, they say now they are happy about multigrade teaching." Thus, creating awareness among the parents was an essential ingredient for the success of MGT in the present school.

CONCLUSIONS AND IMPLICATIONS

The present study identified four key factors that were associated with MGT: leadership, professional development, structural support, and parent awareness. Having a positive attitude, advocacy, clear vision, and monitoring and guidance were identified as major leadership characteristics. It is argued that all the aspects of leadership identified in this study are interconnected – they are not 'piecemeal, but 'part and parcel' of the leadership practices for the successful enactment of MGT. Hence, school leaders should pay attention to all these components.

The study also found that professional development carried in the present school was on-going, relevant, and practical. While existing literature emphasizes the importance of pre-service teacher preparation for MGT, in-service professional development with the above features is also essential. School-based professional development that can cater to the specific needs of the school may be the relevant approach to achieve this.

It was evident from the present study that structural aspects in terms of physical, instructional, and administrative arrangements facilitated MGT. The findings

also indicate that simply combining two grades is not parallel to teaching in a multigrade setup. Rather putting them into heterogeneous groups and basing the instruction on the common curriculum goals is one possible means for doing it. As DI strategies employed in the present school is in line with instructional practices in other contexts, it is postulated that DI can be a suitable instructional approach that can be adopted in MGT. Along with this, due to the increased diversity of students, the provision of an additional teacher or a teacher assistant is mandatory in multigrade classes. Furthermore, since the outcomes of the combined two grades were fruitful in the context of the study, it could be postulated that MGT can be expanded to the other grades of the school.

Lastly, the findings of the present study reveal that parent awareness is a crucial factor in the implementation of MGT. As literature reports that negative perception of parents could impede MGT, educating them on related aspects cannot be left unattended.

Limitations

The present study is constrained with certain limitations. Firstly, owing to the case study design of the current investigation, its findings cannot be generalized. Hence, similar studies could be replicated in different contexts to elicit a broader understating. In this regard, the case of a school where MGT was unsuccessful can be considered. Additionally, quantitative studies are needed to enable the generalisation of the results to similar contexts. Secondly, it is not possible to comment on the sustainability of the practices since data collection was cross-sectional. Despite the use of multiple sources of data, they were all collected only once and at one point in time. Thus, a repetition of the same study in the future is required in or to confirm the findings. Finally, as the study is limited to the views of the principal and the teachers, to compare multiple perspectives, parents' as well as students' viewpoints could be included in future studies.

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The Relevance of Traditional Personal Teaching Theories in a Technological Advanced Educational Environment

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ABSTRACT

As technology develops and students are being exposed to it from the day they are born, it necessitates a change in the way they receive tuition. This study explores the relevance of traditional personal teaching theories in a technologically advanced educational environment. Self-completion questionnaires were issued to lecturers, ranging from junior lecturers to senior professors, of a leading South African university in order to determine their teaching philosophy and theory. Four basic theories of teaching (transfer, shaping, traveling, and growing) were unpacked and elements thereof were included in the questionnaires. It is clear from the study that critical thinking is the preferred teaching theory of lecturers. It is recommended that uniform approaches to teaching be adopted by lecturers in order to improve students' learning and success.

Keywords: ODL practitioners, open distance learning, teaching, teaching philosophies, teaching theory

INTRODUCTION

In an effort to unify the concept of teaching and learning, various studies have been conducted in the field of teaching practice, teaching theory, and teaching philosophy. These theories have been developed and studied over decades and essentially form the backbone of teaching practice as it is known today. During the conception of any learning activity, there will be decisions

made regarding content, techniques, instructional design, time and place, the sequence of events, as well as assessment criteria. These decisions represent the teaching theory employed by lecturers even if they are unaware that these are established classifiable teaching principles and concepts. The learning theory of students however has had an impact on the teaching theories of lecturers, as lecturers now have to adapt to the needs of students in order to be consistent with the students' learning theories that have been influenced by changes in technology. Therefore, with the rapid change in technology, and the changing needs of students in terms of learning, it is logical to assume that there is a need for change in the teaching approaches of lecturers. This is however a complex task as there is a wide range of mediums that students are exposed to like internet tools, computer simulations, and computer-mediated communication (Proserpio & Gioia, 2007).

With the changing nature of the profile and composition of students, their preferences for entertainment and relaxation activities shifted from watching television or reading to spending a lot more time on the internet. For lecturers, this means that student learning now needs to include virtual teaching components (Proserpio & Gioia, 2007).

Initially, emails were used, and then electronic learning platforms started appearing, first only as repositories of teaching materials, and then as more and more sophisticated interactive platforms

for coursework submission and online feedback, with discussion forums for student workgroups, and options to build in any type of multimedia materials. Today many universities have moved on to webinars, MOOCs, entire courses taught online, and the magic word of 'blended learning' has appeared across the educational landscape as the 'must-have' teaching approach in modern higher education. Academics tend to start using those tools and technologies because they are available and being used by other educational institutions, but often little thought is given to the fundamentals of good university teaching. The first question that can be asked is, is there a real need to improve teaching methods, and if yes, at which level of university education, for which students and most importantly, why? Secondly, what are the goals we have set for our teaching method, and what results are we trying to achieve? Once these questions have been asked we should ask ourselves whether using digital tools might help lecturers in achieving these goals, and if yes, which digital tools would be the most appropriate to use. What tends to get lost in the process is that the most sensible and adequate answer to the third question might be an unequivocal 'no'. Depending on the goals we try to achieve, 'old-fashioned' face-to-face teaching in small groups might be the best approach, and the influence and benefit of digital support might be negligible (Moser, 2016). This view may prove to be short-sighted and costly in the long run.

With the continuous advancement of technology and increasing access to the

internet and information, it is inevitable that technology deserves a significant presence in the landscape of education and more so in an ODL environment where teaching and learning take place within an online platform. The questions begging to be asked include: What are the current teaching practices of ODL practitioners? How do ODL students engage with teaching? Is there a disconnect between these two concepts?

The Changing Nature of Education

With the advent of the "Digital Natives" generation, there has been a call for change in the application of teaching theories in education. This digital generation is characterized by their exposure to technology from the start of their lives and is assumed to hold knowledge and skills that allow them to handle technologies in a "natural" way (Šorgo et al., 2017). Students that are of the "Digital Native generation prefer multitasking, and have a low tolerance for lectures, prefer active over passive learning and rely on information available through technology" (Ghaith, 2010). This characteristic of the native generation necessitates that the teaching theory of the lecturer is customized to fit the learning theory of the student. The learning theory of a student refers to a student's default manner of obtaining and retaining knowledge, attitudes, or skills during the process of learning (Ackerman & Hu, 2011).

It is thus imperative that lecturers adapt to this changing nature of student learning by adopting the appropriate skills in a technology-enhanced learning atmosphere.

However, there has been some criticism that the changing student learning theories are described in hyperbole and that it is not necessary to make a dramatic change to the teaching environment (Ghaith, 2010). This may be attributed to the disproportionate usage of the technology and the lack of the necessary skills by some students due to widely differing socio-economic backgrounds, ethnic/cultural backgrounds, qualification specializations accessibility to the various technology platforms, and gender.

Despite the disproportionate usage of technology, lecturers still need to ensure that they acquire the relevant skills that are a prerequisite for fully optimizing the constant changes in technology. Another view suggests that in order to keep up with the student learning theories, lecturers are recommended to constantly incorporate the latest technology in teaching (Proserpio & Gioia, 2007). Technology tools that could be incorporated into teaching may include the internet and computer simulation. The internet provides the opportunity to access news and information in various formats. The internet also provides the opportunity to communicate with other students as well as the lecturer (Proserpio & Gioia, 2007) – a communication channel that allows for the interaction that would otherwise have occurred in the classroom. Computer simulation allows for interactivity and a chance for students to actively search for solutions to problems that occur within the simulation.

The technological advances and changes in the educational environment might influence a lecturer's personal perception of education and how he/she interacts with learners - in other words, the lecturer's personal teaching philosophy and theory. Philosophies influence the way one sees the world and theory impacts how one initially interacts with that world (Himes & Schulenberg, 2013). In 1983 before the technological advances in education prevalent in today's educational environment, Dennis Fox published an article in which he delineates simple and developed personal teaching theories (Fox, 1983). These theories are discussed in the section that follows.

Personal Teaching Theories

In an attempt to find a solution for common misunderstandings between teaching colleagues as well as between lecturers and students, Fox (1983) conducted research that delineated four concise approaches lecturers had to teach. These "basic theories of teaching" expresses the relationships between teaching and learning and illustrates how the relationship can be either classified as simple or as developed. Simple teaching theories include the transfer and shaping theory and suggest that the lecturer is in full control of the teaching encounter as well as the information conveyed to students and that students are passive participants. In developed teaching theories, traveling, and growing, students are seen as active participants of the teaching encounter and a contributing partner to their education.

Fox (1983) also identified a third type of relationship between the lecturer and student, simply stated as a hybrid, the building theory. The hybrid forms a bridge between the simple (shaping and transfer) and developed (traveling and growing) theories.

Transfer Theory

The transfer theory is exactly what it says, it is the transfer of knowledge or information from the lecturer to the students. Those who follow this theory, see knowledge as a commodity that can be transferred from one person to another. The transfer theory can be divided into two variants. The first variant focuses on the breaking down of information into simple pieces and it being transferred without any distortion taking place as a result of the simplification. The second variant is known as the broadcast theory and is based on the lecturer just sharing information with students regardless of whether or not it is applicable to either the student or the situation.

Shaping Theory

This theory refers to the process of shaping students into a predetermined pattern. Lecturers embracing this theory would normally use verbs like "produce" and "develop" when they talk about their teaching practices. Followers of this theory regard the shaping theory in one of two ways. Firstly, they see it as the actual shaping of minds or secondly as the creation of connections in students' minds. Depending on the discipline in question the way

this approach is applied will vary widely from scientific experiments to classroom teaching.

Traveling Theory

The traveling theory is a metaphor for the road of education where the lecturer and the students are seen as traveling companions. The main drive behind this theory is that lecturers have experienced it all before and is guiding the student through the process of discovery as a traveling companion rather than a lecturer. It is a cooperative learning process and not just a one-way track.

Growing Theory

The emphasis of the growing theory is on the personal development of the student. It is about the intellectual and emotional development of the student but is not limited or inhibited by a preconceived idea of a specified outcome due to the fact that continuous changes are taking place and learning is constantly evolving.

Building Theory

This theory views the student's mind as a building site, where building material is delivered and a building or a structure is constructed with the building material that has been delivered. In the educational context theoretical content is transferred to the student, although it does not stop there. It is the student's responsibility to apply the theoretical content to construct something according to a pre-determined plan. As the student construct something from the

transferred theoretical concepts the teaching theory is on its way to becoming a developed teaching theory

AIM AND METHOD

It is clear from the preceding sections that traditionally lecturers teach according to personal teaching theories. It is also clear that the educational environment has changed as a result of technological development. This gives rise to the question: are the personal teaching theories discussed by Fox (1983) before the known technological advances in education, still relevant?

The aim is thus to explore the relevance of traditional personal teaching theories in a technological advanced in an educational environment.

In determining the relevance of the traditional teaching theories, a self-completion questionnaire based on the personal educational theories as discussed by Fox (1983) was developed for this research. The questionnaire mostly incorporated questions that are of a quantitative nature.

The questionnaire was conveniently dropped off by a fieldworker and it was collected by a second fieldworker after five days from lecturers of a leading South African university. A total of 204 correctly completed questionnaires were obtained, which is a 6.74% margin of error at a 95% confidence level and response distribution of 50%.

RESULTS

The respondents were presented, based on traditional teaching theories, with a

list containing personal teaching theory statements. Respondents were asked to indicate their personal teaching theory on a 7-point scale ranging from 1 = strongly disagree to 7 = strongly agree. For easy reporting on the items scale point 1 - 3 (disagree – strongly disagree) collapsed to form a new category disagree; scale points 5 - 7 (agree – strongly agree) to form a category agree and 4 remains neutral. Table 1 below is indicative of the results obtained for this question.

Table 1

Distribution of responses on personal teaching theory statements

	Items	1-3 (Disagree)	4 (Neutral)	5 -7 (Agree)	N	**%**
1	A student development-plan does not need to specify the exact dimensions and outcomes to achieve.	72.90%	10.34%	16.74%	203	100
2	All parts of learning materials are components of a higher system that is interconnected and meaningful.	3.95%	10.84%	85.23%	203	100
3	Attitudes, activities, and personal skills are more important than detailed knowledge.	37.25%	28.92%	33.82%	204	100
4	Exploration of learning material is a personal activity.	17.74%	21.67%	60.58%	203	100
5	If a topic is taught it will be learned.	48.02%	15.84%	36.15%	202	100
6	Learned content should be permanent and useful.	10.40%	11.88%	77.72%	202	100
7	Training and education are the same.	73.04%	12.25%	14.70%	204	100
8	Lecturers have to develop the mind and brains of students.	21.56%	15.69%	62.75%	204	100
9	Lecturers are there to shape the minds of students.	17.74%	11.33%	70.94%	203	100
10	Lecturers create a possible bridge between theories and concepts.	3.43%	4.41%	92.16%	204	100
11	Part of teaching is to deliver the study material to the student.	23.77%	16.83%	59.40%	202	100

Table 1 *(Continued)*

	Items	1-3 (Disagree)	4 (Neutral)	5 -7 (Agree)	N	%
12	Student success is to be measured by practical outcomes.	9.80%	24.51%	65.69%	204	100
13	Students should be closely monitored with predetermined outcomes.	10.95%	17.41%	71.65%	201	100
14	Students should just study the lecturer's notes.	86.06%	4.48%	9.46%	201	100
15	Study material is only significant in terms of what it does for the personal growth of the student.	49.25%	22.39%	28.36%	201	100
16	Subjects should have large factual content.	18.41%	27.86%	53.73%	201	100
17	Successful learning is a result of well-prepared material.	11.39%	18.81%	69.81%	202	100
18	Teaching is a matter of creating connections in the students' minds.	4.48%	8.96%	86.56%	201	100
19	Teaching is only an act of conveying information.	59.71%	17.41%	22.89%	201	100
20	Teaching takes place according to a predetermined plan.	13.00%	22.50%	64.50%	200	100
21	The driving force for learning and growing is internal and should come from the learner.	7.44%	13.37%	79.21%	202	100
22	The emphasis of teaching should be on growing the student as a person.	12.38%	17.33%	70.30%	202	100
23	The lecturer must guide students in their learning as he/she knows best.	7.43%	9.90%	82.67%	202	100
24	The lecturers focus their attention on knowledge before it is transferred rather than on the act of transfer.	20.00%	24.50%	55.50%	200	100
25	The student is a contributing partner in his/her own learning.	2.00%	1.99%	96.02%	201	100

As indicated in Table 1, the five items that the respondents agree with, are:

- *The student is a contributing partner in his/her own learning* (96.02%);
- *Lecturers create a possible bridge between theories and concepts* (92.16 %;);
- All parts of learning materials are components of a higher system that is interconnected and meaningful (85.23 %);
- Teaching is a matter of creating connections in the students' minds (86.56 %)
- *The lecturer must guide students in their learning as he/she knows best (85.23 %).*

The five items that the respondents disagree with are:

- *Students should just study lecturer's notes* (86.06%);
- *Training and education are the same* (73.04%);
- *A student development-plan does not need to specify the exact dimensions and outcomes to achieve* (72.09%);
- *Teaching is only an act of conveying information* (18.91%);
- *Study material is only significant in terms of what it does for the personal growth of the student* (49.25%).

The five items that the respondents are neutral about are:

- *Attitudes, activities and personal skills are more important than detailed knowledge* (28.92%);
- *Subjects should have large factual content* (27.86%);
- *Student success is to be measured by practical outcome* (24.51%);
- *The lecturers focus their attention on knowledge before it is transferred rather than on the act of transfer* (24.50%);
- Teaching takes place according to a predetermined plan (22.5%).

Determining Sub-Constructs

Principal factor analysis with varimax rotation and Kaiser normalization was conducted on the items to assess the underlying structure for the twenty-five items of the questionnaire. Three factors were requested, based on the scree plot, Eigen values, and % of variance as well as the minimum of three items per construct. After rotation, the first factor accounted for 10.30% of the variance, the second factor accounted for 9.12%, the third factor accounted for 8.27%.

Most factor loadings were 0.4 or above, showing good convergent validity (Chesney et al., 2006). The constructs are therefore unidimensional and factorially distinct, and all items used to operationalize a construct's load onto a single factor. Some cross-loadings were experienced as well as a number of items that did not load anywhere.

Cronbach's Alpha (α) was used to calculate the reliability of the sub-constructs. The Cronbach's alpha for the three sub-constructs all yielded Cronbach's alpha

values between 0.6 and 0.8 indicating that the reliability is acceptable. The table below represents the Cronbach's alpha values of each of the three constructs, see Table 2.

The score for each of the constructs *comprehensive; critical thinking and coaching* are represented by a single value by calculating the mean of the applicable items relating to the construct. The constructs' average on a 7-point scale are:

comprehensive 5.09 (s = 0.82); critical thinking 5.18 (s = 1.18); and simple 2.90 (s = 1.12) implying that lecturers prefer the critical thinking.

Each lecturer was categorized by the preferred learning theory as displayed in the Table 3. Lecturers mostly (53.92%) preferred the critical thinking teaching theory.

Table 2

Cronbach's alpha

Sub-construct	Items	Cronbach's alpha
Comprehensive	12, 17, 18, 20, 22, 23 and 24	.70
Critical thinking	8, 9 and 10	.70
Coaching	7, 14, 15, 19 and 25	.64

Table 3

Lecturer preferred teaching theories

Category	% of Total	N
Comprehensive	41.67%	85
Critical thinking	53.92%	110
Coaching	1.47%	3
Comprehensive and Critical thinking	2.94%	6
All	100.00%	204

DISCUSSION

Philosophy is the way that a person sees things and the world around him or her; and theory is the way that the person interacts with the things and the world around them. A lecturer's personal teaching philosophy shapes his or her personal teaching theory. Fox (1983) delineates four "basic theories of teaching", i.e. transfer, shaping, traveling,

and growing. These were unpacked and elements thereof were included in a questionnaire that was presented to a sample of lectures, ranging from junior lecturers to senior professors, at a leading South African institution of higher learning.

Simons (1992) was of the opinion that that learning was a matter of who initiates and controls the learning function and that the interaction between the lecturer and

student influenced the development of thinking and learning skills. It is clear from the results that lecturers emphasize the role of the student in higher learning by agreeing to the statement "*The student is a contributing partner in his/her own learning*". Lecturers disagreement with the statement "*Students should just study lecturer's notes*" and are more or less neutral when it comes to whether a*ttitudes, activities, and personal skills are more important than detailed knowledge*. A factor analysis revealed three constructs with acceptable internal reliability, on teaching theories comprising comprehensive, critical thinking and coaching. The comprehensive theory entails teaching the student everything there is to know about the subject at hand. The critical thinking theory focuses on application and problem solving and applying the learning material to address a problem or opportunity. In critical thinking and comprehensive teaching, theories represent independent learning. Lecturers and students shared control and are co-responsible for achieving learning goals, implying that there is a high level of interaction between lecturer and student. The third teaching theory, coaching, is basically telling the student what he or she needs to know to pass the exam. The coaching theory is lecturer dependent learning, where students believe that the lectures are the persons who are there to make them learn, to motivate and inform them and control and evaluate their learning (Shuell, 1988). Lecturers are orientated towards controlling learning as they feel responsible for students' success (Deci et al., 1982). In other words, lecturers are orientated to follow coaching like teaching theory. On the other hand, more than 80% of lecturers see independent learning as an important learning goal (Simons, 1992). Putting it differently, lecturers would like to deploy critical thinking and comprehensive teaching theories while lecturing. The research supports the seminal work of Simons (1992) as the findings revealed that 95.59% of the lecturers prefer critical thinking (53.92%) and comprehensive (41.67%) teaching theories. The study however did not address the question of whether lecturers teach according to their preferred personal teaching theories.

CONCLUSION AND RECOMMENDATIONS

The research aimed to determine the relevance of traditional personal teaching theories in a technologically advanced educational environment. When comparing the emerged theories to the traditional personal theories as identified by Fox (1983), the theory categories (simple, developed, and hybrid) are aligned. The coaching theory matches the simple category due to items such as "*students should just study lecturers notes*" and "*teaching is only an act of conveying information*". Critical thinking theory fits the developed category due to statements such as "*lecturers have to develop the mind and brain of students*" and "*lecturers create a possible bridge between theories and concepts*". The comprehensive theory, due to statements such as "*student success is to be measured*

by the practical outcome" and *"the lecturers focus their attention on knowledge before it is transferred rather than on the act of transfer,"* fit hybrid theory.

To conclude, the traditional personal education theory categories (simple; developed and hybrid) are still relevant, however, the theories itself are not relevant as lecturers are combining teaching theories by combining theories to fit the technological developments and to cope with peer and student pressures within the educational environment.

It is of strategic importance for institutions to know what teaching theories are used by lecturers. An institution's image as a place of higher learning can easily be damaged it the teaching theory and the level of study is a mismatch. It is therefore recommended that the actual learning theory that lecturers apply in teaching be researched as a lecturer might prefer an independent (critical thinking or comprehensive) teaching theories but apply a dependent (coaching) teaching theory in the learning environment. It is furthermore recommended that students' approach to learning is researched as it will enable institutions and departments to formulate a teaching theory that will improve students' learning experience. A mismatch between the teaching theory and the learning style can cause learning failure, frustration, and demotivation.

The research is exploratory in nature, convenience sampling was used and it is limited to a single institution, therefore, the findings cannot be generalized.

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Action Research in Examining the Enquiry Approach of Lesson Study in Mathematics

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ABSTRACT

Action Research (AR) focusses on classroom research for improving instructional practices while the Japanese inquiry-model of Lesson Study (LS) emphasises on teachers' collaborative work on student-engaged lessons. Both approaches are central to professional development as they draw on students' feedback for designing quality lessons. Through AR design, this paper reports on the effectiveness of LS in enhancing the enquiry approach and student engagement in a mathematics classroom. The main objective is to investigate and demonstrate the value and use of enquiry approach and how teachers can engage students in the development of the concept of perimeter during problem-solving, which was investigated by analysing the type of questions asked and the follow-up instructional activities. Our data focus on questions the teacher posed, classroom observation of 27 Grade Four students' behaviour while solving a perimeter problem, and teacher's feedback during the debriefing session. Findings revealed higher use of open-ended questions (88.89%) that elicited higher-order thinking than closed questions (11.11%). We argue that the enquiry approach in this LS probed students' ability to explore alternative solutions, extend their prior conceptual understandings, developed teacher's support for activation, and use of higher-order mathematical thinking during the course of searching for solutions. Results suggest that LS constitutes a powerful context to understand the quality of questions

that teachers use during their day-to-day practice. Further, we have evidenced that LS conducted within an AR design could be a useful research strategy in better understanding teachers' support for the development of 21st Century skills among our students.

Keywords: Action research, higher-order thinking, lesson study, mathematical communication and thinking, open-ended questions

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INTRODUCTION

What is an ideal mathematics classroom?

> Imagine a classroom, a school, or a school district where all students have access to high-quality, engaging mathematics instruction … The curriculum is mathematically rich, offering students opportunities to learn important mathematical concepts and procedures with understanding … Alone or in groups and with access to technology, they work productively and reflectively, with the skilled guidance of their teachers. Orally and in writing, students communicate their ideas and results effectively. They value mathematics and engage actively in learning it. (National Council of Teachers of Mathematics [NCTM], 2000)

The following extract outlines the mathematical process of teaching and learning that should occur in the 21st Century mathematics classroom. It is expected that through teacher-designed activities that engage students during problem-solving, students will actively participate in constructing new knowledge through discovery. And as teachers facilitate students who are engaged in mathematical communication, the students' mathematical thinking will be further enhanced, steering way for meaningful learning to occur. Central to capturing the essence of meaningful learning in Mathematics is the enquiry or investigative approach, which is a salient element in the Japanese model of Lesson Study. Since AR and Lesson Study are frequently treated as separate entities, this study was conceived to show how the two can be integrated to reap the aggregated benefits of the marriage between them

Lesson Study and Action Research

> "Research lessons help you see your teaching from various points of view… A lesson is like a swiftly flowing river; when you're teaching you must make judgments instantly. When you do a research lesson, your colleagues write down your words and the students' words. Your real profile as a teacher is revealed to you for the first time". (Lewis & Tsuchida, 1998)

If teachers want to make changes in their teaching and student learning, they need to be provided with the opportunity to reflect on the choices they had made during the course of their classroom practice. That sets the need to embed lesson study in classroom AR. While AR answers specific classroom research questions,

lesson study also allows the AR to be done collaboratively. Furthermore, teachers gain more by participating in lesson study while conducting AR as they share and talk more about teaching, lesson, and resources under the mentorship of the 'Knowledgeable Other' (Takahashi, 2014).

The lesson study approach in classroom AR also creates many "eyes to see children" (Lewis, 2002b), which becomes sound testimony of teachers' actions and concomitant student learning. Likewise, AR is a case study, defined by Merriam (1989) as "an intensive, holistic description and analysis of a single entity, phenomenon, or social unit." The unit within the context of the study is most often a classroom of students. Activating the two approaches in tandem, Lesson study, which creates "many eyes to see children" complements AR that provides a "holistic description" of particular instructional practices in a way that researchers' feedback of students' learning, students' feedback and discussions with the 'Knowledgeable Other' form the basis of improving the lesson. Thus, lesson study in researching classroom issues (by using AR) provides solutions on how to improve learning, which is not possible through formative or summative assessments that only provide information on what to improve, without addressing the crucial *how*. As such, lesson study can be a powerful approach in answering research questions when conducting classroom AR in the 21ˢᵗ century (Lewis, 2002a).

Accordingly, this study was conceived by combining AR and the inquiry element of the Japanese Lesson Study approach in researching the effectiveness of using Lesson Study in a mathematics classroom. Therefore, this study is focussed on investigating the nature of inquiry approach in Lesson Study by examining the type of questions teacher asked and the follow-up activities that the teacher provided, which will help to explain students' mathematical thinking processes and answers the research question 'How can teachers engage students in the development of the mathematical concept of perimeter through problem-solving?'

Mathematical Thinking

The most acceptable understanding of mathematical thinking is as a mental process that includes the presence of at least one mathematically-related activities during the process of problem-solving such as reasoning, analysing, synthesising, abstraction, symbolic representation, symbolic manipulation (Schoenfeld, 1992), understanding mathematical ideas, establishing relationships among the mathematical ideas, solving the problem (Lutfiyya, 1998), and proofing (Harel et al., 2006). In particular, Stacey (2007) posited that deep mathematical knowledge, general reasoning abilities, and knowledge of heuristic strategies were essential elements of mathematical thinking. Another perspective refers to mathematical thinking as exploring the world and communicating about it by 'doing mathematics' or mathematising (Romberg & Kaput, 1999). Accordingly, mathematical thinking occurs during

problem-solving activities because students are engaged in a meaningful setting usually through communication. As Romberg and Kaput (1999) explained:

> Curriculum activities that reflect this perspective are those that involve students in problem-solving and that encourage mathematization. ….. In addition, they encourage the use of mathematical languages for expressing, communicating, reasoning, computing, abstracting, generalizing, and formalizing. These systems of signs and symbols extend the limited powers of the human mind in many directions, and they make possible a long-term (cross-generational) cultural growth of the subject matter. Finally, such situations embody systematic forms of reasoning and argument …..

In the wake of emphasising communication during mathematics problem solving, the National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics (National Council of Teachers of Mathematics, 2000) regards communication, problem-solving, reasoning and proof, connections and representation as essential components of any mathematics lesson as outlined in its Process Standards. Mathematical communication involves applying the correct mathematical notation, in addition to the correct use of mathematical language, symbols, and graphical representations. By communicating mathematically during problem-solving, students are able to argue

logically as they analyse mathematical ideas critically. NCTM (2000) reiterated the value of mathematical communication as an integral component of problem-solving both in a mathematics classroom and in real-life situations, for the construction process of new mathematical knowledge will fail to occur without students communicating mathematically. As students communicate mathematically, their mathematical ideas become clearer and they are also able to justify their mathematical thinking. It is only during problem-solving that students experience them. The fourth emphasis, Learning to communicate mathematically of the Curriculum and Evaluation Standards for School Mathematics (NCTM, 1999), states that

> The development of a student's power to use mathematics involves learning the signs, symbols, and terms of mathematics. This is best accomplished in problem situations in which students have an opportunity to read, write, and discuss ideas in which the use of the language of mathematics becomes natural. As students communicate their ideas, they learn to clarify, refine, and consolidate their thinking. (NCTM, 1989)

Mathematical reasoning is also developed during problem-solving when students are guided to make and prove conjectures, communicate mathematically to provide logical explanations and make analysis and justifications. During mathematical communication as well,

students master their ability to make representations when they establish relationships between real-world setting and the world of mathematics using multiple representations.

Quantitative literacy which embodies problem-solving, reasoning, and real-world applications (Roohr et al., 2014) is also another term that is associated with mathematical thinking. Since mathematical thinking is a broad term that encompasses multiple meanings and the thinking process occurring in students' minds is not transparent. Watson and Geest (2005) listed a series of activities that students needed to participate to show that mathematical thinking was in progress. Among them are

"choosing appropriate techniques, generating own enquiry, describing connections with prior knowledge, giving reasons, finding underlying similarities or differences, working on extended tasks over time, generalising structure from diagrams or examples, creating and sharing own methods, making comparisons, changing their minds, posing own questions, initiating their own mathematics".

Therefore, it is rather difficult to single out one activity as they complement one another in enhancing mathematical thinking during problem-solving activities. Since mathematical thinking is an abstract process that occurs in one's mind and is not visible, assessing the type of mathematical thinking that is occurring can be achieved through the type of questions that teachers pose.

This is because when students respond, they rely on different types of thinking in answering those questions as discussed in the subsequent section.

Higher-order Thinking Skills and Lower-order Thinking Skills Questions

The importance of questioning students cannot be underestimated. As Reinhart (2000) stressed,

"Never say anything a kid can say! This one goal keeps me focused. Although I do not think that I have ever met this goal completely in any one day or even in a given class period, it has forced me to develop and improve my questioning skills. It also sends a message to students that their participation is essential. Every time I am tempted to tell students something, I try to ask a question instead".

When students are posed with questions, they resort to various types of thinking to access the required and relevant mathematical knowledge to answer the question. Rashid and Qaisar, (2016) reiterated that the questions posed during a lesson influenced the type of thinking skills that was occurring. In particular, the type of oral questions posed to play a significant role in the development of thinking skills during problem-solving (Sprague, 2008).

According to Capacity Building Series (2011), the type of questions asked can be categorised as open questions and closed questions or commonly known as a 'yes/ no' question. A closed question such as

"What is 4 + 6?" is contrasted with an open question such as "Is there another way to make 10?" (Capacity Building Series, 2011). Open questions help teachers build students' self-confidence as they allow learners to respond at their own stage of development. Open questions intrinsically allow for differentiation of learning ability. Responses will reveal individual differences, which may be due to different levels of understanding or readiness, the strategies to which the students have been exposed, and how each student approaches problems in general. Open questions signal to students that a range of responses are expected and, more importantly, valued. By contrast, yes/no questions tend to stunt communication and do not provide useful information (Capacity Building Series, 2011).

Illuminating further, open questions are recognised for being effective for learning to occur as they motivate a plethora of responses and encourage students to think 'out of the box', which is central to higher-order thinking (HOT). Since the nature of open questions requires students to justify their response, students usually dwell in elaborative thinking (Lee et al., 2012), thus stimulating meaningful negotiations to occur, which most likely lead to the extended conversation (Maftoon & Rezaie, 2013). Therefore, open questions are associated with the higher levels' of Bloom taxonomy such as reasoning and judgment (Hargreaves, 1984), and engage children in higher-order thinking (Roth, 1996). Subsequently, open questions promote students to process and reflect on their thoughts and ideas, which eventually sets of self-regulated thinking skills (Zimmerman, 2013).

Since HOT include elaborative thinking skills such as critical thinking, creative thinking, deductive thinking, inductive thinking, rational thinking, analogical thinking, metaphor, metacognition, making inferences, making generalisation, making a conclusion, judging idea, making predictions, solving problems, analysing, proposing solutions, and comparing and hypothesising (Rajendran, 2010), open questions invoke students' HOT. Accordingly, open questions elicit higher-order thinking (HOT) while closed questions confine the nature of thinking to lower-order thinking (LOT) as students' responses are limited to a yes or no.

Mainali (2012) provided an insight into how HOT was related to the activities that students carried out in the classroom.

> Students are engaged in HOT when they: visualize a problem by diagramming it, separate relevant from irrelevant information in a word problem, seek reasons and causes, justify solutions, see more than one side of a problem with sources of information based on their credibility, reveal assumptions in reasoning and identify bias or logical inconsistencies.

As such, the students' responses to these verbal open questions provide insights into

their mathematical thinking that is involved and is captured through the mathematical communication that transpires during the inquiry-based mathematics lesson. Crucial to the type of thinking that is occurring within students is the type of questions that teachers pose (Capacity Building Series, 2011). This is because "the type of questions teachers ask is critical in providing the correct support in consolidating students mathematical knowledge as it shapes their mathematical thinking" (Capacity Building Series, 2011) and in "helping students to identify thinking processes, to see the connections between ideas and to build new understanding as they work their way to a solution that makes sense to them (Capacity Building Series, 2011).

Despite the many benefits of an open question, it is nevertheless not well received by teachers. Repeated studies conducted over many decades reveal that teachers use a higher proportion of closed questions than open questions (Brock, 1986; Galton et al., 1999; Lefstein & Snell, 2011; Maftoon & Rezaie, 2013) in their classroom. Of interest is the study by Brock (1986) who discovered that with proper training, teachers could be guided to ask more open questions (173) than closed questions (21). In comparison, untrained teachers tended to use a higher rate of closed (117) than open questions (24).

Therefore, in this study, the questions that the teacher posed during a mathematics inquiry-based lesson were recorded and analysed to determine whether they are open or closed questions as open questions invoke HOT and closed questions invoke LOT.

THEORETICAL FRAMEWORK

Bruner's constructivist theory articulates that students learn best when they are engaged in active inquiry, which allows them to "go beyond the information given" (Bruner, 1973). For meaningful and effective learning to occur, students need to individually interpret the information in reality based on their past learning experience. Accordingly, teachers need to create opportunities for them to make discoveries in the learning by designing appropriate tasks in the lesson that builds on their prior learning, leading to their anticipated current learning and also by engaging them in active dialogues.

RESEARCH DESIGN

This study was an attempt to use AR design in a Lesson Study context as a possible strategy for analysing teachers' support for students' to develop 21st Century skills, in particular, higher-order thinking skills and providing an innovative model of continuous professional development for mathematics teachers. This study was conceived by combining AR and the enquiry element of the Japanese Lesson Study approach in researching the effectiveness of using Lesson Study in a mathematics classroom. The lesson study approach involved collaborating with teachers to plan, observe, and reflect on lessons (*Lewis,* 2002b). An explorative AR design was conducted by designing

activities, implementing and observing two lessons, which were improved through debriefing sessions in two different cycles. This design allows teacher-researchers to be engaged in emerging and current classroom issues arising in their classrooms, which require urgent and immediate solutions. Both lessons were on the same topic and lesson objective of introducing the concept of perimeter conducted by two different teachers in two different schools, who were part of the Lesson Study team and AR group. Four members of the Lesson Study team observed and evaluated two different AR lesson cycles. The findings of the AR in the first lesson design were in the form of suggestions for improvement for the implementation of the second improved lesson. This research paper reports only on the findings of the AR on the second improved lesson of the Lesson Study cycle.

The researcher was an observer. Key components included training teachers on the Lesson Study and problem-solving activities, field observation of the participating classroom during implementation, and debriefing sessions with the teacher after implementation. The research project spanned a year. Data collection included on-line support during lesson planning and development for the teacher, field observation of the participating classroom (teacher and students) during lesson implementing, recording of the questions posed and analysis of the lesson plans, and the videotaped lessons.

This study was focussed on investigating the nature of inquiry approach in Lesson Study by examining the type of questions teacher asked and the follow-up activities that the teacher provided, which would help to explain students' mathematical thinking processes and answers the research question 'How can teachers engage students in the development of a mathematical concept through problem-solving?'. In this study, mathematical thinking is operationally defined as occurring when there is evidence of students engaged in at least one activity of solving problems, communicating mathematically, and making mathematical reasoning (Ministry of Education Malaysia [MOE], 2012). Therefore, to substantiate the nature of mathematical thinking, the mathematical communication that transpired between the teacher and the students was further studied by quantitatively and qualitatively analysing the questions posed by the teachers to the class. These questions were recorded and categorised into open and closed questions as open questions invoke higher-order thinking (HOT) while closed questions invoke lower-order thinking (LOT).

METHODS

Prior to preparing an inquiry-based lesson, the teacher attended a one-day workshop on Inquiry Based Mathematics Education (IBME) and lesson study. The primary aim of the workshop was to introduce the principles of implementing Lesson Study and as a follow-up to the workshop, the participants would collaborate with the researchers to discuss and develop a lesson plan. Four schools participated and at least

four teachers from each school attended the workshop. The schools and the teachers participated out of their own free will in the workshop as they wanted to improve further their pedagogical knowledge in an attempt to move away from traditional classroom teaching. This set the baseline for this study. The participants were motivated to make their lesson more interesting, more creative, and simultaneously upskill their pedagogical content knowledge. Upon returning to the school, the participating teacher prepared a lesson plan that adopted inquiry-based pedagogy using online communication with the researchers.

The participating teacher and her team of two teachers prepared a lesson plan that was developed together with the team of three researchers, who formed the Lesson Study and AR group members. The lesson plan went through a series of revisions based on the feedback provided by the team members and the 'Knowledgeable Other'. The lesson was on the introductory concept of perimeter. The lesson was planned for one hour and began on time. The instructional steps were carried out in accordance with the lesson plan, with good time management. The students were 29 multi-ethnic high-achievers from a Grade 4 class in an urban co-educational school in Penang Malaysia. They were seated facing each other in groups of five. The lesson was videotaped and qualitative data was collected mainly by observing the students, their worksheets, and feedback from the teacher Lesson Study and AR group members through their field notes.

We report on mathematical thinking skills that students demonstrated when they were solving problems during the lesson. Therefore, evidence of events that occurred during the mathematics lessons to show how the teachers engaged students in the development of the concept and how mathematical thinking was enhanced due to the enquiry approach on Lesson study was cited. The focus is on mathematical communications, representation, and reasoning because of the themes that emerged from the data.

RESULTS

Problem Solving and Mathematical Skills in the Follow-up Activities

The lesson began with a problem posed to the students. The problem was about elephants intruding a coconut plantation. The teacher adopted the technique of story-telling simultaneously with a visual representation of cut-outs of elephants made from manila cardboards 'walking' into a plantation. That approach got the students laughing and interested. They were seen communicating with each other and also to the teacher on the other directions that elephants could have invaded the plantations, which got the teacher to get some students to help her 'walk' the elephants in. This indicates that students were able to make relations to the real-world and the world of mathematics. They also analysed and were reasoning mathematically by arguing the single direction the elephants were invading, which suggests evidence of mathematical thinking.

Inviting the students to help the teacher enhanced students' active participation and empowered them in the learning process.

The students were then posed with a real-life problem on how to prevent the elephants from invading the plantation. Despite multiple logical responses like 'scare them with loud noises' to even 'gunning them down', majority agreed on erecting a barbed-wire fence. To this, the teacher called one student at a time to paste the cut-out fences at the plantation to prevent the invasion. The students 'neatly' placed one fence beside another all around the plantation.

The main activity of the lesson developmental stage required the students to use a marker pen and multi-coloured papers. They were requested to cut the coloured papers into any two-dimensional geometric shapes and paste them to design another two-dimensional geometric figure with the condition that the adjoined geometric shapes must be of different colours. This activity was conducted in small groups of four to five students. The geometrical shapes that students created took multiple shapes and sizes. This suggests that students' creativity was harnessed in the lesson and was not stumped by providing pre-made geometrical shapes. As they were drawing the geometric shapes, they were enhancing the skills of manipulating instruments like rulers and they could be seen communicating and debating about the best shape that ought to be constructed as many students had many versions of how the final product should look like. In addition, as they were cutting the geometric shapes, they were enhancing their mathematical skills of using scissors to cut polygons like square, rectangle, and triangle and exercising precision in cutting out the geometric shapes. While they were collaborating as a team to accomplish their tasks, the teacher moved around the classroom, gauging students' understanding and providing prompts when necessary.

After creating the two-dimensional geometrical shapes, the students were asked to use marker pens to outline the perimeter for that geometric figure. Their challenge was in drawing the outline that marked the perimeter. There was a group that drew the outline to the interior sides of the various geometrical shapes that created the single geometrical figure. Another group had 'gaps' in the exterior outline, which contradicted the concept of perimeter as a continuous line bordering a closed geometric figure.

Mathematical Communication, Representation and Reasoning

After the students had completed the group activities, one group member for each group was asked to present. It was during the presentation that students seemed very excited as they were eagerly pointing out how 'different' the geometric figures were. There was a lot of communication among themselves, to the teacher, and to the presenter in the form of questions, comments, and discussions, especially the group that presented on the perimeter with interior boundaries marked and with 'gaps' in the exterior outline. The teacher related to the earlier story of the plantation and the

students pointed out that the fencing was on the exterior boundaries of the plantation and the fencing must be securely adjoined to each other. Mathematical reasoning and logical thinking, relating, representation, and mathematical communication appear to have occurred. The students were able to make representations as the students provided answers that indicated that they were able to establish relationships between the real-world (plantation) and the world of mathematics (geometrical figure). They were able to relate the conceptual knowledge of perimeter being a continuous line bordering a closed geometric figure to the procedural knowledge of drawing the outline of the perimeter. At this juncture, it is necessary to highlight that the mathematical terminology of 'perimeter' was not introduced yet. The two activities were used to develop the concept of identifying the continuous line bordering a closed geometric figure.

After the presentations, the teacher introduced the mathematical register of the perimeter as the fencing that they had built at the beginning of the lesson and the outline of the marker pen in the second activity. The closure of the lesson involved the students explaining in their words the mathematical ideas on the concept of perimeter. Prompting from the teacher helped students to draw conclusions on what is not a perimeter based on the two groups' misconceptions. The lesson ended with the teacher giving the students homework. Figure 1 exhibits the activities that occurred during the lesson.

Open and Closed Questions

A lot of questions were posed during the lesson. However, only questions related to the development of the conceptual understanding of perimeter were recorded as exhibited in Table 1. Rhetoric questions or questions requesting participation such

Figure 1. Activities during problem solving

as *Who can help to put the fence?* are not discussed in this section. From a total of 18 questions posed, 2 or 11.11% were yes/no (closed) questions, while 16 or 88.89 % were open questions that encouraged a variety of flexible responses from the students. In addition, there was the frequent use of *why* and *how* during the lesson, mainly preceding students' responses. A total of five times, the teacher used the WH question words of *why* and *how* to seek clarification to students' responses. Table 1 exhibits the questions that were posed.

Table 1

Types of open and closed questions

Num	Open Question	Closed Question (Yes/No)
1	What does the picture show?	There is an opening here (pointing to the constructed fence). It that acceptable?
2	What is happening now?	Your friend has drawn the inner boundary. Is that acceptable?
3	How to prevent the elephants from invading the plantation?	
4	Do you think we should kill them?	
5	With what?	
6	Any other way?	
7.	Discuss how you can construct the geometrical shape so that no adjacent cut-outs have the same colour	
8	The boundary drawn around your constructed geometrical shape has a gap. Why is this not acceptable?	
9.	Make a summary on what is not a perimeter	
10	What do you think is a perimeter? Use own words.	
11	Why when determining the perimeter, the interior boundary can not be included?	
12	What is not acceptable with the drawn boundary for this geometrical shape?	
13	In determining the perimeter, why there must not be a gap in exterior boundary?	
14	How do you determine the perimeter for this diagram?	
15	What did you learn today?	
16	In your words, describe perimeter?	

DISCUSSIONS

Problem-solving was the main activity in the lesson. Two problems were posed, with one real-word setting in the form of story-telling and the second problem posed during the lesson development, which was the main task that students had to complete as a group activity The problem that was posed in the induction set was carefully designed to achieve the desired mathematical concept of perimeter. It also captured a real-life scenario. As students progressed through the process of solving the problem, the majority of the students acquired the concept, even though misconceptions occurred among two groups of students. Through the teachers' spontaneous facilitation and questioning, a reflective activity was conducted to address the misconception, where students made relations between the two activities that enhanced their understanding of perimeter as the continuous line bordering a closed geometric figure.

There was also clear evidence of mathematical communication occurring throughout the lesson as a result of questioning, specifically during the story-telling, group discussions, and group presentations. Communication refers to an interactive process that involves activities like speaking, listening, writing, and reading. It is one way to share mathematical ideas and clarify the understanding of Mathematics and can be in verbal or written modes (Cuevas, 1991). According to the National Research Council (1989),

….. research offers compelling evidence that students learn mathematics well only when they construct their own mathematical understanding. To understand what they learn, they must enact for themselves verbs that permeate the mathematics curriculum: "examine," "represent," "transform," "solve," "apply," "prove," "communicate." This happens most readily when students work in groups, engage in discussions, make presentations, and in other ways take charge of their own learning.

In this lesson, oral communication most commonly occurred in the highest frequency among students to convey their mathematical thinking and it was a two-way interaction that transpired between teacher-student, student-student, and student-object. A high percentage of 99.89% of open questions and 11.11% of closed questions, preceded by the use of *why* seven times, indicate higher-order thinking occurring during the lesson.

During the group presentation, students' speaking skills using the mathematical language were enhanced when they were engaged in questioning the use of words such as *square*, *rectangle*, and *triangle*. Their mathematical ideas were reflected upon, discussed, and modified. Listening skills were developed as they listened to their peers explaining the mathematical ideas and their understandings were developed as they responded to what they hear. As such, it encouraged them to think

mathematically. They also 'read' the graphic forms of the two-dimensional geometric figures to rationalise their thoughts and make interpretations about the perimeter. The written skills were observed when students outlined the boundaries that mark the perimeter.

According to Jacobs et al. (2005), four essential strategies scaffold mathematical communications: rich tasks, safe environments, students' explanations and justifications, and processing of ideas. A detailed analysis of the lesson reveals that all four elements were present. The rich task is defined as being open-ended and challenging. A safe environment refers to a non-threatening environment that invites students to share their ideas, despite producing incorrect solutions. The emphasis is placed more on their ability to reason and make justifications, instead of the correct answer. The third strategy of making 'explanations and justifications' encourages students to 'think out loud' in order to communicate their mathematical ideas, while the final strategy refers to listening to the thoughts of others, which are manifestations of their thinking (Jacobs et al., 2005).

In the observed lesson, the task was rich as there were multiples correct solutions and was appropriate for the students. The environment was non-threatening as students were comfortably presenting their ideas individually and publicly in the classroom. During the group presentation, students were motivated to explain and justify their answers, and at the end of

the lesson, they provided the lesson summary using their own words. When the teacher was enacting the story of the elephants invading the plantation and when other groups presented, the students listened and provided their views when their mathematical understanding was challenged. Along the line of thought of Jacobs et al. (2005), the observed lesson had successfully promoted mathematical communication in the lesson. However, students' confidence level in communicating was much higher when they were in their groups as compared to communicating ideas individually.

The observable mathematical communication was easily captured, unlike the mental processes. However, evidence of students explaining their mathematical ideas and disagreeing with their peers' views could only have happened with the occurrence of mathematical thinking through the mathematical processes of reasoning, relating, and representing. In addition, based on the work of Watson and Geest (2005), some of the activities that suggested mathematical thinking occurred in this lesson. Students were involved in selecting suitable techniques to create their preferred geometrical shapes. They were reasoning and were sharing their methods amidst comparing their work with their peers. They were also posing questions

During the debriefing session with the 'Knowledgeable Other', the teacher also shared her views on how much her students enjoyed the lesson and citied the vibrant atmosphere as a result of students' active

engagement in the activities. However, she also agreed that the lesson consumed time and effort as it involved careful planning and spontaneous facilitation, but was worth the effort and time invested in the lesson planning and implementation. She "felt more confident in handling the lesson. This is because of the meticulous preparation for this lesson, even though it took more time. But it was worth it."

> She also felt that the inquiry approach helped here to improve her skills in facilitation.

> " I felt that I have learned a lot about how to facilitate my students. Most of the time, we tell students what to do. But, during this and after this lesson, I learned the art of asking the correct questions to get students to think and seek solutions. I think that all the more made students enjoy the class more."

> She also felt that the class was less rigid and the students were having meaningful learning as they communicated the ideas freely.

> "The activities during problem-solving enabled the students to respond freely and creatively in responding to the tasks. They also enjoyed moving to some groups to see their friends at work. They also had the opportunity to share their views with their other groupmates."

> The overwhelmingly positive feedback from the teacher neither meant that her past

lessons were not effective nor not enjoyed by her students. As she said, "the students enjoyed it more than usual and the lesson was more effective than the traditional way of teaching" and the type of questions that she asked probed her students to think deeply and more creatively than usual. Therefore, the teacher's facilitation skills played a crucial role as well in making the lesson more meaningful through the mathematical processes that the students underwent.

These mathematical processes and skills were invoked among students as a result of the teacher's facilitation skills as without her ability to facilitate, the mathematics lesson would have turned into a traditional class whereby the teacher executes the role of the knowledge disseminator and students passively receiving the knowledge. The lively atmosphere of the class throughout the duration of the lesson is a testament to her facilitation skills enhancing students' mathematical thinking in a mathematics inquiry-based lesson.

CONCLUSION

Lessons created through lesson study tend to be an inquiry-based lesson as teachers work collaboratively in a small group with the 'Knowledgeable Other'. As a result, in this study, students' mathematical thinking was enhanced through the use of open questions during problem-solving and was demonstrated by mathematical communication, reasoning and representation during questioning. Their mathematical thinking was developed

through the use of open questions during the stages of solving the open-ended problem, students' self-learning through problem-solving activities, whole-class discussion, and summarising or explaining using their own words. Lesson study also promoted teacher facilitation.

From the findings, it is evident that students' higher-order mathematical thinking was enhanced due to the element of enquiry in Lesson Study. In addition, through problem-solving activities, the nature of enquiry was further augmented when students were able to communicate mathematically and do mathematical reasoning

It is also apparent that AR is becoming an important research design tool in addressing classroom pedagogical issues in a nuanced manner. Its versatility and power in generating valuable data about *in situ* practice are evident when incorporated into Lesson study, mainly because of the many indistinguishable common features shared by both approaches. Both are enquiry-based, with a focus on improving teachers' pedagogical content knowledge through collaboration. However, there are mixed views on which approach is more structured. While Ferrance (2000) claimed that AR was a highly structured discipline of inquiry, Dudley (2011) asserted that lesson study as a "highly specified form of classroom action research…". On the other hand, there is another third perspective, which views the two as parallel approaches. Lesson study when implemented as a type of classroom

practitioner research remodels into AR. This point of view emerged from their aligned methodologies, shared common foci (Lewis et al., 2009), and the use of feedback as authentic evidence of students' learning (Willis, 2007).

However, the extensive use of AR should not be confined to the classroom and this study has attempted to take an innovative approach in melding AR and Lesson Study to capture the enormous benefits that AR can offer. While the primary aim of this paper is to highlight the effectiveness of Lesson Study by studying the nature of the inquiry approach and student engagement through the type of questions asked and follow-up activities provided by the teacher in the classroom. This paper resonates with the perspective of moving away from treating AR and Lesson Study separately and integrate them as the way forward in conducting effective classroom research in the 21st Century.

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The Mediating Role of Cognitive Emotion Regulation Strategies in the Development of Social Behavior among Adolescents

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ABSTRACT

This study aimed to investigate the mediating role of cognitive emotion regulation strategies in predicting emotional intelligence, spiritual intelligence, and parent-peer attachment towards social behavior among adolescents. A quantitative approach was utilized to gather the information through survey forms. A comparative causal-effect study design was applied and five instruments were used for data collection. In addition, a structural equation modeling was conducted to test the effect of the mediator variables of cognitive emotion regulation strategies on 538 secondary school students selected from five zones identified as north, south, west, east and East Malaysia. The results showed cognitive emotion regulation strategies fully mediated the effects of emotional intelligence and closeness on social behavior. The results also reported that the cognitive emotional regulation strategies were significant as partial mediators of the relationship between the spiritual intelligence and social behavior. As a result, this study proposes a mediation model to support the combination of psychological theories from the emotional, spiritual and cognitive regulation aspects. In summary, the findings of this study recognized the factors that contribute to the social behavior among adolescents, which is crucial to policy makers in developing a prevention and intervention program.

Keywords: Cognitive emotion regulation strategies, emotional intelligence, spiritual intelligence, social behavior

INTRODUCTION

Social behavior is an umbrella term that refers to a wide range of interrelated behaviors in the process of communicating. It includes physical and emotional behaviors which are influenced by ethics, attitudes, genetics and culture, among others. According to the report by World Health Organization (WHO, 2002), more than 1.6 million people around the world die as a result of violent behavior each year. In fact, violent behavior is one of the major causes of death among people aged between 15 to 44. Most forms of violent behavior, including activities that threaten health and well-being, are more common during adolescence (Steinberg et al., 2008). The number of crimes involving juveniles had increased by 30.8% from year 2009 to 2013 and keeps increasing yearly. These figures may indicate that adolescents are becoming more aggressive. Among the crimes committed include possession of weapons, breaking traffic rules, truancy, being involved in criminal activities related to the property of others, gambling, substance abuse, and trespassing.

In Malaysia, the prevalence of negative social behaviors among adolescents have increased, such as snatch theft 76%, physical assault 27%, physical fight 28%, and other violent-related behavior 16% (Lee et al., 2007). Previous studies indicated aggressive adolescents showed clear psychosocial maladjustment, low academic performance, absenteeism from school, involvement in delinquent acts, substance abuse, and various mental health problems such as depression (Ostrov & Godleski, 2009; Piquero et al., 2007). Aggressive adults tend to show psychiatric problems and criminal conduct in addition to experiencing unstable marital relations and unemployment (Coccaro et al., 2009) and often suffer from depression, anxiety, low self-esteem, and stress, which are associated with physiological ailments, including headaches or sleeping irregularities (Malarvili & Saroja, 2018; OMoore & Kirkham, 2001).

The substantial effects of negative social behavior on psychosocial adaptation and mental health effects reiterate the significance of specifying factors that increase or inhibit aggressive conduct. Knowing such factors is essential not only for perceiving the mechanisms of negative social behavior but more accurately, for devising constructive plans for preventing violence and managing behavior. Several studies had aimed to identify variables that potentially influenced negative social behaviors, such as behavioral inhibition and control, empathy, and anger management (Barnett & Mann, 2013; Denson, 2013). Among processes believed to affect social behavior, emotional intelligence has appeared as a possibly pertinent variable (Brackett et al., 2004; Ragini & Badri, 2018). Studies have supported a robust relationship of spiritual intelligence and parents-peer attachment with social behavior (Choy & Zainal, 2019; Wigglesworth, 2006).

Emotional Intelligence (EI), Spiritual Intelligence (SI) and Parent-Peer Attachment (PPA)

Generally, elements such as emotional, spiritual, parent-peer relationships are profoundly related with individual social behavior especially during adolescent development. Accumulating evidence suggests EI is an individual mental ability that can be measured reliably (Brackett & Mayer, 2003; Śmieja et al., 2014). A number of initial studies have proposed lower EI is associated with engagement in self-destructive behaviors (Brackett & Mayer, 2003; Trinidad & Johnson, 2002); while higher EI is linked to positive consequences (Rivers et al., 2007). EI pertains to the capacity to apply reasoning concerning emotions and the potential of emotions to improve reasoning. Further, EI is believed to refer to the ability to perceive and thoroughly express emotion, use emotion to control thought, understand emotions, and manage emotions for emotional enhancement (Mayer et al., 2008).

Spiritual intelligence refers to the application of spiritual information according to the circumstances while handling routine problems and achievement of goals (Arbabisarjou, 2016; Emmons, 2000). Moreover, King (2008) also considered SI as a set of mental abilities related to non-materialistic and elevated dimensions of life, for example personal understanding, profound existential thinking, and extension of meaning. According to King (2008), SI consists of critical existential thinking, engendering of personal meaning, transcendental awareness, and expansion of conscious states. Bowell (2004) indicated SI involved seven steps: awareness, meaning, evaluation, centeredness, vision, projection, and mission.

Generally, attachment is referred to as an affective bond between a child and his/her caregivers, and it is affected by the ways in which caregivers react to the child and the extent to which they are available to respond to his/her needs (Bowlby, 2008). According to Bowlby's (1969) attachment theory, children start to develop a safe attachment relationship if they are assured of the caregivers' availability and responsiveness. This increases their confidence in themselves and in others. The lack of responsiveness and supportive reactions gives rise to instability in the caregiver-child relationships and hence, results in an insecure bond (Boris & Zeanah, 2005). Stephiana and Wisana (2019) reported the role of parents in child cognitive development.

Many studies have documented the relationship between peer acceptance and social behavior consequences. Commonly, popular students are regarded as being more prosocial and sociable, less aggressive and less detached (Asher & McDonald, 2009; Card & Little, 2006). Similarly, students' friendships and peer groups are ascribed to as social-behavioral traumas. Compared to children without friends, those with friends are more sociable, cooperative, and self-confident; children involved in bilateral friendships are also inclined to be more independent, altruistic, prosocial, and less aggressive compared to those

who are deprived of such friendships (Wentzel & Ramani, 2016). Concerning peer acceptance, these outcomes seemed to be valid and applicable to students in all age groups (Cillessen et al., 2005; Wentzel et al., 2004). Peer crowds often vary in terms of social behavior reputation (Brown et al., 1989).

Cognitive Emotion Regulation Strategies (CERS)

Emotion regulation refers to the processing, intensifying, weakening, altering or maintaining of emotions in a goal-directed manner (Gross & Thompson, 2007; Ochsner et al., 2012), which leads to more stable emotions (Gross & Jazaieri, 2014; Ochsner & Gross, 2005). Previous research on self-regulation emotion had been conducted mainly in Western countries. A growing number of studies had focused on the self-emotion regulation and behavior (Gross & Thompson, 2007; Ochsner & Gross, 2005), especially on the increased prevalence of violence among adolescents (Swahn & Donovan, 2004). Adolescents who are unable to control their emotions often display negative behavior and difficulties with emotional functioning (Bao et al., 2015). They are likely to express anger and aggressive behavior and consequently they may experience psychological impairments and develop mental disorder. Specifically, this process has been referred to as dysfunctional emotion regulation (Ahmed et al., 2015).

Dysfunctional emotional regulation affects the academic success through decreased social functioning and impaired

psychological and physical wellbeing of adolescents (McLaughlin et al., 2011). Furthermore, emotion regulation strategies emphasize the cognitive reappraisal involved in changing thoughts and beliefs (Aldao et al., 2010). A great number of studies have shown a growing interest in the mechanisms underlying the relation between attachment and depressive disorders in adolescents (Choy & Zainal, 2019; Gaylord-Harden et al., 2009; Ruijten et al., 2011). Emotion regulation is often described as involving skills, behaviors, and strategies that may initiate, control, modulate, inhibit, or enhance emotional experiences and expressions needed to adapt to a specific situation (Calkins, 2010). Emotion regulation is a goal-oriented process that focuses the form, intensity, expression, or duration of an emotion (Thompson, 1994; Vohs & Baumeister, 2016). This potential to self-control emotions is a fundamental attainment that develops during childhood and school years (Calkins, 2010; Eisenberg & Fabes, 2006). Adolescents can refer to a robust repertoire of emotion regulation strategies, like self-distracting, reconsidering in emotional situations (Blandon et al., 2010). Cognitive strategies, like cognitive reappraisal or reflection, which are initially displayed in late childhood, are also considered as part of that repertoire (Garnefski et al., 2007). Furthermore, adolescents can seek help from their parents or peers who act as social regulators since they tend to protect the adolescents in confusing conditions or avert their attention following a personal loss.

Since experiences and interactions play a significant role in the enhancement

of children's emotion regulation skills, it seems natural to propose that parent–child communication is the main predictor of emotion regulation problems (Thompson, 2001). Attachment has been viewed as an important factor in dealing with emotional situations. Wolfradt et al. (2003) found that adolescents who perceived parental support applied active problem-focused coping strategies which were considered adaptive. In addition, higher parental attachment predicts increased use of reappraisal and decreased suppression of emotional experiences in the way in which core emotions regulate strategies in adulthood (Gresham & Gullone, 2012). Also based on the findings of another study, adolescents who experienced a safe attachment style seemed to be capable of regulating mature emotional states through implementation of functional regulation strategies (Sroufe et al., 2009).

In summary, based on the highlights and reviews of previous studies as above, it is clear that EI, SI and PPA contribute to CERS and thus affect adolescent social behavior. However, studies to identify the relationships between all the above indicators in a single mediation model has not been appropriately studied. Therefore, this study aimed to explore all of the above variables by proposing the mediation model to address the social behavior problem faced by adolescents. Studies using the cognitive emotion regulation strategy were mostly explored in western countries where customs, cultures and environments are very different from Malaysia. Therefore, this study is crucial to provide awareness and the processes of cognitive that occur consciously or unconsciously during the period of adolescent development.

Problem Statement

Adolescent misbehavior is often exposed in the media. According to statistics, the involvement of adolescents in various types of misconduct is increasing every year. The involvement of juvenile offenders has led to more cases of life-threatening deaths. This issue provides a clear picture of the depleted morale and personality among today's youth. Despite the many discussions, studies and efforts undertaken by various parties, these behavioral problems continue to be a hot topic that challenges the community and country in finding solutions. Behavior has a bearing on individual and environmental factors (Bandura, 1986). Through previous theories and studies, the identified individual factors were emotional intelligence and spiritual intelligence; while the environmental factors were parents and peers perceived risks of behavior. However, before behavior is formed, a cognitive process occurs in which the emotional stimuli trigger a tendency to react (Gross, 1998; Ragini & Badri, 2018). This cognitive process triggers emotional regulation strategies which an individual will consciously use before he/ she is exposed to the behavior. Therefore, knowledge of cognitive self-regulation strategies for emotion is important as it determines the well-being of an individual's lifestyle especially in adolescent behavior. To understand the implications of using

cognitive emotion regulation strategies, a study needs to be conducted to identify the factors of cognitive emotion regulation characteristics that may influence an individual to regulate his/her emotions and behavior when faced with a situation.

Generally, in order to understand the existence of adolescent social behavior, the relationships between variables need to be described in detail in order to implement the form of cognitive strategies of emotionally self-regulating adolescents in order to implement them effectively. To address these needs, this study sought to explore the relationship between emotional intelligence, spiritual intelligence, parent-peer attachment and adolescent social behavior through cognitive emotion regulation strategies as a mediator among adolescents. Given that such studies have not yet been carried out in this country, we expect that the findings and formulation of this research

model will contribute positively to the design and implementation of programs to address adolescent behavior problems today. The mediation model which will be presented later can be the basis for future studies in enhancing our understanding and knowledge of the variable factors that relate to social behavior among adolescents in Malaysia. It is hoped the findings of this study will help many parties in finding solutions to adolescent behavior problems.

PRESENT STUDY

This study aims to address the effect of emotional intelligence (EI), spiritual intelligence (SI), parent-peer attachment (PPA), and cognitive emotional regulation strategies CERS) on adolescents' social behavior by proposing the mediation model, namely Model of Social Behaviour (MSB). Figure 1 shows the conceptual framework of the present study.
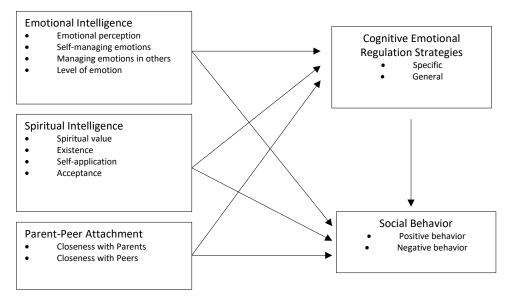
Figure 1. Conceptual framework

The main objectives of this study are: (1) to investigate the causal relationship of emotional intelligence, spiritual intelligence, parent-peer attachement, cognitive emotional regulation strategies and social behavior among adolescents; and (2) to examine the mediating effects of the CERS on the causal relationship between EI, SI, PPA, and adolescents' social behevior.

METHODOLOGY

Research Design and Sampling Procedures

This study adopted a correlational research design using structural equation modeling SEM to achieve the objectives of the study. The questionnaires were used to collect the data. A total of 538 participants were drawn from five identified zones in West Malaysia representing north, south, west, east and East Malaysia. The researcher employed cluster probability sampling to select one state in the respective zones to recruit adolescents from the national secondary schools. Upon receiving permission from the Ministry of Education to conduct this study, a letter was forwarded to the respective State Department of Education in each state to gain access to the selected schools.

Instruments

Cognitive Strategies of Emotional Self-Regulation (CSESR). This instrument was designed to assess reappraisal and suppression by John and Gross (2004). The instruments consisted of 36 items measuring cognitive strategies of self-blame, blaming others, acceptance, refocus on planning, positive refocusing, rumination, and positive reappraisal from the perspective of catastrophizing. The responses were measured on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Social Behavior Checklist (SBC). This instrument measures SB-positive and SB-negative. This instrument was adapted from the procedures and guidelines by the Ministry of Education in collaboration with the Malaysian Police Force (PDRM) and the Malaysian Crime Prevention Foundation. Out of the 36 items, 12 items measure the positive and 24 items measure the negative social behavior.

Emotional Intelligence Survey

This instrument was developed based on the model by Salovey and Mayer (1990) and improved by Schutte et al. (1998). This instrument comprises 4 dimensions namely, emotional perception, self-managing emotions, managing emotion in others, and the level of emotion. The responses were rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Spiritual Intelligence Survey

This was assessed using the Spiritual Involvement and Beliefs Scale-Revised (SIBSR-R) (Hatch et al., 1998). The instrument was divided into 4 dimensions comprising basic spiritual values, existence, self-application, and acceptance. The items were scored on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Level of Closeness Survey

This was assessed using the Closeness with Parents and Closeness with Peers survey questionnaires which were divided into beliefs, communication, and separation/distant dimensions. All items in the mentioned instruments were scored on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Analytic Strategy

The analyses were conducted using SPSS and SEM-AMOS (Analysis of Moment Structures). SPSS was used for the descriptive analysis. Structural equation modelling (SEM-AMOS) was used for the path analysis. The path analysis was used to test the measurement model (inter-correlation), structural model, and mediation. First, the measurement model was developed based on the outcomes of the Pearson-correlation test. Second, the structural model was created to examine the effect of the exogenous variables (EI, SI, PPA, CERS) on endogenous variables (SB). Lastly, the test of mediation was used to determine the research objectives and research questions. The mediation model is proposed in the end of the study.

Preliminary Analysis

Preliminary analysis is an initial process conducted at the beginning of a study to ensure the data are valid and notmally distributed. In this study, for the measurement model, the premilinary analyses included the analysis of univarite normality, collinearity analysis, and confirmatory factor analysis (CFA).

The results of the preliminary analysis supported the univariate normality of the data (skewness and kurtosis values were in the range of -1.19 to 1.17 by Kline (2015). Also, the value of Tolerance (ranged between 0.28 to 0.61) and Variance Inflation Factor (VIF) (ranged between 1.64 to 3.52) met the cut off points, as recommended by Norusis (1995). The confirmatory factor analysis (CFA) was conducted before the SEM to ensure the construct indicators actually represented the constructs to be measured in the study (Byrne, 2016; Hair et al., 2010). To ensure the vailidity and reliability of the instrument, the present study focused on convergent validity and discriminant validity. Table 1 shows the inter-correlation among the contructs ranging from 0.31 to 0.87 (p< 0.001), supporting the discriminant validity (Hair et al., 2010).

Table 1

Inter-correlation among constructs in the study: measurement model

Correlation	1	2	3	4
Emotional Intelligence (EI)	1.0			
Spiritual Intelligence (SI)	.80***	1.0		
Parental-peer attachment (PPA)	.70***	.82***	1.0	

Table 1 *(Continued)*

Correlation	1	2	3	4
Cognitive Emotional Regulatioan Strategy (CERS)	.54***	.48***	.31***	1.0
Social Behaviour (SB)	.63***	.72***	.50***	.87***

Note: *** correlation is significant at p<0.001

RESULTS

Model Fit

To determine the causal relationship between the constructs in the proposed model (Structural Model), the fit of the proposed model (Model of Social Behaviour) to the data had to be verified. The results of the present study indicated the model fit the data well. More than 4 fitness indices achieved the threshold values needed as suggest by Schumacker and Lomax (2016): RMSEA (<0.08) = 0.04; AGFI (> 0.90) = 0.93; GFI (>0.90) = 0.96; CFI (>0.90) = 0.98; IFI (>0.90) = 0.98; and relative Chi-square (< 5) = 2.25. Therefore, the Model of Social Behaviour (MSB) was accepted, and it could explain the causal relationship of the variables.

Causal Relationship of Emotional Intelligence (EI), Spiritual Intelligence (SI), Parent-peer Attachment (PPA) and Cognitive Emotional Regulation Strategies (CERS) with Social Behaviour (SB). Table 2 shows only two out of four causal relationships were significant, specifically, the path between CERS and SB ($\beta = 0.54$; p<0.01) and the path between SI and SB ($\beta = 0.43$; p<0.001). However, causal relationship between EI and PPA to SB was insignificant. The results indicated adolescents with cognitive emotional self-regulation strategies showed better SB. Additionally, PPA was not significantly related to adolescent SB. The strongest causal relationship was found for CERS, indicating for each one unit increase in CERS adolescent SB, it would be an increase by 0.54 units.

Table 2

Results of SEM on causal relationship on social behaviour

Construct	Estimate	S.E.	C.R.	p	β
Emotional Intelligence (EI)	-0.13	0.18	-0.70	0.481	-0.07
Spiritual Intelligence (SI)	2.02	0.67	2.99	0.003	0.43**
Parental-Peer Attachment (PPA)	-0.09	0.14	-0.68	0.496	-0.08
Cognitive Emotional Regulation Strategy (CERS)	0.24	0.03	6.74	0.000	0.54***

Note: *** significant at p<0.001; **significant at p<0.01

Causal Relationship between Emotional Intelligence (EI), Spiritual Intelligence (SI), Parent-peer Attachment (PPA) towards Cognitive Emotional Regulation Strategies (CERS) among Adolescents in the Model of Social Behaviour (MSB). Table 3 shows EI ($\beta = 0.45$; p<0.001), SI ($\beta = 0.38$; p<0.01), and PPA ($\beta = -0.31$; p<0.05) were significant predictors of the adolescent CERS. EI and SI showed positive causal

relationship while PPA showed negative causal relationship with adolescent CERS. The results also showed EI had a stronger effect on adolescent CERS compared to SI and PPA. One unit increase in the EI would increase adolescent CERS by 0.45 units. Overall, the results indicated high EI and SI had positive effects on adolescents' CERS, although with low parental or peer attachment. A negative effect was found.

Table 3

Results of SEM on the causal effects of Cognitive Emotional Regulation Strategies (CERS)

Constructs	Estimate	S.E.	C.R.	p	B
Emotional Intelligence (EI)	1.92	0.36	5.21	0.000	0.45***
Spiritual Intelligence (SI)	3.97	1.38	2.87	0.004	0.38**
Parental-Peer Atttachment (PPA)	-0.75	0.29	-2.56	0.010	-0.31*

Note: *** significant at p<0.001; **significant at p<0.01; *significant at p<0.05

Mediating Effect

Generally, mediating effect occurs when a third variable affects the relationship between two other related variables (Hair et al., 2010). Mediation effect occurs only when there is a significant relation between each construct (Baron & Kenny, 1986). In this study, the results of the inter-correlations clearly revealed a significant correlation between all the constructs as shown in Table 1. Therefore, objective 4 aimed to identify the mediating effects of cognitive emotional regulation strategies on the causal relationship between (1) emotional intelligence and social behaviour, (2) spiritual intelligence and social behaviour, and (3) parental-peer attachment and social behaviour.

To identify the mediating effects in the Model of Social Behaviour (MSB), this study needed to establish the presence of mediation effect in the proposed model by proving that full mediation model is better than direct model. According to Kline (2015), Model Comparison involves the comparison of the value between direct model and indirect model. However, the researcher can adopt the additional decision criteria to determine the better fitting model, such as CMIN, PNFI, and AIC. The results of the Model Comparison and the Model Fit summary as reported in Table 4 and Table 5 supported the mediation effect in the model proposed by this study. The analysis showed the full mediation model is better than the direct model, and hence supporting the

proposed Mediation Model of Adolescent Social Behaviour. Therefore, objective 4 explained the mediating effect of each path on the MSB as well as the total direct and indirect effect for the overall model.

The Model Comparison established the presence of the mediation effect on the proposed model. The mediating effect for each causal relationship may be identified as either full mediating effect or partial mediating effect. Full mediation effect happens when the direct effect between the causal variables and the outcome variables in the Full Mediation Model is insignificant. However, partial mediation effect occurs when a direct effect exists between the causal variable and outcome variable in the Full Mediation Model.

Table 4

Model Comparison

Model Comparison	CMIN	p	Decision Criteria (Mediation Model Better)
Indirect Model	24.32	0.000	sig-$\chi^2 < \alpha$ for Indirect Model
Direct Model	188.83	0.000	χ^2 smaller value

Table 5

Model fit summary

Model Fit Summary	Full Mediation Model	Indirect Model
CMIN (Smaller value is better model)	148.58	172.91
AIC (Smaller value is better model)	226.58	244.91

Table 6 shows CERS was a significant full mediator of the relationship between EI and SB (p> 0.05; Mediation Model) as well as the relationship between PPA and SB (p>0.05; Mediation Model). On the other hand, CERS is a significant partial mediator of the relationship between the SI and SB (p<0.001; mediation model). The strongest mediating effect emerged for EI (0.94) followed by SI (0.64) and attachment (0.26). The total effect of the model is 1.85.

Overall the model indicated EI, SI, PPA and CERS explain 56% of the variance in adolescent SB (Figure 2). This means other factors account for the remaining 44% of the variance in adolescent SB. Additionally, Figure 2 shows EI, SI, and PPA explain 33% of the variance in CERS.

In conclusion, the findings of the study are in agreement with previous studies, especially those related to cognitive emotion regulation conducted by Gross (1998) and John and Gross (2004). This study has successfully explored the influence of several factors found to contribute to the individual's ability to regulate emotions. The

Table 6

Matrices of standardized direct effect, mediating effect, and total effect

Standardized Effect	Outcome variable	Causal Variables		
		EI	SI	P&P
Direct Model	SB	0.24*	0.76***	-0.32*
Mediation Model *Causel relationship: CERS to SB = .54****	SB	-0.07	0.43**	-0.08
Total indirect effect		0.24	0.21	0.17
Total effect		0.94	0.64	0.26

Note: *** significant at p<0.001; **significant at p<0.01; *significant at p<0.05
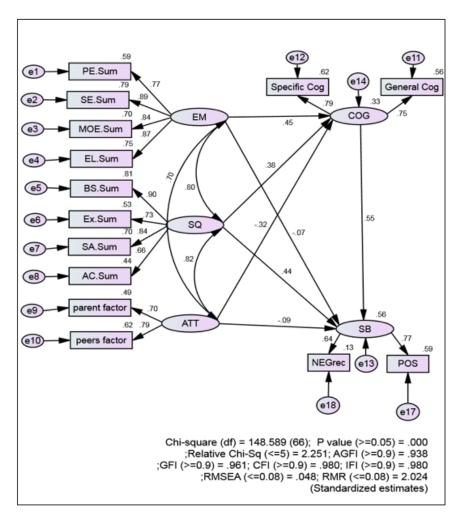
Figure 2. Model of Social Behaviour (MSB)

information, contributions and implications of the practice to be discussed are based on several findings on the relationship between EI, SI, PPA with adolescent CERS and SB.

EI is not the primary predictor of adolescent SB but is considered as a major contributor to adolescent SB. This suggests although previous studies had found EI affected SB, its effect is not as great as that of SI. SI is considered to be an important factor in the formation of EI. SI not only influences adolescent SB but it also appears to affect CERS. High levels of SI strongly influence adolescents' positive SB; whereas those with high level of SI comprised of adolescents who are less likely to have SB problems. SI is also found to affect several dimensions of CERS because according to a study, SI is seen to be able to control the state created by intellectual as well as emotional intelligence as its ability is a combination of the ability in the brain and the ability in the soul (Goleman, 1996). This shows the theory of SI and its influence is relevant to this study and needs attention from all parties to address adolescent behavior problems.

The finding also reported PPA was a dominant contributor to social behavior among adolescents. Both theory and previous studies had found PPA had the potential to influence adolescents' behavior and it is also consistent with the finding of this study. PPA, SI and EI play a very important role in adolescent behavior (Albeny et al., 2019). Parents play a very powerful role in shaping adolescent behavior and personality. It can also influence adolescent CERS because

low level of parental involvement is seen as a symptom of depression which can result in the adolescents' inability to regulate emotions (Kostiuk & Fouts, 2002) which then ultimately leads to behavioral problems (Albeny at el., 2019; Bennett, 2003). Additionally, PPA has also been found to influence adolescents' mood regulation (McCarthy et al., 2000). Emphasis should be given to all parental involvement for this is important for adolescent self-esteem.

Previous theories and studies on emotion regulation had reported its positive relationship with SB. The results of this study also confirmed the findings although the CERS dimensions used are different. The dimensions of reappraisal, refocusing on planning, and positive reappraisal contributed to positive social behavior while the dimensions of blaming (others) and thinking of catastrophizing contributed to negative social behavior. Previous studies did not specifically address the positive aspects of SB, so the references focused only on the negative aspects. Knowledge of these strategies can be a guide for specific strategies that can be applied to adolescents to help them control their emotions and thus avoiding being reckless in handling situations.

DISCUSSION

In this study, a mediation model of the relationship between EI, SI, PPA and adolescents' social behaviour was proposed to explore the mediating effects of CERS in the model. This study extends the current knowledge by considering the

elements contributing to adolescents' social behaviour. Specifically, we considered social supports contributed more to positive behaviour among adolescents. The findings supported the hypotheses that suggested EI and SI had the strongest relationship with CERS. Meanwhile, PPA showed negative correlation with CERS. The study also reported SI and CERS were significantly related on adolescents' social behaviour. This result indicated both variables contributed significantly to positive or negative adolescents' social behavior associated with emotional regulation (Gross & Thompson, 2007). Moreover, the inability to control problematic behavioral would lead to the struggle in regulating and releasing anger (Hessler & Katz, 2010). Thus, it is imperative for people to utilize diverse strategies to regulate their emotions. The other two factors on EI and PPA did not contribute to the fluctuation of the behaviour. The central aim of the current study was to investigate a mediational model in which CERS serves as a mediator in the relation between EI, SI, PPA, and SB among adolescents. First, the results supported the hypothesized relationship between SI and SB in adolescents. Higher level of SI indicated better SB in adolescents. Second, adolescent EI and PPA did not affect adolescent SB directly. Third, CERS were positively related to SB. Finally, the results partly supported the mediational role of CERS. CERS served as a full mediator in the relationship between EI, SI and PPA. Furthermore, CERS emerged as a partial

mediator in the association between SI and SB.

Meaningful relationship between the variables justified the investigation of a mediational model. In line with previous research, the current findings supported negative relations of PPA and SB (Kullik & Petermann, 2013). In adolescence, parents still function as important attachment figures and, in case of low attachment quality, they may exert their influence on psychological problems of their child. Furthermore, adolescents begin to develop attachment relationships with friends and romantic partners who fulfil comparable attachment functions. As indicated earlier, a few researchers had pointed out the core ability of SI, a general factor that penetrates into and guides other abilities (Fry, 2003; Ronel, 2008). A number of earlier studies had proposed lower EI was associated with being involved in self-destructive actions, including unacceptable conduct and cigarette smoking (Brackett & Mayer, 2003; Trinidad & Johnson, 2002), and higher EI was associated with positive sequences, like prosocial actions, parental love, and positive peer and family relationships (Rivers et al., 2007). This study supported this proposition. Based on the analysed data, the main results showed, (1) EI affects SB, (2) SI affects SB, (3) PPA affects SB, (4) and CERS affect SB of teenagers.

Due to the relationship between EI and social conduct variables, numerous researchers had proposed not being able to handle emotions is related to conflicting behaviours in social relations and

behavioural complexities (Lomas et al., 2012). A number of studies have examined likely relationships between EI and various forms of aggression, such as bullying (Elipe et al., 2012; Lomas et al., 2012) or sexual aggressors in various situations (e.g., in school, with a partner during sex) (Siu, 2009). The studies in this field have indicated those high on EI are in touch with their own emotions and emotions of others, tend to handle themselves better and efficiently deal with others, and attend adequately to work requirements. The findings of this research confirmed these assertions. SI focuses on internal abilities of an individual, and it displays in different forms, like optimistic self-concepts, generous acts of donation, or elevated moral self and personal transcendence (Zohar, 2012). Hence, spiritual health of teenagers is crucial for their mental health. This study demonstrated the two-stage process through which SI may influence social actions. First, SI may influence social actions through its role as a comprehensive guide that affects SB and second, CERS mediates and increases the influence of SI to affect the SB of students.

Securely attached infants grow while expecting their emotional signals to be responded attentively and predictably. Therefore, they show their feelings readily and have the potential to regulate their emotions in a flexible manner respective to their environment (Goldberg, 2014). However, insecurely attached children grow while expecting their emotional signals to be responded rather selectively or unpredictably. Their emotional interactions are impaired; thus, they tend to display maladaptive emotional regulation strategies, like minimisation or exaggeration. Earlier studies had investigated the relationship between emotional regulation and the quality of attachment in an adolescent sample (Choy & Zainal, 2019; Farley & Kim-Spoon, 2014). The data collected using an Inventory for Parent-Peer Attachment (IPPA) revealed higher level of trust and communication and lower level of alienation predicted more adaptive emotional regulation, whereas lower level of trust and communication and higher level of alienation predicted maladaptive emotional regulation (Taylor-Colls & Fearon, 2015). Overall, the findings demonstrated the relationship among EI, SI, PPA and adolescent SB. They also added to the body of knowledge by addressing the influence of emotional and spiritual support as well as PPA on SB among adolescents'. In conclusion, the study found the effect of CERS as a mediator of adolescents' SB and confirmed the data collected fit the proposal mediation model.

CONCLUSION

Implication

This study combined three main variables to see the effect of predictor factors on adolescent social behavior through cognitive emotion regulation strategies and finally proposing a mediation model. This combination produced new findings in addition supporting previous studies as well as the development of more integrated models to explain practically and theoretically the factors of adolescent social

behavior. The findings had successfully added another piece of scientific information and provided new information on aspects of adolescent behavior which emphasized emotion regulation dimensions as a means of controlling behavioral responses. Cognitive emotion regulation is seen as an effective intermediary agent for controlling adolescent social behavior. This study has provided useful information and findings to various parties, especially to adolescents, parents, schools, ministries, NGOs and the community in solving adolescent social behavior problems. The information also provided to both counselors and guidance teachers on how to assist students with social behavior problems.

Based on the theory of general strategy and cognitive strategy, emotion can actually be regulated to help in the process of determining social behavior. Cognitive emotion regulation strategy does not stand alone but is one of the agents of variation in shaping the individual social behavior especially among adolescents. Previous theories and studies had shown emotional intelligence, spiritual intelligence and parent-peer attachment can influence behavior but this study examines the influence of CERS as a mediator of adolescent social behavior by gathering all the above factors as new information as seen through these findings. The findings of this study clearly suggest factors such as EI, SI and PPA can help adolescents perform cognitive activities to regulate their emotions in relation to a more positive behavior. This means having EI, SI, PPA do not necessarily guarantee adolescents showing good behavior for the

cognitive process of emotional regulation occurs before a person acts. The theoretical gap between EI, SI, PPA and SB has been identified through this study where appropriate use of CERS plays an important role for adolescents in shaping adolescent social behavior.

Recommendation

This study has identified various variables contributing to the formation of positive social behavior as well as negative social behavior among adolescents. Therefore, a follow-up planning and actions need to be given specific attention by different stakeholders. Studies have shown spiritual intelligence is the most important direct contributory factors while emotional intelligence and parent-peer attachment are indirect contributing factors to cognitive emotion regulation strategy and adolescent social behavior. All of these variables need to be exposed to knowledge and skills through various programs. Therefore, the policy makers such as the Ministry of Education should take proactive steps in designing intervention programs and providing efficient services so adolescents can practise relevant knowledge and apply it in their daily lives. The ministry should review the policies, priorities and curriculum content in the relevant subjects so that this knowledge can be passed on to the adolescents before the advanced program is implemented. Aside from the practical application of the teaching and learning process, meaningful activities within the co-curriculum could also support and reinforce

this knowledge. The ministry needs to reflect on what programs are being implemented through studies, actions or views from experts that can lead to continuous changes in adolescent social behavior. For family, every married couple needs to be equipped with the knowledge and skills of parenting so when they face the problems, they will be able to add value to the relationship between parents and children. Good and meaningful relationships need to be established by parents so that children receive adequate care and love.

Suggestion

The model generated from this study can serve as a basis for further research related to the issue of cognitive emotion regulation strategy and adolescent social behavior. Future studies may use experimental methods through interventions to identify the effects and consequences of using cognitive emotion regulation strategy in expressing individual social behavior. Contributions of other variables such as teachers, community leaders, and the community may be able to influence adolescent social behavior. Among other methods that may enhance the findings includes using a qualitative approach through structured interviewing methods to develop deeper information into adolescent behavior experiences; longitudinal studies may also be able to provide input on the relationship between variables from childhood to early adolescence through observation, interview and document analysis.

This study is limited to intelligence and revenue factors. It is suggested future studies may focus on demographic backgrounds such as gender, socioeconomic status, parental education status and geographical factors such as urban and rural areas as culture and environment may play an important role in social behavior problems among adolescents. Future studies may also consider personality factors and self-efficacy as well as self-esteem as psychosocial factors in adolescents' cognitive emotion regulation strategy and social behavior. The population of this study is also limited to adolescents in the secondary schools throughout Malaysia. It is recommended that adolescent samples be taken from behavioral rehabilitation centers or among juvenile detainees in prison. The sampling method can be performed either randomly or just as a sample. Those from rehabilitation centers have been identified to have committed a serious types of misconduct and not just a self- reports. In addition future studies can also look at aspects of individual internalizing problems such as depression, anxiety, stress and others in studying their current cognitive emotion regulation strategy used through their first-hand experiences of dealing with negative situations without ignoring positive aspects such as happiness, laughs among others.

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School Readiness, Cognitive, and Language Abilities of Six 6-Year-Old Malay Children with Cochlear Implants: A Case Series

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ABSTRACT

Cochlear implant is an electronic medical device that helps to restore hearing in children and adults with sensorineural hearing loss by replacing the function of the damaged parts of the cochlea and electrically providing sound signals to the brain. For school-aged children, the ability to hear is crucial as it enables them to acquire school readiness skills that are vital to their learning in mainstream schools alongside normal hearing children. This study described the school readiness of six 6-year-old Malay children with cochlear implants together with their cognitive and language abilities prior to their school entry. The school readiness of the children with cochlear implants was rated by their parents based on the Year One School Readiness Scale. Their cognitive abilities were measured using the Comprehensive Test of Nonverbal Intelligence, Second Edition (CTONI-2) while their language abilities were determined using the Malay Preschool Language Assessment Tool (MPLAT), the

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Malay Language Assessment, Remediation, and Screening Procedure (Malay-LARSP), and the Multilingual Phonological Test (MPT). All findings were compared with the normative values obtained from same-aged normal hearing children. Results determined that 5 of 6 children with cochlear implants were not ready for mainstream school, 4 of 6 children with cochlear implants had cognitive abilities that were below average of developmental norms, and all 6 children with cochlear implants had language abilities that were not commensurable with their chronological age.

INTRODUCTION

Cochlear implant is an electronic hearing device that could help alleviate sensorineural hearing loss in children by replacing the function of the damaged parts of the cochlea and electrically transmitting sound signals to the brain (Justice et al., 2009). By restoring their ability to sense sounds, the device in turn helps the children to acquire language skills (Chang, 2017). It was found that prelingual hearing-impaired infants who were at certain levels of deprivation of auditory input had longer detection time and less interest to speech stimuli compared to normal hearing infants (Jusczyk & Luce, 2002). By not paying attention to the ordering of speech sounds of the language, a hearing-impaired infant may not be able to develop normal sensitivities to language-specific properties such as phonotactic and rhythmic cues, thus is unable to segment words from fluent speech and acquire vocabulary like a normal hearing infant could. Attention to sound stimuli is therefore a prerequisite in the acquisition of language in children (Houston et al., 2003).

Early detection of hearing loss and implantation of cochlear implants, among other factors, are strongly associated with improved speech and language performance in deaf children (Meinzen-Derr et al., 2010). Several studies reported children who received cochlear implants by 24 months of age exhibited good spoken language outcomes (Spiric et al., 2016; Suh et al., 2009) and were likely to catch up academically to their hearing peers in school (Nicholas & Geers, 2007). Early detection of hearing loss is key as the earlier the cochlear implantation, the more likely it is for children to be school-ready and to make a successful transition into the mainstream education system (Nicholas & Geers, 2007).

School readiness is a multi-dimensional concept that measures the preparedness of a child cognitively, socially, and emotionally to adapt and thrive in school settings (Sabol & Pianta, 2017). It is measured through five distinct domains, which are physical well-being and appropriate motor development, emotional health and a positive approach to new experiences, age-appropriate social knowledge and competence, age-appropriate language skills, and age-appropriate general knowledge and cognitive skills (Janus & Offord, 2007). In the context of formal education, children would need to be

equipped with basic literacy and numeracy skills in order to be considered school-ready (Wei & Hutagalung, 2014). The relationship between literacy skills and language skills are reciprocal as the engagement in literacy activities require a metalinguistic focus central to oral or written language (Justice, 2005). Similarly, language development is integral to the development of number representations and consequently in the learning of numeracy skills (Spaepen et al., 2011). These findings implicated the importance of language skills for children to develop other fundamental skills for school readiness.

In a study by Umat et al. (2018), children with cochlear implants were found to perform significantly lower in overall school readiness compared to their hearing peers and were rated to perform '*below average*' in the domains of civic, language and communication, and academic. The poor school readiness skills were expected as the children were implanted late at the mean age of 29.9 months. Similarly, Harrington et al. (2010) found that children who were implanted at the relatively late age of 24.3 months did not demonstrate the school readiness level expected of their chronological age. The poor school readiness of children with cochlear implants could be explained through the developmental psychobiological approach model, which suggested the children have not obtained the necessary self-regulation abilities to allow them to effectively engage in learning activities in school (Blair & Raver, 2015). These self-regulation abilities are embodied

in, but not limited to, a child's ability to focus and maintain attention, regulate emotion and stress physiology, reflect on information and experience, and engage in sustained positive interactions with teachers and peers.

Cupples et al. (2018) noted there was a large degree of variability and individual factors in the success rate of children with cochlear implants in the acquisition of speech and language leading to school readiness. For one, the study determined the use of oral language and higher cognitive ability levels were indicative of higher language outcomes. Along with poor language skills, Umat et al. (2018) stated children with cochlear implants showed poor academic abilities. Furnham et al. (2009) deduced the biggest contributor to academic outcomes of school children was their cognitive abilities. This was substantiated by findings that cognitive abilities largely contributed to the school readiness skills of young children (Harrington et al., 2010). Mukari et al. (2007) reported while most Malaysian children with cochlear implants were enrolled into mainstream schools, the placements were not necessarily appropriate as they showed relatively poor academic performance. Thus, this present study aimed to report on the school readiness together with the cognitive and language abilities of children with cochlear implants at school-entry age through a case series of six 6-year-old Malay children with cochlear implants. Due to their late age of implantation, it was hypothesized the children in this study would not perform

up to par with their hearing peers in overall school readiness, cognitive, and language skills. The evidence could be used to push for the implementation of policy for early implantation and intervention of deaf children in Malaysia in order to maximize their potential in school and beyond.

Purpose of Study

Malaysia has documented a sizable number of cochlear implantation from two of its largest cochlear implant programmes, the Universiti Kebangsaan Malaysia (UKM) Cochlear Implant Programme (n=410) (Goh et al., 2018) and the National Cochlear Implant Programme under the Malaysian Ministry of Health (n=205) (Malaysian Ministry of Health, 2017). The average age of cochlear implantation of patients from the two programmes were relatively late at 39.8 months (Goh et al., 2018) and 41.5 months (Yusoff et al., 2017) respectively. Similarly, the children with CI in this study had a late average age of cochlear implantation at 39.8 months. It is important to report on the outcomes of the children with CI from this late age of cochlear implantation in hope of providing better insight to healthcare professionals in designing appropriate intervention strategies to help these children achieve optimum academic performance in school. To date, there are very few published studies in Malaysia reporting on the outcomes of patients post cochlear implantation, with only one study reporting on mainstream school readiness of paediatric cochlear implant recipients

in Malaysia (Umat et al., 2018). This study adds on to the previous study by describing the school readiness together with the cognitive abilities and language abilities of six 6-year-old hearing-impaired Malay children with cochlear implants (CI) as compared to the normative data of same-aged normal hearing (NH) children.

MATERIALS AND METHODS

Research Design

This study employed the qualitative research design through descriptive case series reporting on the school readiness, cognitive abilities, and language abilities of six 6-year-old Malay children with CI.

Subjects

A total of six 6-year-old Malay children with CI and their respective parents were involved in the study. The children with CI were selected from the UKM and National CI Programmes based on five inclusion criteria: they need to be 1) 6 years old in 2017; 2) attending the final year of preschool in 2017; 3) of Malay ethnicity and the Malay language is their native language; 4) prelingually deaf prior to cochlear implantation; and 5) free from additional disabilities. Based on the inclusion criteria, 11 children with CI were invited to participate in the study but only six were consented by their respective parents to participate. Their age of cochlear implantation (the age between chronological date of birth and age during switch-on of CI) ranged from 2;1 (years;months) to 5;7

(Mean=39.83 months, SD=18.39 months). Table 1 reports the demographics of the six children with CI.

Research Instruments

Year One School Readiness Scale (Majzub, 2009). The school readiness of the children with CI was rated by their respective parents using the Year One School Readiness Scale. The questionnaire assesses respondents' perception on the different domains of school readiness (A=academic, B=socio-emotional, C=gross motor abilities, D=fine motor abilities, E=self-help skills, F=language and communication, G=moral, H=aesthetic and creativity, and I=civic). The overall alpha value obtained for all domains of school readiness based on the sampling of 380 6–year-old NH children was very high at 0.96. This makes the questionnaire a reliable tool to gauge the school readiness of Malaysian children who are entering their first primary school year. The mean overall school readiness of each child with CI in this study was compared with the mean of the normative 380 6-year-old NH children. From the normative data, the following four categories were computed as benchmark for school readiness: '*not prepared*' (<25th percentile, Mean=<3.77), '*moderately prepared*' (25th to 50th percentile, Mean=3.77-4.24), '*prepared*' (51st to 75th percentile, Mean=4.25-4.68), and '*very prepared*' (>75th percentile, Mean=>4.68).

Table 1

Demographics of the six 6-year-old Malay children with CI

Subject	Gender	Chronological age (y;m)	Age of CI implantation (y;m)	Hearing age (y;m)	Type of CI fitting	Radiological findings
CI_1	Female	5;10	2;4	3;6	Unilateral	Normal
CI_2	Female	6;3	2;10	3;4	Bilateral	Normal
CI_3	Female	6;7	2;1	4;6	Bimodal	Normal
CI_4	Male	5;11	4;11	1;0	Bimodal	Bilateral cochlear anomaly and large endolymphatic sac
CI_5	Male	6;4	5;7	0;9	Bimodal	Large vestibular aqueduct
CI_6	Male	6;8	2;2	4;5	Bilateral	Normal

Footnote: (y;m)=(years;months)

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Comprehensive Test of Nonverbal Intelligence, 2nd Edition (CTONI-2) (Hammill et al., 2009). CTONI-2 was used to assess the cognitive abilities of the children with CI. The test uses nonverbal formats to measure the reasoning and problem solving skills of children and adults aged between 6 to 89 years old. CTONI-2 consists of six subtests, namely Pictorial Analogies (PA), Geometric Analogies (GA), Pictorial Categories (PC), Geometric Categories (GC), Pictorial Sequences (PS), and Geometric Sequences (GS). The tool measures analogical reasoning, categorical classification, and sequencing reasoning skills using picture stimuli. The CTONI-2 has demonstrated adequate reliability for individuals aged 6 years old. The present study utilized age-normed composite scores (M=100, SD=15) comprised of all six subtests (r=0.88 to 0.91) as a measure of nonverbal intelligence. The raw scores obtained at the end of all the six subtests of CTONI-2 were converted to sum of scaled scores and composite indexes based on the normative data of their chronological age group. The composite indexes served as the reference data for analysis and were compared to the following normative values of the age range 6;0 to 6;11: <70 ('*very poor*'), 70-79 ('*poor*'), 80-89 ('*below average*'), 90-110 ('*average*'), 111-120 ('*above average*'), 121-130 ('*superior*'), and >130 ('*very superior*'). A standard score of 2 SD below norm is considered developmentally of concern.

Malay Preschool Language Assessment Tool (MPLAT) (Razak et al., 2014). MPLAT is designed to measure the receptive and expressive use of language among preschool children of age 4;0 to 6;11. The test consists of five subtests: Picture Vocabulary (PV) and Grammatical Understanding (GU) to measure receptive language abilities; Referential Meaning (RefM), Relational Meaning (RelM), and Sentence Repetition (SR) to assess expressive language abilities. Three of the subtests (SR, GU, and RelM) had ceiling level score whereby ceiling effect is reached after five consecutive wrong responses or no response, after which the tests were immediately halted. Initial reliability measures were determined through the test-retest scores of MPLAT on a total of 101 typically developing children in the Klang Valley. The test-retest scores for subtests RefM, RelM, and SR showed high correlation coefficients of >0.80 while the PV and GU subtests showed acceptable reliability values of 0.78 and 0.77 respectively. The standard scores obtained from the children with CI were analysed based on the normative data of NH children (Mean=20, SD=4). A standard score of 2 SD below norm is considered developmentally of concern.

Malay Language Assessment, Remediation, and Screening Procedure (Malay-LARSP) (Razak et al., 2016). Malay-LARSP was used to produce language profiles based on spontaneous speech of the children with CI in free

conversations. It provides a comprehensive description of grammatical skills at the sentence, phrase, and word level. The extracted combinations were then profiled based on the various developmental stages of syntactic acquisition: stage 1 (one-word utterance level), stage 2 (two-word utterance level), stage 3 (three-word utterance level), stage 4 (4-word utterance level), stage 5 (inter-sentence level through the use of coordination, subordination, and embedding processes), stage 6 (complexity/error tabulation), and stage 7 (discourse level). Also, their mean length of utterance (MLU) was calculated. In this study, the Cohen's kappa inter-rater reliability on the analysis by the main researcher and two speech therapists who have had extensive experience with the assessment were very high at 0.85 and 0.88 respectively. The reliability scores indicated an almost perfect agreement (McHugh, 2012).

Multilingual Phonological Test (MPT) (Lim, 2010). MPT was used to assess the phonological development through consonant inventory of the children with CI. All 19 original Malay consonant sounds were tested at least once in the three positions within the word: initial, medial, and final. The test consists of 26-word items and five repeated word items to test for intra-word consistency of production. The overall production was scored using the formula for percentage of consonants correct [PCC = (Total consonants correct / total number of consonants) x 100]. Also, the stages of lexical acquisition, consistency

of intra-word production, and inventory of consonants acquired by the children with CI were determined. The Cohen's kappa inter-rater reliability scores of the MPT analysis obtained in this study were very high at 0.85 and 0.92.

RESULTS

Year One School Readiness Scale

From the normative data of the questionnaire, it was determined only 25% (n=95) of the NH children were '*not prepared*' for mainstream school. As for the remainder of the NH children, 25.3% (n=96) were '*moderately prepared*', 11% (n=42) were '*prepared*', and 38.7% (n=147) were '*very prepared*'. In contrast, five of the six children with CI in this study were rated by their parents as '*not prepared*', which meant 83.3% of the study sample were not ready for mainstream schools. Only one child with CI (CI_6) was found to have achieved school readiness and was rated as '*prepared*'. Table 2 reports the school readiness scores of each of the six children with CI based on the normative cut-off scores of the NH children.

The majority of the children with CI were rated by their parents to be below the lower quartile (<25th percentile) in the domains of academic (5 out of 6), language and communication (5 out of 6), and civic (6 out of 6). Of the nine domains, CI_1 and CI_4 were rated to perform below the 25th percentile in four domains, CI_3 in five domains, CI_2 and CI_5 in seven domains, while CI_6 only in two domains. The individual performances of all six children

Table 2

The school readiness of the six 6-year-old Malay children with CI

Subject	School readiness scores [Mean (SD)]	Not prepared (<3.77)	Moderately prepared (3.77-4.24)	Prepared (4.25-4.68)	Very prepared (>4.68)
CI_1	3.19 (0.96)	✓	-	-	-
CI_2	3.16 (0.63)	✓	-	-	-
CI_3	3.66 (0.81)	✓	-	-	-
CI_4	3.68 (0.83)	✓	-	-	-
CI_5	3.15 (0.54)	✓	-	-	-
CI_6	4.25 (0.50)	-	-	✓	-
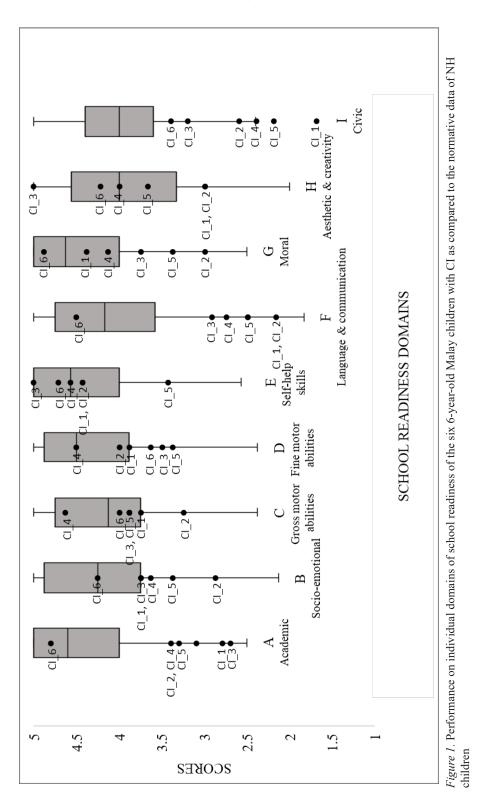
with CI on each domain of school readiness are reported in the boxplots in Figure 1.

Further analysis using Pearson's correlation coefficient (r) indicated the correlation between domain A (academic) and overall school readiness of the NH children was strong and positive (r=0.84, p<0.001). The large effect size (r^2) of 0.71 showed 70.6% of the variability in the NH children's overall school readiness can be predicted by the variability in their academic scores (domain A). Similarly, the correlation between domain F (language and communication) and overall school readiness of NH children was strong and positive (r=0.90, p<0.001). The large r^2 of 0.81 indicated 81% of the variability of NH children's overall school readiness could be predicted by the variability in their language scores (domain F).

For children with CI, domain A and overall school readiness indicated a non-significant correlation (r=0.73, p=0.10). There is however a strong and positive correlation between domain F and overall school readiness (r=0.93, p=0.007) with a large r^2 of 0.87. This indicated 86.5% of the variability in overall school readiness of children with CI could be predicted by the variability in their language scores (domain F).

CTONI-2

Analysis of CTONI-2 scores of the children with CI based on the normative age group 6;0 to 6;11 indicated two of them (CI_1 and CI_3) were in the range of '*poor*' nonverbal intelligence and another two (CI_4 and CI_5) were '*below average*'. Two children with CI were within or above the normal range for the same age group, with CI_2 being in the '*average*' nonverbal intelligence range and CI_6 in the '*above average*' range. The findings indicated four of six children with CI had nonverbal intelligence that did not commensurate with their chronological age. Despite the below average performance, none of the four children with CI demonstrated performance that was 2 SD below norm, clearing them

Figure 1. Performance on individual domains of school readiness of the six 6-year-old Malay children with CI as compared to the normative data of NH children

of developmental delay (Harvill, 1991). Figure 2 below illustrates the nonverbal intelligence level of each of the six children with CI.
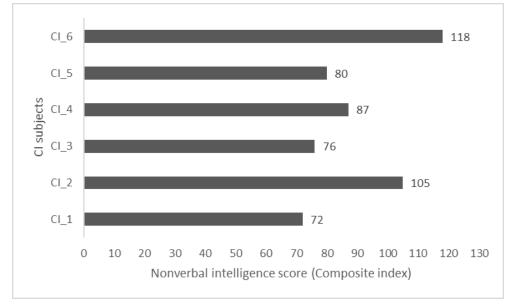
Figure 2. Nonverbal intelligence scores of the six 6-year-old Malay children with CI

Footnotes: Range of composite index and their corresponding descriptive nonverbal IQ terms (Hammill et al., 2009); <70=*very poor,* 70-79=*poor,* 80-89=*below average,* 90-110=*average,* 111-120=*above average,* 121-130=*superior,* >130=*very superior.*

MPLAT

Findings in MPLAT determined three of the children with CI (CI_2, CI_3, and CI_5) performed below the minimum range of the language age 4;0-4;5 while two (CI_1 and CI_4) were within the range of scores for the same age group, and one child (CI_6) performed above mean for the language age of 5;6-5;11. The children with CI showed better performance in their receptive language skills compared to their expressive language skills (refer to Figure 3). However, only CI_3 was presented to have delayed receptive language (over 2 SD below mean) while five of the six children

with CI, except for CI_1, showed delayed expressive language abilities based on their respective language age groups (Razak et al., 2014). Overall, the language abilities of the six children with CI were considered to be delayed as they did not perform as expected of their chronological age.

Malay-LARSP

Language samples collected from five of the six children with CI (CI_1, CI_2, CI_4, CI_5, and CI_6) were analysed and described based on the stages of Malay-LARSP. CI_3 produced only two impromptu utterances and was thus excluded from the assessment
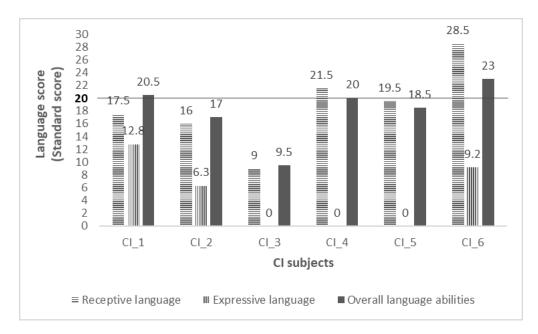
Figure 3. Standard scores of receptive, expressive, and overall language performance of the six 6-year-old Malay children with CI in MPLAT

Keynotes:

1. Receptive language [Picture Vocabulary (PV) and Grammatical Understanding (GU)]
2. Expressive language [Sentence Repetition (SR), Referential Meaning (RefM), and Relational Meaning (RelM)]

Footnotes:

1. CI_1 to CI_5: Based on the normative data of language age 4;0 to 4;5
2. CI_6: Based on the normative data of language age 5;6 to 5;11
3. Normative average for all language age groups is the standard score of 20, SD=4 (Razak et al., 2014)
4. Standard score of zero is given when the child could not answer any of the three tests for expressive language before reaching the ceiling effect. This result, however, does not indicate the absence of expressive language in the child as MPLAT tests pre-selected language structures of children within the age range of 4;0 to 6;11. This indicated that CI_3, CI_4, and CI_5 might have had expressive language abilities that were below the age of 4;0

as a minimum of 50 utterances is required for a representative language sample (Boehm et al., 2005). The expressive language of CI_2, CI_4, and CI_5 corresponded to the language age of 1;0 to 2;2 (Brown, 1973) and their utterances were most dominant in stage I. This corresponded to their MLU of 1.78, 1.41, and 1.41 respectively. They however could not produce complex sentence structures through the expansion of

phrases. They also demonstrated errors such as omission and order reversal of elements. Of the three children with CI, CI_2 made the most error [omission (n=6) and order reversal (n=2)] compared to CI_4 [omission (n=1)] and CI_5 [omission (n=2)]. This indicated CI_2 might be actively combining elements to produce longer sentences, which explained why the child's MLU was higher than that of CI_4 and CI_5.

CI_1 and CI_6 had higher expressive language frequency that corresponded to the age range of 2;3 to 2;6 and 2;11 to 3;4 respectively. CI_1 produced utterances with highest concentration in stages I and II. The child was also able to produce expansion of phrases at stage III (n=5) and at stage IV (n=3), and also produced errors [omission (n=5) and order reversal (n=7)], which

contributed to the high MLU of 2.33. On the other hand, CI_6 produced utterances with highest concentration in stages II and III. The child was also able to produce expansion of phrases at stage III (n=8) and complex structures at stage IV (n=2). CI_6 also produced many errors in utterances [omission (n=10) and order reversal (n=3)]. These activities contributed to CI_6's high MLU of 3.21. One common finding across all the five language samples was the omission of words by the children with CI in their utterances. This indicated the limited and small vocabulary inventory, as well as the possibility of slow vocabulary growth amongst the children with CI. Table 3 below describes the findings of Malay-LARSP based on the respective language samples of the five children with CI.

Table 3

Malay-LARSP findings of the five 6-year-old Malay children with CI

Subject	CI_1	CI_2	CI_4	CI_5	CI_6
Syntactic stages of utterances produced (%)	Stage I (30.1%)	Stage I (49.3%)	Stage I (66.4%)	Stage I (59.3%)	Stage I (15.7%)
	Stage II (45.9%)	Stage II (28.2%)	Stage II (16.4%)	Stage II (18.6%)	Stage II (48.7%)
	Stage III (14.3%)	Stage III (11.9%)	Stage III (9.1%)	Stage III (18.6%)	Stage III (25.1%)
	Stage IV (9.7%)	Stage IV (10.6%)	Stage IV (6.4%)	Stage IV (3.5%)	Stage IV (6.8%)
			Stage V (1.7%)		Stage V (3.7%)

Table 3 *(Continued)*

Subject	CI_1	CI_2	CI_4	CI_5	CI_6
Expansion of phrases (n)	Stage III: X+V:VP (4) X+A:AP (1)	None	None	None	Stage III: X+S:NP (4) X+V:VP (1) X+O:NP (1) X+A:AP (2)
	Stage IV: XY+O:NP (1) XY+A:AP (2)				Stage IV: XY+V:VP (1) XY+A:AP (1)
Errors made (n)	Ø (5) ↔ (7)	Ø (6) ↔ (2)	Ø (1)	Ø (2)	Ø (10) ↔ (3)
MLU	2.33	1.78	1.41	1.41	3.21
Highest concentration of structures	Stage II (2;3 to 2;6)	Stage I (1;0 to 2;2)	Stage I (1;0 to 2;2)	Stage I (1;0 to 2;2)	Stage III (2;11 to 3;4)

Footnotes:
1. X+V:VP=Element + Verb: Verb Phrase
2. X+A:AP=Element + Adverb: Adverb Phrase
3. X+S: NP=Element + Subject: Noun Phrase
4. X+O: NP=Element + Object: Noun Phrase
5. XY+O: NP=Elements + Object: Noun Phrase
6. XY+A: AP=Elements + Adverb: Adverb Phrase
7. XY+V: VP=Elements + Verb: Verb Phrase
8. Ø=Omission of elements
9. ↔=Order reversal of elements

MPT

Analysis of findings in MPT determined all of the children with CI scored less than 94.2% of consonants correct, which was below the average percentage expected of children aged 4;0 and above (Lim, 2010). Only one child with CI (CI_6) scored near the average of the age group, with 93.6% of consonants correct. Similarly, only CI_6 was found to have acquired all 19 Malay consonant sounds. The remaining five children with CI had yet to fully acquire all the consonant sounds, indicating they had delayed phonological inventories as all the sounds were supposed to be acquired by the age of 4;0 to 4;5 (Lim, 2010). Table 4 below reports the PCC and the corresponding degree of severity, intra-word production consistency, and acquired and missing consonant sounds of each of the six children with CI.

Table 4

MPT findings of the six 6-year-old Malay children with CI

Subject	CI_1	CI_2	CI_3	CI_4	CI_5	CI_6
PCC	61.3%	46.8%	8.1%	75.8%	51.6%	93.6%
*Degree of severity	Moderate-severe	Severe	Severe	Mild-moderate	Moderate-severe	Mild
Intra-word production consistency	3/5	2/5	3/5	4/5	3/5	5/5
Acquired consonants	p, b, t, d, ʔ, t͡ʃ, d͡ʒ, m, n, ɲ, ŋ, l, w, j	p, b, t, d, ʔ, s, h, t͡ʃ, m, n, ɲ, ŋ, l, r, w, j	h, t͡ʃ, m	p, b, t, d, k, g, ʔ, h, t͡ʃ, d͡ʒ, m, n, ɲ, ŋ, l, r, w, j	p, b, t, d, g, ʔ, t͡ʃ, d͡ʒ, m, n, ɲ, l, w, j	p, b, t, d, k, g, ʔ, s, h, t͡ʃ, d͡ʒ, m, n, ɲ, ŋ, l, r, w, j
Missing consonants	k, g, s, h, r	k, g, d͡ʒ	p, b, t, d, k, g, ʔ, s, d͡ʒ, n, ɲ, ŋ, l, r, w, j	s	k, s, h, ŋ, r	None

Footnotes:

*Degrees of severity based on PCC index values (Wertzner et al., 2005):

1. Mild (>85%)
2. Mild-moderate (85% to 65%)
3. Moderate-severe (50% to 65%)
4. Severe (<50%)

Triangulation of Results from Cognitive and Language Assessments

CI_6 consistently performed the best out of the six children with CI in all language assessments. The child performed above mean of the language age 5;6 to 5;11 in MPLAT with the standard score of 23, which was better than expected of the child's hearing age of 4;5 and only about a year delayed from the child's chronological age of 6;8. CI_6 also had the highest MLU of 3.21 in Malay-LARSP and the child was able to produce complex utterances as part of developing language repertoire. CI_6's relatively good language performance could be explained through MPT results which determined the child had a complete speech sound inventory and obtained an acceptable PCC of 93.6%. Like the child's language scores, CI_6 obtained the highest cognitive score among the six children (composite index=118). The score indicated the child's nonverbal intelligence was '*above average*' based on his age group. In contrast, CI_3 showed the second poorest cognitive score (composite index=76) and was categorically

under the '*poor*' range of the same age group. Furthermore, CI_3 obtained the lowest scores on the language assessments, performing significantly below the age of 4;0 to 4;5 in MPLAT with the standard score of 9.5. This indicated a performance that was delayed based on both the child's hearing age of 4;6 and chronological age of 6;7. Malay-LARSP analysis could not be completed for CI_3 due to limited expressive language and the child's MPT results confirmed a low PCC of 8.1% and a low speech sound inventory as the child had yet to acquire most of the consonant sounds, limiting the child's vocabulary production.

CI_1 and CI_4 obtained similar standard scores of 20.5 and 20 respectively, which were within mean of the language age 4;0 to 4;5 in MPLAT. Their findings in Malay-LARSP however varied as CI_1 obtained a higher MLU of 2.33 compared to CI_4's 1.41, which was due to CI_1's ability to produce complex sentence structures. While the language performance was below expected of their chronological age of 5;10 (CI_1) and 5;11 (CI_4), they performed better than expected of their hearing age of 3;6 (CI_1) and 1;0 (CI_4). Both CI_1 and CI_4 had obtained most of the speech sounds but the incomplete inventory resulted in their low PCC of 61.3% and 75.8% respectively. Despite the similar language scores, CI_1 and CI_4 showed differing cognitive performances. CI_4 who was categorized under the '*below average*' cognitive range (composite index=87) performed better than CI_1 under the '*poor*' range (composite index=72). Both their scores ultimately indicated the cognitive performance of below average of their age group, but are not developmentally delayed.

CI_2 and CI_5 performed about 1 SD below mean of age group 4;0 to 4;5 in MPLAT with the standard scores of 17 and 18.5 respectively, which were indicative of their respective hearing ages of 3;4 (CI_2) and 0;9 (CI_5). Their performance was however delayed from their chronological age of 6;3 (CI_2) and 6;4 (CI_5). Their performance in Malay-LARSP was also similar with the MLU of 1.78 (CI_2) and 1.41 (CI_5). The low MLU was the result of their incomplete speech sound inventory and low PCC of 46.8% (CI_2) and 51.6% (CI_5), inhibiting them from forming larger number of words and longer sentences. Their cognitive scores however indicated different performances. CI_2 obtained the second highest score (composite index=105) among the children and was categorically under the '*average*' range of nonverbal intelligence. On the other hand, CI_5 obtained '*below average*' score (composite index=80) and was categorically under the '*below average*' range of the same age group.

DISCUSSION

Findings showed five of the six 6-year-old Malay children with CI in this study were rated by their parents to be not prepared to enrol into mainstream schools. Their poor scores on overall school readiness were attributed to their poor performance (below 25th percentile of normative data) in skills required for them to thrive in mainstream education setting. In contrast, Majzub and

Rashid (2012) found there were generally high levels of school readiness in typically-developing NH children. This indicated that at six years old, the NH children had obtained the necessary self-regulation abilities that allowed them to effectively engage in learning activities, which were pivotal to the adjustment into mainstream schools (Blair & Raver, 2015). Umat et al. (2018) found that compared to NH children, hearing-impaired children had less optimum auditory experience, which might have negatively impacted their self-regulation abilities at biological and behavioural levels. This consequently affects their overall readiness to school, as evidenced in this study. Parents of the five children with CI felt that their children had yet to acquire all the important skills underlying school readiness, resulting in them being rated as unprepared. CI_6 on the other hand, was rated to show commensurable performance with NH peers in most of the domains, which was why the child was deemed ready to be placed in mainstream schools alongside normal hearing peers.

Findings of cognitive abilities determined two of the six children with CI performed comparably to NH peers aged 6;0 to 6;11. This is consistent with findings in literature that children with prelingual deafness showed age-typical level of performance on nonverbal cognitive tasks (Cejas et al., 2018; Karpicke et al., 2011; Lee et al., 2015) as the tests measure skills such as perceptual organization, abstract reasoning, and problem solving without the influence of the children's language

abilities or lack thereof (Barbosa et al., 2013). In contrast to the previous studies, four of the six children with CI in this study had nonverbal intelligence scores that did not commensurate with their chronological age. Even though below average of their age group, their cognitive scores were not developmentally of concern as all the scores were not more than 2 SD below norm of the age group. Emmett et al. (2015) suggested demographic and socioeconomic factors were strongly associated with higher nonverbal intelligence scores in hearing-impaired children. Unique child factors, such as genetic, environmental, and lifestyle factors (Oommen, 2014) could have influenced the varied outcome of cognitive performance of the children with CI. This could explain why a significant association was not established between domain A (academic), which was the biggest contributor to cognitive abilities (Furnham et al., 2009), and overall school readiness of the children with CI in this study (r=0.73, p=0.10). It is therefore imperative the assessment of nonverbal cognitive abilities is not carried out in isolation to the demographic and socioeconomic variables in hearing-impaired children with CI.

Findings of language assessments determined all six children with CI did not demonstrate language performance that was commensurable with their chronological age. Bavelier et al. (2008) attributed the relatively poor language performance in hearing-impaired children to the delayed development of their vocabulary, which was why children were encouraged to build

on their vocabulary inventory in order to increase the likeliness of successful integration into school (Weitzman & Greenberg, 2010). Khoramian and Soleymani (2018) stated the development of vocabulary was directly linked to components of the Baddeley and Hitch's (1974) working memory model, specifically the central executive and phonological loop. The central executive controls all attention and processing activities and regulates the flow of information in the processing system while the phonological loop is involved in the temporary storage of phonological memory codes. Young children were found to exhibit a dramatic increase in their ability to remember phonological information, which was attributed to the increase in their working memory capacity and its processing efficiency, resulting in dramatic improvements in their speech and language skills (Cowan et al., 2012). The abilities however decline with age. In this study, all the six children with CI had missed the early opportunity for normal language learning as they were implanted relatively late and only started hearing after the age of 2;0 (Nicholas & Geers, 2007). It is therefore suggested their below-average language performance might stem from their shorter memory spans leading to slower vocabulary growth as compared to age-matched typically developing children (Pisoni & Cleary, 2003).

The Malay-LARSP profiles of the children with CI evidenced their low vocabulary repertoire, inhibiting them from forming longer sentences. They produced mostly utterances in stages I and II when they should be producing utterances at stage V at their age (Brown, 1973). The lack of vocabulary was further explained through their performance in MPT whereby all of them produced PCC below the normal percentage of 94.2% for children aged 4;0 and above (Lim, 2010). The finding suggested weak phonological awareness had resulted in the children's difficulty to learn vocabulary (Baddeley & Gathercole, 1990). Weaknesses in phonological awareness have been similarly described in previous literature as a basis for weak vocabulary skills in children (Estes & Bowen, 2013; Hu & Schuele, 2005; Ravenska & Hidajat, 2011). Phonological awareness is defined as the sensitivity to the unit of sound of oral language, including the awareness of sentences, words, syllables, and phonemes (Ziolkowski & Goldstein, 2015). Phonological awareness is central to phonological acquisition and subsequently word learning in children (Carey & Bartlett, 1978; Grech & Dodd, 2008). Therefore, based on the low sound production correctness and the incomplete phonological acquisition of five of the children with CI in this study, their small vocabulary inventory was explained. The relatively commensurable performance of CI_6 in MPT as compared to NH peers thus explained the child's ability to perform better than the other five children with CI in language assessments. This could have resulted in the child being rated as prepared for mainstream schools because good language skill is one of the key

indicators of a student's academic success and effective participation in class learning (Sprenger, 2013). The finding on the positive correlation between domain F (language and communication) and overall school readiness (r=0.93, p=0.007), as well as the large r^2 of 0.87 in this study further supported the predictability of children's performance in school through their language skills.

While slow vocabulary development due to late age of cochlear implantation has been determined to be the probable cause of weak language skills in the children with CI in this study, the basis of differing language skills could not be determined based on other demographics. For example, CI_2 and CI_6 were both bilaterally implanted with CI, yet showed very different language performances. Only CI_6's performance was consistent with the hypothesis that bilateral implantation is more beneficial in distinguishing words and sentences compared to unilateral implantation, leading to better language performance (Dunn et al., 2008). CI_2 even showed poorer language performance compared to CI_1 (unilateral user), as well as CI_4 and CI_5 (bimodal users). On the other hand, bimodal user CI_3 performed the lowest in the language assessments despite having been hearing the longest (4;6) out of the six children. This was inconsistent with the assumption that longer duration of hearing equates better language performance (Campos et al., 2018; Dunn et al., 2014). However, the assumption was found true for CI_6 and CI_1 who have been hearing for 4;5 and 3;6 respectively and were respectively the top

two performers in language assessments. Aside from that, there was no indication of a connection between hearing age and language performance. This was apparent with the similar performance of CI_1 (3;6) and CI_4 (1;0), as well as between CI_2 (3;4) and CI_5 (0;9). It was also noted CI_4 and CI_5 had abnormal radiological findings but a previous research has reported normal findings of speech perception in patients with inner ear malformations as the limitations were confined to the inner ear and did not affect the operation of the auditory nerve and central auditory pathway, which are vital to the functioning of CI (Wu et al., 2008). These findings suggested there are other underlying factors in the differing success rate of language learning in children with CI that should be considered in their language assessments.

Findings from this study suggest important implications for the inclusion of hearing-impaired children in mainstream school in Malaysia. First and foremost, school readiness screening should be made compulsory to preschool children with CI much prior to their first primary school year. This is to ensure those who are at high risk of possibly not performing in school could be identified for 'bridging' interventions as early as possible. Maluleke et al. (2019) found that deaf children who were identified late and consequently received delayed initiation of intervention, demonstrated poorer attention, communication abilities, concept knowledge, and early literacy skills compared to children who obtained intervention at earlier ages. As the optimum

age for the most rapid growth in children's self-regulation abilities is within birth to the age of five (Bates et al., 2006), it is suggested early intervention is carried out within this critical period. This suggestion goes hand in hand with the push for early cochlear implantation as ultimately, deaf children could only come to acquire other school readiness skills once the foundation for language is laid (Pace et al., 2018). Language findings from this study revealed the main problem area for the children with CI was their limited vocabulary, which manifested from their low speech sound inventory. Therefore, the planning of intervention modules and strategies for children with CI should focus on behavioural treatment of speech disorders, which include the practice of coordinating movements of oral structures (lips, tongue, and soft palate) to improve speech production (Williams et al., 2010). This will help them to increase their vocabulary repertoire as a basis to improve on their grammatical abilities and overall language abilities. With good language as a precursor for good academic abilities, the chances of the children with CI entering mainstream schools is further enhanced.

CONCLUSION

The majority of the children with CI in this study were found to have poor scores on school readiness skills and performed poorly in both their cognitive and language skills. While their cognitive abilities probably differed due to varying child factors, their poor language performance appeared to be due to issues in speech sound acquisition and consequently learning of vocabulary, which was hindered by their relatively late age of cochlear implantation. This detailed analyses of the language abilities of the six 6-year old Malay children with CI could shed some light at micro level on the difficulties faced by these children when enrolled into formal, mainstream education settings.

Limitations

One of the limitations faced in this study was the variation in the rating of school readiness by parents for the children with CI and by teachers for the normative data of NH children. Despite the high Cronbach's alpha value for ratings by parents in this study (0.96), Umat et al. (2018) explained there was poor inter-rater agreement between the two groups as teachers tended to rate their students lower than parents in their school readiness. However, teachers were found to be the most reliable evaluators of overall school readiness as they do not adopt strictly academic perception of school readiness, but rather view the model of readiness as self-regulation that facilitate teaching and learning activities in classrooms (Blair & Raver, 2015). This makes their rating an appropriate reference for a child's preparedness for school considering school readiness is a multi-faceted concept. Despite the strong reference point, results from this study must be taken with caution due to the possible discrepancy between the evaluation by teachers and by parents.

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Another limitation is the relatively small sample size of 6-year-old Malay children in this study. Despite having the children recruited from two of the largest CI programmes in Malaysia, only 11 children were determined and only six were later consented by their parents to join the study. Based on the quantity alone, this study could not be generalized to all 6-year-old Malay children with CI in Malaysia. The same limitation extends to the design of the study, which is the case study design. As case studies typically deal with individual cases that might not fit standard categories, there are concerns with external validity and generalizability of findings to the wider population. On top of that, qualitative studies such as this could not rely on statistical support to deduce findings and each case is analysed on an individual basis. This, again, brings about concerns of generalizability and the findings must therefore be interpreted with caution.

A limitation was also found in one of the three language assessments employed, the Malay Preschool Language Assessment Tool (MPLAT). Due to the high floor scores, three of the children with CI did not manage to score any of the expressive language subtests (RefM, RelM, and SR). The floor effect inferred the expressive language subtests might have been too difficult for the children with hearing loss whose expressive language was expected to be impaired. This was why MPLAT was supplemented with the expressive language test Malay-LARSP to yield a more accurate analysis of the expressive language performance of children with CI.

Suggestions for Future Research

One of the aspects that should be properly considered in studies involving children with CI is the heterogeneity of their background. In this study, CI_3 appeared to be an outlier in all the language assessments despite fulfilling the selection criteria to join the study, suggesting unique child factors, such as genetic, environmental, and lifestyle factors could have influenced the language outcomes of the children with CI. Therefore, it is strongly suggested future assessments on the abilities of hearing-impaired children with CI is carried out in consideration of potentially influencing demographic and socioeconomic variables.

A larger sample size is also highly suggested for future studies as it could provide more concrete evidence on the outcome of school readiness in hearing-impaired children that might not have been established in this study, such as the association between cognitive abilities and overall school readiness. With a large enough sample, statistical evidence could be generated to further strengthen the justifications of the findings on the abilities of children with CI.

Aside that, there also needs to be participants from varied racial backgrounds to allow for the generalizability of the findings to the general population. In this study, the inclusion criterion was to include only children of Malay ethnicity who spoke

Malay as a first language. The criterion was appropriate for this study as all three of the language assessment tools were specifically designed to assess structures of the Malay language. Further studies on participants of different ethnicities and languages using corresponding assessment tools are required to generate a better picture on the abilities of children with CI in Malaysia, which is a multi-cultural country.

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SOCIAL SCIENCES & HUMANITIES

Predictors of Parental Involvement in Malaysian Secondary Schools

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ABSTRACT

Past literature points to the fact that the extent of parental involvement in school increases the level of a child's ability and independence in studies during the child's schooling years. The present study investigated the predictors of parental involvement in selected regular secondary schools in Malaysia. The participants of the study were class teachers who had been teaching for more than two years, were selected from 40 schools located in Peninsular Malaysia. A cross-sectional and descriptive study using postal-based survey methods was conducted on a sample of 373 secondary school class teachers. Mediation analysis was conducted using the PROCESS macro with the aim of investigating the relationships between the variables. The findings revealed that the association between the role of creativity in principals' leadership practices and parental involvement in secondary schools was mediated by collaborative school practices and school climate. Further analysis revealed that the mediated model had a moderate effect on parental involvement in secondary schools. It is, therefore, necessary for secondary school leaders to consider and implement innovative programmes that take into account the important role of increasing parental involvement in the process of transformation.

Keywords: Collaborative, creativity, mediation analyses, parental involvement, principals' leadership, school climate, school practices

INTRODUCTION

Studies that looked more deeply into the development of children's education have found parental involvement as one of the most prominent indicators for school effectiveness (Đurišić & Bunijevac, 2017; Rutter & Maughan, 2002; Shannon & Blysma, 2007). The learning process is not only confined in the school, but it also takes place at home and in the community. To support parental involvement in school, school plays as an entity that provides a platform for parents to participate in education and establish conditions for transparency and accountability. This is in line with the aspirations contained in the Malaysia Blueprint 2013 -2025 (Ministry of Education, 2017). As a result, the issue of parental involvement has received considerable critical attention through establishing a positive impact between school and community relationships that creates cooperation and support system between each other to improve the quality of student and school.

Importantly, in view of Ministry of Education's initiatives, the current parental involvement initiatives such as *Sarana Sekolah* and *Sarana IbuBapa* in Malaysia are predetermined by the fact that the Ministry of Education of Malaysia aspires to culminate school-parents partnership by the year 2025 (Ministry of Education, 2014). However, there is a paucity of research on focusing strategies and approaches to involve parental involvement in secondary schools compared to primary schools in Malaysia. This is in-line with Vellymalay's

(2012) point of view that indicates that research studies on parental involvement are still inadequate to show the importance of parental involvement to guarantee a child's educational accomplishment. Additionally, in echoing Vellymalay's (2012) argument, Mahamud et al. (2018) indicated that the parental involvement in school activities was not active enough and this deficiency was due to the lack of adequate and proper sensitisation on the effect of parents' participation from management and other private interventions.

Therefore, the present study does so in the context of predicting parental involvement from teachers' perceptions in Malaysian secondary schools. Grounded on the System Theory and Overlapping Spheres Theory, this study attempts to offer empirical evidence on parental involvement in secondary schools. This research focuses on these issues and hopes the findings provide valuable insights to other schools and future studies in Malaysia with an aim towards expanding and improving parental involvement in secondary schools.

Objectives of the Study

The corresponding research questions are listed in the following:

1. Is there a significant relationship between the role of creativity in principals' leadership practices and parental involvement as perceived by class teachers in Malaysian secondary schools?

2. Is there a significant relationship between collaborative school

practices and parental involvement as perceived by class teachers in Malaysian secondary schools?

3. Is there a significant relationship between the role of creativity in principals' leadership practices and collaborative school practices as perceived by class teachers in Malaysian secondary schools?

4. Is there a significant relationship between school climate and parental involvement as perceived by class teachers in Malaysian secondary schools?

5. Is there a significant relationship between the role of creativity in principals' leadership practices and school climate as perceived by class teachers in Malaysian secondary schools?

6. Does the role of collaborative school practices mediate the relationship between the role of creativity in principals' leadership practices and parental involvement as perceived by class teachers in Malaysian secondary schools?

7. Does school climate mediate the relationship between the role of creativity in principals' leadership practices and parental involvement as perceived by class teachers in Malaysian secondary schools?

LITERATURE REVIEW

Parental Involvement

Parental involvement has been studied under various terms. The term is widely used synonymously as parental engagement, family engagement, parent-school involvement, family-school partnerships, and teacher-family partnerships among the educationist, theorists, and practitioners (e.g. Epstein et al., 2018; Povey et al., 2016). Similarly, some researchers labelled parental involvement as a home-school partnership, parents as partners, and parental participation (e.g. Ellis et al., 2013). The parental involvement term has also been extended to schools, families, and community partnerships to emphasise on the integration of these three influential contexts in every facet of the academic growth of the children (Epstein & Sheldon, 2019; Gálvez & Tarrés, 2017). Nevertheless, the significance of parental involvement in support of students of all ages has been widely acknowledged by numerous researchers, practitioners, and policymakers, no matter what type of terminology emanating from the literature (Povey et al., 2016; Sheldon & Turner-Vorbeck, 2019). In this study, parental involvement is referred to as the extent and nature of parental involvement in supporting students' success and collaboration actions in both formal and informal educational experiences of their child.

Role of Creativity in School Principals' Leadership Practices

Goertz (2000) claimed that "complex issues confronting school leaders today required leadership marked by high levels of creativity" (para. 2). Sağnak et al. (2015) mentioned that creativity and effective organisations were not linked naturally but

required a leader who was able to initiate and regulate the changes into resourceful form, and thus able to innovate and lead the transformation. In this study, the role of creativity in principals' leadership practices is seen as a leader who is capable to execute ideas, solutions, and solve problems to amplify the productivity and the growth of the school.

Increasingly, it is vital for school leaders to acquire the skills and abilities to lead stakeholders especially parents in catering towards the need for 21st-century education (Basadur, 2004; Botha, 2013; Kuan, 2012). A strong commitment from the school leader in resolving problems based on appropriate decision making and contributing to sustaining students' educational excellence (Ministry of Education, 2014). In this sense, Stoll and Temperley (2009) believed that creative leaders focused on seeing and doing things differently so as to improve the lives of each student as well as directing the school to a better prospect.

The tendency for parents to involve in school increases when schools initiate activities that encourage them to be involved (Epstein & Sheldon, 2019; Simon, 2017). Simon (2017) asserted that the involvement of parents both at school and at home depended on the role of the school principal in organising and executing the plans. It is the accountability of the principal to encourage strong partnerships among families, teachers, and students. Similarly, Goldring and Sims (2005) described creativity as an effort that needed to be deepened and nurtured by taking the courage to risk in executing some

of the resourceful solutions by bringing together the intellectual capital of the school and community resources to propel student attainment. Based on these claims, the researcher attempts to incorporate the role of creativity in school principals' leadership practices into the research framework to enhance parental involvement in secondary schools.

Collaborative School Practices

Gálvez and Tarrés (2017) referred to family-school collaboration as collaborative activities and strategies initiated by the schools and teachers to involve parents or families in assisting their children and other aspects of school improvement. Similarly, O'Hehir and Savelsberg (2014) pointed out that school efforts or practices were more likely to be cultivated in both at home and school when parents and schools worked together to facilitate a supportive learning environment for students. In this study, collaborative school practices are referred as the school's effort to address a meaningful parental involvement in the school system with mutual benefits to assist parents in their children's education. These six types of practices namely parenting, communicating, volunteering, learning at home, decision making, and collaboration with the community were developed by Epstein et al. (2018) are used to present various activities to mobilise resources and to provide parents with opportunities to involve in school.

In today's educational landscape, parental involvement requires the willingness

to share and build great relationships. This creates a beneficial partnership that involves constant communication between the school and home and the active participation of parents and communities in the development of strategic plans for school achievement and improvement (Ahmad et al., 2016; Mahamud et al., 2018; Krane & Klevan, 2019; Ramalingam et al., 2019; Yonson, 2016). Based on these claims, the researcher attempts to incorporate collaborative school practices in the research framework to enhance parental involvement in secondary schools.

School Climate

The concept of school climate is an effort to recognize the inner, anthropological side of the schools. School climate symbolises the eminence of the entire school community's experiences of school life which is silhouetted by the reflection of the norms, goals, values, teaching practices, interpersonal relationships, and physical surroundings, organisational structures (Cohen et al., 2009; Thapa et al., 2013). It provides a greater understanding of school organisations as it elucidates the vitality and dynamics of social and professional interactions between school administrators, school staff, teachers, students, parents, communities, and stakeholders (Bear et al., 2014; Cohen et al., 2009). In this study, school climate is referred as class teacher's perceptions related to the quality, flexibility, challenges, and uniqueness of the school environment tailored to school affairs and community.

A positive school climate has been a subject of voluminous reviews as students, staff members, and parents work together to create a positive, safe, supportive, and nurturing school environment (Cohen et al., 2009; Thapa et al., 2013), which contributes to improved social-emotional and academic outcomes among students (Berkowitz et al., 2017; Reynolds et al., 2017). Reflecting on this situation, there is a strong interest in studying school climate as a potent predictor towards parental involvement in secondary schools. Based on these claims, the researchers attempt to incorporate school climate in the research framework to enhance parental involvement in secondary schools.

Theoretical Perspectives

This study attempts to integrate a few theories by reflecting the development of thought on ways parental involvement can be encouraged to support their child's school success and educational outcomes.

Overlapping Spheres Theory

The overlapping spheres theory facilitates schools and educators on ways to develop effective partnerships as well as the implementation of procedures between school, home, and community (Epstein et al., 2018; Griffin & Steen, 2010; Thompson et al., 2014). Schools have applied the overlapping spheres theory to highlight the influence of parents and school partnerships on student's learning and development (see Gálvez & Tarrés, 2017; Hamlin & Flessa,

2016). This reason justified a focus on these partnerships as the purpose of the present study. In addition, the overlapping spheres theory provides a general framework for understanding parental involvement and graphically illustrates the potential importance of school-parents partnership.

Epstein's Framework of Six Types of Involvement

Essentially, this study attempted to highlight the duty of schools to reach out to families, that underpin the various involvement activities that are initiated by schools. Epstein (2010) outlined the 'Framework of Six Types of Involvement' and explained the importance of caring educational initiatives and how these particular initiatives could improve academic excellence, good communication, and productive interactions between school and parents (Park & Holloway, 2017; Thompson et al., 2014). Further, it focuses on the role and responsibility of the educational sector to ensure a level playing field between families and schools. Thus, collaborative school practices appear to be an accurate indicator of how well schools take the initiative and of their efforts to involve parents as partners in their children's learning and social development.

Generativity Theory

In resembling Epstein's Generativity theory (1999), the role of creativity in leadership practices recognises the power of promoting and nurturing creativity to encourage individual teachers' creative thinking, expand teachers' time and space in facilitating creative practicalities and increase shared resources of ideas and strategies among teachers (Epstein, 1999; Epstein et al., 2013). In other words, these activities reflect the leadership and advocacy roles needed to facilitate parental involvement in the six different types of partnership-related activities and establish supportive and healthy school climate. As Amabile (2017) noted, the effective implementation of programmes depends on the collaboration between a team and individuals that are able to develop and initiate ideas. Ultimately, such leadership practices can improve parental involvement, leading to more innovations within, and increased performance of organisations. This proposition was supported by Shannon and Bylsma's (2007) High Performing School (HPS) Model, which includes leadership as the subset that represses the rest of the characteristics of a high performing school, as shown in Figure 1.

Based on the aforementioned discussion, the present study sought to integrate the role of creativity in school principals' leadership practices in promoting parental involvement in secondary schools. Hence, when focusing on parental involvement, the critical role of school leadership is attributed to the ability, capacity, potential, or competence of a school leader and the nature of the overall approach implemented by the school leader to enhance the participation of parents in the school.
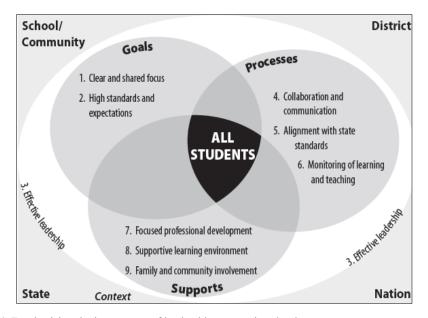
Figure 1. Emphasising the importance of leadership aspects in schools

Source: Adopted from Shannon and Bylsma (2007, p.4)

Bronfenbrenner's Ecological Theory

Bronfenbrenner's ecological theory (1977) served as the foundation for connecting school climate and parental involvement (see Berkowitz et al., 2017; Hashim et al., 2015; Povey et al., 2016; Thapa et al., 2013; Vellymalay, 2012). This theory emphasises the relation between home and school that influences children's academics and development. It theorizes a framework to understand the school environment as the linchpin in establishing learning and reinforcing school programmes to support parental involvement as aligned to the microsystem. In essence, school climate encapsulates the outcome of the interactions between the school community relations and the basic physical facilities in the school.

Connecting Theories under System Theory

School is an open system institution that receives influence from its surrounding (Hoy et al., 2013). Parents are naturally "part of the school's surrounding community, in which their values are closely linked to the school ethical climate" (Rosenblatt & Peeled, 2002, p. 351). Likewise, all schools are open systems that consist of overlapping responsibilities among schools, families, community, stakeholders, private sectors, and school environment, which need to be acquainted simultaneously towards children's academic, emotional, and social development.

When a school leader initiates effective parental involvement programmes and when the school has a supportive environment,

stronger networks and relationships are established. Thus, when the school is able to fulfil the needs of the parents, stronger ties between the school and the parents exist, thereby encouraging parental involvement in their children's education. Figure 2 displays the application of the above theories in this study.

The centrality of system theory to school-community partnership is well acknowledged in Getzels-Guba model of social system view especially on teacher-parents partnership and school-parents partnership (Lunenburg & Ornstein, 2012). Figure 3 illustrates the framework for understanding the administrative processes within the interactions in the systems theory developed by Getzels and Guba in 1957 (as cited in Lunenburg & Ornstein, 2012).

In a school setting, school administrators, teachers, and parents have duties and actions that are expected from each of them, as well as anticipations that constitute the quality of a school's performance. Therefore, the role or personality plays an important part in ensuring that needs are fulfilled. For example, a school principal may be expected by the MoE to emphasise teaching and service to the student and to the school community, respectively, while parents expect an emphasis on the needs of their children at school. Thus, these approaches clearly view the role of school leaders as ensuring the effectiveness of practices (collaborative school practices) in enhancing parental involvement, and specifying a supportive environment (school climate) to foster parental involvement.
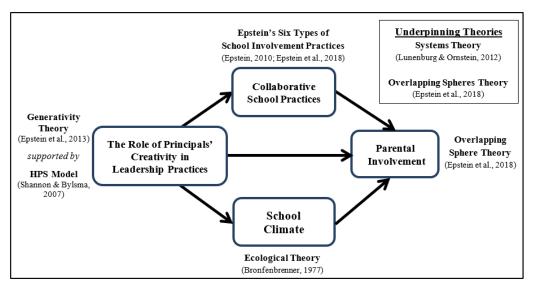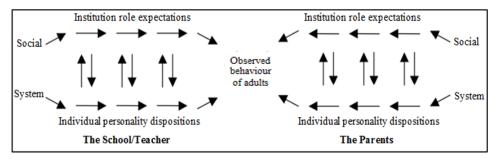
Figure 2. Theoretical framework of the study

Source: Adapted from Lunenburg and Ornstein (2012, p.48)

Figure 3. The Getzels-Guba Model

METHODOLOGY

Population and Sampling Procedures

The target population of this study is regular secondary school class teachers from Peninsular Malaysia. Four states were selected from each region based on the highest number of regular secondary schools namely Perak, Selangor, Pahang, and Johor. Regular secondary schools are known as public schools with centralized education systems. Using a multistage cluster stratified sampling technique, class teachers were randomly selected based on two stages. This is to ensure the selected samples are representative and generalizable (Fraenkel et al., 2019). At the school stage, using a proportionate stratified sampling procedure, schools were drawn from Perak (13), Selangor (14), Pahang (11), and Johor (14). In the second stage, ten teachers were randomly selected from each school that represented the four states using a disproportionate stratified sampling procedure. This is supported by Brown (1967) that a random selection of teachers ranging from four to ten in numbers for each school is sufficient to represent the thoughts and perceptions of teachers in the entire school.

In the final stage, purposive sampling was used to select ten respondents from each school based on the three sampling frame:

a. Firstly, the respondents should be class teachers from regular secondary schools;
b. Secondly, the respondents should be a class teacher who has rendered their service in the teaching profession for at least two years or more;
c. Thirdly, the respondent should be a trained teacher and not a temporary teacher.

The present study was cross-sectional and data were gathered over a period of five weeks. A total of 373 responses was obtained from the group of 400 potential respondents, with 27 questionnaires being discarded due to incomplete data and unengaged responses. The response rate was 93.25%.

Data Collection Procedures

Questionnaires were sent by post to the randomly selected forty regular secondary schools from the listed directory. Detailed instructions were provided to the liaison person (Assistant Principals also known as *Guru Penolong Kanan*) and participants. A return envelope with affixed postage stamps was provided to facilitate the return of the completed questionnaires from the school liaison person. It was also mentioned that the questionnaires were supposed to be answered by class teachers who had worked for more than two years with schools as a control measure. To ensure that the questionnaires were completed by class teachers, the liaison person was requested to obtain the school stamp and signature from the school principal on the checklist note and was asked to return to one of the researchers together with the filled up questionnaires.

Validity

The researcher imposed two screening stages to ensure the quality of the translated items. Firstly, the back-to-back translation technique was used to ensure and preserve the meaning of the original items. Secondly, face validity was established by having language teachers (Malay and English) and panel experts to scrutinize the translated questionnaires to ensure that the contents did not deviate from the original version.

Variables and Measurements

A questionnaire using a five-point Likert-type scale was employed to gather data on the constructs of the research model. Permission to adapt the questionnaires was obtained from the respective authors. The dependent variable, parental involvement, was measured using 15 items derived from Wee (1999). The responses were measured using a five-point Likert-type scale anchored by 1 = 'Never involved'; 2 = 'Rarely involved'; 3 = 'Sometimes involved'; 4 = 'Often involved' and 5 = 'Always involved'.

The units of measurement for the role of creativity in principals' leadership practices were adapted from Epstein et al. (2013) and rated on a 5-point Likert-type scale, in which 1 = 'Strongly disagree' and 5 = 'Strongly agree'. The items for collaborative school practices were obtained from Epstein et al. (2018) and Ministry of Education (2013) and were assessed based on the five-point frequency responses of 1 = 'Never practised'; 2 = 'Rarely practised'; 3 = 'Sometimes practised'; 4 = 'Often practised' and 5 = 'Always practised'.

The measurement units for school climate were derived from Bear et al. (2014). The original scale was assessed based on four point Likert scale ranging from 1 = 'Disagree a lot' to 4 = 'Agree a lot'. In this study, the scale was modified with permission from the author to a five point Likert scale. The items were scored based on a five point Likert scale with 1 = 'Not true at all', 2 = 'Not true', 3 = 'Not sure', 4 = 'True' and 5 = 'Absolutely true'.

Table 1 presents the reliability of the instrument. Overall, the entire instrument showed good internal consistency, as

Table 1

Reliability of the instrument (n = 50)

Construct (Latent Variables)	Total Items	α
Parental involvement (PI) **(Dependent variable)**	15	.840
The role of creativity in principals' leadership (CL) **(Independent variable)**	40	.843
Collaborative school practices (SP) **(First mediator variable)**	20	.879
School climate (SC) **(Second mediator variable)**	40	.809

supported by the rule of thumb from George and Mallery (2016, p. 232).

Common Method Variances

The present study adopted Harman's single-factor test as suggested by Podsakoff et al. (2003), in which one fixed factor is extracted from all principal constructs and the one extracted factor should explain less than 50% of the variance. The analysis showed that the one extracted factor explained 30.16% of the variance.

A correlation of more than .9 indicates common method variance (CMV) (Bagozzi et al., 1991). In the present study, using the Pearson correlation coefficient, the relationship between the challenge subordinate and volunteering was .234, as displayed in Appendix A. In other words, there was minimal CMV.

RESEARCH FINDINGS

Sample Characteristics

The study involved 373 respondents. Most of the respondents had served in their current

school for more than ten years ($n = 276$, 63.3%). Most of them were class teachers for Form 5 ($n = 84$, 22.5%) and Form 4 ($n = 80$, 21.4%) classes. Only 2.1% of the respondents were class teachers for lower and upper six forms. Meanwhile, 51.8% ($n = 193$) of the respondents were class teachers for the lower secondary levels. Further, the respondent's profile also showed that most of the respondents ($n = 117$, 33.4%) had teaching experiences for more than twenty years in their present school. The majority of the participants had teaching experiences for more than eleven years or equal to twenty years ($n = 155$, 41.6%). It clearly shows that the selected respondents fulfilled the three sampling criteria.

Inference Analysis

The seven research questions, which involved the direct relationships and the mediating effect were independently assessed using the PROCESS macro for SPSS utilising simple mediation analyses (Model 4), as provided by Hayes (2018).

The mediation is said to be significant if zero is not straddled between the upper and lower levels of the confidence intervals (Hayes & Preacher, 2010; Preacher & Hayes, 2008). Table 2 summarises the results of the PROCESS macro assessment for direct and mediated relationships, which were generated using bootstrapping functions.

The bootstrapping approach was used to examine the possible mediating effect of collaborative school practices and school climate on the relationship between the role of creativity in principals' leadership practices and parental involvement. The bootstrapping method provides an estimate of the magnitude of the indirect effect as well as an analysis of the statistical significance of the indirect effect. The confidence interval for the point estimate can also be calculated by using the upper bound and lower bound method (Hayes, 2018). The significance of the path coefficients was examined using 95% confidence intervals (BootLLCI and BootULCI).

Table 2

Bootstrap results of total, direct and indirect effects of mediation analysis (N = 373)

Path	β	Boot SE	ρ (Two-tailed)	Boot 95% CI LLCI	Boot 95% CI ULCI	VAF
Total effect (unmediated, path c) CL → PI	0.4485	0.0402	.0000	0.3694	0.5276	
Direct effect (mediated, path c') CL → PI	0.1875	0.0361	.0000	0.1166	0.2584	
Indirect effects						
CL → SP (path a)	0.4761	0.0432	.0000	0.3911	0.5611	
SP → PI (path b)	0.2992	0.0515	.0000	0.1979	0.4004	
Mediator effect - SP						
CL → SP → PI (a x b)	0.1424	0.0350		0.0827	0.2209	43.16%
Indirect effects						
CL → SC (path d)	0.3303	0.0411	.0000	0.2495	0.4110	
SC → PI (path e)	0.3591	0.0542	.0000	0.2526	0.4657	
Mediator effect - SC						
CL → SC → PI (d x e)	0.1186	0.0278		0.0704	0.1804	38.75%

Note: R^2 = 0.741, ρ = 0.000
5000 bootstrap samples; α - .05; CI - 95% confidence intervals;
β - standardised coefficients; Boot SE - bootstrap standardised errors;
LLCI - Lower limit confidence intervals; ULCI - Upper bound confidence intervals; VAF - Variance Accounted For

The first research question of this study was to determine the influence of the role of creativity in school principals' leadership practices on parental involvement. As seen in Table 2 (path c), the results disclosed that the role of creativity in leadership practices positively and significantly influenced the extent of parental involvement, yielding the coefficient corresponding to path c, as shown in Figure 4. The standardised regression coefficient for this total effect was $\beta = 0.449$, SE $= 0.040$, $p < 0.05$. This finding signified that the role of creativity in school principals' leadership practices promote parental involvement. Figure 4 show the results of the total effects assessment.

Research question two to research question five were assessed to determine the influence of collaborative school practices and school climate on the role of creativity in school principals' leadership practices and parental involvement. For collaborative school practices, the analysis showed that the role of creativity in school principals' leadership practices was a significant predictor of collaborative school practices (path a), with the standardised regression coefficient $(\beta) = 0.476$, SE $= 0.043$, $p < 0.05$ as displayed in Table 2.

Additionally, collaborative school practices was found to be a significant predictor of parental involvement (path b), with $\beta = 0.299$, SE $= 0.052$, $p < 0.05$. Meanwhile, for school climate, the findings showed school climate has a significant relationship for both the role of creativity in school principals' leadership practices (path d) with $\beta = 0.330$, SE $= 0.041$, $p < 0.05$ and parental involvement (path e) with $\beta = 0.359$, SE $= 0.054$, $p < 0.05$. The direct effects of the role of creativity in school principals' leadership practices on parental involvement (path c') via collaborative school practices and school climate are presented in the mediation model depicted in Table 2 and Figure 5.

Next, the mediation analyses were carried out to answer research questions six and seven. The outcomes of mediation testing are also presented in Figure 5. The present study used mediation analysis based on 5,000 bootstrapped samples utilising bias-corrected and accelerated 95% confidence intervals. The outcome revealed that the indirect effect of the role of creativity in principals' leadership practices on parental involvement through the mediator of collaborative school practices is statistically
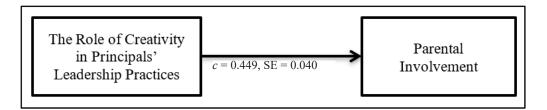
Figure 4. Total effect between the role of creativity in principals' leadership practices on parental involvement (path c)
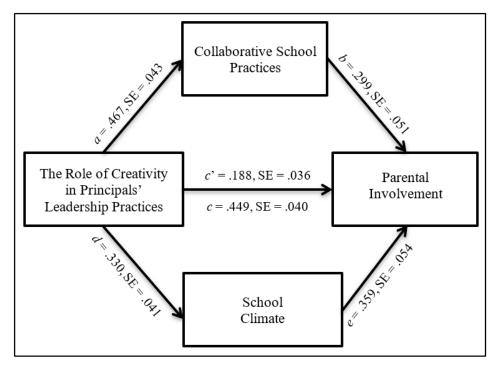
Figure 5. Direct effects of the role of creativity in principals' leadership practices on parental involvement (path c') via collaborative school practices and school climate

significant with β = 0.142, SE = 0.035, 95% confidence interval, LLCI = 0.0827 and UBCI = 0.2209, as displayed in Table 2. The mediation is said to be significant if zero is not in between the upper and lower limits of the confidence intervals (Hayes & Preacher, 2010). Therefore, in the present study, the indirect effect of collaborative school practices was statistically significant and the indirect effect did not straddle a '0' in between the upper limits and lower limits when bootstrapped at 95% indicating a mediation effect.

As for the school climate, further analysis revealed that school climate mediated the relationships between the role of creativity in principals' leadership

practices and parental involvement. The bootstrapping analysis showed that the indirect effect was significant β = 0.119 with a *p*-value of 0.000. Further, as emphasised by Preacher and Hayes (2008), the indirect effect did not straddle a '0' in between the ULCI (0.0704) and LLCI (0.1804) when bootstrapped at 95%.

The strength of the mediation was further supported by computing the variance accounted for (VAF) index (Hair et al., 2017). Hair et al. (2017) described that the VAF was calculated as VAF = ab/(c' + a*b), which determines the size of the indirect effect in relation to the total effect. Accordingly, it is assumed to be a full mediation when the VAF has an outcome

above 80% while a value between 20% and 80% is partial mediation followed by a value less than 20% means there is no mediation. In the present study, the VAF for the indirect effect was 43.16% (collaborative school practices) and 38.75% (school climate) respectively. Therefore, collaborative school practices and school climate only partially mediated the relationship between the role of creativity in principals' leadership practices and parental involvement.

The mediating effect is equal to the total effect subtracted by the direct effect, which was c – c'= 0.261. According to Ferguson (2009), effect size indicates the magnitude of the relationship observed between the variables. In this study, the effect size was 0.261, which was moderate (Ferguson, 2009). This finding was also supported by Muijs's (2012) and Cohen's (1992) rule of thumb. Therefore, the mediated model demonstrated a moderate effect size on parental involvement.

These findings showed that parental involvement could be enhanced by the role of creativity in school principals' leadership practices through collaborative school practices and school climate. In other words, if a principal has thoroughly incorporated the role of creativity in his/her leadership practices, then it can be predicted that parental involvement will be high, through the aid of collaborative school practices and school climate. Overall, the model explained 74.1% of the variance in parental involvement ($R^2 = 0.741$, $\rho = 0.000$). This means that the remaining 25.9% of the variance is unable to be predicted as it

may be caused by other factors that are not examined in this study.

DISCUSSION

The focal point of this study is to determine the predictors of parental involvement in secondary schools with regards to the role played by the school to foster an effective school-parent partnership. The findings showed that the role of creativity in principals' leadership practices played a key part in influencing parental involvement in secondary schools. This result speaks to the need for schools, especially those in the process of creating partnership programmes, to actively include school principal in their actions and progress. This finding corroborates the assumptions of the Generativity Theory and Shannon and Blysma's HPS model in which creativity as one of the vital elements in effective leadership and in particular the role of creativity in principals' leadership practices as the potent predictor towards parental involvement. As such, the role of creativity in principals' leadership practices could lead to an internalised set of role expectations that teachers should be creative and problem-solver at developing comprehensive parent-involvement programmes. This can influence the amount and the type of parental involvement in school. For instance, school leaders can inspire teachers' creativity by displaying their own creative problem-solving skills. School leaders can facilitate teachers by encouraging teachers to obtain training to expand their experience, and knowledge outside of

their current areas of expertise to promote parental involvement. According to Shaked and Schechter (2017), leaders can exhibit idealized influence as an integral part of school improvement by taking initiatives to ignite collaboration with school-community relations and stakeholders. Although most of the parents gain from a supportive and caring relationship with their child's teachers, this relationship is stronger if the implementation of professional development programmes were integrated with site-based practices (Povey et al., 2016). Through this initiative, teachers may also gain confidence in their ability to assist parents in their child's learning.

School leaders and teachers need to make an effort to ensure the success of the best practices in parental involvement programmes by emphasising on the importance of choosing suitable activities that enable parents to involved individually. As the essence of effective school-home partnership is not much on parental involvement programmes but how well schools have reached the decision about what the school will do and exactly how the school carries out the programmes (Epstein & Sheldon, 2016). Reflecting on Generativity Theory and System Theory, the findings revealed that the role of creativity in principals' leadership practices influence parental involvement not only through principals' expertise, creative abilities, and enthusiasm, but also mediated by collaborative school practices that support towards establishing effective and progressive parental involvement

programmes. This finding is in agreement with the findings from Ramalingam et al. (2019) which stated that parents felt more comfortable to engage in their child's education when the school took the effort to communicate with parents about school meetings, events, programmes, and activities that needed to be attended by parents.

The role of creativity in principals' leadership practices plays a pertinent central role in allowing teachers to utilize the resources, express and execute their ideas, as well as broaden their knowledge and skills (Epstein et al., 2013; Zhang et al., in press) to engage parental involvement in school. Similarly, school leaders who encourage teachers to broaden their knowledge and skills as well as allowing teachers to express their ideas will be highly inspired to communicate and assist parents. This is because, without the support of school leaders and school staff, it is impossible for teachers to assist and establish a partnership with parents (Athanasoula-Reppaa et al., 2010; Lipsky et al., 2017). It is vital for school leaders to be supportive and willing to accept and guide parents in a constructive manner. As such, there must be an effort from the school to connect parents where they can contact teachers and administrators who work with their children. For example, the celebration of different religious and cultural festivals is also common in most of the schools in Malaysia. Many schools see these as a way of giving recognition to the children's different backgrounds and an opportunity to involve parents as well.

School climate reflects the internal side of a school that leads to stronger bonding between school and parents. This finding highlights that secondary schools do exhibit care for parents by creating an atmosphere that is respectful and constructive for parents, students, stakeholders, or anyone within the school compound. Clearly, this exemplifies that secondary school administrators and teachers are well informed and consulted to maintain an 'open door' approach for parents to contact and visit the school. As schools encourage parents to become involved, parents' perceptions about school improve and in turn create an atmosphere where parents want to be involved in their child's education. By understanding the need and interest of students and parents, school climate seemed to rely on the boundaries that schools create with parent–teachers relations to support teachers, parents, and students to manage the unique experiences with the school (Lipsky et al., 2017). This develops a shared structure in school organisation to collaborate with teachers, school staff, parents, and community towards establishing an inclusive and equitable environment.

These findings can be explained by the fact that the role of creativity is more likely to be fostered by supervisors (school leaders), only if supervisors (school leaders) encourage and implement new ideas from co-workers (teachers and school staff) (de Jong & Hartog, 2007; Zhang et al., in press). The characteristics of the leadership style itself are conducive to be applied in schools and the change factors to demand such creativity elements to be integrated with the current leadership style practiced by secondary school leaders. When principals encourage and inspire teachers to develop meaningful partnerships between school and parents, it can lead to the development of a shared understanding that will contribute towards improving teachers' perceptions and attitudes about the school environment. This is in line with Amabile's (1988) theoretical support based on the componential theory of creativity which identifies management practices as one of the factors that impact the work environment and in return impacts employee creativity.

In view of the theoretical contribution, this study has integrated the System Theory (Lunenburg & Ornstein, 2012) and Theory of Overlapping Spheres (Epstein et al., 2018) as the main underpinning theories and supplemented with three other theories/framework i.e. Generativity Theory (Epstein, 1999), Six Types of School Involvement Practices (Epstein, 2010; Epstein et al., 2018), and Ecological Theory (Bronfenbrenner, 1977) to explain the factors that contribute towards parental involvement in secondary schools. The System theory has supported the integration of school leadership, schools' efforts, and school environment. Additionally, in this study, it was found that the combination of creativity in principals' leadership practices is important in explaining innovative and creativity in the school's efforts and practices towards improving parental involvement. Besides, the integration of these theories has led to the mediation effect of collaboration

school practices and school climate towards parental involvement especially on the relationship between the role of creativity in principals' leadership practices and parental involvement. Such an attempt is still novel in parental involvement literature.

Although the present study has yielded important findings and added to the existing body of knowledge, the researchers acknowledge that there are certain areas that can be explored further. A similar study can be further enhanced by combining research designs into a mixed-method approach to examine the relationship between these variables. Interviews, site visits, and observations can be integrated into the research which will help to reveal a deeper understanding of the respondents' perceptions. Thus, it is recommended that future research should include other techniques of data collection such as interviews and direct observation for the purpose of cross-validation on the responses given.

The sample for the present study consisted only of class teachers. Another potential area of research for future study is the use of the split sample approach to reduce or eliminate the issues of bias when data is collected from a single source. In the educational context, using this approach, the study can be complemented by collecting data from multiple groups of respondents, such as principals, teachers, students, and parents. This type of research design and analysis reduces the potential source of bias referred to as common method variance.

In summary, there are numerous ways that schools can be involved in school-family-community partnerships. This study begins to demonstrate the various ways that schools can partner with parents and communities, as well as the role of creativity in principals' leadership practices, collaborative school practices, and school climate that is needed in developing and implementing partnership activities. This finding was mirrored in a quantitative study where the role of creativity in principals' leadership practices was related to stimulate certain behaviours of teachers that fostered a critical role in parental involvement. Working on parental involvement program, schools need to take into account the ability and needs of parents especially barriers that are being greater obstacles in collaboration with the school and the support received from the school environment can be among the other possible solutions to establish an effective way to assist students' academic attainment and social support. It is hoped that secondary schools in Malaysia are able to play a more integral role in creating and implementing school-family-community partnerships within the context of parents' ability that strive to meet the needs of all students.

CONCLUSION

The role of creativity in principals' leadership practices is seen as the ability to develop creative solutions for increasing productivity, engaging teachers in problem-solving, and encouraging parental involvement. School leaders are the cornerstone of a school organisation and have the capability to

create the conditions that enable students, teachers, parents, and communities to work together to generate new ideas. These ideas will create awareness of the need to adapt to the rapid changes of the times and enable the school organisation to progress towards education transformation.

School efforts in planning and initiating activities or strategies play a significant contribution towards fostering parental involvement in school events as schools always serve as a platform that enables parents to acquire information on their child's social and academic development. Further, a healthy and supportive school climate is seen as a key factor in increasing parental involvement in secondary schools. A highly positive school climate creates a coherent environment that allows everyone to be involved and has a greater impact on parental involvement in school-related programmes.

Schools should, therefore, support greater parental involvement through developing and implementing strategies as well as fostering a healthy and supportive school climate to increase parental involvement in secondary schools. The framework proposed in the present study supports the MEB agenda and the *Sarana* toolkits, which will substantially strengthen the Ministry of Education's efforts to improve student and school quality.

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APPENDIX

Appendix A. Correlation matrix for all constructs

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1												
2	.637**	1											
3	.719**	.685**	1										
4	.296**	.318**	.309**	1									
5	.256**	.259**	.224**	.694**	1								
6	.349**	.349**	.379**	.648**	.621**	1							
7	.306**	.309**	.320**	.666**	.694**	.754**	1						
8	.244**	.290**	.254**	.514**	.511**	.592**	.609**	1					
9	.327**	.365**	.316**	.511**	.548**	.587**	.647**	.647**	1				
10	.270**	.298**	.271**	.554**	.563**	.609**	.664**	.625**	.659**	1			
11	.285**	.311**	.311**	.617**	.609**	.655**	.697**	.569**	.576**	.699**	1		
12	.414**	.406**	.423**	.286**	.271**	.395**	.324**	.284**	.332**	.316**	.353**	1	
13	.333**	.421**	.381**	.331**	.289**	.405**	.382**	.303**	.351**	.286**	.313**	.690**	1
14	.399**	.376**	.392**	.271**	.224**	.305**	.294**	.234**	.311**	.314**	.308**	.667**	.620**
15	.419**	.361**	.454**	.216**	.155**	.250**	.248**	.151**	.286**	.258**	.265**	.570**	.538**
16	.394**	.312**	.360**	.242**	.208**	.354**	.245**	.246**	.266**	.268**	.298**	.632**	.562**
17	.458**	.438**	.440**	.181**	.150**	.309**	.199**	.176**	.235**	.205**	.216**	.634**	.602**
18	.420**	.392**	.457**	.151**	.297*	.273**	.182**	.154**	.211**	.217**	.209**	.388**	.367**
19	.349**	.385**	.425**	.163**	.110*	.264**	.211**	.155**	.220**	.232**	.242**	.399**	.400**
20	.370**	.375**	.401**	.181**	.179**	.286**	.226**	.150**	.208**	.275**	.284**	.424**	.378**
21	.404**	.413**	.416**	.291**	.214**	.365**	.270**	.240**	.304**	.322**	.309**	.452**	.376**
22	.399**	.368**	.405**	.248**	.202**	.348**	.267**	.239**	.270**	.294**	.287**	.446**	.410**
23	.396**	.423**	.440**	.159**	.158**	.244**	.208**	.188**	.214**	.279**	.288**	.523**	.430**

Note: ** Correlation is significant at the 0.01 level (2-tailed).
   * Correlation is significant at the 0.05 level (2-tailed).

APPENDIX

Appendix A. Continued

Note:

No.	Variable		No.	Variable
1	School_Home_Interaction		12	Parenting
2	Home_based_Involvement		13	Learning_Home
3	School_based_Involvement		14	Volunteering
4	Provide_Resources		15	Communicating
5	Manage_Surroundings		16	Decision_Making
6	Provide_Feedback_Recognitions		17	Collaboration_with_Community
7	Creative_Expressions		18	Teacher_Student_Relations
8	Challenge_Subordinates		19	Teacher_Staff_Relations
9	Encourage_Broadening		20	Teacher_Parents_Relations
10	Encourage_Capturing		21	School_Safety
11	Manage_Teams		22	Clarity_Expectations
			23	Fairness_Rules

	14	15	16	17	18	19	20	21	22	23
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14	1									
15	.730**	1								
16	.562**	.478**	1							
17	.617**	.581**	.594**	1						
18	.452**	.514**	.369**	.565**	1					
19	.392**	.495**	.333**	.444**	.725**	1				
20	.375**	.410**	.412**	.428**	.690**	.744**	1			
21	.474**	.504**	.397**	.539**	.721**	.597**	.621**	1		
22	.449**	.492**	.377**	.476**	.737**	.618**	.594**	.762**	1	
23	.471**	.468**	.393**	.555**	.630**	.617**	.632**	.625**	.593**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).
        * Correlation is significant at the 0.05 level (2-tailed).

A Measurement Model of Teachers' Motivation Factors in Primary Schools

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ABSTRACT

Motivation has an enormous impact in the field of education, which is strongly linked to appreciation, financial rewards, professional development, interpersonal relationships, work significance, achievement, and work status. The motivation model that originated from the two-factors Herzberg's motivation theory was adopted in this study. The implementation of this validation was to confirm whether the measurement model for motivation construct is appropriate for primary school teachers in Kelantan, Malaysia. This study proposed a measurement model by applying the Confirmatory Factor Analysis that achieved its construct validity with an acceptable fit (RMSEA= 0.06, CFI= 0.95, Chisq/df=2.32). Besides, the model met its unidimensionality with the factor loadings ranging from 0.57 to 0.98, which described the factors that contributed to teachers' motivation in eight dimensions, namely responsibility, potential, promotion, and reward, recognition, interpersonal relationship, working condition, working environment, achievement, and organisation policies. This model met its convergent validity and reliability with AVE=.77 and CR=.94. The modification indices of this model confirmed that the discriminant validity was achieved and described the consistent findings and assigned data quality to fit within the suggested model. This model could be utilised by researchers to examine the motivation effect in education institutions.

Keywords: Measurement model, motivation, primary schools, teachers

INTRODUCTION

Motivation serves as an internal reinforcement factor that stimulates the willingness of workers to bring the most enthusiastic effort into their jobs. In schools, as educational hubs, teachers play a crucial role in order to ensure high-quality education in transforming students into global citizens for the corporate world. However, this can only be realised if school teachers are inspired to accomplish their goals effectively. Various motivational factors that encourage school teachers on work effectiveness to improve institutional performance have been outlined. These factors included recognition from heads of department, empowerment, achievement of students, and the development of career (Rasheed et al., 2010).

The aspiration of teachers based on the motivational factors, namely recognition, achievement, development of career, and advancement opportunities, substantive roles, and jobs, as well as hygiene factors (supervision, salaries, environment and physical conditions of work, organisational policies, and relationships with colleagues), may promote positive job satisfaction, that would improve the achievement of students in schools (Boyle, 2014; Mertler, 2001). Besides, Anastasiou and Papakonstantinou (2014) explained that teachers were more satisfied with their work, including nature and the ability to work, as well as to help students.

Meanwhile, a study by Morcom and MacCallum (2009) proved that teachers had also played a role that significantly preserved better relationships among colleagues, who could be inspired to collaborate in the face of a challenging and 'tiring' educational environment. Besides, the situation was also related to the well-being of the teacher's lifestyle, which is driven by responsive values, vision, and learning. Moreover, other important motivating factors for teachers have been to respect them by highlighting their achievements, granting them responsibility and autonomy, as well as providing promotional opportunities (Erciyes, 2019).

Teachers are influenced by the perceptions of job contexts that also affect the well-being of life and motivation. The attitudes of teachers can be considered based on the experiences towards the life well-being and motivation, as well as the perceptions of contextual variables to create teachers' experiences at school (Collie et al., 2012). Motivation can influence job satisfaction and loyalty within an organisation. Therefore, the level of job satisfaction and commitment to educational organisations are affected by the type of leadership exercised by the Principal (Mak et al., 2010).

An individual's interest should be stimulated and fulfilled to influence self-motivation. Then only the individual can deliver the best performance through the limited use of resources with maximum efficiency (Zamani & Talatapeh, 2014). Teachers' work motivation can also be nurtured by greater responsibility, promoting innovation and providing opportunities for career development (Arifin, 2014). It intended to meet the needs of teachers in terms of physiology, social and economic needs, as well as moral standards that are the

responsibility of the government, parents, and the community for the benefit of future generations (Gobena, 2018).

Besides, motivation is also a stage or effort that can be achieved on tasks and activities of the work role and scope (Mehta et al., 2003). In the meantime, school teachers can express their motivation and satisfaction in teaching when they are comfortable in their economic well-being and work environment (Nyamubi, 2017). As the teaching implementation performance influence the teachers' feelings and the positive impact of the teaching, teachers always strive to implement the learning efficiently and effectively (Abdullah et al., 2016). The teacher's role is essential for the students' learning process. Thus, teachers'

motivation significantly showed a direct contribution and impact on students (Alam & Farid, 2011).

The study proposed a measurement model for primary school teachers in order to identify the contributing factors to motivation and its respective measures, such as responsibility, potential, promotion and reward, recognition, interpersonal relationship, working condition, working environment, achievement, and organisational policies. Besides, this study investigated the convergent and discriminant validity, as well as the reliability for the proposed model.

The theoretical framework for this study was illustrated in the following Figure 1.
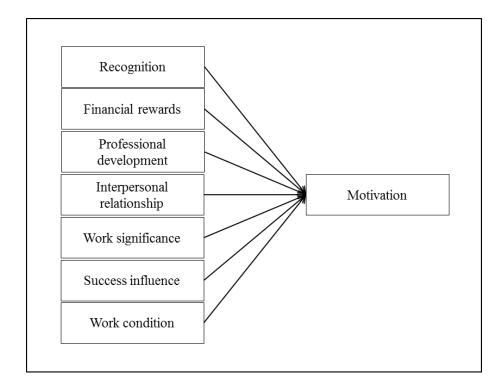
Figure 1. The motivation's theoretical framework

METHOD

Participants

A total of 330 primary school teachers, from the schools with excellent performance in the Primary Achievement Test in the state of Kelantan, Malaysia, were chosen as respondents in this study, comprising of 124 male teachers (37.6%) and 206 female teachers (62.4%). For teaching experience, 191 teachers had been teaching for 20 to 29 years (57.90%), 72 teachers (21.80%) had been teaching for 10 to 19 years, 35 teachers (10.60%) had been teaching for 30 years and above, while 32 other teachers (9.70%) had less than ten years of teaching experience.

Instrument

The questionnaire was selected based on the two most essential factors in the selection of an instrument, which was the original instrument accurately measured motivation as the variable of interest and its reliability, as well as the instrument's validity. A quick assessment of the previous research using the instrument allowed this study to be replicated.

The original version of the Teacher Motivation Survey (TMS) was previously developed in English. Therefore it had to be translated and adjusted to the local language in order to determine the motivational factors. Thus, once the permission to use was obtained from the owner of the instrument, the original instrument was translated into the Malay Language, the primary language spoken in Malaysia. Two (2) language experts conducted the forward and backward translation of the questionnaire.

The questionnaire needed to meet an outstanding linguistic translation and had to be adjusted to cultural differences to maintain the integrity of its content and to be referred to as the modified cross-cultural questionnaire. The validation was designed to ensure that the translated questionnaire had the same equivalent items to evaluate the construct as the original version, and was then retained to ensure the integrity of the questionnaire (Marzuki et al., 2018).

Besides, this study addressed issues focused on the emic view of Malaysian culture. This perspective focused on cultural differences that applied to the primary school teaching community, which were viewed from an insider's perspective. Also, studies conducted from an emic perspective often included more comprehensive and culturally rich knowledge than studies conducted from an etic point of view.

Boyle (2014) developed a 26-item scale instrument to evaluate teachers' motivation. The instrument was known as Teacher Motivation Survey (TMS). The scale clarified the seven (7) motivational dimensions of recognition, financial rewards, professional development, interpersonal relationships, work significance, success influence, and work condition. More specifically, TMS evaluated the level of teachers' feeling towards all the components that affected their motivation in schools. The TMS instrument consisted of 26 ordinal Likert type items. The item rated in 4-point scales, which were highly

unmotivated, unmotivated, motivated, and highly motivated. However, in this study, the interval 10-point scale ranging from 1 (strongly disagree) to 10 (strongly agree) was utilised to give more freedom to the respondents in choosing the best answers (Awang, 2015a; Awang et al., 2015).

Subsequently, the Exploratory Factor Analysis (EFA) was implemented to examine all items and evaluate the dimensions of the items that represented the motivation construct. This test yielded one (1) method of the main unrotated component (Bido et al., 2017), namely that all items would form one (1) or more dimensions (Costello & Osborne, 2005) using the pilot study data to ensure that the instrument was valid, reliable, and capable of generating accurate research results to avoid any doubts about its validity.

The Principal Component Factor Analysis (PCFA) with Varimax Rotation was implemented on all items. The finding showed a significant value of the Bartlet Test of Sphericity (Chi-Square=2442.21, p<0.01). While, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) measurement value was KMO=0.69, which satisfied the KMO analysis requirements (Table 1).

The procedure of factor analysis yielded eight (8) different dimensions for motivational items with Eigenvalue=1.16. The factor loadings of all 26 items were divided into each of the eight (8) components, namely responsibility, potential, promotion, and reward, recognition, interpersonal relationship, work condition, work environment, achievement, and organisational policies. The items for each component were determined according to the findings of the Rotated Component Matrix analysis. The entire 26 items were retained as the factor loadings were higher than 0.60, with the lowest was 0.66, and the highest was 0.93.

From the factor analysis results, the reliability test was obtained (Yong & Pearce, 2013) to validate each measurement item in the components through the Cronbach's alpha measurement to confirm the stability of the instrument. A Cronbach's alpha of at least 0.60 or higher (Hinton et al., 2004; Taber, 2017) for a variable indicated that the measuring elements in the motivation construct were capable of providing one (1) measure with reliable internal consistency (Marzuki et al., 2018). The output for each component in the motivation construct had higher Cronbach's alpha values than 0.60,

Table 1

Principal component factor analysis for motivation construct

KMO		0.69
Bartlet Test of Sphericity	Chi-Square	2442.21
	Df	325
	Significant	0.00

which ranged from 0.78 to 0.91. Therefore, all components of this construct were used to calculate the motivation construct, $\alpha=.80$. The value was considerably high (Hinton et al., 2004; Taber, 2017), suggesting that the translated TMS questionnaire was a reliable instrument and was valid to evaluate the motivation of primary teachers.

Data Analyses

In order to ensure its unidimensionality, the data of this study had been recoded. This motivation model estimation was examined in Structural Equation Modelling (SEM) using the Analysis of Moment Structures (AMOS) software. The technique implemented the Confirmatory Factor Analysis (CFA), while the Maximum Likelihood Estimation (MLE) generated the model estimation. Besides, the covariance matrix of the item was utilised as an input. Indices were categorised based on their loading values, while the indicators were correlated to their respective unobserved or latent variables to calculate the estimate.

RESULTS

The questionnaire with 26 items applied in this study was adopted from the previous study. The 10-point interval scale items used in this study consisted of eight (8) components, which were M1 (responsibility), M2 (potential, promotion, and reward), M3 (recognition), M4 (interpersonal relationships), M5 (working condition), M6 (working environment), M7 (achievement), and M8 (organisation policies). The scale extended from 1 (strongly disagree) to 10

(strongly agree). All these eight components were derived from the EFA analysis from the previous pilot study (Abdullah & Ismail, 2018).

This motivation construct analysis evaluated the measurement model through the CFA analysis to assess the item significance of the reflective construct. Figure 2 presents the first-order reflective measurement model.

The M1 component contained five (5) questionnaire items, namely M11, to M15. While, the M2 component consisted of four (4) questionnaire items, namely M21, to M24. The M3, M4, M5, M6, and M7 components consisted of three (3) questionnaire items respectively, which were M31 to M33, M41 to M43, M51 to M53, M61 to M63, and M71 to M73. Besides, M8 components contained two (2) questionnaire items accordingly, which were M81 to M82. All these 26 questions, namely the M11 to M82, were the response items, while e1 to e26 were the respective measurement errors of each item for the motivation construct.

Unidimensionality

The items of motivation construct in the questionnaire were in the form of "*Are these factors motivating you?*", which used interval scale 1 (strongly disagree) to 10 (strongly agree). Since all the 26 questions in the questionnaire were positive items, the answers would be in the positive form if the teachers agreed on these items. Thus, the test of unidimensionality for the first-order reflective measurement model had
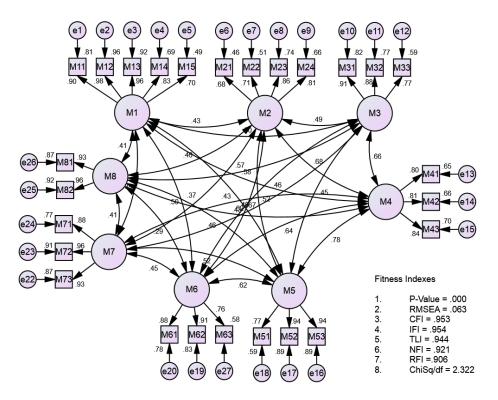
Figure 2. The first-order reflective measurement model

been satisfied, with all the measurement items showed the high factor loading values, except for M63 with the factor loading value of 0.57. However, it was retained since the value was approaching 0.60. Thus, all the measuring items ranged from 0.57 to 0.98.

The high value of the factor loadings suggested that each particular item measured the motivation construct significantly. Thus, it could be retained for each aspect of the construct in the model. The values of unidimensionality expressed that all factor loadings indicated positive values in one (1) direction. The validation test was conducted to examine the strength of the instrument, as well as to measure the motivational design. The Modification Indices (MI) value table

was revised, and it had been ascertained that no items needed to be removed. This motivation measurement model confirmed to be free from overlapping and redundant items. Thus, discrimination validity was achieved.

Validity

The CFA result explained the fitness indexes and the factor loadings for each item, as shown in the following Table 2. Overall, the analysis indicated that the model achieved the required good fit.

This motivation measurement model was carried out with the Maximum Likelihood Estimate (MLE). The CFA

Table 2

The fitness indexes for the motivation measurement model

Category	Index	Index Value	Output for the required level
Absolute fit	RMSEA<0.08	0.06	Achieved
Incremental fit	CFI>0.90	0.95	Achieved
Parsimonious fit	Chisq/df<3.00	0.32	Achieved

tested model confirmed an acceptable fit (RMSEA=0.06, CFI=0.95, Chisq/df=2.32). The construct validity of the motivation measurement model had been met, confirming the accuracy of all the 26 items to measure the motivation construct. The motivation construct contained eight (8) components, and the particular items are presented in Table 3.

Then, the Average Variance Extracted (AVE) values were examined to confirm the convergent validity and reliability of the motivation construct. The values of AVE were higher than 0.50, showed that the value had satisfied the convergent validity value. Thus, this measurement model reached the convergent validity requirements, and the AVE values ranging from 0.59 to 0.90 for all components.

Table 3

The Confirmatory Factor Analysis (CFA) report summary for the measurement model

Second Order	First Order	Item	Factor Loading (>.60)	CR (>.60)	AVE (>.50)
Motivation	M1	M11	.90	.94	.77
		M12	.98		
		M13	.96		
		M14	.83		
		M15	.70		
	M2	M21	.67	.85	.59
		M22	.71		
		M23	.86		
		M24	.82		
	M3	M31	.91	.89	.73
		M32	.88		
		M33	.77		
	M4	M41	.81	.86	.67
		M42	.81		
		M43	.83		

Table 3 *(Continued)*

Second Order	First Order	Item	Factor Loading (>.60)	CR (>.60)	AVE (>.50)
	M5	M51	.77	.92	.79
		M52	.94		
		M53	.94		
	M6	M61	.88	.84	.64
		M62	.91		
		M63	.57		
	M7	M71	.87	.94	.85
		M72	.96		
		M73	.93		
	M8	M81	.95	.95	.90
		M82	.95		

Then, the validity analysis was utilised to examine the instrument's ability to measure the construct of motivation, as well as to identify its redundancy. The measurement confirmed that the motivation measurement model was free from unnecessary or overlapping items. Furthermore, the correlations between the components were lower than 0.85, explained that the components were not having a multicollinearity problem or redundant, as shown in Table 4.

Table 4

Correlation values between components

			Estimate
M1	<-->	M2	.43
M1	<-->	M3	.50
M1	<-->	M4	.58
M1	<-->	M5	.43
M1	<-->	M6	.50
M1	<-->	M7	.39
M1	<-->	M8	.41
M2	<-->	M3	.49
M2	<-->	M4	.68
M2	<-->	M5	.53
M2	<-->	M6	.43
M2	<-->	M7	.37
M2	<-->	M8	.46

			Estimate
M3	<-->	M4	.66
M3	<-->	M5	.45
M3	<-->	M6	.46
M3	<-->	M7	.40
M3	<-->	M8	.57
M4	<-->	M5	.78
M4	<-->	M6	.64
M4	<-->	M7	.67
M4	<-->	M8	.62
M5	<-->	M6	.62
M5	<-->	M7	.52
M5	<-->	M8	.46
M6	<-->	M7	.45
M6	<-->	M8	.29
M7	<-->	M8	.42

The diagonal values indicated the square roots of the AVE value of motivation construct. At the same time, the other values indicated the association between the respective components. As a result, the measurement of the discriminant validity for all components was achieved as the diagonal values showed higher values than others in its row and column. This study confirmed that the discrimination validity of the measurement model of motivation had been met, as shown in Table 5.

Table 5

Discriminant validity index summary for motivation

	M1	M2	M3	M4	M5	M6	M7	M8
M1	**0.88**							
M2	0.43	**0.77**						
M3	0.50	0.49	**0.85**					
M4	0.58	0.68	0.66	**0.82**				
M5	0.43	0.53	0.45	0.78	**0.89**			
M6	0.50	0.43	0.46	0.64	0.62	**0.80**		
M7	0.39	0.37	0.40	0.67	0.52	0.45	**0.92**	
M8	0.41	0.46	0.57	0.62	0.46	0.29	0.42	**0.95**

Reliability

The Composite Reliability (CR) values, which were higher than 0.60 for the motivation construct, demonstrated that the reliability of the constructs had been achieved to the required level (CR≥.60), M1=.94, M2=.85, M3=.89, M4=.86, M5=.92, M6=.84, M7=.94, and M8=.95. The CR components values between 0.84 and 0.95, and the CR construct a value of 0.90 indicated the level of reliability and internal consistency of the measured components representing the motivation construct. Besides, the AVE values exceeding 0.50 also indicated the reliability of the measurement model in measuring the motivation construct. The AVE achieved, as the lowest AVE, was M2=.59, followed by M6=.64, M4=.67, M3=.73, M1=.77, M5=.79, M7=.85, while the highest AVE value was M8=.90.

Modelling Motivation as the Second Order Construct

An ellipse represented the latent construct of motivation and it was measured by eight (8) components, namely M1 to M8, also represented by ellipses. Furthermore, motivation had been developed as a second-order construct that consisted of eight (8) components. While each component was calculated through a certain number of items. The components were M1, M2, M3, M4, M5, M6, M7, and M8, described in Figure 3. The confirmatory factor analysis (CFA) was utilised to test whether the

measurement model of motivation construct was consistent with the contruct's nature. This study was intended to determine the contributing factors to the motivation construct and its respective measurements.

Then, the measurement model was examined. The CFA-tested model showed an acceptable fit (RMSEA=0.07, CFI=0.95, Chisq/df=2.42). Thus, the motivation measurement model had achieved its construct validity, showing the precision of each of the 26 items in the motivation construct. Figure 3 showed the result of the factor loadings for the second-order motivation construct, as well as the first-order construct.
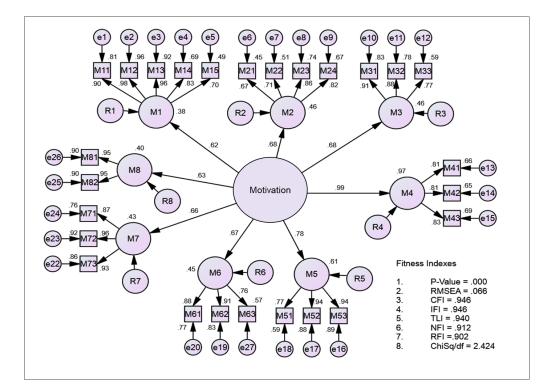
Figure 3. The measurement model for measuring motivation

Then, the CFA analysis evaluated the standardised estimate and squared multiple correlations. The standardised estimate explained the factor loading for each item in the motivation measurement model. The strength of a relationship is defined as in the following Table 6.

Table 7 presents the factor loading for each item in the measurement model that measured the latent construct. The motivation clarified the correlation between the variables and the factors of motivation, and the point to understand the nature of the specific factors. All the related items with the

Table 6

Definition of r coefficient value

r Coefficient Value	Definition of Correlation
.00	Not Exist
.10 - .39	Low
.40 – .69	Moderate
.70 – .99	High
1.00	Complete

Source: Dancey and Reidy (2011)

Table 7

The item correlations in the motivation measurement model

			r	Interpretation
M1	<---	Motivation	.62	Moderate
M2	<---	Motivation	.68	Moderate
M3	<---	Motivation	.68	Moderate
M4	<---	Motivation	.99	High
M5	<---	Motivation	.78	High
M6	<---	Motivation	.67	Moderate
M7	<---	Motivation	.66	Moderate
M8	<---	Motivation	.63	Moderate
M11	<---	M1	.90	High
M12	<---	M1	.98	High
M13	<---	M1	.96	High
M14	<---	M1	.83	High
M15	<---	M1	.70	High
M21	<---	M2	.67	Moderate
M22	<---	M2	.71	High
M23	<---	M2	.86	High
M24	<---	M2	.82	High
M31	<---	M3	.91	High
M32	<---	M3	.88	High
M33	<---	M3	.77	High
M41	<---	M4	.81	High
M42	<---	M4	.81	High

Table 7 *(Continued)*

			r	Interpretation
M42	<---	M4	.81	High
M43	<---	M4	.83	High
M53	<---	M5	.94	High
M52	<---	M5	.94	High
M51	<---	M5	.77	High
M63	<---	M6	.76	High
M62	<---	M6	.91	High
M61	<---	M6	.88	High
M73	<---	M7	.93	High
M72	<---	M7	.96	High
M71	<---	M7	.87	High
M82	<---	M8	.95	High
M81	<---	M8	.95	High

factor loading above 0.60 were maintained in the measurement model. The highest factor loading for the motivation construct was M4 (.99), while the lowest factor loading was M1 (.62). In each component, the highest factor loading for M1 component was M12 (.98), while in M2 component was M23 (.86). Besides, the highest factor loading for M3 component was M31 (.91). The highest factor loading for M4 component was M43 (.83), M5 component with M53 (.94), and M6 component with M62 (.91). For M7 component, the highest factor loading was M72 (.96), while the M8 component with both M81 and M82 (.95).

The squared factor loadings indicated that each factor explained the percentage of the variance in the motivation variable. The values shown in Table 8 indicated the values of squared multiple correlations for the specific items. All items explained the R^2 values that were equal to or higher than 0.40, except for the M1 component (R^2=.38). The item with less than 0.40 R^2 value should be eliminated from the measurement model. However, all items had been retained as the fitness indexes for this motivation measurement model had exceeded the required level (Awang, 2015b).

The value of squared multiple correlations shown in Table 7 confirmed that M4 component (interpersonal relationship) contributed the highest variance in the motivation construct (R^2=.97). While the lowest variance was contributed by the M1 component (R^2=.38), consisted of responsibility items. In the M1 (responsibility) component, the highest variance came from item M12 (accountability value and direct responsibility towards students learning). In contrast, the M2 component (potential, promotion, and reward) explained the

Table 8

The effect size and squared multiple correlation values

	Effect Size (R^2)	Percentage of Variance
M8	.40	40%
M7	.43	43%
M6	.45	45%
M5	.61	61%
M4	.97	97%
M3	.46	46%
M2	.46	46%
M1	.38	38%
M81	.90	90%
M82	.90	90%
M71	.76	76%
M72	.92	92%
M73	.86	86%
M61	.77	77%
M62	.83	83%
M63	.57	57%
M51	.59	59%
M52	.89	89%
M53	.89	89%
M43	.69	69%
M41	.66	66%
M33	.59	59%
M32	.78	78%
M31	.83	83%
M24	.67	67%
M23	.74	74%
M22	.51	51%
M21	.45	45%
M15	.49	49%
M14	.69	69%
M13	.92	92%
M12	.96	96%
M11	.81	81%

highest variance from M23 item (opportunity for promotion). For the M3 component (recognition), the highest variance was M31 (being selected as the "teacher-of-the-month"). While for the M4 component (interpersonal relationship), the highest variance value was M43 (interpersonal relationship/interaction with students). The M5 component (working condition) explained that the highest variance was the M53 item (total of the job to be done). In the M6 component (working environment), the highest variance came from item M62 (condition and location of school buildings). For the M7 component (achievement), the highest variance was from M72 (student achievement), while for M8 component (organisation policies), the highest variance value was M82 (instructional workshops offered and organised by the school).

DISCUSSION AND CONCLUSION

This study examined and validated the measurement model describing contributing motivation factors among primary school teachers, as well as their reliability and validity. The findings assured the reliability and validity of the proposed model. The overall analysis of this structural equation model of motivation recorded the influential factors of responsibility, potential, promotion and reward, recognition, interpersonal relationship, working condition, working environment, achievement, and organisational policies confirmed that this model achieved a good fit.

In conclusion, this instrument is a valid tool to measure motivation factors for the teacher population in primary schools. Besides, this study achieved its objective mainly by creating a systemic model to boost the motivation of teachers. Further research may extend this model to other school environments and may evaluate other areas of its applicability.

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Married Female Employees' Work-Life Balance and Job Performance: The Role of Affective Commitment

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ABSTRACT

The role of working women has evolved because of changes in economic conditions and social demands in recent years. Many married women have become economic contributors to their families. However, they struggle with pressure on handling their jobs and maintaining family integrity. Can married female employees' job performance be enhanced by work-life balance or others? This study aimed to examine the effects of work-life balance and affective commitment on married female employees' job performance in Indonesia. A structural equation modeling-partial least square was used to analyze the responses gathered via a questionnaire survey from married female employees working in the banking sector in Indonesia. Results showed that work-life balance significantly affected job performance. Affective commitment mediated the relationship between work-life balance and job performance. This study revealed that work-life balance not only directly affected job performance but also

indirectly influenced it through affective commitment. This study also discussed the implications for married female employees' balancing of family and work.

INTRODUCTION

In the past, women were analogous to housewives. As such, only a few of them went out for work. A limited number of women were educated because they were forced to be under the superiority and generosity of their fathers or husbands (Delina & Raya, 2013). With the rapid growth of economic development, some women have received education and opened their minds to modern society. Education not only empowers women but also creates more career opportunities for them. In the current era of the knowledge economy, brainpower is more essential than endurance or physical strength, inspiring female workers to surge in every industry as equals of men (Kim, 2014).

This phenomenon reflects a dilemma among many female workers who are married because they have to perform multiple tasks at home and in workplaces. They are obligated to take care of their families while under work-related pressure. As a result, many female employees have experienced difficulties in considering work and family life (Casper et al., 2011). This condition can potentially affect the integrity of female employees who lose focus on their tasks. In general, a female worker prioritizes her family over her career. A work-life imbalance is an essential reason for employees to leave their job, especially for married female workers (Kossek et al., 2014). It can harm sustainable people management in organizations, which in turn can damage effectively and efficiently sustainable organization goals (Pfeffer, 2010). Thus, balancing work and family life is one of the greatest challenges faced by both organizations and female employees.

Work-life balance has become a strategic management issue because work-life balance produces positive outcomes, such as organizational citizenship behavior (Lambert, 2000), in-role performance, firm productivity (Konrad & Mangel, 2000; Shepard et al., 1996), employee turnover, work engagement, job satisfaction, and organizational commitment (Wang & Walumbwa, 2007). Previous studies also described the essential role of work-life balance associated with the psychological well-being of individuals and the overall sense of harmony in life, which is an indicator of the balance between job and family roles (Clark, 2000; Marks & MacDermid, 1996). Other studies have indicated that employees and organizations benefit from the success of the balance between employees' work and family life (Greenhaus & Powell, 2006). When employees have an imbalanced state between work and life, their primary domain of personal lives is threatened. In the workplace, a lack of balance between work and life diminishes employees'

performances (Harrington & Ladge, 2009; Parkes & Langford, 2008) or results in absenteeism. Conversely, a balance between work and life can improve one's prosperity and family satisfaction (Grzywacz, 2000) and organizational commitment (Cegarra-Leiva et al., 2012; Magnini, 2009; Wayne et al., 2004). The balanced experience between work and life enhances employee's work engagement and job performance (Carlson et al., 2008).

Previous studies have investigated work-life balance and its effect on employees' attitudes and behaviors (Carlson et al., 2008; Cegarra-Leiva et al., 2012; Magnini, 2009). Interestingly, a majority of studies that address the topic of work-life balance have been conducted outside Southeast Asian societies, which has different cultural characteristics and industrial structures (Hofstede et al., 2010; Spector et al., 2004). Initial evidence has explored factors affecting work-life balance in Southeast Asia, such as Malaysia context (Au & Ahmed, 2014). However, the relationship between work-life balance and job performance for married female employees in Southeast Asian regions, such as Indonesia is still unknown. Specifically, this study investigated married female employees in Indonesia, which has a conservative culture. Based on existing works, this study aimed to examine the role of affective commitment mediating the influence of work-life balance on married female employees' job performance in Indonesia.

LITERATURE REVIEW AND HYPOTHESES

Married Female Employees' Work-life Balance

Work-life balance, especially for married female employees, has become a strategic issue in the management field. In general, work-life balance is defined as "an overall level of contentment resulting from an assessment of one's degree of success at meeting work and family role demands" (Valcour, 2007). Furthermore, Clark (2000) also defined work-life balance as "satisfaction and good function, at home and work, with a minimum level of role conflict." Kalliath and Brough (2008) outlined work-life balance into six definitions. *First*, as multiple roles, work-life balance refers to having both positive and negative influences in the relationship between family life and work and vice versa. *Second*, as equity across multiple roles, work-life balance refers to three components of balance, namely, satisfaction balance, involvement balance, and time balance. *Third*, as satisfaction between multiple roles, work-life balance refers to the satisfaction of activities at home and at work with low levels of conflict. *Fourth*, as a fulfillment of role salience between multiple roles, work-life balance refers to a range of levels of effectiveness and satisfaction of an individual in his or her role in work or at home in accordance with an individual's priorities at a specific time. *Fifth*, as a relationship between conflict and facilitation, work-life balance is the

low level of conflict and the presence of facilitation: "low levels of inter-role conflict and high levels of inter-role facilitation represents work-family balance" (Frone, 2003). *Sixth*, as perceived control between multiple roles, work-life balance refers to a level of autonomy that an individual must be able to have in fulfilling the demands of his or her multiple roles.

Past theoretical approaches have described the concept of work-life balance in two perspectives (Haar, 2013). Some studies used a negative perspective, namely work-life conflict (e.g., Frone et al., 1992; Powell et al., 2009) as a way to reflect the quality of fit between one's job life with one's family life. Work-family conflict refers to "meeting one's family role expectations is perceived to be incompatible with meeting the role demands of one's job, and vice versa" (Frone & Rice, 1987). Work-family conflict concept has bidirectional nature where one's job experience interferes with one's family life and vice versa. Other studies used a positive perspective, namely work-life enrichment or work-life facilitation (e.g., Greenhaus & Powell, 2006), as a way to reflect work-life interface conditions. Work-life enrichment refers to "the extent to which experiences in one role improve the quality of life in the other role" (Greenhaus & Powell, 2006). Work-life enrichment concept is considered as a bidirectional like work-family conflict concept where one's experience in work improves the quality of family life and vice versa.

Currently, some studies define work-life balance as the level of employees' satisfaction assessed from their success in fulfilling the demands of work responsibilities and roles in family life (Haar, 2013; Haar et al., 2014; Kossek et al., 2014). Married female employees' work-life balance is a perceived phenomenon characterized by "a sense of having achieved a satisfactory resolution of the multiple demands of work and family domains" (Higgins et al., 2000). A work-life balance condition for married female employees describes a positive experience or affective outcome perceived from successfully balancing their roles in the workplace and at home (Greenhaus et al., 2003; Thornthwaite, 2004; Valcour, 2007). Work-life balance reduces the level of work-life conflict (Carlson et al., 2009), which reflects an individual's orientation regarding different life roles and inter-role phenomenon (Delina & Raya, 2013; Marks & MacDermid, 1996; Parkes & Langford, 2008). Work-life balance is viewed as the absence of work-life conflict (Greenhaus & Allen, 2011).

Job Performance

Williams and Anderson (1991) divided individual performance into two types: organizational citizenship behavior and in-role behavior. Organizational citizenship behavior is defined as an individual's behavior that is not directly or explicitly recognized by the formal system of organizations in his or her workplace but can improve organizational functions to be effective and efficient. In-role behavior, also known as job performance, is the quality and quantity achieved by employees in carrying

out their duties in their work following the responsibilities that have been given to them (Mangkunegara, 2010). This study focused on the job performance of married female employees. Employees who have a high job performance always complete the work assigned to them, fulfill the responsibilities specified in their job descriptions, and perform activities that directly have an impact on the performance of their group or organization as a whole.

Affective Commitment

The concept of employees' commitment has been recognized as an essential concept in the study of work attitudes and behavior in the workplace (Allen & Meyer, 1990, 1996; Haque et al., 2019; Presbitero et al., 2018). In general, employees' commitment to their organization is defined as "a psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization" (Allen & Meyer, 1996). Commitment is a multidimensional concept, which consists of three dimensions (Allen & Meyer, 1990, 1996; Meyer et al., 1993): (1) continuance commitment, which is "commitment based on an employee's recognition of the costs associated with leaving his or her organization" (Allen & Meyer, 1996); (2), normative commitment, which is an "employee's feeling of obligation to remain with his or her organization" (Allen & Meyer, 1990); and (3) effective commitment, which is an emotional attachment of a worker who is dedicated to his or her workplace and enjoys

being a member of his or her organization (Allen & Meyer, 1990). This study focuses on the third commitment which is affective commitment. Employees with a strong affective commitment willingly work for their organizations and have confidence in the acceptance of organizational values and goals (Glazer & Kruse, 2008).

Married Female Employees' Work-Life Balance and Job Performance

Psychological prosperity and harmony that a worker feels in his or her life, such as work-life balance, help them concentrate on their jobs, resulting in enhanced outcomes (Netemeyer et al., 2005). Work-life balance positively affects individual performance (Cegarra-Leiva et al., 2012; Harrington & Ladge, 2009; Magnini, 2009; Parkes & Langford, 2008). According to affective event theory (AET), the affective experience of employees at events determines their work attitude and behavior (Weiss & Cropanzano, 1996). Married female employees' work-life balance is a positive affective outcome that arises from conducive work conditions determined by an effective job design. This design will increase the employees' resources to attain a balance between work responsibilities and roles in family life (Bailyn, 2006). Working conditions such as work hours, job complexity, and control over work time determine employees' perceptions of work-life balance (Valcour, 2007). Employees react to working conditions that they experience. This condition may encourage their affective state, while other conditions likely yield positive and negative

experiences. Employees' positive workplace experiences, such as being able to fulfill work responsibilities supported by fulfilling roles in their family life at home, may determine a positive affective outcome that ultimately shapes work attitude and behavior in their workplaces. Based on this discussion, the current study assumes that the outcome of the positive experience felt by employees regarding the success of balancing work and family life determines positive behaviors, such as high job performance. Conversely, the results of negative experiences felt by employees regarding failure to balance work and family life (high levels of work-life conflict) likely have a negative impact on jobs, such as decreased levels of their performance. Furthermore, the present study predicts that married female employees who perceive a work-life balance may perform well in workplaces. The first hypothesis is formulated as follows:

Hypothesis 1. Married female employees' work-life balance positively affects their job performance.

Married Female Employees' Work-Life Balance and Affective Commitment

An employee who perceives a balanced combination of work and life (Thornthwaite, 2004) may tend to have a high emotional bond with other workers in an organization that emits every effort to the organization (Meyer et al., 1989). Work-life balance positively influences affective commitment (Choi et al., 2018; Kim & Ryu, 2017; Muse et al., 2008). The current study assumes that the outcome of the positive

experience felt by employees regarding the success of balancing work and family life may shape a high emotional bond between employees and their organizations. Conversely, work disruptions on the family and family disruption on work negatively influence affective commitment, causing employees' low emotional bond with their workplaces (Allen et al., 2000; Netemeyer et al., 1996; Streich et al., 2008). Based on the discussions above, the second hypothesis is formulated as follows:

Hypothesis 2. Married female employees' work-life balance positively influences their affective commitment.

Affective Commitment and Job Performance

High emotional bond in an organization causes employees to have a high affective commitment that further encourages them to remain loyal to their organization (Meyer et al., 1989). This condition motivates employees to exert efforts to help their organizations, so high emotional bond becomes the driving force that makes workers contribute to the improvement of their performance. This explanation is reinforced by Gerrig and Zimbardo (2002), who justified that raised emotions caused actions. Thus, when employees have an affective commitment to their organizations, these emotions motivate their working behaviors. Many experts have studied the structural relationship between affective commitment and performance (Mathieu & Zajac, 1990; Mayer & Schoorman, 1992; Swailes, 2004; Vandenberghe et al., 2004).

Affective commitment positively influences employees' performance (Van Gelderen & Bik, 2016), indicating that a high level of employees' affective commitment to their organization possibly leads to their increased performance. Conversely, lack of employees' affective commitment to their organization causes negative effects, such a low performance (Chen & Francesco, 2003; Mayer & Schoorman, 1992; Swailes, 2004; Vandenberghe et al., 2004; Van Gelderen & Bik, 2016). The current study argues that female employees' affective commitment may influence their job performance. Based on the above explanation, another hypothesis is formulated as follows:

Hypothesis 3. Affective commitment positively influences women employees' job performance.

Mediating Role of Affective Commitment

Both positive and negative experiences in balancing roles at work and at home may determine work attitude and behavior as described by AET (Weiss & Cropanzano, 1996). Workers who can perceive a balanced combination of work and life may result in a high emotional bond between workers and organizations in the form of affective commitment (Kim & Ryu, 2017; Thornthwaite, 2004). When an employee's emotional bond with work increases, his or her emotion serves as a driving force that improves his or her job performance (Van Gelderen & Bik, 2016). Therefore, a balance between work and life held by workers triggers their strong emotional

bond toward their workplaces and improve their job performance. Conversely, negative experiences are perceived by employees when they fail to balance work and family life; in other words, they feel that high levels of work-life conflict may cause employees' weak emotional bond toward their workplaces (Allen et al., 2000; Netemeyer et al., 1996; Streich et al., 2008), possibly decreasing employees' job performance (Chen & Francesco, 2003; Mathieu & Zajac, 1990; Mayer & Schoorman, 1992; Swailes, 2004; Van Gelderen & Bik, 2016). Based on the explanation above, the fourth hypothesis is formulated as follows:

Hypothesis 4. The relationship between married female employees' work-life balance and their job performance is mediated by affective commitment.

METHOD

Sample

Data were collected by sending questionnaires to married female employees who worked at 50 banks within two cities in Indonesia via a convenience sampling method. This method was used because collecting data in the Indonesian context tended to be difficult and might be rejected by either companies or employees who served as respondents. The banking industry was chosen because married females' work activities greatly influence the patterns of employees' family life, and *vice versa* (Dugdill, 2000). All working days become very full and do affect married female employees' family life. Their activities in

the workplace coerce all family activities at home into the weekends. Hence, gathering data from married females' employees in the banking industry seems appropriate to investigate married females' work-life balance and its effect.

A total of 500 questionnaires were sent via postal mail, and 211 responses were retrieved, yielding a 42.2% response rate. A total of 206 effective samples were collected because four questionnaires were dropped due to incomplete responses. The majority of the respondents (83.5%) had children and generally had a good level of education; that is, 70.9% of the respondents held a higher education degree. Furthermore, 60.2% of the respondents had more than 5 years of working experience.

Measures

Work-life balance was measured by using previously developed instruments (Delina & Raya, 2013), which consists of 10 items, such as "my relationship with my family is suffering because of the pressure or long hours of my work" and "my family is missing out on my input, either because I do not see enough of them, or I am too tired." The work-life balance was further measured using reverse coding the negative direction with Likert's scale from 1 (strongly agree) to 5 (strongly disagree). A higher score reflects a work-life imbalance. Conversely, a lower score reflects a work-life balance. The level of reliability of these items was above the conventional standard ($\alpha = 0.950$).

Measurement of *affective commitment* was originally developed by Allen and Meyer (1990) using a 24-item instrument, which was later modified by Meyer et al. (1993) to 18 items. Six items in this instrument were designed to measure affective commitment. The respondents self-reported their perceptions on an affective commitment by using Likert's scale from 1 (has a weak affective commitment) to 5 (has a strong affective commitment). Some examples of the items were "I really feel as if this organization's problems are my own" and "I would be very happy to spend the rest of my career with this organization." The level of reliability of these items was above the conventional standard ($\alpha = 0.849$).

Female employees' performance was measured using a 10-item instrument adapted from Williams and Anderson (1991). Some examples of the items were "During the past year, how often have you acted in the following manner when carrying out a job: (1) Adequately complete the assigned duties; (2) Fulfill responsibilities specified in the job description." The respondents rated their agreements with a Likert scale from 1 (below-average level of job performance) to 5 (above-average level of job performance). The level of reliability of these items was above the conventional standard which is ($\alpha = 0.972$).

Table 1 shows the minimum and maximum values, the mean, and the standard deviation of each variable. The average scores in terms of work-life balance (M=3.39), affective commitment (M=3.07), and job performance (M=3.4) of married female employees in Indonesia were within the average margins. The table also reveals

Table 1

Descriptive statistic and normality test for variables

Variable	Theoretical Range	Actual Range	Mean	Standard Deviation	Skew	Kurt
Married female employees' work–life balance	1.00 – 5.00	1.80 – 4.40	3.39	0.54	-0.540	-0.090
Affective commitment	1.00 – 5.00	2.00 – 4.33	3.07	0.42	0.963	1.997
Job performance	1.00 – 5.00	2.30 – 5.00	3.40	0.53	0.381	-0.351

Notes: n = 206; Skew = Skewness; Kurt = Kurtosis.

that the normality test for each variable shows the scores below the threshold values (Skew & Kurt < ±3) (Kallner, 2018). It shows that the data in this study fulfill the normality assumption.

Partial Least Square Analysis

Our hypotheses were tested through structural equation modeling-partial least squares (SEM-PLS) analysis technique using WarpPLS 5.0 software. Some reasons were considered when this study use this technique. *First*, the SEM-PLS analysis technique can simultaneously estimate the structural model and measurement models (Weerawardena et al., 2015). *Second*, this technique is appropriate for the study that used small sample sizes (Latan et al., 2019). SEM-PLS consists of two steps: the evaluation of the measurement model and the evaluation of the inner model. In the first step, the measurement model is assessed through validity and reliability tests. The validity test is examined through confirmatory factor analysis (CFA) involving the examination of convergent and discriminant validities (Latan & Ghozali, 2012). A convergent validity test is conducted by looking at the value of the average variance extracted (AVE) and communality. A construct is considered to satisfy the requirements of convergent validity if the value of AVE and communality produced is more than 0.5 (Hair et al., 2014). The discriminant validity can be examined on the basis of the square root of AVE for each construct that should be greater than the correlation between constructs in a research model (Hair et al., 2012). Furthermore, the reliability test can be examined on the basis of Cronbach's alpha or a composite reliability value. If Cronbach's alpha or composite reliability value is above or equal to 0.7, then all the constructs can be considered reliable (Solihin & Ratmono, 2013). In the second step, the inner model is assessed to predict causal relationships between variables and to verify hypotheses.

RESULTS AND DISCUSSIONS

Model Fit and Quality Indices

SEM-PLS analysis yielded the model fit and quality indices. These tests were performed by evaluating the following values: average R-square (ARS), average path coefficient (APC), average block variance inflation factor (AVIF), the goodness of fit (GOF), and Q-square coefficient (Q^2). Table 2 shows that ARS and APC were 0.295 ($p<0.001$) and 0.378 ($p<0.001$), respectively. These results indicated that the data in this study were compatible with the models built (Weerawardena et al., 2015). Table 2 further reveals that the AVIF was 1.548, which indicated that our data were free from multicollinearity problems (Hair et al., 2014). The GOF of 0.446 suggested that our data were largely compatible with theoretically constructed models (Wetzels et al., 2009). Q^2 of 0.220 (affective commitment) and 0.374 (job performance) implied that our model had an acceptable predictive value (O'Cass & Weerawardena, 2010).

Measurement Model Analysis

The first stage in measurement model analysis was used to measure the construct validity in terms of convergent validity and discriminant validity. In Table 3, the AVE and the communality variable for work-life balance, affective commitment, and job performance were above 0.50. These values indicated that all the variables in this study met the requirements of convergent validity (Hair et al., 2014). The square root of the AVE for each variable was greater than that of the correlation between variables in the same column. This result indicated that all the variables met the requirements of discriminant validity (Hair et al., 2012).

The second stage in the measurement model analysis was conducted to test the reliability of each construct. The results showed that the values of composite reliability for work-life balance, affective commitment, and job performance were above 0.70 (Table 3). This result indicates that all the variables being studied met the requirements of reliability (Solihin & Ratmono, 2013).

Table 2

Model fit and quality indices

Quality indices criteria	Values	Rule of thumb
Average path coefficient (APC)	0.378***	*p-value* < 0.05
Average R-squared (ARS)	0.295***	*p-value* < 0.05
Average block VIF (AVIF)	1.548	< 3.3
Tenenhaus GoF (GoF)	0.446	≥ 1.00 (*small effect size*), ≥ 0.25 (*medium effect size*), dan ≥ 0.36 (*large effect size*)
Q-squared (Q^2) coefficient: Affective commitment Job performance	0.220 0.374	> 0 (*acceptable predictive model*)

Note: *** $p<0.001$

Table 3

Composite reliability, AVE, and correlation of variables

Variable	Composite Reliability	AVE	Work–life Balance	Affective Commitment	Job Performance
Married female employees' work–life balance	0.950	0.654	**0.809**		
Affective Commitment	0.894	0.587	0.468	**0.766**	
Job Performance	0.972	0.778	0.378	0.600	**0.883**

Note: Diagonal elements are the square root of the AVE statistics. Off-diagonal elements are the correlation between the latent variable calculated in PLS

Common Method Variance

The data of this study came from the same source, namely, married female employees, by using a self-rating method. Consequently, the data might produce biased effects (Podsakoff et al., 2012). Common method variance is a potential problem in social research, primarily in behavioral research (Podsakoff et al., 2003, 2012). Method biases are a problem because "they are one of the main sources of measurement error" (Podsakoff et al., 2003). To ensure that the common method variance could not cause bias to our results, Kock (2015) suggested that the value of full collinearity variance inflation factors (VIFs) should be examined. If the full collinearity VIFs value of each variable was smaller than 3.3, the common method variance did not significantly affect the study data. The test results using WarpPLS 5.0 (Table 4) showed that the value of full collinearity VIFs for each variable was below 3.3. These results indicated that the research data did not produce a biased effect.

Table 4

Full collinearity VIFs

Married female employees' work–life balance	Affective commitment	Job performance
2.552	2.197	2.863

Structural Model Analysis

Structural model analysis was conducted to test the hypotheses of this study. The results of the structural model (Table 5) showed that married female employees' work-life balance significantly influenced their job performance ($\beta = 0.389$; $p < 0.001$). Hence, the first hypothesis (H_1) was supported.

Table 5

Model 1: Direct effect without a mediating variable

The relationship	Path Coefficient	p-value
H$_1$: Married female employees' work–life balance $\rightarrow$ job performance	0.389	$p<0.001$

Our results revealed that the ability of married female employees to fulfilling the demands of work responsibilities and roles in family life directly affected their job performance. Consistent with our results, previous findings demonstrated that work-life balance positively affects female employees' performance without a mediating variable in a structural model (Kim, 2014).

The married female employees' work-life balance also significantly affected the affective commitment (β=0.485; $p<0.001$) as shown in Table 6. Hence, the second hypothesis (H$_2$) was supported. In Indonesia, married female employees committed in their careers if they had harmony between their work and family. Consistent with this finding, the results of Choi et al. (2018), Kim and Ryu (2017), and Muse et al. (2008) revealed that employees who perceive to

have a work-life balance tend to have a high emotional bond with their workplaces. By contrast, work-family conflict negatively influences their affective commitment to their workplaces, thereby causing a low emotional bond between employees and their organizations (Allen et al. 2000; Netemeyer et al., 1996; Streich et al. 2008).

Affective commitment significantly affected job performance (β= 0.568; $p<0.001$). Hence, the third hypothesis (H$_3$) was supported. This finding was consistent with previous observations that employees' affective commitment to their organization enhances their job performance (Van Gelderen & Bik, 2016). Conversely, workers who lack affective commitment have a low organizational performance (Chen & Francesco, 2003; Mathieu & Zajac 1990; Mayer & Schoorman, 1992; Swailes, 2004; Van Gelderen & Bik, 2016).

Table 6

Model 2: Full structural model with a mediating variable

The relationships	Path Coefficient	Sig. P-Value
Married female employees' work–life balance $\rightarrow$ Job performance	0.109	Not significant (*n.s.*)
Work–life balance $\rightarrow$ Affective commitment	0.485	$p<0.001$
Affective commitment $\rightarrow$ Job performance	0.568	$p<0.001$
Married female employees' work–life balance $\rightarrow$ Affective commitment $\rightarrow$ Job performance	0.276	$p<0.001$

The work-life balance indirectly affected job performance through affective commitment (β=0.276; $p<0.001$) as shown in Table 4. Hence, the fourth hypothesis (H$_4$) was supported. This finding revealed that the balance between married female employees' work and life would improve their emotional bond with their organizations, thereby enhancing their job performance.

A significant path coefficient (β=0.389, $p<0.001$) was found between work-life balance and job performance in Model 1, whereas an insignificant path coefficient (β=0.109, *n.s.*) was observed when the affective commitment was inserted in Model 2. In the comparison of the two models, the mediating role of affective commitment on the path of work-life balance to job performance was verified. In Model 2, the work-life balance to job performance was completely transmitted with a full mediation of affective commitment (Nitzl et al., 2016). This result was similar to previous findings (Kim, 2014; Kim & Ryu, 2017; Van Gelderen & Bik, 2016) in a non-Southeast Asian business context wherein increasing employees' affective commitment by balancing their work-life experiences positively affects employees' performance.

Discussion, Limitations, and Future Studies

This study empirically examined the direct and indirect effects of employees' work-life balance on job performance in Indonesia by administering a questionnaire survey to married female employees working in the banking sector. The results showed that married female employees' work-life balance positively influenced their job performance (hypothesis 1). The affective experience of female employees concerning their work-life balance would tend to determine their job performance. Married female employees' positive experience concerning work-life balance could cause an increase in job performance, whereas a negative experience could result in a decrease in job performance.

Married female employees' work-life balance also positively influenced their affective commitment (hypothesis 2). Their effective experience concerning work-life balance would tend to determine their affective commitment to their organizations. Their positive experience could cause an affective commitment to the organization. Conversely, a negative experience could lead to a low affective commitment.

In addition, affective commitment positively influenced women employees' job performance (hypothesis 3). A high level of affective commitment to the organization could cause an increase in job performance. By contrast, their lack of affective commitment to the organization could negatively affect the organization. For example, they would have low job performance. This study further extended the investigation on the mechanism of the process underlying the effect of married female employees' work-life balance on job performance.

The results revealed that affective commitment mediated the underlying mechanism (hypothesis 4), confirming

that affective commitment had an essential role in the relationship between work-life balance and job performance, specifically for married female employees in Indonesia. The results of this study extended the generalization and understanding of the mediating roles of affective commitment within the process mechanism underlying the effects of work-life balance on employee performance that have been separately examined in other studies (Choi et al., 2018; Kim, 2014; Kim & Ryu, 2017; Muse et al., 2008; Van Gelderen & Bik, 2016). Our study used a special sample, namely, married female employees who were not used in testing models in previous studies.

This study was also conducted in a banking industry setting in the Indonesian context. Our results further contributed to the generalization and applicable of the work-life balance role in predicting affective commitment and job performance examined in previous studies. Our results also extended the use of AET (Weiss & Cropanzano, 1996) in predicting the impact of affective experiences on work-attitudes, such as affective commitment, and certain behaviors, such as job performance.

According to the findings, married female employees who can simultaneously take care of work and family life likely dedicate themselves to careers that enhance their job performance. Therefore, facilitating married female employees to achieve a balance between work and family life has emerged as an important managerial issue, especially in the banking sector. Therefore, organizations should initiate policies and programs to address married female employees' needs in fulfilling their job responsibilities outside their workplaces to create a balance between work and family life. For example, refreshing day-offs in which employees take 2 weeks off every 3 years to refresh their mind and to have time to spend with families could be implemented by organizations as a benefit for loyal employees. These benefit programs would likely influence married female employees' emotions and perceptions in which employees would feel their organizations' support and care about their well-being.

Finally, there are a few limitations to this study. First, its small sample size might not sufficiently represent the married female employees' population to support the generalization of the findings. To gain better insights, future researchers should collect data across industrial sectors. Second, statistical tests showed that our data did not produce a biased effect. However, further studies should collect data by using different sources, such as combinations of subordinates and supervisors (Podsakoff et al., 2003, 2012). Third, this study discussed the impacts of work-life balance on employees' behaviors, including affective commitment and job performance. Future directions should consider other employees' behaviors, such as organizational citizenship behavior or employee turnover, as consequences of work-life balance and affective commitment. Future studies should also consider social factors, such as leader behavior, policy

systems, and psychological environment, as antecedents to work-life balance.

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Does the Work-Life-Balance of Resident and Expatriate Women Employees Differ?

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ABSTRACT

Work-life-balance and expatriation are phenomena that have evinced keen interest among Social scientists. Though the two topics have been researched separately, studies that examine the relationship between the two are scarce. Further, there are far less studies that have examined these among women employees. The present work intends to fill this gap in the literature. Using a randomly collected sample of 201 female employees from India and the Middle East, the study examined the difference in work-life balance between them. The study has brought out some interesting results, which will be of high utility to social scientists and researchers. It has been found that female Indian employees enjoy better work-life balance than expatriates.

Keywords: Expatriates, work-life balance, work-family conflict, work-life conflict

INTRODUCTION

Empirical examination about work-life-balance (WLB) among working mothers started receiving focus in the 1960s. The earlier studies emphasized on working mothers and members of dual-earner families. During this time, researchers considered work and family life as two separate segments and often failed to examine the personal life of the respondents. It was in the 1970s that social scientists started exploring the effect of family life on work and vice-versa. This was based on the premise that individuals usually reside in different life domains – work and private. There could also be

multiple sub-domains, which vary based on individuals. Thus arose the "Spill-over Theory" (Pleck, 1977), which postulates that there are asymmetrically permeable boundaries between the life domains of work and family. Thereafter, there is a general consensus that work and family influence each other. Studies started examining how women had to suffer from the effects of spill-over as a result of the family to work roles; and how men had to suffer due to spill-over from work to a family role (Naithani & Jha, 2009). By the end of the 20th-century focus started shifting towards "Work-life Conflict Theory". By the turn of the century, WLB started receiving the required focus and attention from diverse social science fields including Psychology, Sociology, and Management.

Now literature is replete with evidence pertaining to diverse aspects of WLB (Biswas et al., 2015; Harju & Yliopisto, 2015; Pradhan, 2016).

Review of Literature

Though scholarly attention in Work-life balance (WLB) is decades old, interest in expatriate WLB gained interest only recently (Harju & Yliopisto, 2015; Harris, 2004; Kempena et al 2015; Mäkelä et al., 2011). Though many social scientists examined expatriate WLB, however, very few attempted it among women expatriates (Fischlmayr & Kollinger 2010; Harju & Yliopisto, 2015). It has been empirically proven that women employees in general and expatriate women, in particular, have to undergo innumerable hardships to balance work and life. Social scientists have evinced interests in studying expatriation and associated phenomenon. Expatriation is always on the agenda of most multinational companies as employees are required by them at host countries for various purposes (Mäkeläet et al., 2011). Expatriates have to be assigned to international assignments for facilitating control, coordination, and integration of operations in their host countries, and to transfer knowledge as well as organisational practices (Suutari, 2003). International assignments are a challenge to expatriates. The most important is the need for relocating families to host nations. At times situations warrant relocation without the family too. This creates a lot of adjustment problems.

The behavioural patterns of expatriates have been explained in the backdrop of cultural studies done by Hofstede (1982). According to Hofstede (1982), culture is deep-rooted in any individual, and cultural norms are learned from family settings from early childhood. These norms are carried to their respective adulthood, and even to host countries. Lewis and Ayudhya (2006) opined that though WFC could be universal in nature, the individual responses differed, and was governed by culture. Pradhan (2016) drew a clear differentiation between the WLB of developed and developing countries. Developed countries offer multiple working options like work from home and other family-friendly work policies (Lewis & Ayudhya, 2006). These are not applicable in developing countries (Joplin et al., 2003). Working for long hours

is a feature in developing countries. This is likely to create conflicts and imbalances in work-family situations (Pradhan, 2016). This is all the more intense among women expatriates. A review of the literature revealed that only limited studies have examined the WLB of expatriates (Harju & Yliopisto, 2015), and still lesser that of women expatriates. Table 1 presents the details of the studies that have been done in these areas.

The female expatriate workers in the Middle-East have certain unique features. Though there is a paucity of statistics regarding the exact quantum of women expatriates, it is estimated that females constitute an estimated 30% of the workforce. This is the lowest rate globally. Most female expatriate workers are engaged in non-professional and semi-skilled jobs (Keane & McGeehan, 2008; Malecki & Ewers, 2007). There are many social scientists like Shaffer and Joplin (2001) who loathed that only a little attention was given to this area of research.

The issues that affect work-life balance in the home and host countries could be different and vary drastically. If the purpose for which expatriation is done is to succeed, due and adequate attention needs to be provided to the successful management of work and private life of the employees (Kempena et al., 2015). Vashishtha and Mishra (1998) found that, among other factors, support from respective families could positively impact work-life balance. Some of the issues associated with expatriate work-life balance include probable new position and/or role at workplace, cultural practices, and languages that are unfamiliar, the indispensable absence of the extended family members and friends at the destination nation (Kempena et al., 2015). Further, Pandey and Srivastava (2000) found that members of nuclear families experienced higher levels of interpersonal work stress. For expatriates, since they are away from their extended families and are members of nuclear families, it can be presumed that they could be having lower

Table 1

Studies of expatriates work-life balance

No	Variable	Authors
1	Expatriates' work-life balance	Fischlmayr and Kollinger (2010) Harju and Yliopisto (2015) Kempena et al. (2015) Mäkelä et al. (2011)
2	Female expatriates work-life balance	Fischlmayr and Kollinger (2010) Harris (2004) Khokher and Beauregard (2014) Mäkelä et al. (2011)

levels of work-life balance. Based on this the first hypothesis is formulated:

H_1 : Indian Resident Female employees have better work-life balance than expatriates

The demographic factors of the respondents have been a subject matter of empirical examination (Leger, 2004; Naithani, 2016). Studies, for instance, Naithani (2016) had found that various demographic factors, including health and recreation factors, had a direct bearing on the work-life balance of expatriate employees. Other demographic factors studied include the health of the respondents, their financial position, spiritual/religious aspects, hobbies. (Naithani & Jha, 2009). Leger (2004) found that female employees aged between 35 and 55 years tended to experience higher levels of depression and anxiety disorders leading to work-life conflicts. In line with these findings the second hypothesis is formulated:

H_2 :There is no significant difference in WLB with respect to the demographics of women employees.

A few subsidiary hypotheses were also formulated:

H_{2a} : There is no significant difference in WLB of female employees based on their marital status

H_{2b} :There is no significant difference in WLB of female employees based on the employment of their spouses.

H_{2c} :There is no significant difference in WLB of female employees based on their ages

H_{2d} :There is no significant difference in WLB of female employees based on their years of experience

Objectives of the Study

Based review of literature, the following objectives were identified for the study:

1. To explore if Resident and Expatriate female employees differ with respect to WLB;
2. To explore if there is a significant difference in WLB of female employees based on their demographic profiles.

METHOD

For the collection of data for the study, a modified version of a standardized tool, the "WFC questionnaire" developed by Carlson et al. (2000); modified by and cited in Jayaweera (2005) was used. The tool consists of a total of 12 items under two factors – Work-life conflict (WLC) and Work-family conflict (WFC). The questionnaire is such that the two factors measure WLF. The measure was of Likert scale ranging from strongly disagree to strongly agree. The coding of the response for analysis was done such that strongly disagree was provided a point of 5 and strongly agree was provided a point of 1. Thus, a high score on the questionnaire denoted a high level of WLB. The questionnaire was randomly administered online over google docs.

Towards this, the link to the questionnaire was mailed to the respondents. As all the items were made compulsory, there was no missing data and none of the responses warranted rejection, and all the responses were used for analysis

Data was collected online, from a sample of 201 female employees using convenient sampling. 107 respondents were residents in India and 94 were expatriates working in Saudi Arabia. The respondents belonged to various industries like the Service sector, IT/ITeS, Teaching, and Hospital. Respondents varied drastically regarding demographics. The ages of the respondents ranged from 20 to over 55 years. Fifty-one (51) were married, 53 unmarried, and 3 divorced. Their experiences varied from less than a year to over 15 years. There existed diversity regarding qualifications, which ranged from undergraduate to doctorate. Based on the diversity it can be assumed invariably that the data is representative in nature. Sampling adequacy was assessed through the Kaiser-Meyer-Olkin (KMO) Measure. The KMO value was 0.877 and Bartlett's Test of Sphericity value was 1273.257. Since the values are significant (0.000), there is adequacy with respect to the sample.

Reliability and Validity

Due to the uniqueness of the study, factor analysis was conducted. Based on Eigen values, two factors emerged, with a cumulative variance of 61.86%. The first factor (Work-life conflict – WLC) had eight items, and the second factor (Work-family conflict – WFC) four items. The loadings of WLC ranged between 0.778 and 0.572; and that of WFC between 0.896 and 0.755. The loadings are well above the stipulated value of 0.40. This value is as per the standard stipulations provided by Ford et al. (1986), Hinkin (1995), and Thompson (2004), which are widely used (Costello & Osborne, 2005; Field, 2009; Matsunaga, 2010; Samsudeen & Sulphey, 2017; Sandhya & Sulphey, 2019; Sulphey & Upadhyay, 2019). The reliability of the tool was assessed with Cronbach's Alpha. The Alpha of WLC was .880 and that of WFC was .873. The two values are above the rule of thumb of .70 (Nunnally, 1978). In line with Churchill (1979), the inter factor correlations were assessed and the r-value was .522 (significant at 0.01 level). These results established the reliability and validity of the tool.

RESULTS

In tune with the first objective and to test the tenability of the H1, t-test was done and the results are presented in Table 2.

It can be seen from the table that for both the factors the t-values (2.765 and 7.541 respectively) are significant at 0.01 level. This signifies that there was a significant difference between female resident and expatriate employees. An examination of the mean values shows that WLC was higher (37.103) for residents than expatriates (24.745). This pattern was visible for WFC. The mean for residents was 15.430, and that of expatriates was only 12.117. This reflected in the overall WLB too. The mean value for residents was 42.533, and

Table 2

Data and t-values

	Residence	N	Mean	Std. Deviation	Std. Error Mean	*t*-value	Sig.
WLC	Resident	107	27.103	6.2976	0.6088	2.765	0.006
	Expatriate	94	24.745	5.7154	0.5895		
WFC	Resident	107	15.430	2.6816	0.2592	7.541	0.000
	Expatriate	94	12.117	3.5313	0.3642		
WLB	Resident	107	42.533	8.0673	0.7799	4.985	0.000
	Expatriate	94	36.862	8.0236	0.8276		

expatriates was 36.862. Based on these findings the H_1 that "Indian Resident Female employees have better work-life balance than expatriates" is accepted. This finding substantiates the studies of Kempena et al. (2015), and Vashishtha and Mishra (1998). This difference in WLB could be due to the support that employees in India receive from their extended families. Expatriate employees have nuclear families and are devoid of this support from extended families (Pandey & Srivastava, 2000).

The second objective was to find the impact of demographics on WLB. Demographics were studied in a multitude of studies (Krishnan & Sulphey, 2009;

Sulphey & Faisal, 2017). The demographics studied were marital status, employment of spouse, age, and years of experience. The findings based on marital status (Table 3) showed that the factors and overall WLC did not differ significantly based on marital status.

Based on this, the hypothesis that "There is no significant difference in WLB of female employees based on their marital status" is accepted. This finding validates earlier studies by Mjoli et al. (2013) and Panisoara and Serban (2013).

The details of the t-test with respect to the employment of spouse is presented in Table 4.

Table 3

Data and t-value based on marital status

	Marital status	N	Mean	Std. Deviation	Std. Error Mean	t-value	Sig.
WLC	Married	116	26.23	6.141	0.570	0.470	0.639
	Unmarried	82	25.82	6.108	0.675		
WFC	Married	116	13.79	3.630	0.337	0.525	0.600
	Unmarried	82	14.06	3.393	0.375		
WLB	Married	116	40.03	8.592	0.798	0.120	0.904
	Unmarried	82	39.88	8.408	0.929		

Table 4

WLB based on the employment of spouse

	Residence	N	Mean	Std. Deviation	Std. Error Mean	*t*-value	Sig.
WLC	Employed	117	26.179	6.5530	0.6058	0.489	0.625
	Not employed	84	25.750	5.5208	0.6024		
WFC	Employed	117	13.966	3.6411	0.3366	0.405	0.686
	Not employed	84	13.762	3.3496	0.3655		
WLB	Employed	117	40.145	9.0328	0.8351	0.519	0.604
	Not employed	84	39.512	7.7700	0.8478		

While the spouse of 117 respondents were employed, 84 did not have any employment. It can be observed from the Table that there exists no significant difference in both WLC and WFC as well as overall WLB, based on the employment status of spouse. The mean values were very close and did not show any difference. This signifies that the employment status of spouses does not exercise any impact on the WLB of women employees. Delina and Raya (2013) had found that working women found it challenging to balance their work and personal life, irrespective of the employment of their spouses. Anitha and Muralidharan (2014) also found that the employment of spouse had an influence on the WLB. The present study is thus making a significant contribution to the literature by stating that the employment status of spouses does not impact WLB.

To test the tenability of the hypothesis that "There is no significant difference in WLB of female employees based on their ages", ANOVA was conducted (Table 5).

The results of the analysis show that there were no significant differences in WLF between the various groups based on age. As such the hypothesis H_{2c} is accepted. Many studies have examined the role of age on WLB (Delina & Raya, 2013; Makabe, 2015). Earlier studies, for instance, Crompton and Lyonette (2005) had found younger employees experience work-life disruptions. Similarly, Yeandle (2005) had found that older workers were capable of obtaining the desired level of WLB due to various factors. The finding of the present study is in contra to these earlier studies, as it has found that there is no relationship between age and WLB among women employees. This may be due to the cultural differences with respect to the sample studied.

It was also hypothesized that "There is no significant difference in WLB of female employees based on their years of experience". This hypothesis is also accepted as the ANOVA was not significant (Table 6). It was not significant either

Table 5
ANOVA of the sample based on age

		Sum of Squares	df	Mean Square	F	Sig.
WLC	Between Groups	338.338	5	67.668	1.837	0.107
	Within Groups	7181.662	195	36.829		
	Total	7520.000	200			
WFC	Between Groups	46.050	5	9.210	0.741	0.594
	Within Groups	2425.085	195	12.436		
	Total	2471.134	200			
WLB	Between Groups	365.206	5	73.041	1.008	0.414
	Within Groups	14129.928	195	72.461		
	Total	14495.134	200			

for WLC and WFC. The F value of the overall WLB is also not significant which signifies that years of experience have no impact on the WLB of the respondents. This finding goes contra to the finding of Anitha and Muralidharan (2014) who found that experience of the respondents had the influence of WLF. However, there is a need for a more in-depth study with a larger sample to generalise the finding.

DISCUSSION

The findings of the study have many theoretical and practical implications. A high level of WLB has the potential to reduce turnover intention and reduce task

Table 6
ANOVA of the sample based on experience

		Sum of Squares	df	Mean Square	F	Sig.
WLC	Between Groups	170.190	5	34.038	0.903	0.480
	Within Groups	7349.810	195	37.691		
	Total	7520.000	200			
WFC	Between Groups	97.239	5	19.448	1.598	0.163
	Within Groups	2373.895	195	12.174		
	Total	2471.134	200			
WLB	Between Groups	478.984	5	95.797	1.333	0.252
	Within Groups	14016.151	195	71.878		
	Total	14495.134	200			

performance. Another aspect of importance is that support from respective families could positively impact work-life balance. The present study has found that women expatriate employees have issues related to WLB. This could be overcome with support from family members. Further, the findings of Fischlmayr and Kollinger (2010) that balanced leisure time with appropriate activities is of significant importance. Setting priorities and proper definition of clear goals regarding leisure time would help in this direction. This balancing of leisure time and the required cross-cultural adjustments would be areas that could be of interest to social scientists for empirical examinations.

CONCLUSION

Though WLB is a topic that has been researched oft repeatedly, it is still a hot topic as it throws out challenging, interesting and intriguing results; each time an empirical examination is done. The present work focused on identifying the difference in WLB with respect to female Indian residents and expatriate employees in the Middle-east. The study has provided some interesting results, which is partly in tandem with earlier studies. It has established that expatriate female employees have a lesser amount of WLB than resident employees. This could be due to the lack of support from the extended family that is readily available when in the home country.

A probable limitation of the study is that the data for the study has been collected solely from respondents in the Middle-east countries. There may be certain socio-cultural issues that are unique to the region, which could have influenced the results. This can be confirmed only after conducting a study in other regions of the world. Indian diaspora is now working across the globe in countries ranging from Australia and Malaysia to UK, Canada, and the USA. A cross-national study that considers samples from these countries are sure to have interesting results. This will also open the opportunity of comparing the WLB of female expatriates in developing and developed nations. It is expected that the present study will stimulate social researchers to conduct further studies in this challenging area.

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The Study of Job Embeddedness and its Effect on Employee Retention in the Hospitality Industry of Pattaya City, Chonburi Province

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ABSTRACT

High turnover rates and labour shortages have become a large and serious problem for the hospitality industry of Pattaya City, the world-renowned resort city in Thailand. Instead of using the more frequently studied variables of employee satisfaction, organisation commitment, perceived job alternatives, and job search, this study used job embeddedness theory to understand the turnover intention of employees. This paper examines the level of job embeddedness and its relationship to turnover intention. A total of 421 valid and complete self-administered questionnaires collected from five hotels located in Pattaya city area were used in the study. Hierarchical linear regression and the correlation test were used for data analysis. The results show job embeddedness is negatively correlated to turnover intention. Moreover, organisation-embedded factors are a better predictor than community-embedded factors when trying to understand the turnover intention of an employee. However, in contradiction to the theory, job embeddedness is not a better predictor of turnover than conventional variables.

Keywords: Employee retention, job embeddedness, Pattaya, turnover intention

INTRODUCTION

An organisation's success and accomplishment depend on the consistent determination and dedication of its employees. Employees, especially those who are trained and possess job-related skills, experiences, knowledge, and competency, are considered a valuable asset that will help

the organisation succeed in its mission and drive it towards desired goals, developing sustainability in the long run. A large and serious problem for most organisations is that high employee turnover rates cause various direct expenses (recruitment and selection costs) and indirect expenses (loss of morale among remaining employees, loss of competency and knowledge) that could be crucial (Dess & Shaw, 2001). As a result, the organization's efficiency and effectiveness are impaired. Turnover leaves the organisation with an insufficient number of employees for the work process. High turnover rates could demotivate and stimulate higher stress due to more responsibility falling on the remaining employees (Hendrie, 2004; Waldman et al., 2004). New employees may not have developed the skills required to adequately meet customer expectations, causing dissatisfaction, and customers loyal to the ex-employee might follow the ex-employee. A great deal of research has been undertaken to understand the high employee turnover phenomenon (Mitchell et al., 2001). Yet finding the root cause in order to reduce turnover rates is still a challenge for many organisations and researchers alike.

High turnover rates and labour shortages have driven organisations and businesses to start studying the factors that contribute to turnover and employee retention. Traditional research has focused on an attitude-driven process and its component parts. The most frequently studied variables include employee satisfaction and organisation commitment (Borah & Malakar, 2015).

However, Mitchell et al. (2001) introduced the job embeddedness theory, which focused on the factors that influenced employee retention from a relatively different perspective than that of turnover research. Instead of asking "Why do employees quit?", the theory addresses the question "Why do employees **not** quit?" and examines the "constraining forces" or "spider web" that prevent turnover. Job embeddedness theory involves three dimensions: fit, link, and sacrifice. Each dimension is important both on- and off-the-job. The theory's perspective is different from that of conventional studies that focus on the psychological process of withdrawal, making it more comprehensive, applicable to more contexts, and able to better predict actual turnover and turnover intention (Holtom & Inderrieden, 2006; Holtom & O'Neill, 2004). For this reason, it has gained popularity and interest ever since. Various academic articles and studies published in journals around the world have advocated the theory's validity and reliability.

Pattaya City, Chonburi province, is Thailand's world-renowned touristic city, popular among Thai and foreign tourists alike. The tourism and service sectors are among Thailand's top revenue-generating industries. In 2017, 35.4 million tourists travelled to Thailand, generating over 930 billion baht for the overall tourism industry. Accounting for over 17% of the GDP, or over 2.5 trillion baht, the industry is considered the country's major source of income. The Department of Employment, Ministry of Labour indicates that the labour demand

in the service sector was 16.87 million in 2015, 17.23 million in 2016, 17.58 million in 2017, 17.90 million in 2018, and 18.08 million in 2019, increasing every year. The hospitality and food and beverage service industries are among the country's top 5 industries with the highest labour demand (Department of Employment, 2018). The Tourism Authority of Thailand (TAT) Pattaya Branch states that the occupancy of hotels in Pattaya City was 86.05% in 2016. Therefore, hotel businesses in Pattaya City need a great amount of labour to handle the demand for services. Hotel staff, especially experienced and multilingual ones, are in high demand among Pattaya City hotels due to frequent employee turnover and career changes. Despite good benefits, high wages, and weekly days off for employees, organisations still face the labour shortage issue. This leads to competition over labour. The labour shortage also affects existing employees due to more responsibilities, resulting in fatigue and, eventually, turnover.

Job embeddedness is statistically significant and negatively associated with turnover intention and actual turnover. The study by Chan et al. (2019) found job embeddedness determined proactive customer service and enhanced the greater performance of hotel employees. However, literature and research articles on job embeddedness in Thailand have not come to any clear conclusion and are limited in number. In order to obtain theoretical accuracy and precision, this study aims to examine the relationship between job embeddedness and turnover intention of

employees in the hospitality industry in Pattaya City, Chonburi province. Study results can be presented to management teams in order to develop a solution and improve and develop the management protocol of the organisation to reduce employee turnover rates. It can also serve as a guide for those who are interested in employee retention to apply and develop further in other organisations.

LITERATURE REVIEW

Turnover and Turnover Intention

Rahman and Nas (2013) described turnover as a permanent migration (of an employee) out of an organisation. Mathis and Jackson (2008) stated that turnover was a permanent departure from an organisation that reflected the employee's will to terminate the employment. Turnover intention means a condition in which an employee has a wish to leave and to search for other options in order to leave his/her position in the current organisation in the near future (Darrat et al., 2017; Mitchell et al., 2001). Many researchers have studied turnover intention to understand actual turnover (Chikwe, 2009; Lim, 2008; Taormina & Kuok, 2009).

Many researchers agree with Mobley (1982) that turnover intention should be studied in order to understand the actual causes of turnover (Johnsrud & Rosser, 2002; Kaur et al., 2013) because turnover decisions depend on various factors. Udechukwu and Mujtaba (2007) indicated that the concept of voluntary turnover was developed from social, economic, and psychological aspects. A turnover decision

is generally concluded after thorough thinking, situation evaluation, consideration of alternatives, opportunity exploration, and reconsideration. Carley (1992) had affirmed that turnover decisions, in general, were not thoughtless acts but resulted from a systematic and complicated process.

From the literature review, a positive relationship between turnover intention and actual turnover has been observed. Actual turnover increases with turnover desire (Griffeth et al., 2000; Kaur et al., 2013). Theoretical and empirical evidence suggest that turnover intention is a variable that can best predict turnover (Ajzen, 2002; Borah & Malakar, 2015; Ramesh & Gelfand, 2010), but since it is difficult to collect actual turnover data because of reasons like confidentiality, it is more common in research to measure turnover intention than actual turnover behaviour.

Job Embeddedness

The job embeddedness theory provides a new perspective to explain employee retention by focusing on the factors associated with retention rather than turnover (Holtom et al., 2006a). It can predict turnover intention and actual turnover better than job satisfaction and organisation commitment, as well as perceived job alternatives and job search (Holtom & Inderrieden, 2006; Holtom & O'Neill, 2004; Mitchell et al., 2001). Attitudinal variables like job satisfaction and organisation commitment account for only 4–5% of the variance in turnover (Hom & Griffeth, 1995; Griffeth et al., 2000). Job embeddedness theory is developed from research by Lewin (1951) that discovered human beings have a "Life Space", intertwined with everyday life elements (Reitz & Anderson, 2011). Both job-related embeddedness (organisation embeddedness) and non-job embeddedness (community embeddedness), along with traditional variables, such as job satisfaction and organisation commitment, can be used to explain employee turnover (Jiang et al., 2012). From the literature review, it is observed that organisation factors are able to predict retention better than community factors (Lee et al., 2004; Mitchell et al., 2001; Thau et al., 2007). Employees with high job embeddedness demonstrate fewer unfavourable behaviours when facing unanticipated events. The job embeddedness theory consists of three variables for analysis: fit, link, and sacrifice, each of which is divided into organisational embeddedness and community embeddedness in its respective aspect. In total, there are six dimensions.

Fit is divided into fit for the organisation (fit-organisation) and fit for the community (fit-community). Individual value, career goals, knowledge, skills, and abilities relevant to the organisation's culture, and qualities required for the job, highly influence an employee's turnover decision. If the employee fits or is compatible with the organisation and possesses a personal value that aligns with the nature of the job or organisational culture, turnover will be low. Moreover, off-the-job factors, such as climate, vibe, facilities, local values, politics, religion, and entertainment can

also influence an employee's decision to quit. However, there is relatively little supporting research on fit-community as an influence on retention (Lee et al., 2004). In most research articles, the association between fit-community and turnover intention is not observed. This is possibly because the community has less influence on turnover decisions than do organisation embeddedness factors, especially in this age of nuclear family households where there are few interactions among neighbours. This could represent the reason such association is not observed.

Links are characterised as formal or informal connections between a person and institutions or other people (Mitchell et al., 2001). The link variables are divided into link with the organisation (link-organisation) and link with the community (link-community). The study of links covers social, mental, and financial links of an employee with people surrounding him or her. The higher the number of links between the person and the web, the more an employee is bound to the job and the organisation. The drive that keeps the employee from leaving could be pressure from family, colleagues, or their community (Maertz et al., 1996; O'Reilly et al., 1989; Prestholdt et al., 1987).

The sacrifice variable is divided into organisational sacrifice (sacrifice-organisation) and community sacrifice (sacrifice-community). Sacrifices are losses perceived by employees when they leave the job. They can be either material or psychological benefits received during employment or in the future. Job-related losses include monetary reward, promotion opportunity, and good colleagues, while community losses include a familiar atmosphere, community facilities, local group, or community membership. Sacrifice involves a comparison of losses to new job alternatives. The greater the sacrifice, the more difficult it becomes to leave a job (Shaw et al., 1998).

Since Mitchell et al.'s (2001) job embeddedness theory was introduced, it has been further expanded, and much research has been conducted. One of the research studies further expanded the theory to understand the influence of nation, culture, and family on job embeddedness. The work of Ramesh and Gelfand (2010) studied job embeddedness among employees in the United States and compared it to the situation in India. They found that the fit factor well explained retention in the United States, while the link factor better accounted for retention in India. Research by Tanova and Holtom (2008) studied the effect of job embeddedness on employee turnover in Denmark, Finland, Italy, and Spain. In Denmark and Italy, only on-the-job factors predicted turnover, while in Finland and Spain, both on- and off-the-job factors were necessary to predict turnover. However, the amount of research on the effect of job embeddedness on turnover intention is still low compared to research on job satisfaction, organisation commitment, perceived job alternatives, and job search. This article aims to study the level and relationship of job embeddedness factors and the turnover intention of employees

in the hospitality industry of Pattaya City, Chonburi province, Thailand.

Hypothesis 1: Job embeddedness has a significantly negative relationship with turnover intention.

Hypothesis 2: Organisation embeddedness can predict the turnover intention of employees better than community embeddedness factors.

Hypothesis 3: Job embeddedness theory can predict the turnover intention of employees better than conventional theories (job satisfaction, organisation commitment, perceived job alternatives, and job search).

METHOD

Study participants were full-time frontline employees and managers/supervisors in five hotels in Pattaya City. The questionnaires were distributed to all employees employed in the five hotels during the month of May 2019. Using self-administered questionnaires, a total of 465 responses were obtained. After eliminating incomplete and missing data, 421 questionnaires were found to be valid and complete and were used in our final sample. To test our hypotheses, descriptive statistics and inferential statistics (correlation and hierarchical linear regression) were analysed.

Measurement

The tool used in this study was a structured questionnaire that was created based on relevant concepts, theories, and previous literature. The questionnaire was developed from the work done by and Holtom et al. (2006b) and Mitchell et al. (2001). The

questionnaire was divided into four sections. The first section contained demographic information for the respondent, including age, gender, level of education, marital status, position, years of service in the current organisation, experience in the hospitality industry, total monthly income, number of family members receiving support from the respondent and financial situation of the family. The next section asked 12 questions about overall job satisfaction, affective commitment, continuance commitment, and normative commitment. The third section inquired about the level of job embeddedness: fit-organisation, fit-community, sacrifice-organisation, sacrifice-community, link-organisation and link-community. The researcher adjusted the questions to suit the research context by adding the terms 'hotel' and 'Pattaya City' to facilitate a better understanding. In addition, one question was added to each aspect, bringing the total number of questions to 24 instead of the 18 present in the original questionnaire created by Holtom et al. (2006a). The last part of the questionnaire consisted of 11 closed-ended questions that asked about turnover intention, perceived job alternatives, and job search. Sections two, three, and four were measured using rea 5-point Likert scale ranging from strongly agree (5) to strongly disagree (1). Cronbach's alpha coefficient of the questionnaire is 0.814.

RESULTS

Descriptive Information

The demographic characteristics of this

study were as follows: There were 153 male respondents (36.3%) and 268 female respondents (63.7%). The respondents ranged in age from 18 to 68 years old with an average age of 36.73 years. In terms of the level of education, 345 respondents (81.9%) had an educational level lower than a bachelor's degree, while 74 respondents (17.6%) had a bachelor's degree and 2 respondents (0.4%) possessed a higher level of education. With respect to marital status, 200 respondents (47.5%) were single, 124 (29.5%) were married with kids, 42 (10.0%), were married without kids and 55 (13.1%) were divorced. A majority of the respondents (80.8%) were operational level employees; of the remaining, 14.7% were mid-level management and 4.5% were executive level. The average years of service in the current organisation was 2.76 years with an average of 3.29 years of experience in the hospitality industry. With respect to income, 268 respondents (63.7%) had a monthly income between 9,000-15,000 Baht, while 71 (16.9%) had lower than 9,000 Baht and the remaining 82 (19.4%) earned 15,000 Baht and above. The average number of family members receiving support from the respondents was 2.92 persons; 57 (13.5%) of the respondents did not have to support anyone, while 43 (10.2%), 102 (24.2%), and 219 (52.1%) had 1, 2, or more than 2 family members as their financial dependents. The questionnaire classified the respondents according to their family financial situation, with 89 (21.1%), 150 (35.6%), 163 (38.7%), and 19 (4.5%) stating they were from the lower class, working class, lower-middle-income, and upper-middle-income levels, respectively.

Mean, standard deviations, and correlations among tested variables are presented in Table 1. Conventional variables—job satisfaction, organisation commitment, job alternative, and job search behaviour—are all significantly correlated with turnover intention (r=-.31, -.28, .78, .71, p<0.01), which is in line and in support of the literature. The higher the satisfaction and commitment of employees to an organisation, the less they will think about quitting. The more employees know about job alternatives and the more job searching they do, the greater the chance they will leave the organisation. As we expected, job embeddedness is significant having a positive correlation with job satisfaction (r=.69, p<0.01) and organisation commitment (r=.81, p<0.01). However, job embeddedness is weakly and negatively, but not significantly, correlated with job alternatives (r=-.02) and job search (r=-.06), which is in contradiction to Mitchell et al.'s (2001) finding. This could be due to the ease of finding job information today via the internet on various platforms. Employees could still be embedded, yet fully aware of their alternatives.

Tests of Hypotheses

As shown in Table 1, job embeddedness is negatively correlated with turnover intention (r=-.15, p<0.01), which is in line with our expectations. This result suggests that there is a negative relationship between employee's being embedded and

Table 1

Means, standard deviations, and correlations of the studied variables

	Mean	SD	TI	JS	OC	JA	JSB	JE	JEO	JEC	FO	FC	SO	SC	LO
													Correlations		
Turnover Intention	2.95	1.07													
Job Satisfaction	3.50	1.00	-.31**												
Org. Commitment	9.87	2.76	-.28**	.77**											
Job Alternative	3.20	.96	.78**	-.20**	-.19**										
Job Search Behavior	2.97	1.12	.71**	-.24**	-.23**	.70**									
Job Embeddedness	20.20	4.05	-.15**	.69**	.81**	-.02	-.06								
JE_Organization	10.18	2.21	-.23**	.74**	.84**	-.09	-.13*	.94**							
JE_Community	10.02	2.10	-.05	.56**	.67**	.05	.02	.94**	.77**						
Fit-Organization	3.49	.85	-.19**	.71**	.75**	-.05	-.11*	.83**	.89**	.67**					
Fit-Community	3.75	.81	-.09	.57**	.55**	.06	-.02	.82**	.71**	.83**	.66**				
Sacrifice-Organization	3.27	.89	-.27**	.64**	.83**	-.18**	-.17**	.84**	.89**	.68**	.69**	.58**			
Sacrifice-Community	3.36	.87	-.16**	.58**	.73**	-.09	-.12*	.83**	.75**	.81**	.63**	.61**	.70**		
Link-Organization	3.41	.78	-.14**	.59**	.61**	.00	-.05	.81**	.85**	.66**	.65**	.62**	.62**	.62**	
Link-Community	2.92	.94	.12*	.23**	.35**	.14**	.17**	.62**	.41**	.76**	.33**	.42**	.38**	.35**	.36**

Note: $N = 421$, **. significant at 0.01, *. significant at the 0.05

their intention to quit. The more they are embedded, the less they will think about quitting. Thus, Hypothesis 1 is accepted.

Hypothesis 2, stating that organisation embeddedness can predict the turnover intention of employees better than community embeddedness factors, is answered by the results demonstrated in Table 2 through hierarchical linear regression analysis. After controlling for the effects of age, gender, job satisfaction, organisation commitment, job alternatives, and job search, organisation embeddedness significantly improved the prediction

of turnover intention ($\beta=-.214,\ p<0.01$) with a change in R^2 (ΔR^2) of .009 and adjusted R^2 ($\Delta Adj.R^2$) of .008. On the other hand, community embeddedness was not statistically significant and did not improve the prediction of turnover intention with $p>0.10$. This is in line with results obtained from Table 1 that community embeddedness does not correlate with turnover intention. Therefore, we conclude that organisation embeddedness can predict turnover better than community embeddedness. Hypothesis 2 is accepted.

Table 2

Results of hierarchical linear regression analysis organization embeddedness and community embeddedness on turnover intention

	Model 1		Model 2	
Variables	*b*	*β*	*b*	*β*
(Constant)				
Age	-.001	-.011	.000	-.003
Gender	.009	.004	.006	.003
JS	-.116	-.109**	-.074	-.069
OC	-.009	-.023	.030	.077
JA	.604	.542***	.607	.545***
JSB	.291	.303***	.294	.306***
JE_Org			-.104	-.214***
JE_Com			.037	.072
R²		.680		.690
ΔR²				.009
Adj. R²		.675		.683
ΔAdj.R²				.008
F		146.675***		114.367***
ΔF				6.260

Note: N=421, *** significant at 0.01, ** significant at 0.05, * significant at 0.10

Hypothesis 3 was that job embeddedness could improve the prediction of employee turnover intention above and beyond that predicted by conventional variables (job satisfaction, organisation commitment, perceived job alternatives, and job search). Table 3 and Table 4 show the results and reveal that job embeddedness can improve prediction of turnover intention over job satisfaction ($\beta=.141,\ p<0.05$), organisation commitment ($\beta=.241,\ p<0.01$), job alternative ($\beta=-.128,\ p<0.01$), and job search ($\beta=-.106,\ p<0.01$) after controlling for age and gender. However, even though job embeddedness is statistically significant to turnover intention after controlled the aforementioned variables and improved

overall model predictability, the beta coefficients of job embeddedness remained low (less than 0.3) comparing to the conventional variables. As demonstrated in Model 2 of Table 3 and 4, Job embeddedness's beta coefficient (β) in predicting turnover intention were .141, .241, -.128, -.106 compared to job satisfaction, organisation commitment, perceived job alternatives and job search's beta coefficient of -.391, -.459, .774, and .703, respectively. These reveal, in contradiction to the literature review, conventional variables can predict employee turnover intention better than job embeddedness in the context of this study. Thus, hypothesis 3 is rejected.

Table 3

Results of hierarchical linear regression analysis of turnover intention, job satisfaction, organisation commitment, and job embeddedness

	Model 1		Model 2		Model 1		Model 2	
Variables	b	β	b	β	b	β	b	β
(Constant)	4.490		4.126		4.436		3.929	
Age	-.008	-.086*	-.009	-.099**	-.008	-.092*	-.010	-.109**
Gender	-.096	-.043	-.089	-.040	-.102	-.046	-.100	-.045
JS	-.316	-.296***	-.418	-.391***				
OC					-.104	-.268***	-.178	-.459***
JE			.037	.141**			.064	.241***
R^2		.106		.117		.092		.112
ΔR^2				.01				.020
Adj. R^2		.100		.108		.085		.103
$\Delta Adj.R^2$				.008				.018
F		16.566***		13.725***		14.000***		13.076***
ΔF				4.755				9.453

Note: N=421, *** significant at 0.01, ** significant at 0.05, * significant at 0.10

Table 4

Results of hierarchical linear regression analysis of turnover intention, job alternatives, job search, and job embeddedness

Variables	Model 1		Model 2		Model 1		Model 2	
	b	β	b	β	b	β	b	β
(Constant)	.335		.953		1.039		1.561	
Age	-.005	-.054*	-.002	-.025	-.003	-.039	-.001	-.016
Gender	.017	.008	.002	.001	.010	.004	-.004	-.002
JA	.862	.774***	.862	.774***				
JSB					.679	.707***	.676	.703***
JE			-.034	-.128***			-.028	-.106***
R^2		.611		.626		.509		.520
ΔR^2				.016				.011
Adj. R^2		.608		.623		.505		.515
$\Delta Adj.R^2$				.015				.010
F		218.14***		174.40***		144.04***		112.47***
ΔF				17.420				9.228

Note: N=421, *** significant at 0.01, ** significant at 0.05, * significant at 0.10

DISCUSSION

The results of this research are both in support and in contradiction to the job embeddedness theory of Mitchell et al. (2001). The study contributes to proving the theory in a number of ways. First, job embeddedness is negatively related to turnover intention in the case of hospitality industry employees of Pattaya City, Chonburi province, Thailand. This result is in line with many previous studies in both western and eastern contexts. Borah and Malakar's (2015) study of employee job embeddedness in the Guwahati region of Assam, India, showed the same results. Similarly, Ramesh and Gelfand's (2010) study of job embeddedness in both the United States and India found that job embeddedness was negatively related to

turnover in both samples. Our research, conducted in Thailand, is yet further evidence that job embeddedness can be applied across cultures, and that it is a significant predictor of employee turnover in organisations.

Second, this study adds to a growing body of research that indicates organisation factors of job embeddedness are a better predictor of turnover intention than community factors. These results are in line with and Hussain and Deery (2018), Lee et al. (2004), Ramesh and Gelfand (2010), and Shafique et al. (2011). Especially, the study by Ampofo et al. (2016) studied job embeddedness in Thailand found organisation embeddedness could predict turnover intention but not community embeddedness, which in line with our findings. The explanation for

why community factors did not contribute to the prediction of turnover could stem from the urbanisation lifestyle and the lack of community in modern society, where individuals moved toward more isolated ways of life. Thus, community factors do not constrain employees from leaving the organisation. While organisational and occupational communities formed at work could form a "surrogate families" (Lee-Ross, 2008) strengthening employee's embeddedness replacing neighbourhood communities in the traditional sense. It is reasonably understandable for researchers to only study job-related organisation factors and omit community factors when trying to understand employee turnover intention.

However, the results of this study are conflicting with existing literature that job embeddedness theory is a better predictor of turnover intention than conventional variables. Mitchell et al. (2001) supposed that job embeddedness improved the prediction of voluntary turnover, above and beyond that accounted for by job satisfaction, organisation commitment, perceived alternatives, and job search. According to Yang et al. (2011), the number of researches was comparing the power of job embeddedness to the conventional variables and most of the empirical finding demonstrates job embeddedness predicted turnover better. The findings by Mallol et al. (2007) suggested job embeddedness was a robust predictor of employee retention across diverse populations and prior research by Crossley et al. (2007) and Felps et al. (2009) supported the claim that

job embeddedness could predict voluntary turnover better and beyond job attitudes and the core variables of turnover from traditional models. Thus, to the best of the author's knowledge, no study has revealed a similar finding that conventional variables are a stronger predictor of turnover intention. Tantiboontaweewat and Maneesri (2013) studied job embeddedness, job satisfaction, and organisational commitment on turnover intention of 660 Thai respondents and found job satisfaction and organisational commitment were significantly correlated to turnover intention, but not job embeddedness. Therefore, it may be that job embeddedness is not a powerful predictor of turnover intention in the case of Thai people and conventional variables of job satisfaction, organisation commitment, perceived alternatives, and job search still a better use when trying to understand employee turnover intention in Thailand context.

CONCLUSIONS

The study of job embeddedness and its effect on employee retention in the hospitality industry of Pattaya City, Chonburi province, provides evidence to support the generalisation and validity of job embeddedness theory in predicting turnover intention. Job embeddedness is negatively correlated to turnover intention and job-related embedded factors are a better predictor than community-related factors when trying to understand the turnover intentions of employees. However, job embeddedness is not a better predictor

of turnover than conventional variables thus further job embeddedness research in Thailand in a wider range of organisation contexts is needed.

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Motivational Factors for Knowledge Sharing in Co-Working Spaces: Co-Working Spaces in Thailand from the Management Perspective

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ABSTRACT

The preliminary aim of this study is to explore the intrinsic and extrinsic motivational factors for knowledge sharing in co-working spaces. This study employed a qualitative approach based on in-depth interviews. The key interviewees were management personnel from 19 co-working spaces in Thailand categorised according to the sector. The motivational factors can be divided into two categories: intrinsic and extrinsic. Intrinsic motivation consists of four sub-categories: altruism, knowledge self-efficacy, self-interest, and job autonomy. Extrinsic motivation consists of five sub-categories: reward, reputation, networking, environment, and reciprocity. The findings of this study demonstrate that motivational factors support knowledge sharing in co-working spaces. The results further reveal that networking is the most significant motivational factor. Interviewees from the private sector revealed that intrinsic motivational factors were more effective than extrinsic. On the other hand, representatives from both the public and higher education

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sectors suggested that extrinsic motivational factors were more effective than intrinsic.

INTRODUCTION

Globalisation facilitates and drives methods of working by incorporating digital technology (Baldwin, 2017). In recent years digital technology has become a significant element of globalisation, driving the economy and changing the nature of traditional work styles by enabling people to work from anywhere in the world and at any time (Lundvall, 2016; Roos & Shroff, 2017; Spreitzer et al., 2017). The effect of these changes is that a new type of career has developed for digital nomads who prefer freedom in their working and personal lives to economic rewards (Thompson, 2018). Digital nomads can work anywhere, such as in cafés or co-working spaces which are flexible and suitable for their working needs. They also have the capacity to move to any place in the world (Makimoto, 2013; Thompson, 2018)

In 2005, Brad Neuberg built the first official co-working space, named Spiral Muse, in San Francisco (Spinuzzi, 2012). Spiral Muse was designed to attract the interests of independent professionals, as well as supporting the community in which space was built by allowing individual professionals to be independent but avoid the loneliness of working from home (Spinuzzi,

2012). Co-working spaces have been popular for the last decade. They are utilised most by start-up companies, entrepreneurs, freelancers, and digital nomads, as they enable people to work alongside others in shared spaces (Parrino, 2015). Co-working spaces provide facilities, offer good services, and help to create communities (Rus & Orel, 2015). People from different businesses can interact, share knowledge, and co-innovate with others in the same co-working space (Fuzi, 2015; Parrino, 2015; Spinuzzi, 2012). Additionally, the disadvantages of traditional workplaces such as the office, home, or cafés, are that they lack social and professional interaction, making it difficult for people to distinguish between their private and professional lives (Fuzi, 2015; Leclercq-Vandelannoitte & Isaac, 2016). Thus, co-working spaces provide a new means of working and demand is increasing for somewhere that is more than a workspace; they improve the work-life balance, provide flexible economic efficiency and offer many types of sharing facilities, equipment, and services for members (Kojo & Nenonen, 2017).

Co-working spaces are areas where micro-businesses and freelancers can collaborate on a variety of activities and tasks, sharing information, knowledge, ideas, and resources with other members of the community (Capdevila, 2015; Rus & Orel, 2015). Members of this new community have chosen to come to the space to work and share their knowledge and gain knowledge from others (Butler, 2008; Fost, 2008). Moreover, members of

co-working spaces also aim to communicate and build trust among each other (Capdevila, 2015). Finally, they can acquire knowledge from other members and apply it to their own organisation (Cao & Xiang, 2012; Foss et al., 2010).

Previous research involves a wide range of influential factors for knowledge sharing in many contexts (Wasko & Faraj, 2005). Many studies signal that motivational factors lead to a great deal of knowledge sharing in the various sectors of an organisation (Amin et al., 2009; Barreto, 2003; Lin, 2007). In terms of knowledge sharing in a co-working space, most members often share knowledge voluntarily and informally around interaction points (Soerjoatmodjo et al., 2015). Moreover, knowledge sharing among members should be supported by the management personnel of the co-working spaces, since it would help to increase the creditability of each member as well as providing partners and networking opportunities (Fuzi, 2015).

However, there is limited theoretical research on the concept of knowledge sharing in co-working spaces. Therefore, research on co-working spaces has the potential for further academic exploration. Moreover, there are studies that signal motivational factors that lead to greater knowledge sharing. Hence, this paper aims to preliminarily explore the motivational factors of knowledge sharing in co-working spaces to assist management personnel in developing strategies to improve knowledge sharing activities among members.

By seeking to understand knowledge sharing and the motivational factors affecting it, a qualitative approach was applied in this study to preliminarily explore the intrinsic and extrinsic motivational factors involved, by interviewing management personnel of co-working spaces from different sectors in Thailand. The study considered the insights of interviewees concerning the motivational factors they believed were important for supporting knowledge sharing in co-working spaces. The preliminary results of this study could be used as guidance for developing a questionnaire and a quantitative study for the testing of motivational factors affecting knowledge sharing in the context of users of co-working spaces in Thailand.

The remainder of the paper is structured as follows. Section 2 presents a review of the literature focusing on intrinsic and extrinsic motivational factors, knowledge sharing, and co-working spaces. Section 3 presents the model, sample selection, data collection, and analysis methods used in this study. Section 4 presents the results and discusses the findings. Finally, Section 5 presents the conclusion and a discussion on the consequent implications and limitations of the study and ideas for further research.

LITERATURE REVIEW

Motivational Factors for Knowledge Sharing

Motivation is a determinant in studies on knowledge sharing among individuals and has been discussed in previous literature (Bock et al., 2005; Chen & Hsieh, 2015; Kankanhalli et al., 2005; Lin, 2007; Ryan

& Deci, 2000; Tan & Ramayah, 2014). Knowledge can be easily shared, and its value influences people's motivation to share it (Ipe, 2003), given motivation is a psychological element that guides, drives and encourages individuals to aim for a specific goal (Gagné et al., 2019; Ryan & Deci, 2000).

There are two types of motivation: intrinsic and extrinsic (Lin, 2007). Intrinsic motivation is driven by an interest in or enjoyment of activities without economic rewards or pressure. People can be intrinsically motivated by engaging in tasks to improve their own capabilities and increase an organisation's effectiveness (Ryan & Deci, 2000). Extrinsic motivation refers to an action that leads to outcomes, focusing on goals such as monetary rewards and career advancement. There is no requirement for the benefit to outweigh the effort, only the existence of a suitable reward at the end of such an effort. There may, of course, be a different approach to it, but this does seem quite an extreme view (Ryan & Deci, 2000). Both intrinsic and extrinsic motivational factors affect the individual's intention to share knowledge. This idea has been explored and examined across many contexts in studies on knowledge sharing (Gagné et al., 2019; Hansen & Avital, 2005; Ipe, 2003).

Intrinsic motivational factors encourage individuals to perform knowledge sharing in response to their own interest or pleasure in doing so or in order to gain knowledge from their experiences without expecting material returns (Lin, 2008; Wasko & Faraj, 2005). Such individuals enjoy helping others and find dealing with problems interesting, simply because these actions make them feel good (Hung et al., 2011; Kankanhalli et al., 2005; Podrug, 2017). Individuals may also enhance their self-efficacy to provide knowledge and have the opportunity to help others on the basis that they enjoy that others can apply such knowledge to create new ideas and gain useful information for their organisations (Lin, 2007; Podrug, 2017). In terms of job autonomy, when professionals have to undertake a variety of creative tasks without any support from others, they may have little guidance on how to complete their tasks. Therefore, they must use their free time to research new ideas and participate in knowledge sharing activities. The opportunities often lead to the acquisition of knowledge that can be applied to their tasks (Llopis & Foss, 2016).

On the other hand, it is widely believed that some individuals share knowledge only once they have completed a cost-benefit analysis proving it to be beneficial or if they believe they will receive something in exchange for their contribution. In other words, such individuals rely on extrinsic motivation (Davenport & Prusak, 1998; Hung et al., 2011; Lin, 2007; Park & Gabbard, 2018). Such individuals always analyse the perceived benefits they will receive in exchange for their efforts to ensure these efforts are worthwhile (Lin, 2007). In order to share their knowledge, individuals who are extrinsically motivated must believe that their efforts will be rewarded either with reciprocation of the act

or enhancement of their reputation (Bock et al., 2005; Hung et al., 2011; Lin, 2007; Pillet & Carillo, 2016).

Based on previous research, both intrinsic and extrinsic motivational factors support knowledge sharing. However, the discussion can be contextually explored in terms of the private, public, and higher education sectors to establish any differences in terms of motivational factors in knowledge sharing.

Knowledge Sharing Motivation in the Higher Education Sector

Cheng et al. (2009) examined the effectiveness of knowledge sharing among academics and the reasons why academics at private universities in Malaysia shared and/or did not share their knowledge. The findings revealed that the higher education sector should promote knowledge sharing activities by creating an environment in which people were incentivised with reward mechanisms to encourage knowledge sharing. Additionally, an academician wishing to enhance his or her reputation as an expert in a specific knowledge domain can also develop networking within the academic community.

Saad (2013) applied a qualitative approach to explore the motivational factors of knowledge sharing with academicians at public universities in Malaysia. The results of this study presented seven motivational factors influencing academics to share knowledge. These were reputation building, acknowledgement (including receiving rewards, gaining promotion and recognition), becoming knowledgeable, reciprocity, vision, and mission, mentoring, and personal beliefs (including culture, sense of responsibility, and religion).

Mansor et al. (2015) examined the motivational factors for promoting knowledge sharing among individuals at public universities in Malaysia. The interviewees had experience as knowledge providers with positive attitudes towards knowledge sharing. The results of this study revealed the following: 1) Concerning the environmental factor, there was no informal avenue for knowledge sharing activities within their faculties. However, the faculties organise a formal avenue whereby senior professors are invited to give talks or share research and findings, experiences, and thoughts based on their expertise. They would prefer to share their knowledge at seminars and conferences at either local or international venues. 2) As for the personal factor, academics were found to be motivated if the knowledge sharing activities related to helping others, improving relationships with their peers, and networking building. Therefore, personal and environmental factors were found to influence knowledge sharing among academics.

As previously mentioned, the knowledge sharing motivational factors in the higher education sector can be synthesised with extrinsic motivational factors (environment, reputation, networking, rewards, and reciprocity), and are more effective than the intrinsic motivational factor (altruism).

Knowledge Sharing Motivation in the Public Sector

Olatokun and Nwafor (2012) investigated the effect of extrinsic motivational factors (organisational rewards and reciprocal benefits) and intrinsic motivational factors (knowledge self-efficacy and altruism) on employee attitude and intention towards knowledge sharing. The findings implied that knowledge sharing attitudes and intention to share knowledge was only related to intrinsic motivational factors. On the other hand, neither of the extrinsic motivational factors were important to the knowledge sharing mechanism since this involved temporary motivation to force employees to share knowledge.

Amayah (2013) investigated the factors affecting knowledge sharing in the government, based on quantitative research. The samples in this study consisted of 439 civil service employees at a mid-size public academic institution in the Midwestern United States. The results revealed that all motivators (personal benefits, community-related considerations, and normative considerations) had a significant effect on knowledge sharing variance. As for the enabling factors, social interaction, rewards, and organisational support were found to affect knowledge sharing, although reciprocity had no significant effect.

Chen and Hsieh (2015) examined the importance of intrinsic and extrinsic motivational factors on knowledge sharing in the government of Taiwan. The survey involved 514 middle-level managers working for the Taipei City public

companies. The findings revealed that civil servants were interested in a commitment to the public interest (normative motives), compassion (affective motives), and willingness to self-sacrifice (affective and normative motives), driving them to share knowledge for spiritual reasons. Additionally, compassion was the most influential predictor of norm-based public sector motivation and affected explicit knowledge more than tacit knowledge.

Accordingly, intrinsic motivational factors (altruism, knowledge self-efficacy, and interest) can be considered to be more supportive than the extrinsic motivational factor (reward) for knowledge sharing.

Knowledge Sharing in the Private Sector

Bock et al. (2005) tested the factors affecting the knowledge sharing attitudes and intentions of individuals in four large private organisations. The results from a field survey involving 467 employees presented that 'anticipated reciprocal relationships' and 'perceived personal contribution to the organisation' were the major determinants of individual attitudes towards knowledge sharing. However, 'anticipated extrinsic rewards' believed by many to be the most important motivational factor for knowledge sharing, were not significantly related to attitudes towards knowledge sharing.

Lin (2007) examined the role of both intrinsic (knowledge self-efficacy and altruism) and extrinsic (organisational rewards and reciprocal benefits) motivational factors on employee knowledge sharing. The findings indicated that reciprocal benefits,

knowledge self-efficacy, and altruism were important motivational factors for employee knowledge sharing attitudes and intentions.

Hau et al. (2013) aimed to investigate the effects of individual motivational factors (organisational rewards, reciprocity, enjoyment) for tacit and explicit knowledge sharing among employees. The findings presented that reciprocity and enjoyment contributed significantly to enhancing tacit and explicit knowledge sharing among employees. Moreover, all three motivational factors were found to have greater positive effects on tacit than explicit knowledge sharing. However, only organisational rewards had a negative effect on the tacit knowledge sharing intention of employees but a positive influence on their explicit knowledge sharing intention.

Finally, it can be implied that most related studies focus on the intrinsic motivational factors (altruism and knowledge self-efficacy) than intrinsic motivational factors (rewards and reciprocity) of knowledge sharing in the context of the private sector.

Knowledge Sharing in Co-Working Spaces

Soerjoatmodjo et al. (2015) studied the knowledge sharing process in co-working spaces using in-depth interviews containing semi-structured questions. The interviewees were entrepreneurs from SME companies who were members of co-working spaces in Jakarta. The findings indicated that most shared knowledge was unrelated to the commercial trade and not shared knowledge with direct competitors. Most entrepreneurs shared knowledge voluntarily and informally among each other in co-working spaces. Tacit knowledge was shared around interaction points such as the kitchen, during lunch, or coffee breaks, endorsing, and promoting members to share their knowledge with the hosts of co-working spaces through community activities.

As can be seen from the previous discussion, motivational factors have been identified to encourage knowledge sharing in organisations across the private, public, and higher education sectors. Several studies have identified intrinsic and extrinsic motivational factors as key determinants of knowledge sharing (Gagné et al., 2019; Hung et al., 2011; Razmerita et al., 2016; Rusu & Avasilcai, 2014). Meanwhile, other studies argue that intrinsic motivational factors offer a better means of motivation than extrinsic in terms of individual attitudes towards sharing knowledge (de Almeida et al., 2016; Jabbary & Madhoushi, 2014; Rusu & Avasilcai, 2014). However, a few studies investigate the effects of motivational factors on knowledge sharing in co-working spaces. Therefore, this study addresses the research gaps and proposes an integrated framework to preliminarily explore the motivational factors for knowledge sharing in the context of co-working spaces in Thailand.

Moreover, this comprehensive literature review highlights the following research gaps. This paper is based on the qualitative study of knowledge sharing from the perspective of management personnel in co-working spaces using their own experiences. Thus, the results presented in

this study offer guidance on how intrinsic and extrinsic motivation can be used to encourage all users of co-working spaces to participate in knowledge sharing activities in the future to benefit each other by improving their abilities and gaining access to business opportunities (Holienka & Racek, 2015). This leads to the rationale behind the research objective which is to preliminarily explore the motivational factors for knowledge sharing in co-working spaces to assist management personnel in developing strategies for knowledge sharing activities among members of co-working spaces.

Data analysis primarily involves a review of the intrinsic and extrinsic motivational factors since these from the key theoretical framework of this study. Moreover, such analysis is conducted in the context of public, private, and higher education sectors.

METHOD

This study applied a qualitative method to generate findings on motivational factors to support knowledge sharing in co-working spaces, from the perspective of management personnel from different sectors, age, and working experience. Purposive sampling was used as the basis for selection. Interviewees in this study consisted of management personnel from 19 co-working spaces in Thailand. Management personnel was selected because they understood the environment and activities of co-working spaces. Interview data sources were triangulated based on a discussion on the study context. Interviewees were selected across the private, public, and higher education sectors. Information on the interviewees is presented in Table 1.

The data was collected through in-depth interviews using semi-structured questions.

Table 1

Demographic characteristics of interviewees

Number Interviewee Code	Interviewee Code	Gender	Age (year)	Sector	Region	Working Experience in Co-Working Spaces (years)
1	CWSP1	Female	31-40	Private	Central	3
2	CWSP2	Male	31-40	Private	Central	3
3	CWSP3	Female	41-50	Private	Central	2
4	CWSP4	Female	31-40	Private	Central	3
5	CWSP5	Male	41-50	Private	Central	4
6	CWSP6	Male	41-50	Private	Central	3
7	CWSP7	Male	31-40	Private	Central	4
8	CWSP8	Female	31-40	Private	Central	4.5
9	CWSP9	Female	41-50	Private	Northern	6

Table 1 *(Continued)*

Number Interviewee Code	Interviewee Code	Gender	Age (year)	Sector	Region	Working Experience in Co-Working Spaces (years)
10	CWSP10	Male	41-50	Private	Northern	1
11	CWSP11	Female	51-60	Private	Southern	3
12	CWSP12	Male	31-40	Private	Southern	4
13	CWSG1	Male	41-50	Public	Central	1
14	CWSG2	Female	41-50	Public	Central	7
15	CWSG3	Male	41-50	Public	Eastern	6
16	CWSU1	Female	41-50	Higher Education	Northern	6
17	CWSU2	Male	41-50	Higher Education	North Eastern	3
18	CWSU3	Male	41-50	Higher Education	North Eastern	3
19	CWSU4	Male	51-60	Higher Education	Southern	4

Firstly, the researcher listed various co-working spaces used by the different sectors in Thailand. Invitations were then sent by email to administrators of 50 co-working spaces in Thailand, with positive responses received from management personnel of 19 co-working spaces. After making the necessary introductions, the researcher explained the study objectives. Interview guidelines were then sent to the 19 interviewees and appointments made for the interviews.

The interviews were either conducted face-to-face at the co-working spaces or over the telephone. Each interview took between 30 and 60 minutes and was recorded using audio recording software with the permission of the interviewees. Most of the interviews were conducted in Thai, with only one in English. At the beginning of the interview, the researcher explained the objectives of this study and assured each interviewee that any personal data would remain confidential. All interviewees subsequently confirmed their participation. The interview questions were designed to enable the researcher to gather data using the following five dimensions: 1) General information on the interviewees; 2) General information on the co-working spaces; 3) Motivational factors for supporting knowledge sharing in co-working spaces; 4) Knowledge sharing and activities in co-working spaces; 5) Potential action for promoting knowledge sharing in co-working spaces. A probing question was also included to obtain more detailed answers from the interviewees. The

researcher made notes and summarised the key points made by the interviewees.

Although this research is exploratory and conducted as a preliminary investigation with the use of qualitative data prior to quantitative data being applied in a subsequent study, the researchers relied on both deductive and inductive approaches. The categories and sub-categories were constructed according to intrinsic and extrinsic motivational factors for interview content analysis, guided by the findings of the literature review. On the other hand, the researcher also welcomes any factors emerging from the data collected in this study.

FINDINGS

The interview data is analysed using intrinsic and extrinsic motivational factors. Intrinsic motivational factors consist of four sub-categories: altruism, knowledge self-efficacy, self-interest, and job autonomy. Extrinsic motivational factors consist of five sub-categories: rewards, reputation, networking, environment, and reciprocity. Both types of motivation are considered to be key to knowledge sharing in co-working spaces. The findings are reported in Table 2.

The findings reveal that motivational factors support knowledge sharing in co-working spaces. The most significant motivational factor was found to be networking, based on the fact that all management personnel mentioned it as the key means of encouraging individuals to share knowledge in co-working spaces. After networking, environment, and self-

interest were both found to be equally important. The least important motivation factor was job autonomy. None of the interviewees considered reputation to be a motivator for sharing knowledge in co-working spaces.

It is also crucial to consider the results according to sector categorisation. Interviewees from the private sector revealed that intrinsic motivational factors were more effective than extrinsic. They advised that self-interest was the main motivational factor for encouraging users to participate in knowledge sharing activities. Most of the public sector focused on extrinsic motivational factors rather than intrinsic. They stated that budgets were set to provide rewards such as financial incentives, training courses, or incubation programmes to attract individuals to participate in knowledge sharing activities. Representatives from the higher education sector also focused on extrinsic motivational factors rather than intrinsic. They stated that networking and career opportunities were offered to encourage individuals to participate in knowledge sharing activities.

Intrinsic Motivational Factors

The following findings arose from the interviews:

Altruism

Only three interviewees from the private sector mentioned altruism as a key motivational factor for enhancing knowledge sharing, with the following examples:

Table 2

Intrinsic and extrinsic motivational factors provided by management personnel of 19 co-working spaces in Thailand

No.	Interviewee Code	Sector	Intrinsic Motivation				Extrinsic Motivation				
			Altruism	Knowledge self-efficacy	Self-Interest	Job autonomy	Reward	Reputation	Networking	Environment	Reciprocity
1	CWSP1	P	x	x	x	x			x	x	x
2	CWSP2	P	x	x	x				x	x	
3	CWSP3	P			x				x	x	
4	CWSP4	P							x	x	
5	CWSP5	P		x	x				x	x	
6	CWSP6	P							x		
7	CWSP7	P							x	x	
8	CWSP8	P			x				x		
9	CWSP9	P	x			x			x	x	
10	CWSP10	P			x				x	x	
11	CWSP11	P			x				x	x	
12	CWSP12	P		x	x				x	x	
13	CWSG1	G			x		x		x	x	x
14	CWSG2	G		x			x		x		x
15	CWSG3	G		x	x		x		x	x	x
16	CWSU1	U		x	x		x		x	x	x
17	CWSU2	U		x					x		
18	CWSU3	U		x	x				x		
19	CWSU4	U		x	x				x		
			3	**10**	**13**	**2**	**4**	**0**	**19**	**13**	**4**

Note: * P = Private sector, G = Public and U = Higher Education

'Each member could ask other members about something he/she did not understand. That member would then enjoy helping and finding answers for the other person.' – CWSP1

'Our programme had been running for about six years and there were many start-up teams within the six batches. They had all been pleased to join the programme as mentors and share their knowledge with applicants in the current batch.' – CWSP2

Knowledge Self-Efficacy

The importance of knowledge self-efficacy was highlighted by most interviewees from the public and higher education sectors. Here are some examples:

'We selected participants who were experts in financial technology and business to join the competition. These experts were organised into teams under various criteria. Finally, they could share their knowledge with each member to brainstorm, develop a new product, and present the solution to use in the pitching round.' – CWSG1

'We were established more than five years ago and encouraged various partners to collaborate in supporting entrepreneurs or start-ups in the medical, digital, and food business. We developed a programme to nurture them through funding or coaching. Therefore, everyone could apply their knowledge and share it with others in the programme. This enhanced their performance and effectiveness. After finishing the programme, they could commercialise their own products or services to expand the business in the future.' – CWSU1

Self-Interest

Representatives from all sectors highlighted self-interest as an important intrinsic motivational factor for knowledge sharing in co-working spaces. Interviewees stated that:

'I had more than 20 years' experience in banking and was the CFO of a start-up company. I was also a specialist in financial technology. For this reason, many members asked me questions about start-up businesses or finance. I gave them some good suggestions that they could apply to their jobs or for developing new businesses in the future.' – CWSP5

'Many entrepreneurs were interested in aerospace and participated in our activities. The activities involved many interesting topics to which they could apply knowledge from their own businesses.' – CWSG3

'The younger generation could attend topics in which they were interested. They could then share the knowledge gained from that topic. Therefore, they aimed to develop their own businesses further or apply for interesting jobs in the future.' – CWSU3

Job Autonomy

Only two interviewees from the private sector highlighted the freedom of work as a factor for encouraging members to share knowledge among the community. The following is one such example:

'Most of our members have come from other countries to work in Chiang Mai,

Thailand, in the short term. Each member worked autonomously and took a hot desk as his/her workspace. This meant they did not know other members before they joined the community. However, they always helped or shared their knowledge with other members when receiving requests for help or were asked questions about work.' – CWSP9

Extrinsic Motivational Factors

Findings from the interviews are presented as follows:

Rewards

Only one interviewee from the public sector and one from the higher education sector focused on rewards as a means for encouraging individuals to share knowledge.

'We organised a competition on drone technology and invited entrepreneurs who were interested to participate in this activity. We also set up monetary rewards or training programmes to motivate participants. They would share their expertise with others and receive a reward if such knowledge was valuable and useful to society.' – CWSG3

Networking

All interviewees mentioned networking, making it the key motivational factor for knowledge sharing in co-working spaces. The following examples are from interviewees in all sectors:

'We had three co-working centres inside and outside the university, two of which were located at the student centre and the library in the university, with the third in the local community centre outside the university. We would set up the consulting centre and provide recommendations for

businesses. It provided an opportunity for students and other people to participate in this activity. As a result of the consultation, businesses became more effective and some students had the chance to start their own businesses after graduating from university.' – CWSU2

'This co-working space was established to build an interior design studio and co-creation spaces in Bangkok. Most of our members were Chinese and Taiwanese companies. We also supported them in cooperating with Chinese and Taiwanese public companies. Additionally, we were a start-up hub, consisting of entrepreneurs, investors, and consultants as the biggest Taiwanese community in Thailand.' – CWSP6

'We always set up business nurturing programmes every year. Everyone is able to develop their ideas or current projects and then share and pitch them to the committee. Thus, if someone was selected by the committee then he/she could join the programme and benefit from networking by building relationships with participants, developing career opportunities, or business connections through this project.' – CWSG2

Environment

Thirteen interviewees recommended that all co-working spaces should promote the existence of a cooperative environment in order to encourage knowledge sharing among members. Here are some examples from interviewees in the private sector:

'We had a policy and setup environment in which members could share new ideas or knowledge with each other.' – CWSP2

'We had many kinds of digital nomads from overseas in our co-working space. Of course, they did not know each other. So, our team decided to set up an activity called a "power lunch", where we invited all members to have lunch together and helped them to get to know each other. They could build new relationships and share knowledge or business opportunities.' – CWSP9

'Our key partner was the Thailand Creative & Design Center, which was founded to integrate Thai society and culture with modern knowledge and technology. The space was designed to look like a modern library with many books and e-books. We had a book rental system to provide members with interesting books or e-books. Additionally, we had many exhibitions, talks, workshops, or activities which members could join. We motivated members to be creative learners and develop their own designs from our model. Ultimately, we hoped they could develop new ideas or businesses by sharing and exchange knowledge.' – CWSP3

Reciprocity

Four interviewees revealed that the benefit of knowledge exchange among members in a co-working space is a key determinant in influencing members to share knowledge. The following is an example provided by one interviewee from the public sector:

'We supported any start-up joining our programme. Start-ups could receive benefits such as promotion, training programmes, or mentoring. However, we had an agreement between us that members would share the profits on a project. That meant we obtained mutual benefit from the business.' – CWSG1

DISCUSSION

The primary objective of this study is to preliminarily explore the intrinsic and extrinsic motivational factors of knowledge sharing in co-working spaces. The findings of the qualitative study imply that most interviewees perceive the motivational factors as important determinants for knowledge sharing in co-working spaces.

The Effects of Intrinsic Motivational Factors on Knowledge Sharing in Co-Working Spaces

The findings of this study imply that most management personnel of co-working spaces try to find interesting topics and activities to encourage individuals to participate. Most participants have the freedom to ask questions or share ideas with each other during the activities. Hence, they can gain new knowledge and ideas for applying to their related jobs. This finding does not accord with those of Rusu and Avasilcai (2014), who recognised that self-determination was a driver for improving knowledge sharing in organisations, as well as improving work performance and enhancing organisational outcomes.

More than half of the management personnel in co-working spaces expressed that knowledge self-efficacy impacted upon the knowledge sharing intentions and attitudes of users. This finding is consistent

with that of Lin (2007) who argued that the association of knowledge self-efficacy and knowledge sharing was highly significant. However, only three interviewees from the private sector believed that individuals felt pleasure in sharing useful knowledge, thus helping others to become more motivated in sharing knowledge. This finding is also reported by Lin (2007), who found that altruism positively affected employee attitudes towards knowledge sharing.

Moreover, various members working autonomously in these co-working spaces are unlikely to share anything with other workers. Only two interviewees from the private sector stated that the job autonomy of each user motivated them to share knowledge in co-working spaces. However, this result does not match the findings of Foss et al. (2010), in that employees were not happy with the availability of job autonomy, task identity, and feedback within their organisation.

The Effects of Extrinsic Motivational Factors on Knowledge Sharing in Co-Working Spaces

Regarding extrinsic motivational factors, all interviewees mentioned that networking was the most important for influencing knowledge sharing in co-working spaces. This suggests that members of these communities pursue a wide variety of careers and are likely to include students, freelancers, SMEs and start-ups, and such a variation is a good reason for building relationships with others. Moreover, all managers aimed to build networks and collaboration among members in the co-

working space. The managers stated that they organise numerous unofficial activities such as beer parties, pizza parties, or trips to encourage users to get to know each other and improve their relationships. This finding is consistent with the research by Yang and Chen (2007), who found that collaboration and relationship building increased the willingness of individuals to share knowledge.

The finding regarding the environment does not accord with the results of Bock et al. (2005). They argued that the environment was not an important determinant of employee knowledge sharing in an organisation.

Regarding reciprocity, this finding aligns with that of Hung et al. (2011), who found that reciprocity was a key component, leading individuals to create new knowledge and ideas based on the knowledge shared by peers. Moreover, Lin (2007) indicated that reciprocity could affect knowledge sharing and result in long-term collaboration among employees in an organisation. However, reciprocity is not considered to be highly effective, given only four interviewees stated that it was a motivational factor for encouraging individuals to share their knowledge with others in the co-working spaces.

In terms of reward, the results of this study indicate that fewer management personnel agree that rewards should be used as a means of motivating workers to share knowledge in co-working spaces. Lin (2007) explained that organisational rewards such

as financial benefits or job security might not motivate employees to share knowledge within an organisation.

Reputation has no significant influence on knowledge sharing, which is in contrast to the findings of Wasko and Faraj (2005), who suggested that reputation could have a positive effect on an individual's intention to share knowledge within their community.

The Effects of Motivational Factors on Knowledge Sharing in Co-Working Spaces in Terms of Sector

Although the motivational factors for knowledge sharing in co-working spaces are significant, this study also reveals that they differ in importance according to the sector.

Management personnel from the higher education sector focused on extrinsic motivational factors rather than intrinsic. The findings of this study are in accord with those of Mansor et al. (2015) and Saad (2013), who explained that the environment, rewards, networking, and reciprocity could encourage individuals to share knowledge in the context of the higher education sector. None of the interviewees mentioned reputation as a determinant of knowledge sharing, in contrast to the study by Cheng et al. (2009). Some of the findings in their study showed that academicians wished to gain the reputation of being an expert in a specific knowledge domain.

Based on the public sector, most interviewees placed greater importance on extrinsic motivational factors than intrinsic. The majority of findings do not concur with those of Chen and Hsieh (2015)

and Olatokun and Nwafor (2012) who demonstrated that knowledge self-efficacy and altruism received more support than organisational rewards for knowledge sharing in public organisations.

The findings from the private sector indicate that intrinsic motivational factors are more effective than extrinsic for knowledge sharing in co-working spaces. This finding concurs with the research by Lin (2007), in that altruism and knowledge self-efficacy were found to have a greater influence on knowledge sharing than rewards in terms of private organisations.

From the discussion, it is evident that most findings concur with those in the existing literature. However, this study contributes new and significant findings concerning the motivational factors affecting knowledge sharing in the context of co-working spaces. The emerging factor in this study is self-interest which is important for encouraging individuals to share knowledge in co-working spaces.

Practical Implications

Certain practical implications arise from the above discussion. Furthermore, this study reveals that knowledge sharing is useful for individual members, teams, and management personnel in co-working spaces. Accordingly, management personnel should aim to change their goals to motivate members to engage in knowledge sharing activities. Firstly, networking should be a part of creating a knowledge sharing culture to foster the relationship and interpersonal interactions of individuals in co-working

spaces. For all sectors, co-working spaces should have community managers who understand and stimulate users to engage with each other. Moreover, most users are likely to gain new experiences or information from knowledge sharing among members in co-working spaces. However, they can also experience personal satisfaction from networking and sharing knowledge with the community in the co-working space. Secondly, management personnel should set up an appropriate environment in the co-working space by giving individuals a sense of freedom and readiness to help others. Hence, the environment has a positive psychological impact by encouraging individuals to participate in knowledge sharing activities in co-working spaces. Finally, management personnel should develop knowledge sharing strategies in terms of individual interests to motivate individuals to join in knowledge sharing activities with other members in the co-working space.

CONCLUSION

The primary objective of this study was to use a qualitative approach to explore the intrinsic and extrinsic motivational factors for knowledge sharing in co-working spaces in Thailand from the perspective of different management personnel.

The findings of this study support the idea that many aspects of motivation encourage users to share their knowledge in co-working spaces. The main contribution highlights that management personnel is more likely to use extrinsic motivational techniques to encourage members to share their knowledge than intrinsic motivational methods. Additionally, the most significant motivational factor influencing knowledge sharing in co-working spaces is networking.

Based on the sector aspect of co-working spaces, the private sector tends to attribute more importance to intrinsic motivational factors than extrinsic. On the other hand, interviewees from both the public and higher education sectors suggested that extrinsic motivational factors are more effective than intrinsic.

However, there are several limitations to this study that require further research. Firstly, the sample was drawn from co-working spaces in Thailand. Therefore, a study on other countries may produce alternative results, given that different cultures in co-working spaces tend to influence knowledge sharing among users. Secondly, the interviewees in this study were management personnel from 19 co-working spaces. Additional research should be conducted on users of co-working spaces to highlight what they believe would motivate them to share knowledge.

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Revisiting SERVQUAL as a Formative Construct Using PLS-SEM Two-Stage Approach in Service Quality Research

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ABSTRACT

The SERVQUAL instrument has been widely tested in marketing literature to measure service quality in various service settings including telecommunication. Most of these studies to date have treated SERVQUAL as a reflective scale. The existing literature challenges the model specification of many scales including SERVQUAL. However, the existing literature does not sufficiently address SERVQUAL as a formative construct to avoid the model misspecification using the two-stage approach via PLS-SEM. Moreover, the present study revisits the SERVQUAL scale as a formative construct in the telecommunication sector of Pakistan. This study used the mall intercept approach for data collection from the cellular consumers who visited the company-operated service centers in major cities of Pakistan. The study collected 392 responses with the help of personally administered questionnaires, recording a response rate of 65.3%. The results support the formative conceptualization of the SERVQUAL scale. In addition, the results support all the hypotheses providing empirical evidence of nomological validity for the SERVQUAL scale.

Keywords: Customer loyalty, Pakistan, PLS-SEM, reflective-formative, SERVQUAL, telecommunication

INTRODUCTION

Service quality (SQ) has been studied extensively for the last two decades and researchers have studied its various aspects in different settings. SQ plays an important role in a firm's survival and success, providing a competitive advantage over competitors. Extant literature reveals that SQ plays an important role for the generation of customer satisfaction (CS), customer loyalty (CL) and, ultimately, improves profitability (Cronin et al., 2000; Gong & Yi, 2018; Kang & James, 2004; Lee, 2013; Makanyeza et al., 2017; Morgan & Govender, 2017; Ortega et al., 2017; Reichheld & Sasser Jr, 1989). Most of these research studies have been conducted to provide an instrument of SQ which is more reliable and recapitulate in different settings including service settings. Among all these efforts, the most prominent is the "SERVQUAL" instrument developed by Parasuraman et al. (1985, 1988) which was afterward refined by Parasuraman et al. (1998, 1991). This instrument comprises five dimensions which altogether make twenty-two items. It was initially tested in five different service sectors including telecommunication, credit card, banking, maintenance services, and title brokerage. Past studies considered SERVQUAL as a reflective construct. Hence, literature is dominated by the reflective operationalization of the SERVQUAL scale (Bruner & Hensel, 1993).

Recently, several papers have criticized the reflective operationalization of the SERVQUAL scale and support formative operationalization (Diamantopoulos & Winklhofer, 2001; Rossiter, 2002). Though academic research has frequently lacked conceptualizing the constructs as formative to date, however, theoretical criticism has been raised for the appropriate conceptualization of constructs to avoid model misspecifications (Diamantopoulos & Winklhofer, 2001; Jarvis et al., 2003; Mackenzie et al., 2005).

This kind of lacking in literature causes model misspecification and deletion of important measures, hence affecting the practical and theoretical explanation of constructs in diverse settings. First-generation analysis techniques lack to address the model specification as formative or reflective; however, advanced latent variable score technique with the help of structural equation modeling (SEM) provides an opportunity to explore PSQ, CS, and CL by using the two-stage approach in PLS-SEM (Becker et al., 2012). Subsequently, this study sets out two research questions to be answered via empirical investigation, which are i) Does SERVQUAL have model misspecification where it has been operationalized as a reflective scale rather than a formative scale? ii) Does SERVQUAL as a formative scale have nomological validity?

To answer these research questions this study aims to study the methodological conceptualization of SERVQUAL as a second-order formative construct. In addition, it offers to test the nomological validity of SERVQUAL as a second-order formative construct by proposing the PSQ – CS – CL model for the service

sector i.e. telecommunication sector of a developing country (Pakistan). Before conducting a two-stage approach via PLS-SEM, a short discussion is warranted on the operationalization of SERVQUAL as a formative second-order construct which is given in the proceeding section.

SERVQUAL – Second-Order Formative Construct

Previous studies on PSQ have stressed that SERVQUAL is not only a prominent scale but also a widely used and accepted model, successfully operationalized in several satisfaction and loyalty studies (Khan, 2010; Lai et al., 2007; Rajeswari et al., 2017; Ren & Lam, 2016; Santouridis & Trivellas, 2010; Wong & Sohal, 2003). Parasuraman et al. (1985) suggested that PSQ was evaluated with the help of comparing the expectations and perception for the five service aspects/ dimensions which included reliability, tangibles, responsiveness, assurance, and empathy.

Past literature reveals that most of the studies conceptualized PSQ as the reflective construct. However, more recently, some criticism has been raised for measuring the constructs as reflective; alternatively, they are proposed to be better measured by a formative approach (Diamantopoulos & Winklhofer, 2001; Jarvis et al., 2003; Rossiter, 2002). Likewise, Jarvis et al. (2003) illustrated the difference between "formative" and "reflective" models in a way that, in the formative models, items/ dimensions were causing the construct while the opposite happened for reflective models.

Furthermore, the assessment criteria for the reflective measurement model are different from the criteria for the assessment of the formative measurement model (Jarvis et al., 2003). Based on these arguments, it is necessary to conduct future studies to explore the formative operationalization of PSQ instead of considering it a reflective construct. The formative conceptualization of PSQ is developed on the notion that it is a collective assessment that is built with the help of five dimensions. Moreover, a group of researchers have also supported this narrative and criticized the reflective measurement of PSQ in the following manner. For example, Rossiter (2002) emphasized the formative operationalization of PSQ in these words:

> "An example of an attribute that can be a formed attribute is SERVICE QUALITY [. .] If the experts decide that the target raters are likely to make this summative type of judgment, then SERVICE QUALITY is a formed attribute [. .] SERVICE QUALITY is actually a second-order formed attribute in that its components (Reliability, Assurance) are reflective attributes. (Rossiter, 2002)."

Furthermore, recent literature on electronic service quality (ESQ) supports the formative measurement of SQ which operationalized it as a higher-order formative construct (Collier & Bienstock, 2006, 2009; Ladhari, 2009; Parasuraman et al., 2005). In addition, Parasuraman et al. (2005) had given a new scale of ESQ conceptualized as a formative construct and

suggested that it was more appropriate to treat SQ as a formative construct. Another study by Collier and Bienstock (2006) suggested that SQ did not evaluate reliability or assurance. Quite the contrary, it was reliability and assurance that helped to develop the perception and evaluation of SQ. In light of these valid arguments, there is a concern about the past results of PSQ where it has been operationalized as a reflective construct. However, empirical studies on the formative operationalization in the service setting is missing. To make an assessment of SERVQUAL as formative constructs empirically, apart from the subjective characteristics of the sub-dimensions given above (e.g. causality from sub-dimensions to the construct and absence of interchangeability), nomological validity needs to be established. A group of scholars suggested that to test the nomological validity of a variable as a formative construct, one can observe the results of hypothesized relationships (Diamantopoulos & Winklhofer, 2001; Henseler et al., 2009; Urbach & Ahlemann, 2010). If the hypothesized relationships act in a similar manner as hypothesized in past literature, the nomological validity has been established. These arguments suggest that SERVQUAL needs to be associated with some other variables from literature to access its nomological validity which will eventually empirically test the SERVQUAL as a formative construct. Based on these comprehensive arguments, this study proposed to study SERVQUAL as a second-order formative construct.

Furthermore, previous studies in services marketing have used the nomological net of CL to access the constructs (Anderson & Sullivan, 1993; Brady et al., 2005; Spreng & Mackoy, 1996), therefore using the theoretical rationale of Oliver (1999) this research proposed to analyze the direct and indirect impact of SQ on CL via CS (Anjum et al., 2013; Barcelos et al., 2015; Chang & Yeh, 2017; Hussain, 2016; Saleem et al., 2016). The direct and indirect relationships will provide an opportunity to empirically assess: does SQ (second-order formative construct) acts in the same way as it does act in past studies including the mediation effect of CS between SQ and CL apart from the direct impact of SQ on CS and CL. Hence, this study will provide an assessment of SERVQUAL as a formative construct as suggested by Jarvis et al. (2003) to avoid model misspecification for the SERVQUAL scale.

Hypotheses Development and Research Framework

The research framework is established with the help of extant literature on SERVQUAL, which is given in Figure 1. This framework includes PSQ as a second-order construct which caused to develop only three hypotheses as follow.

The literature on CL has indicated that PSQ is an important determinant of CL (Alnsour et al., 2014; Gong & Yi, 2018; Johnson & Sirikit, 2002; Premkumar & Rajan, 2017; Santouridis & Trivellas, 2010). According to Izogo and Ogba (2015) and Makanyeza et al. (2017), when the

customers perceived the SQ to be good they remained loyal with the firm. It implies that better SQ in the form of visually appealing tangibles and reliable, responsive, and empathetic employees develop assurance among consumers which leads toward CL. Hence it is hypothesized that

H1: PSQ has a positive effect on CL.

Extent literature reveals that PSQ plays an important role in keeping the customers satisfied (Hassan et al., 2012; Santouridis & Trivellas, 2010). Particularly in the service sector, PSQ helps to enhance CS (Pumim et al., 2017). Therefore we proposed that

H2: PSQ has a positive effect on CS.

Past literature is mature with enough evidence to conclude that CS is strongly related to CL (Dick & Basu, 1994; Ramamoorthy et al., 2018). Numerous studies have revealed the positive effects of CS on CL (Bloemer et al., 1999; Edward

et al., 2010; Morgan & Govender, 2017; Ortega et al., 2017; Oliver, 1999; Pumim et al., 2017). Satisfied customers tend to have higher CL (Bolton & Lemon, 1999). Hence it is hypothesized that

H3: CS has a positive effect on CL.

The past literature specifies that CS plays the role of a mediator between the relationship of PSQ and CL. This argument is supported by a group of researchers who found that CS plays a significant mediating role between the relationship of PSQ and CL (Han & Hwang, 2014; Makanyeza et al., 2017; Lai et al., 2009; Lee, 2013). Hence it is hypothesized that

H4: CS mediates the relationship between PSQ and CL.

Methodological Consideration

The current development in statistical techniques for analysis including PLS-SEM allows developing the parsimonious
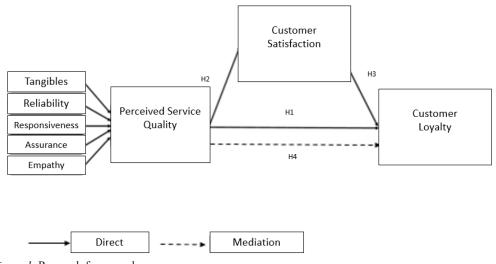
Figure 1. Research framework

predictive research models (Becker et al., 2012; Hair et al., 2011, 2016). In addition, PLS-SEM, as compared to variance-based SEM, provides flexibility for sample size, data normality, and the number of indicators, hence supporting theory development in various settings and contexts (Barroso et al., 2010). PLS-SEM has numerous ways to supplements CB-SEM, the most prominent of which is incorporating the formative items or constructs in one model with reflective constructs. Jarvis et al. (2003) suggested that it helps to address the model specification in many fields including marketing. Furthermore, Jarvis et al. (2003) with the help of a meta-analysis also reported that model misspecification was as high as thirty-two percent in the literature of marketing. Jarvis et al. (2003) further emphasized that various items/constructs which were supposed to be conceptualized formative were measured as reflective constructs.

This situation warrants further investigation and puts a question mark on the practical usefulness of past studies. Previously, in the absence of second-generation statistical analysis tools, researchers were unable to assess the underlying dimensionality of multiple dimensions, making it difficult to assess the higher-order constructs (HOC). Later on, the introduction of CB SEM helped the researchers analyze the constructs with multiple dimensions. However, CB SEM emphasizes dealing with constructs that are reflective. Practically, there are some HOC which are formed of distinctive dimensions and have low correlation with each other. On the other hand, PLS-SEM provides an advantage by combining the reflective and formative higher-order constructs in one model (Becker et al., 2012).

Since SERVQUAL dimensions are distinct in nature considering five different elements of PSQ e.g. tangibles, reliability, responsiveness, assurance, and empathy, it is a second-order formative construct. While its dimension consists of the reflectively measured first-order constructs e.g. tangible consists of indicators: item tangible 2: My cellular service provider's physical facilities are visually appealing and items tangible 4: The appearance of the physical facilities of my cellular service provider is better than the competitors are highly correlated indicators hence projecting reflective nature of the construct. Similar is true for the rest of the dimensions of SERVQUAL. According to Hair et al. (2016), it is necessary to have a clear idea about model specification prior to analyzing the model to avoid Type one and Type two errors (Diamantopoulos & Winklhofer, 2001; Edwards & Bagozzi, 2000). Based on the recent literature, this study operationalized SERVQUAL as a reflective first-order and formative second-order construct. While CS and CL are considered as reflective first-order constructs.

RESEARCH METHODS

Keeping into consideration the research problem and objectives, the quantitative approach with a positive stance was adopted to explore the relationship between PSQ and CS with CL. This study gathered data with the help of the mall intercept approach. The mall intercept approach is a technique that is used in quantitative research to collect the data from the areas where people walk in. Hence the data was collected from the respondents who visited the company-operated service centers of Pakistan, considering the fact that consumers who visited the service centers of telecommunication operators can better judge the SQ of operators on five dimensions of SERVQUAL.

This study used a personally administered questionnaire-based survey for data collection. Moreover, seven points Likert scale was adopted for all items under study, where 1 being "strongly disagree" along with 7 being "strongly agree". Since the model consists of both formative and reflective constructs hence CMV (common method variance) is not an issue (Hair et al., 2016).

Prior to finalizing the questionnaire, a pre-test was conducted with the help of 5 participants via debriefing method to reduce the potential issues in the wording of items and improvement of questionnaire design (Bazera, 1996). A total of six hundred questionnaires were distributed in capital cities of four provinces of Pakistan (Lahore, Karachi, Peshawar, and Quetta) and 392 usable questionnaires were returned. Initially, the data was entered into SPSS for further analysis using Smart PLS 3.2.7. To analyze the HOC in the model, a two-stage approach in PLS-SEM was employed (Becker et al., 2012).

FINDINGS

Table 1 represents the demographic information of the participants which was sampled from the service centers of telecommunication operators of Pakistan. According to the results, the sample consisted of 55% males and 45% females. More than 80% of the participants belonged to the age range of 18-39 years. Furthermore, 40% of respondents had an intermediate education level followed by bachelor's, masters, and matriculation with 38%, 15%, and 7% respectively. In addition, more than 50% of respondents were job holders, 24% were self-employed, 16% were students and only 4% were housewives. Most of the respondents belonged to the income range of 15001-32000 PKR, followed by 22% who had an income range of PKR 15000 and below income. Subsequently, 12%, 10%, 9%, 5% and 3% had an income range of PKR 32001-49000, 49001-66000, 83001-100,000 and 100,001 and above respectively. This study recorded a response rate of 65.3% suggesting an appropriate administration of data collection within 2 months and non-response bias was not an issue (Nulty, 2008; Richardson, 2005).

Table 1

Descriptive findings of the demographic profile

Variable		Frequency	Percentage
Gender	Male	215	55%
	Female	177	45%
Age	18-28 years	204	52%
	29-39 years	131	33%
	40-49 years	42	11%
	50 years and above	15	4%
Education	Middle and Below	2	1%
	Matric	26	7%
	Intermediate	156	40%
	Bachelors	148	38%
	Masters	57	15%
	PhD	3	1%
Position	Student	63	16%
	Job Holder	218	56%
	Household wife	15	4%
	Self-employed	96	24%
Average Income	Below Rs. 15000	87	22%
	Rs. 15001- 32000	152	39%
	Rs. 32001- 49000	47	12%
	Rs. 49001-66000	40	10%
	Rs. 66001- 83000	20	5%
	Rs. 83001-100,000	36	9%
	Rs. 100,001 and above	10	3%

Assessment of Reflective Measurement Model

Table 2 illustrates the measurement model assessment of reflective constructs with the help of reliability, convergent validity, and discriminant validity. As demonstrated, the composite reliability (CR) values of 0.927 (Empathy), 0.904 (Tangibles), 0.931 (Responsiveness), 0.904 (Assurance), 0.937 (Reliability), 0.915 (CS), and 0.94 (CL) indicate that these constructs had internal consistency. Likewise, the convergent validity had been achieved after removing one item (CS4) from CS with low loading.

Table 2

Descriptive findings of variables

Constructs	Items	Loadings	AVE	CR
Tangibles	Tan1	0.825	0.702	0.904
	Tan2	0.820		
	Tan3	0.859		
	Tan4	0.846		
Reliability	Rel1	0.821	0.749	0.937
	Rel2	0.858		
	Rel3	0.875		
	Rel4	0.896		
	Rel5	0.876		
Responsiveness	Resp1	0.877	0.770	0.931
	Resp2	0.907		
	Resp3	0.837		
	Resp4	0.888		
Assurance	As1	0.863	0.703	0.904
	As2	0.820		
	As3	0.819		
	As4	0.849		
Empathy	Emp1	0.839	0.717	0.927
	Emp2	0.847		
	Emp3	0.880		
	Emp4	0.820		
	Emp5	0.848		
Customer Satisfaction	CS1	0.871	0.688	0.915
	CS2	0.914		
	CS3	0.897		
	CS4	Deleted		
	CS5	0.862		
Customer Loyalty	CL1	0.842	0.757	0.94
	CL2	0.897		
	CL3	0.907		
	CL4	0.883		
	CL5	0.817		

Lastly, the average variance extracted (AVE) for each construct was above 0.5 suggesting that each item loaded on its respective constructs and explained more than 50 percent of variance (Hair et al., 2013).

According to current literature, the discriminant validity of the constructs is measured utilizing the Fornell and Larcker (1981) criterion. Table 3 shows that discriminant validity has been established for all the constructs under study.

Table 3

Average Variance Extracted (AVE)

Construct	1	2	3	4	5	6	7
1. Assurance	**0.838**						
2. Loyalty	0.722	**0.870**					
3. Satisfaction	0.677	0.795	**0.830**				
4. Empathy	0.835	0.733	0.691	**0.847**			
5. Reliability	0.758	0.752	0.747	0.75	**0.865**		
6. Responsiveness	0.781	0.751	0.733	0.772	0.825	**0.878**	
7. Tangibles	0.719	0.628	0.610	0.749	0.718	0.688	**0.838**

Note: The bold values represent the square root of Average Variance Extracted (AVE)

Assessment of Formative Measurement Model

Table 4 depicts the assessment of formative construct (PSQ) with its dimensions namely tangibles, reliability, responsiveness, assurance, and empathy. Table 4 demonstrates that VIF values for the dimensions of the formative construct (SERVQUAL) are below the threshold of five (Diamantopoulos & Siguaw, 2006). It suggests that these dimensions are distinctive, and they measure different facets of PSQ. Subsequently, the outer weight significance is assessed with the help of the bootstrapping procedure by generating 5000 sub-samples (Hair et al., 2011). The results of the bootstrapping procedure (Table 4) demonstrate that all the dimensions are found to be significant and important for PSQ.

Table 4

Assessment of formative measurement model

Paths	Weights	S.E	t-value	p-value	VIF
Tangibles → PSQ	0.119	0.070	1.653	0.049	2.671
Reliability → PSQ	0.411	0.090	4.566	p< .001	3.799

Table 4 *(Continued)*

Paths	Weights	S.E	t-value	p-value	VIF
Responsiveness → PSQ	0.309	0.080	3.880	p< .001	3.983
Assurance →PSQ	0.121	0.072	1.674	0.047	4.086
Empathy → PSQ	0.250	0.083	3.015	0.001	4.217

Note: VIF= Variance Inflation Factor, PSQ= Perceived Service Quality

Assessment of Structural Model

Prior to assessing the structural model, multi-collinearity among the constructs was checked. Table 5 shows that VIF values for each construct understudy are below 5 suggesting no collinearity (Hair et al., 2016). Table 5 also demonstrates the coefficients of paths hypothesized in the model using the bootstrapping procedure. All the hypothesized relationships are significant (H1: PSQ →CL, ß =0.482, t = 9.164), (H2: PSQ →CS ß = 0.785, t = 28.308), (H3: CS →CL, ß = 0.417, t = 7.401). Consequently, all hypothesized relationships are supported.

Moreover, Table 5 also elaborates on the coefficient of determination (R^2), the effect size (f^2), and predictive relevance (Q^2) for the constructs under study. The R^2 value for CS is 0.616. This reveals that PSQ explains 61.6% of variances in CS. Similarly, the R^2 value for CL is 0.720, suggesting that PSQ and CS explain 72% of CL. The Q^2 value of 0.539 for CS supports that PSQ possesses the predictive capacity for CS (Hair et al., 2013). Similarly, the Q^2 value of 0.631 for CL suggests that both PSQ and CS possess predictive capacity over CL. The results also reveal that PSQ ($f^2 = 0.318$) and CS ($f^2 = 0.238$) have a medium effect on CL. This indicates that both PSQ and CS are important in explaining and predicting CL. Moreover, PSQ ($f^2 = 1.605$) has a large effect on CS.

Table 6 describes the mediating effect of CS between the relationship of PSQ and CL. The results suggest that CS is a significant mediator between the relationship of PSQ and CL. Therefore, supporting H4 (PSQ→CS→CL, β= 0.141, t=4.436).

Table 5

Direct relationship hypothesis testing

Construct	B	SE	t-value	LLCI	ULCI	VIF	R^2	f^2	Q^2
H1: PSQ → CL	0.482	0.053	9.164	0.384	0.553	2.605	0.720	0.318 (medium)	0.631
H2: PSQ → CS	0.785	0.028	28.308	0.730	0.823	1.00	0.616	1.605 (Large)	0.539
H3: CS → CL	0.417	0.056	7.401	0.338	0.514	2.605		0.238 (medium)	

Table 6

Hypothesis testing of the mediating effect

Hypothesis	Path	B	SE	t-value	LLCI	ULCI
H4	PSQ→CS→CL	0.141	0.032	4.436	0.085	0.210

DISCUSSION

This study has successfully addressed both of the research questions. The first research question refers to the model misspecification of SERVQUAL as a reflective construct. The results of the formative measurement model (Table 4) reveal that SERVQUAL is better operationalized as the formative construct compared to a reflective construct. All the sub-dimensions maintain sufficient outer weights to explain the SERVQUAL construct. A group of researchers suggested that the use of outer loadings instead of outer weights for formative constructs could be misleading (Chin, 1998; Nunnally, 1994). Past literature is evident about this fact where the sub-dimensions are omitted due to reflective measurement model assessment criteria. For example, a study conducted by Dlačić et al. (2014) operationalized SERVQUAL as a reflective reflective second-order construct and combined responsiveness and reliability into one dimension and split tangibles into two sub-dimensions to meet the measurement model assessment criteria. Subsequently, Hassan et al. (2012) studied SQ and omitted responsiveness and reliability from the measurement model. Similarly, another study conducted by Wang et al. (2004) modified the SERVQUAL model by adding a variable. According to Jarvis et al. (2003), the changes in sub-dimensions or indicators of the formative construct are not acceptable hence the above amendments while treating the SERVQUAL as a second-order reflective reflective scale can cause model misspecification. Therefore, by operationalizing SERVQUAL as a reflective formative second-order construct, this study dealt with one of the major model misspecification issues in SQ literature.

The second objective of this study was to access the nomological validity of the SERVQUAL scale as a second-order formative scale, whereby the results of the proposed hypotheses were found to be significant to support the nomological validity of the SERVQUAL scale. The results of each hypothesis are discussed in the given section.

H1: We proposed a positive relationship between PSQ and CL, and the findings indeed support the relationship. These findings are also consistent with the previous literature on PSQ and CL (Makanyeza et al., 2017). This implies that the higher the PSQ the higher the CL will be. It elaborates that those telecommunication service providers which focus on tangibles, offer reliable services, and have responsive employees perform their tasks properly while showing empathy to their consumers, have higher chances of maintaining loyal consumers.

Another reason for the importance of SQ in the telecommunication sector of Pakistan is highlighted by Jahanzeb et al. (2011) that this sector of Pakistan is facing fierce competition and that price reduction is an imitable strategy which is losing significances for developing loyalty among the consumers in Pakistan. In this era of globalization, consumers are well aware of their rights, as such, it is better SQ that leads towards CL. Moreover, the Pakistan Telecommunication Authority (PTA) conducts quality of services survey every year in major cities of Pakistan to ensure the provision of quality services to the telecommunication services' consumers (PTA, 2016). This implies that maintaining SQ is a very important element for the telecommunication sector of Pakistan. Hence, it can be inferred that consumers' perception of being the recipient of better SQ leads toward higher chances of being loyal to the telecommunication service providers (Nasir et al., 2014).

H2: The second hypothesis looked at the relationship between PSQ and satisfaction, and the findings support the proposed positive relationship. It suggests that consumers' perception toward being the recipient of better SQ enhances their satisfaction level. It further suggests that as long as the telecommunication service providers in Pakistan provide up to date tangible facilities to attend the consumer's needs and have responsive and reliable employees who assure them to perform their tasks with empathy, they will have consumers who have higher CS. Additionally, Rashid et al. (2016) demonstrated that when telecommunication consumers' perception regarding SQ was well achieved, there was a higher chance that the consumers would have high customer satisfaction for their telecommunication service provider. So, it is very important for telecommunication service providers in the cellular service sector of Pakistan to please their customers through the best quality of services. In addition, these findings are also coherent with the past literature on the relationship between PSQ and CS (Gong & Yi, 2018; Pumim et al., 2017; Ramamoorthy et al., 2018).

H3: The third hypothesis investigated the relationship between satisfaction and loyalty. This relationship was also positive and significant. It implies that satisfied customers are more likely to be loyal to the telecommunication service provider and its services. It further elaborates that consumers who are happy and feel content with their choice of telecommunication service provider are more likely to be loyal to their service provider. This finding shows that if the consumers are satisfied, they will buy more services from their telecommunication service provider and will provide positive referrals to family and friends. Furthermore, this empirical result is mirrored with the previous researches in the telecommunication sector of Pakistan which describe the CS as a significant positive determinant of loyalty in the telecommunication sector (Sindhu & Arif, 2017; Ahmad et al., 2015; Nasir et al., 2014; Raza & Rehman, 2012).

H4: The fourth hypothesis studied the mediating role of CS between the relationship of PSQ and CL. The results indicated that CS is a significant mediator between PSQ and CL. The findings suggest that CL can be generated by improving CS by offering high quality and reliable service. High-quality services can be provided by the support staff of the company that have the required knowledge to answer customer questions. They should understand specific customers' needs, be able to handle problems that arise, and entertain customers' complaints or inquiries in a friendly manner. These quality-oriented strategies help improve customers' happiness and satisfaction hence leading to promote loyalty in Pakistani telecommunication customers. This empirical result is also consistent with the past studies conducted by Chang and Yeh (2017), Deng et al. (2010), Han and Hwang (2014), as well as Lee (2013).

CONCLUSION AND RECOMMENDATIONS

The results of this study provide support to address the two research questions given at the beginning of this study. According to the assessment of formative measurement model statistics, the SERVQUAL scale is better operationalized as a formative construct because all of its dimensions remain part of the construct (Refer to Table 4). However, the past literature depicts that when SERVQUAL is considered as a reflective construct, some of its dimensions are omitted to meet the reflective measurement model assessment criteria.

This happens due to the misspecification of SERVQUAL as a reflective construct rather than formative. In addition, the results of this study support the nomological validity of the SERVQUAL model as formative whereby all the hypotheses are supported by empirical data.

Based on the findings, several suggestions are made as follows:

1. Future researchers can use this instrument as a second-order formative measurement. The interpretation of the weights indicates that reliability followed by responsiveness and empathy are important drivers of SQ assessment by the customers. Firms should focus on enhancing the delivery of these three key quality dimensions to increase SQ perception of customers.

2. SQ has a positive relationship with CS thus the findings indicate that for firms to keep their customers satisfied they should endeavor to improve their SQ delivery.

3. SQ also has a positive relationship with loyalty which shows that if the SQ is maintained or improved then customers will be loyal to the firm.

4. CS is also positively related to loyalty thus confirming that satisfied customers will remain loyal. Firms should focus on performing services to the best possibility so that the customers feel satisfied and remain loyal to them.

5. The mediating effect of CS between the relationship of PSQ and CL highlights the importance of CS to achieve CL. The firms, while developing marketing strategies to improve CL, should consider the happiness and satisfaction of customers along with maintaining the quality of services in order to keep them loyal.

This study has a certain limitation, as it includes SERVQUAL as second-order formative construct using a two-stage approach. Further studies can be conducted to compare two models considering SERVQUAL as a reflective and formative construct to compare the empirical findings of two models (Model A and Model B) using two-stage approach versus repeated indicator or mixed (hybrid) approach as suggested by Becker et al. (2012).

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Marketing of Apricot Supplied to the Market in Kandahar, Afghanistan

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ABSTRACT

Horticulture crops considerably amplify the country's profile. However, the quantity of apricot on the market has declined and its competitiveness has been challenged. This study focused on the marketing of apricot supplied to the market in Kandahar among 102 farmers. The respondents answered a structured questionnaire designed to explore the association between farmer's socio-demographic factors and the quantity of apricot supplied to the market, to map the marketing channels used by the supply chain players, as well as to identify the marketing constraints. The results from the descriptive analysis showed that major actors in the study area were apricot farmers, wholesalers, collectors, retailers, and exporters. The results also revealed that the chain was constrained by the lack of storage, price setting, lack of governmental support, poor quality of apricot, lack of supply, high transportation cost, and lack of demand. Meanwhile, the results of the chi-square analysis revealed that farm size, education level, farming experience, and family size were significantly associated with the quantity of apricot supplied to the market except for farmer's age. The findings of this study indicate that appropriate intervention mechanisms such as land acquisition

schemes and education awareness programs are necessary for the expansion of farm size and farmers' education to produce an increased quantity of apricot.

INTRODUCTION

Afghanistan is a landlocked and mountainous country comprising approximately 65.2 million ha of land where agricultural lands cover 38.7 million ha (Central Statistics Organization [CSO], 2009; Kakar et al., 2019). Approximately 70% of the population inhabits in rural areas and 61% of all households earn income from agriculture (Leao et al., 2018). For the country's sectoral GDP, agriculture accounted for 20.5%, 21.2% by industry, 51.5% services, and 4.6% tax on imports (Department of National Statistics and Information Authority [DONS&IA], 2019). Specifically, the contribution of horticultural crops to the national GDP accounted for 34% of the whole agricultural GDP, and 6.7% of national GDP (Ministry of Agriculture, Irrigation and Livestock [MAIL], 2019). Afghanistan agriculture is dominated by smallholder farmers cultivating less than 1 ha of the farm (Maletta, 2003).

Historically, Afghanistan has traditionally produced mainly horticultural crops such as fresh and dried fruits, nuts, and vegetables. Fresh produce such as almond, pomegranates, pistachios, grapes, and apricot are produced and exported to global markets since 1970 and earn dignity in global markets (World Bank, 2014). However, the quantity of apricot supplied to markets by Afghanistan has declined over the years from 2014 to 2018 (MAIL, 2019). The situation has adversely affected the farmer's actual income as productivity suffers heavily while the marketing of horticultural crops has increased the selling costs across the supply chain.
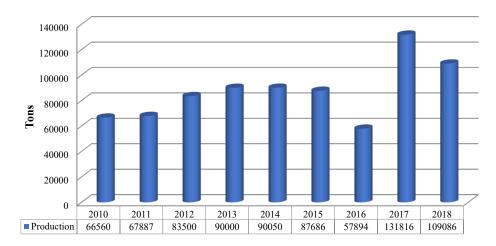
The world apricot production in 2017 was predicted at 4.26 million metric tons. Turkey, Uzbekistan, Algeria, Iran, and Italy are the top five apricot producers where Afghanistan is ranked 9th after Pakistan, France, and Spain in the world in 2017. The apricot production in most apricot producing countries largely involves smallholder farmers. There has been a significant rise in the global apricot production from 3.3 million metric tons in the year 2006 to 4.26 million metric tons in 2017 as shown in Table 1.

Afghan apricot production has fluctuated from 2010 to 2018 as depicted in Figure 1. In the year 2010, the quantity of apricot produced in Afghanistan was estimated at 66,560 tons and an upward trend of increasing production was observed for four consecutive years before it declined in 2016. There was a significant increase in 2017 when apricot production upsurges from 57,894 tons in 2016 to 131,816 tons in 2017. However, the increase in production failed to regain its momentum as production fell to 109,086 tons in 2018 (MAIL, 2019). This is mainly due to the consequence of decades of war including the destruction of orchards,

Table 1

Global apricot production from 2006 to 2017 (in million metric tons)

Year	Production (MMT)	Year	Production (MMT)
2006	3.30	2012	3.84
2007	3.80	2013	4.03
2008	3.73	2014	3.37
2009	3.66	2015	3.97
2010	3.32	2016	3.88
2011	3.76	2017	4.26

Source: Food and Agriculture Organization of the United States Statistics [FAOSTAT] (2018) and Statista (2018)

Total Production

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Production	66560	67887	83500	90000	90050	87686	57894	131816	109086

Figure 1. The trend of apricot production in Afghanistan (tons)

vineyards, farms, lack of horticulture modernization, and shortage of investment caused an almost total loss of access to the international markets (MAIL, 2016).

Moreover, farmer's education, farm inputs, biodiversity, social system, and political system, and the economic system are among the factors hindering agricultural production in Afghanistan (Sarhadi et al., 2014). Agricultural marketing has been recognized as the most important energetic force of economic development and has a guiding and stimulating impact on the production and distribution of agriculture commodities. In Afghanistan, the performance of agriculture marketing is constrained by a number of factors such as poor quality of agricultural produce, lack of market facilities, lack of extension services that ignored marketing improvement, poor

linkage of research, lack of extension service, lack of marketing information, limited access to credit, and transportation problems (Asian Development Bank [ADB], 2018). Furthermore, the consequences of decades of war including the destruction of orchards, vineyards, farms, lack of horticulture modernization, and shortage of investment in Afghanistan have caused almost a total loss of access to markets (MAIL, 2016). Farmers in Afghanistan, especially in the province of Kandahar, are more centered on the production part, yet there is limited market information about their products and the marketing growth is rather slow.

In addition, National Union for Horticulture Development [NUHDA] (2008) identified major problems in increasing the sales of apricot in Afghanistan's value chain, namely the poor quality of production, poor packing, and branding for fresh and dried apricots. Most importantly, the chain coordination in the apricot industry was very poor. Supportive links that have been identified indicated the use of poor packing materials, lack of standards certification, lack of credit, poor roads, and shortage of farmland in the apricot production and a weak value chain. It can be concluded that the value chain of Afghan apricot is less competitive due to the chain players lacking in skills to be effective and efficient. Another study conducted by Roots of Peace [ROP] (2016) regarding best practices for apricot production and marketing in Afghanistan revealed that the marketing channels for apricot farmers were limited. Most of

the farmers are selling their produce to collectors and wholesalers that sometimes control the market price.

The program of Commercial Horticulture and Agriculture Marketing (CHAMP) was introduced by United States Agency for International Development [USAID] (2014) since 2010 to work with Afghan farmers to increase the yield and quality of horticultural crops such as pomegranates, grapes, apricots, apples, almonds, and melons in order to accelerate new export channels on the global market. CHAMP promotes and encourages every stage of the market process in order to improve the effectiveness of Afghan horticulture products throughout the value chain. CHAMP's agribusiness activities stimulate growth in Afghanistan's agricultural sector by creating jobs, improve livelihoods, and boost the economy. Activities in this program include handling pre and post-harvest quality improvements for fresh fruit to meet modern market requirements, linking farmers with traders, and traders with domestic and international markets, facilitating the export of selected fresh and dry fruits to regional and international markets and improving the performance of new and existing businesses.

Since apricot is the fourth main agricultural produce in Afghanistan, the GDP of apricot contributes significantly towards the country's income (United States Agency for International Development, 2017). Furthermore, according to Sharzai (2016) and MAIL (2019), apricot production faces many challenges due to inadequate attempts

to revamp marketing link activities and poor market knowledge among actors, local varieties, and aged farms. By improving marketing activities in apricot production, farmers are able to generate better incomes that can boost the economy of the country (World Bank, 2018). However, apricot production in Afghanistan is constrained by several factors such as regular droughts and other natural disasters, conflict in the region, degradation of the land, poor technology, inadequate inputs, poor infrastructure, poor knowledge, lack of apricot supportive services (MAIL, 2016).

MAIL has introduced the National Comprehensive Agriculture Development Program 2016–2020 as the development policy for the country. The extension of horticulture land and market improvement is one of the seven strategic fundamentals and pillars of the program. Beneath the pillar of horticulture land extension and market improvement, the importance and priorities are (1) extension of the horticultural acreage; (2) upsurge crop productivity; (3) development of value chains for selected crops where the country has a high comparative advantage; (4) infrastructure and market improvement; (5) upgrade of standardization and certification; (6) provision of support to the private sector, (7) growth of crop nurseries through adaption research; and (8) expansion of the area under conservation agriculture.

Several studies have been conducted in Afghanistan regarding fruit marketing, however, a specific study on the marketing of apricot supplied to the markets has yet to be carried out. In order to bridge the gap, it is essential to determine the association between socio-demographic factors and the quantity of apricot supplied to markets and marketing channels used by the supply chain actors in the study area. Thus, the aims of this study were to map the marketing channels used by the supply chain players; identify the marketing constraints faced by the apricot farmers; and to determine the association between farmer's socio-demographic factors and the quantity of apricot supplied to the market in the study areas.

MATERIALS AND METHODS

In order to select a representative sample, a multi-stage random sampling method was applied to select apricot farmers. In the first stage, Arghandab district was selected upon consultation with the agriculture officer of the area. In the second stage, out of 72 villages in the district of Arghandab, five (5) apricot villages were purposively selected based on the quantity of apricot production and accessibility. In the third stage, a registered list of apricot farmers was obtained from the Department of Agriculture, and the size of the sample was selected according to Yamane's (1967) formula where the actual size of the farmer's population is calculated with 5% level of precision. Out of 154 farmers from the registered list, 112 farmers were selected randomly based on proportional to the population size of the selected villages. Finally, primary data was collected using a structured questionnaire via face to face

surveys from 102 farmers according to their availability in Kandahar.

The data collected were analyzed using descriptive analysis and chi-square analysis. Descriptive analysis was employed to summarize the data into simpler and easier forms that could be easily understood and managed. The summarized data can be used for further analysis to present a comprehensive explanation of the results. Additionally, descriptive analysis can be used to categorize a large data set into smaller groups. Chi-square is a technique that computes the statistical significance of the cross-tabulation form. This analysis is broadly used by the researchers to test the significance of the association between two categorical attributes, to test the goodness of fit, and to test the homogeneity or the significance of population variance (Kothari, 2004). Chi-square analysis is one of the simplest methods to test the significance of the relationship between the variables. It is also an inferential statistic that is typically used to analyze the association between two variables (Field, 2009). In this study, the significant level was determined at a 5% level. For instance, the null hypothesis was rejected if P-value ≥ 0.05 (Field, 2009). The focal point of this study was to explore the association between the socio-demographic profile of the farmers and the quantity of apricot supplied to the market. The null and alternative hypotheses were developed as follows:

H_0: There is no association between the farmer's socio-demographic factors and the apricot quantity supplied to the market.

H_a: There is an association between the farmer's socio-demographic factors and the apricot quantity supplied to the market.

RESULTS AND DISCUSSION

This section presents the socioeconomic and farm characteristics of the sampled apricot farmers including their age, gender, family size, education level, farming experience, farm size, land ownership, and quantity of apricot supplied to the market. The marketing constraints faced by the farmers and the results of chi-square analysis are also presented.

Socio-economic Characteristics of the Apricot Farmers

Table 2 demonstrates the socio-demographic characteristics of apricot farmers in the study area. The results revealed that approximately 46.1% of the apricot farmers were aged between 40-49 years, 35.3% were aged between 30-39 years, whereas very few (1.0%) of the total number of farmers were aged between 60 and above years old. The average age of the farmers was 38.5 years. This indicates that apricot production is managed by young farmers in the study area. Interestingly, Maletta (2003) found that the average age of Afghan farmers was approximately 47 years old. It is reasonable to attribute the difference between the findings as to the area of the research. The research of Maletta (2003) was conducted throughout the agro zones of Afghanistan

Table 2

Socio-economic and farm characteristics of the apricot farmers

	Category	Frequency	Percentage	Mean
Age	20 – 29	11	10.8	
	30 – 39	36	35.3	
	40 – 49	47	46.1	
	50 – 59	7	6.9	38.5
	60 – and above	1	1.0	
	Total	102	100.0	
Gender	Male	102	100.0	
	Female	0	0.00	-
	Total	102	100.0	
Family size	1 – 3	34	33.4	
	4 – 6	38	37.3	
	7 and above	30	29.4	
	Total	102	100.0	
Education level	No formal Education	71	69.6	
	Primary School	20	19.6	
	Secondary School	11	10.8	-
	High School	0	0.00	
	Total	102	100.0	
Farming experience/ Year	Less than 10	16	15.7	
	10 – 20	63	61.8	16
	21 – and above	23	22.5	
	Total	102	100.0	
Farm size (Ha)	Less than 1	69	68.1	
	1 - 2	27	26.2	0.394
	More than 2	6	5.7	
	Total	102	100.0	
Land ownership	Farmer's Property	85	83.3	
	Belongs to farmer's family	8	7.8	
	Leased	9	8.8	-
	Total	102	100.0	

Table 2 *(Continued)*

	Category	Frequency	Percentage	Mean
Quantity Supply (Kg/Year)	Less than 10,000	35	34.3	
	10,000 – 20,000	45	44.1	
	21,000 – 30,000	13	12.7	15299.2
	More than – 30,000	9	8.8	
	Total	102	100.0	

while this study only covered the Arghandab district in Kandahar.

All the sampled farmers were male (100%). This finding is more elaborated by Pain et al. (2016) who stated that women face barriers to working outside as villagers in Kandahar were mostly culturally conservative where females were commonly engaged in home-made tailoring. There are, of course, exceptions, with examples of married females managing and earning livestock revenue. Most of (37.3%) the family members comprised of 4-6 while (29.4%) of the family members were 7 and above. The average family size of the sampled farmers was 5 head. Most of the farmers had no education (70%), 19.6% of the farmers obtained primary education while only a few numbers of farmers obtained secondary education (10.8%). Majority of the farmers had 10-20 years of farming experience (61.8%), 22.5% had between 21 and above years of farming experience, whereas the remaining had less than 10 years of farming experience (15.7%). The average farming experience of the farmers was 16 years.

The farmland areas owned by the farmers comprised approximately 68.1% of apricot cultivation on less than 1 ha, a portion of the farmers cultivates on 1-2 ha (26.2%) and the rest of the farmers cultivate on more than 2 ha of land (5.7%). The average farm size for apricot production was 0.394 ha. This average indicates that majority of the apricot farmers in the study area are operating on a small scale. Maletta (2003) also reported that most Afghan farmers owned less land for cultivation. Majority of the farmers own (83.3%) their farmland, 8% of the farmers cultivate on their family land which does not directly belong to them, while the rest cultivate on rented (9%) farmland. The majority of sampled farmers supplied apricot ranging between 10,000 kg –20,000 kg (44.1%), 34.3% of the farmers supplied less than 10,000 kg and some of them supplied 21,000 kg – 30,000 kg (12.7%) while 8.8% of the farmers supplied more than 31,000 kg of apricot. The average quantity of apricot annual supply was 15,299.2 kg.

Marketing Channels of Apricot in Kandahar

Agriculture marketing can be defined as the whole set of production, distribution, and marketing process through which the desired product is delivered to the consumer (Woods, 2004). Agriculture marketing deals with the production management initiates from harvest to its final use. Activities such as collecting, grading, packaging, storing, shipping, selling prices, market information, and extension services are the various components that have an important role in the marketing system of agricultural produce (Yadav & Chhatwal, 2020).

In many countries, fresh products are marketed through a range of various channels. These channels include the local market, wholesale market, retail and middleman, and street vendor. Marketing channels provide a visual movement of the product from conception to end consumer,

each involves different actors in the chain with specific roles and linkages (McCormick, 2001). Marketing channels are frequently used to place performers in the chain for a better understanding of interfaces in order to determine the obstacles and resolve possible issues arise at various sequences (Anandajayasekeram & Gebremedhin, 2009). Marketing channels of apricot in Kandahar province of Afghanistan resemble other fruits like grapes, pomegranates, and figs which comprise of the connections of series of actors such as producers/ processors, intermediaries, and consumers. The current marketing channels of fresh and dried apricots are illustrated in Figure 2 and Figure 3 respectively.

The results of fresh apricot channels showed that the farmers directly sold their apricot to wholesalers (69.6%), collectors (18.6%), and retailers (11.8%) (Figure 2). Most of the wholesalers sold their apricot to the retailers (78.9%) and directly to
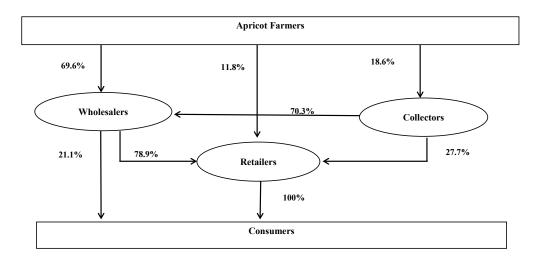
Figure 2. Fresh apricot marketing channels in Kandahar

consumers (21%). Meanwhile, the collectors, also known as small wholesalers sold their apricot to wholesalers (70.3%) and to retailers (27.7%). The retailers subsequently sold their apricot to consumers (100%). The results indicated that wholesaler plays a major role in the buying and selling process within the apricot marketing channel in Kandahar. These findings are congruent with the studies of Aujla, Abbas, Mahmood, & Saadullah (2007) and Jaji (2016) who also found that fruits marketing channels were mostly led by wholesalers in Pakistan and Malaysia, respectively. The marketing channels usually vary from one product to another as well as from one province to another. For each product, there is always more than one marketing channel.

On the other hand, the results of dried apricots showed that the farmers sold their processed apricot to wholesalers (60.2%), collectors (20.8%), exporter (11.2%),

and retailers (7.8%) (Figure 3). Most of the wholesalers sold their apricot to the exporter (88.2%), retailers (11%), and directly to consumers (0.8%). The collectors (or small wholesalers) sold their apricot to wholesalers (83.6%) and to exporters (16.4%). The retailers subsequently sold their apricot to consumers (100%). For dried apricot, exporters play a significant role along the supply chain as compared to fresh apricot. Exporters supply in huge amounts after sorting, cleaning, packaging, and branding mainly to India and Pakistan and some amount to the United Arab Emirates and Europe.

Constraints associated with the marketing of apricot faced by the farmers are related to the marketing of apricot in supplying pattern. The major constraint faced by the sampled apricot farmers was the lack of storage and about 90% of farmers reported this problem. The survey also
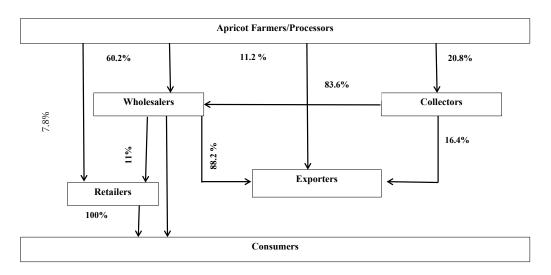
Figure 3. Dried Apricot Marketing Channels in Kandahar

showed that there were no regulated cool storages for apricot produce in the study area. Price setting was another major problem in the study area. Farmers were unaware of market prices as well as the supply and demand due to the ambiguity ensued by the informal regulation. Price setting ranked second in the survey, followed by a lack of government support for improving the market, poor quality of apricot, lack of supply, high transport cost, and lack of demand as summarized in Table 3.

Table 3

Major apricot marketing constraints

Marketing Constraints	Frequency	Percentage	Rank
Lack of storage	92	90	1
Price setting	79	77.5	2
Lack of Gov. support for apricot market	62	60.7	3
Poor quality of apricot	51	50	4
Lack of supply	26	25.5	5
High transport cost	13	12.7	6
Lack of demand	5	4.9	7

Note: Multiple responses from respondents

Chi-square Analysis

Chi-square was used to test statistical independence. The hypotheses were formulated to establish an association between the socio-demographic profile and the quantity of apricot delivered to the market. If the socio-demographics are not associated, the outcome of the statistical test will be insignificant and the null hypothesis will not be rejected, which means that there is no statistical association between the quantity of apricot and socio-demographics, and vice versa. That is, if the variables between dependent and independent variables are statistically significant, then the null hypothesis will be rejected, indicating that there is an association between dependent and independent variables.

The following hypotheses were tested for this study:

H_0: Farmer's socio-demographic factors have no association with the quantity of apricot supplied to the market.

H_a: Farmer's socio-demographic factors have an association with the quantity of apricot supplied to the market.

Chi-square analysis revealed that 4 out of 5 independent variables were significantly associated with the dependent variable as shown in Table 4. These variables were education level (p=0.046), farm size (p=0.000), farming experience (p=0.027),

Table 4

Association between socio-demographic factors and the quantity of apricot supplied

Variable	X^2	d.f	Sig.	Decision
Age	12.341 [a]	12	0.419	Fail to reject H_0
Education level	37.144 [a]	6	0.046*	Reject H_0
Farming experience	27.905 [a]	6	0.027*	Reject H_0
Family size	9.810 [a]	9	0.038*	Reject H_0
Farm size	88.716 [a]	9	0.000**	Reject H_0

Note: Dependent Variable: Quantity of Apricot Supplied, **Significant at 1% level of significance, *Significant at 5% level of significance

and family size (p=0.038) of the farmers confirming their importance with the quantity of apricot supplied to the market. On the other hand, the age of the farmers showed a non-significant association with the quantity of apricot supplied to the market.

Farmer's age is not associated with the quantity of apricot supplied to the market as indicated by the alpha value (α=0.419) at a 5% significance level. The null hypothesis which assumes that there is no association between the age of farmers and the quantity of apricot supplied to the market is accepted. This finding is in line with the studies conducted by Jaji et al. (2018) who revealed a non-significant relationship between farmers' age and quantity of pineapple supplied to the market. On the contrary, Negasi (2015) found a significant relationship between farmers' age and quantity of fruits and vegetables supplied to the market. The education level is associated with the quantity of apricot supplied to the market. The alpha value

(α=0.046*) at a 5% level of significance indicated a rejection of the null hypothesis and the education level of farmers is significantly associated with the quantity of apricot supplied to the market. This finding is congruent with the studies conducted by Ayalew (2015), Hailu (2016), and Jaji et al. (2018) where farmer's education is significantly associated with the quantity of potato and fruits supplied to the market.

Farming experience is statistically significant with the quantity of apricot supplied to the market at a 5% level of significance. The alternative hypothesis which assumes that there is an association between farming experience and the quantity of apricot supply is accepted (α=0.027*). This finding is in line with the studies conducted by Mahlet et al. (2015) on the significant relationship between farming experience and tomatoes and potatoes supplied to the market. Jaji et al. (2018) and Negasi (2015) also showed that farming experience is significantly associated with the quantity of pineapple supplied to

markets. The family size of the respondents also showed a significant association with the quantity of apricot supplied to the market. The significance test at a 1% level with alpha value (α=0.038*) indicated family size significantly associated with the quantity of apricot supplied to the market. This finding is in line with the studies conducted by Hailu (2016) and Negasi (2015) where the family size is significantly associated with the quantity of fruits and vegetables supplied to the markets.

Finally, farm size also had an association with the quantity of apricot supplied to the market. The significance test at a 5% level with alpha value (α=0.000**) indicated the acceptance of the alternative hypothesis and farm size can be concluded as statistically associated with the quantity of apricot supply to the market. This finding is in line with the studies conducted by Bosena, Bekabil, Gebremedhin, & Hoekstra (2011) and Jaji et al. (2018) where the size of the land allocated for cotton and pineapple was associated with the supply of cotton and pineapple to the market respectively. Moreover, studies by Negasi (2015), Hailu (2016), and Ayelech (2011) also showed a significant relationship between farm size and quantity of fruits and vegetables supplied to the markets.

CONCLUSION

It can be concluded that apricot is cultivated by smallholder farmers and the production is managed by young farmers. Most of the farmers own their farmland in the study areas. The marketing channels were mostly controlled by wholesalers where other intermediaries were supplying a smaller amount of apricot compared to wholesalers. The most important constraints regarding the marketing of apricot were lack of storage and price setting. Family size, education level, farming experience, and farm size had a significant association with the quantity of apricot supplied to the market. Based on the findings from the present study, appropriate intervention mechanisms such as the expansion of farm size programs and education awareness programs are necessary to enable the apricot farmers to increase their production, hence the quantity of apricot supply to the market. These interventions will enhance the economy of the country in general and farmers' livelihood in particular.

This study contributes to the knowledge where marketing channels for both fresh and dried apricot were mapped and the socio-demographic factors associated with the quantity of apricot supplied in Kandahar were identified. The study further contributes to the identification of these factors and suggested measures that will benefit the farmers and executing the operations in a manner so the supply quantity can be increased to the market. The research outcomes help farmers, traders, and service providers engaged in the study area to have a better understanding of apricot production and marketing. Furthermore, the findings also provide policymakers with information and perspective of the entire market channels that can be used as a framework for formulating apricot marketing development programs and

enhancing the marketing channels for apricot.

However, the small number of respondents participating in this study posed a limitation which prohibited the generalization of the results into entire Afghanistan since the results were only specific to Kandahar province. In addition, finding the apricot farmers and who are willing to participate in the study was a difficult task because of security concerns. Therefore, future research on this topic should include more apricot farmers from different provinces of Afghanistan in order to bridge the gap found in the literature so that the findings can be generalized beyond the samples in this study.

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Case Study

Residents' Awareness of Inbound Tourism in Rural Community in Japan: Case Study on Tambasasayama City, Hyogo Prefecture

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ABSTRACT

This study investigated the awareness of residents who had not yet begun long-stay tourism undertakings in rural area in Japan, to understand their basic intentions concerning agricultural and rural-experience exchange business, farm-stay business, and receiving foreign tourists. The factors that influence the intentions are defined based on the theory of planned behavior (TPB). A survey questionnaire was employed to collect data from the residents in three communities in the Murakumo area of Tambasasayama City. A structural equation model (SEM) was used to analyze the level of the factors' influence on the residents' intentions. With regard to the residents' intentions toward the three types of business, a large proportion of residents tended to hold negative attitudes. Residents almost held more negative attitude to farm-stay business and receiving foreigners than to carry out agricultural and rural-experience exchange businesses. There existed significant differences in intentions according to gender, and the intentions of males were stronger than females. In the analysis of influence factors, the factor of attitude had a significant positive effect on residents' concerns about rural-exchange experience businesses, farm-stay businesses, and receiving foreign tourists. The factor of perceived behavioral control only had a significant positive effect on the concerns about receiving foreign tourists. The subjective norm had no significant relationship to residents' intentions.

INTRODUCTION

Japan has been undergoing serious problems with respect to population and aging. Since

2011, the population has declined for five consecutive years. The aging rate (the proportion of people over 65 years old) reached 27.3% in 2016. This situation is particularly serious in the rural areas. The rural population has been declining since 1970, and the aging rate of the farming population reached 39.7% in 2016, which is higher than that in urban areas. Rural areas have begun to lose vitality and appear to be experiencing a recession. In such a serious situation, promoting urban-rural exchanges can have a great effect on regional revitalization and rural invigoration.

In recent years, urban residents are increasingly showing interest in nature and rural life. To maintain rural residents' enthusiasm and inspire the desire to visit in rural area, the development of tourism is of great practical significance. Promoting tourism and the subsequent increase in visitor numbers can bring about various social and economic benefits. Since the establishment of Japan Tourism Agency in 2008, Japan has been pursuing a tourism-based country strategy. The government is making continuous efforts to increase the number of foreign tourists visiting Japan. The number of foreign visitors is increasing rapidly, and reached 24.03 million in 2016. The Tokyo Olympic Games will be held in 2021, which provides an opportunity to attract more foreign tourists to Japan. The Japanese government has set the goal of attracting 40 million foreign tourists and 8 trillion yen of travel consumption by 2020. In such a situation, urban-rural exchange needs to pay more attention to collaboration between tourism sectors and rural areas to promote new exchange demand, with foreign tourists as the target.

Cultivating talent plays an important role in developing tourism. The exploration of talent and the formation of an enthusiastic team are important premises on which to base this development. With regard to rural tourism, developing local resident-led tourism activity is necessary. Thus, to ensure the project is carried out smoothly, local residents' awareness of the promotion of residency tourism like farm-stays is important so as to make it easy for the formation of sightseeing talent teams.

In regard to the research of rural-experience activities and local residents' awareness of them, a study about residents' awareness investigated residents' interest in exchange activities, their evaluation and reasons for engagement, and the requirements of the activities in resident-oriented exchange activities (Honjo et al., 2000). An intention survey of farm stays was conducted to evaluate the possibility of operating the farm stay in terms of operating patterns, institutional, psychological, and labor barriers as well as operational trends and expected supports (Saruishi, & Fujisaki, 2000). A study introduced farm stays from the perspective of management and space, using the area of Ajimu in the Oita Prefecture as an example (Kim et al., 2006). They concluded that coordination of the farm stay, application of the public facilities, and cultivation of the instructors should be promoted. A survey with Japanese and different groups of foreign tourists

was conducted to prove that they differ in motivations and behavior (Funck, 2012). Through interviews with key persons from the accommodation industry, they examined the innovations induced by an increase in foreign tourists. A study from the perspective of "Green Tourism" for foreign tourists through marketing research (indicated that the problems of business accounting, residents' intention, system and cooperation are existing in receiving the foreign tourist (Tsutsui & Sawabata, 2010). The importance of Product strategy and Price strategy are also pointed out in facing the international needs (Ryohei, 2014). An intention survey was carried out about farmers who hosted agricultural experiences and learning activities for students (Tamura & Ishida, 2007). Reception motivations, feelings, and continuous reception conditions were investigated among the experienced farmers while reasons for not receiving visitors, the conditions of reception, and proposals for the expansion of the system were examined among the inexperienced farmers. A study (investigated the reasons for farmers to join in green tourism activities, the benefits they gained, as well as some future issues; they also analyzed the relationship between types of farmers and their involvement (Saito et al., 2001).

Most existing studies investigate the awareness, participation, and statements of residents who had already participated in farm-stay tourism, but they lack analysis of the factors influencing residents' intentions. Therefore, the purpose of this research is to investigate the awareness of residents who have not yet started long-stay tourism in Tambasasayama City. The aging of Tambasasayama is thought to outweigh the whole of Japan, which has resulted in anxiety, a deterioration in the education environment and the environment generally, and losses in Tambasasayama's unique landscapes. Tourism in Tambasasayama is mainly of the one-day type or has short residency times that are insufficient for allowing it to fully display its attractions and ensure a significant income. Thus, Tambasasayama still needs to vigorously develop tourism with relatively longer residency times that can boost the local economy. Investigating the residents in Tambasasayama permits an understanding of their basic intentions with regard to the agricultural and rural-experience exchange business, the farm-stay business, and the reception of foreign tourists; it also allows us to analyze how each factor influences intentions based on the TPB, and to offer viable suggestions for promoting long-stay tourism.

MATERIALS AND METHODS

Summary of the Investigation Area

The investigation was carried out in the Murakumo area of Tambasasayama in three communities: Kusanokami, Mukai, and Saikusho. The total population in Murakumo area is 995 in 2016. In the Kusanokami community the population is 90; in Mukai there are 134 people, and in Saikusho there are 129 people. Tambasasayama enjoys easy access to Kyoto, Osaka, and Kobe. It takes only an hour to get to

Tambasasayama from these cities by train or highway. Tambasasayama is also rich in tourism resources. It has beautiful scenery throughout the year, and has cultural activities such as Tanba yaki. The richness in the variety of specialty agricultural products such as black soy beans, is another advantage of Tambasasayama. Tambasasayama also has a rich food culture. Tambasasayama's plan––"Tambasasayama Tourism City Development Vision" — has provided guidance to developing tourism since 2007. In 2009, the government established a tourism strategy based around three ideas in this vision: increasing the number of people who is interested in Tambasasayama, promoting exchange, and strengthening regional powers. The current tourism in Tambasasayama is developed in only a small region, and tourists thus spend only a short time in the area, which makes it hard to boost cultural consumption and the local economy. The proportion of accommodation for tourists is relatively low. The number of tourists to Tambasasayama was 2,345 of whom just 120 people were accommodated. Moreover, domestic demand is shrinking. Therefore, it is of great importance to expand the region for tourism, develop long-stay tourism, and develop the foreign market.

Survey Method

Questionnaire Distribution. In 2018, a total of 272 questionnaires were distributed to all the households across three communities—Kusanokami (38 households), Mukai (48 households),

and Saikusho (50 households)—in the Murakumo area, Tambasasayama city. From these, 186 questionnaires were collected, out of which 165 were completed, for an effective recovery rate of 68.4%. An envelope containing two questionnaires was distributed to each household by the presidents of the community associations. They entrusted the envelopes to the household heads and asked two members over the age of 18 years in each household to fill the questionnaires.

The research aimed to ascertain residents who were still not aware and had not started the farm-stay business. We found that the Murakumo area did not offer such undertakings, and the area's directors intended to promote regional vitality by starting the farm-stay business and inbound tourism. This prompted them to help with the survey. The investigation of the Murakumo area helped us understand how ordinary rural area views such undertakings. This underlies our selection of the three communities in the Murakumo area with large populations and a willingness to partake in the survey.

Personal Characteristics of the Respondents. The basic information of the respondents was collected and organized, and demographic characteristics such as age, gender, residence, and occupation were analyzed.

As shown in Table 1, the number of male and female respondents were almost equal, with 50.9% male and 49.1% female. Of the respondents, 38.2% were aged

above 70 and 22.4% of were between 60 and 69. The majority of respondents were elderly. The living arrangements of the majority (77.6%) consisted of either two generations living together or couples. The majority were respondents for whom agriculture provided the main source of income (62.4%). Most respondents had no experience of communicating with foreigners. The respondents were almost evenly distributed in the communities.

Table 1

Demographic characteristics of the respondents

		Frequency	Percent
Gender	Males	84	50.9
	Females	81	49.1
Age	Under 20	1	0.6
	20s	8	4.8
	30s	18	10.9
	40s	18	10.9
	50s	20	12.1
	60s	37	22.4
	Above 70	63	38.2
Residence Conditions	Single	9	5.5
	Couple	61	37.0
	Two generations	67	40.6
	Three generations	28	17.0
Main job (income source)	Agriculture	47	28.5
	Self-employed	16	9.7
	Full-time job	21	12.7
	Part-time job	30	18.2
	Housework	28	17.0
	Retirement	10	6.1
	Student	2	1.2
	Others	11	6.7
Days off work	Very few	42	25.5
	1 day a week	48	29.1
	2–3 days a week	55	33.3
	4–5 days a week	8	4.8
	Almost every day	12	7.3

Table 1 *(Continued)*

		Frequency	Percent
Communicate with foreigners	Never	125	75.8
	Several times so far	37	22.4
	Daily (including in the past)	3	1.8
Community	Kusanokami	46	27.9
	Mukai	56	33.9
	Saikusho	63	38.2

Method of Analysis

Analysis of residents' awareness in the research is based on the theory of planned behavior (TPB), which is one of the most widely used and influential theoretical models for studying the relationship between attitudes and behavior (Davies et al., 2002).
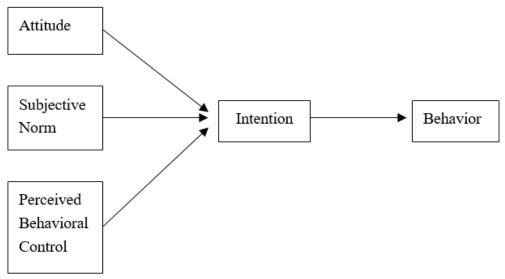
Fishbein and Ajzen (1975) proposed the theory of reasoned action (TRA), which posited that behavioral intention was a factor that directly determined behavior. Behavioral intentions are influenced by two variables: attitudes and subjective norms.

In 1991, a new variable was added to the TRA, which contributed to the formulation of the TPB. Within this framework, the individual performance of a particular behavior is predicted by three variables: an individuals' attitude toward the behavior, the subjective norm, and perceived behavioral control. All three lead to the formation of the intention toward behavior, which finally affects the behavior (Ajzen, 1991, 2002).

Figure 1 depicts the basic theoretical framework of TPB. Attitude has been explained as the degree to which individuals have a favorable or negative assessment when they perform a particular behavior (Ajzen, 1991; Han et al., 2009; Tonglet et al., 2004). Subjective norms refer to the social pressures that individuals feel when performing a particular behavior. They reflect the opinion of an individual's "important other" on his or her particular behavior. Perceived behavioral control reflects the degree of perceived difficulty when an individual performs a particular behavior. More precisely, perceived behavioral control assesses an individual's perception of how efficiently he/she can control factors that may enable or hinder the actions required to deal with a specific situation (Verma & Chandra, 2018).

Questionnaire Design

The questionnaire was designed based on the TPB as indicated in Table 2. Three questions focused on behavioral intentions, including the residents' concerns about the agricultural and rural-exchange experience business, concerns about the farm-stay business, and concerns about reception of foreigners. A five-point Likert scale was used to evaluate the items.

Figure 1. Theory of planned behavior
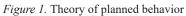
Table 2

Questionnaire items

Items	Details
Behavioral Intentions	BI1. Agricultural and rural-exchange experience business
	BI2. Farm-stay service business
	BI3. Experience exchange business for foreigners
Attitudes	AT1. I think that it would be better if more people visited Murakumo
	AT2. I like to talk to people
	AT3. I'm interested in talking to foreigners
	AT4. I would like to increase my income through tourism
Subjective Norms	SN1. When starting a new career, I am more concerned with the opinions of others
	SN2. When starting a new career, I care about the opinions of my family
	SN3. I am concerned about the opinions of others when I host tourists

Table 2 *(Continued)*

Items	Details
Perceived Behavioral Control	PBC1. I hope to play a core role in the community
	PBC2. I can cope with tourists from the city
	PBC3. I can cope with foreign tourists
	PBC4. I can provide housing for homestay tourists
	PBC5. I have knowledge of the related systems and support policies regarding the establishment and operation of farm stays

Process of Analysis

The framework of the analysis is shown in Figure 2. The research first analyzed the magnitude of the three intentions, and then elaborated the degree of influence of each factor on these three behavioral intentions.

The following hypotheses were proposed:

H1 - Residents tend to hold negative attitudes regarding intentions toward the agricultural and rural-experience exchange business, implementing farm-stays, and receiving foreign tourists.

H2 - There is a significant difference in the intentions of different genders, and the intentions of males are stronger than those of females.

H3 - Attitudes have a significant effect on residents' intentions.

H4 - Subjective norms have a significant effect on residents' intentions.

H5 - Perceived behavioral control has a significant effect on residents' intentions.
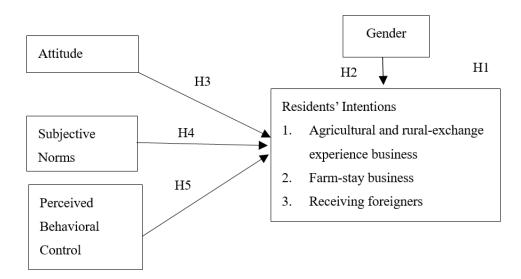
Figure 2. The framework of the analytic process.

RESULTS AND DISCUSSIONS

Residents' Intentions

Table 3 presents residents' concerns. In terms of exchange experience businesses, 30.9% of the respondents were concerned or absolutely concerned about it, whereas 35.8% had no concerns or absolutely no concerns. In terms of farm-stay businesses, 15.7% of respondents were concerned or absolutely concerned while 55.2% had no concerns or absolutely no concerns. In terms of the reception of foreigners, 18.1% of the people were concerned or absolutely concerned while up to 55.2% had no concerns or absolutely no concerns.

To understand how gender influences intentions, independent-sample t-tests were conducted.

Table 3

Residents' intentions

		Frequency	Percent
Agricultural and rural-exchange experience business	Absolutely no concern	15	9.1
	No concern	44	26.7
	Indifferent	55	33.3
	Concern	44	26.7
	Absolute concern	7	4.2
Farm-stay business	Absolutely no concern	25	15.2
	No concern	66	40.0
	Indifferent	48	29.1
	Concern	18	10.9
	Absolute concern	8	4.8
Receiving foreign tourists	Absolutely no concern	28	17.0
	No concern	63	38.2
	Indifferent	44	26.7
	Concern	23	13.9
	Absolute concern	7	4.2

First, the mean values of male and female concerns about agricultural and rural-experience exchange business, farm-stays, and receiving foreign tourists were analyzed. As Table 4 suggests, the mean values of male concerns about these three businesses are higher than those of females, indicating that men are more concerned about the development of the various businesses than women.

Table 4

Mean value of degree of intention by gender

	Gender	N	Mean	SD
Agricultural and rural-experience exchange business	Male	84	3.1	1.048
	Female	81	2.7	0.980
Farm-stay	Male	84	2.7	1.095
	Female	81	2.3	0.928
Receiving foreign tourists	Male	84	2.6	1.116
	Female	81	2.4	0.991

Table 5 presents the results of analyzing the independent-samples t-tests. The sig (2-tailed) values of gender with respect to the experience exchange business and farm-stay are less than 0.05, indicating that there is a significant difference between the genders with regard to types of business and that men are more concerned about these two businesses than women. The sig value of gender in the reception of foreign tourists is greater than 0.05, suggesting that gender has no significant impact on the reception of foreign tourists.

Table 5

Independent-samples t-tests by gender

		Levene-test of variance equation		t-test of mean equation		
		F	Sig	t	df	Sig (2-tailed)
Agricultural and rural-experience exchange business	equal variances assumed	0.143	0.705	2.476	163.000	0.014
	unequal variances assumed			2.479	162.848	0.014
Farm-stay	equal variances assumed	3.295	0.071	2.565	163.000	0.011
	unequal variances assumed			2.573	160.369	0.011

Table 5 *(Continued)*

		Levene-test of variance equation		t-test of mean equation		
		F	Sig	t	df	Sig (2-tailed)
Receiving foreign tourists	equal variances assumed	1.299	0.256	1.731	163.000	0.085
	unequal variances assumed			1.735	161.934	0.085

Reliability Test of the Questionnaire

The research estimates reliability by employing the internal consistency statistic Cronbach's α. The value is between 0 and 1. The closer the coefficient is to 1, the higher the reliability is. The total Cronbach's α of this questionnaire is 0.862, indicating that the data are very reliable.

Factor Analysis

The three components of attitude, subjective norm, and perceived behavioral control were analyzed according to the theoretical model. It was necessary to determine that the selected factors to measure the structures in question are accurate. The KMO test value was equal to 0.823 and Bartlett's sphericity test shows that chi-square is 0.000. Thus, factor analysis is applicable.

As Table 6 shows, three common factors with eigenvalues greater than one were extracted that are consistent with the theoretical basis of the research.

Table 6

Rotated component matrix a

	Component		
	1	2	3
AT3. I'm interested in talking with foreigners	0.845		
AT1. I think that it would be better if more people visit Murakumo	0.802		
AT2. I like to talk with people	0.794		
AT4. I would like to increase income through tourism	0.780		

Table 6 *(Continued)*

| | Component | | |
	1	2	3
PBC5. I know the related systems and support policies regarding the establishment and operation of the farmhouse		0.942	
PBC4. I can provide house for homestay tourists		0.763	
PBC2. I can cope with tourists from the city		0.700	
PBC3. I can cope with foreign tourists		0.651	
PBC1. I hope to play a core role in community		0.538	
SN3. I am concerned about the opinions of others when I am hosting tourists			0.862
SN1. When starting a new career, I am more concerned with the opinions of others			0.859
SN2. When starting a new career, I care about the opinions of my family			0.770

a Extraction method: principal component analysis

b Rotation method: promax with Kaiser normalization

c Rotation converged in four iterations

Influence Factors of Residents' Intentions

Correlation between Factors and Residents' Intentions. The Pearson correlation analysis is used to examine the correlation between the three factors and residents' intentions. The results shown in Table 7 demonstrate that attitude, the subjective norm, and perceived behavioral control are significantly correlated with the concern levels of residents regarding rural experience and exchange, farm-stays, and receiving foreign tourists.

Structural Equation Model. The hypothetical model was tested using SEM with the software AMOS 21.0. First, the maximum likelihood method was used to verify the factor analysis. In using

confirmatory factor analysis to evaluate the degree of model fit, it is best to consider a perfect adaptation degree, value-added adaptation degree, simple adaptation degree, and multiple indicators.

The goodness of fit of the measurement models are presented in Table 8. The values of the measurement models were all within the reference standard. Thus, it is concluded that the measurement model fit the data well. After the measurement model was verified, the structural model was further tested by AMOS 21.0. Table 9 presents the standardized path coefficients and their significance levels of the TPB model. The significance levels of paths indicated whether the hypothetical relationship was supported. The value of C.R. is the t value

of the t-test. When this value is greater than 1.96, it means the regression coefficient has a significance level of less than 0.05. As can be seen in the table, three of the nine paths had significance levels less than 0.001 and one path had a significance level of less than 0.05.

Table 7

Correlation analysis of factors and intentions

		Rural-experience and exchange business	Farm-stay business	Receiving foreign tourists
Attitude	Pearson correlation	.776**	.670**	.744**
	Sig. (2-tailed)	0	0	0
	N	165	165	165
Subjective norm	Pearson correlation	.293**	.289**	.238**
	Sig. (2-tailed)	0	0	0.002
	N	165	165	165
Perceived behavioral control	Pearson correlation	.572**	.651**	.562**
	Sig. (2-tailed)	0	0	0
	N	165	165	165

**$p < 0.05$

Table 8

Fit indices of the TPB Model

Model fit indices	χ2/DF	RMR	RMSEA	GFI	CFI	TLI	PNFI	PGFI
Reference standard	< 2.00	< 0.08	< 0.08	> 0.80	> 0.80	> 0.80	> 0.50	> 0.50
Measurement model	1.947	0.056	0.076	0.899	0.949	0.930	0.661	0.577

Table 9

Standardized path coefficients and significance level of TPB Model

Path	Standardized Estimate	S.E.	C.R.	P
Attitude ----- Experience exchange business	0.971	0.190	7.713	***

Table 9 *(Continued)*

Path	Standardized Estimate	S.E.	C.R.	P
Attitude ----- Farm-stay	0.912	0.190	7.299	***
Attitude ----- Foreigner reception	1.162	0.227	7.928	***
Subjective Norm ----- Farm-stay	0.010	0.116	0.127	0.899
Subjective Norm ----- Experience exchange business	0.023	0.109	0.316	0.752
Subjective Norm ----- Foreigner reception	-0.048	0.125	-0.583	0.560
Perceived Behavioral Control ----- Foreigner reception	0.290	0.238	2.327	0.020
Perceived Behavioral Control ----- Farm-stay	-0.074	0.204	-0.678	0.498
Perceived Behavioral Control ----- Experience exchange business	-0.156	0.196	-1.481	0.139

***$p < 0.001$

CONCLUSIONS

This research investigated residents' intentions toward implementing agricultural and rural-experience exchange businesses, farm-stay businesses, and receiving foreign tourists in three communities in the Murakumo area of Tambasasayama City. Based on the framework of the TPB, this research puts forward the hypothesis that attitudes, the subjective norm, and perceived behavioral control affect residents' intentions to some extent. Conclusions derived from the empirical analysis can be summarized as follows.

Regarding intentions toward the agricultural and rural-experience exchange business, implementing farm-stays, and receiving foreign tourists, the proportion of residents that tended to hold negative attitudes was large. Moreover, residents almost held more negative attitude to farm-stay business and receiving foreigners than to the experience exchange business. The above conclusions confirm H1 proposed in the research.

With regard to the impact of gender on residents' intentions, it can be concluded from the t-test that gender has a significant influence on concerns about agricultural and rural-experience exchange businesses and farm-stays but no significant influence on concerns about receiving foreign tourists. H2 has not been fully supported. With regard to the mean values of degrees of intention, females held relatively lower degrees of intention than males. Considering the conservative attitude of females toward starting a new business, the pivotal role that

females play in the exchange activities, and the additional responsibilities that females will be required to undertake, females hold more negative attitudes toward these businesses.

This research mainly used SEM to analyze the factors influencing residents' intentions. The factor of attitude had a significant positive effect on the concern levels of residents with regard to rural-exchange experience businesses, farm-stay businesses, and receiving foreign tourists. This confirms H3. The factor of the subjective norm had no significance on residents' intentions. Thus, H4 is rejected. Perceived behavioral control only had a significant positive effect on the concern about receiving foreign tourists. H5 has not been completely proven. Therefore, in the Murakumo area, residents' intentions toward rural tourism, farm-stays, and receiving foreigners are mainly influenced by their own attitudes and feelings; when residents consider receiving foreigners, their own abilities and perceptions of difficulty will have an impact on their intentions.

The research also examined the issues that residents cared about in starting farm-stay businesses and receiving foreign tourists. The factors that residents cared about most with farm-stays were guest room and facilities preparation, labor problems, operational capabilities, and disease and safety management problems which were associated with hardware conditions and operation management systems. The factors with the most concern when receiving foreigners were language, food and customs,

and disease and safety management problems, which were associated with learning capability, information, and management systems. Given the factors that residents cared about most, it is suggested that establishing a group for tourism business promotion should be considered as a means of providing support and assistance to the farm-stay business. The group can formulate a clear management system and provide learning resources and information; this will go some way to eliminating unease among residents, and will enhance their enthusiasm and motivation.

The results of the data collection and analysis show that attitude has a significant impact on the intention to start the farm-stay business and accept foreign tourists. This requires the leaders and relevant staff in charge of the area to educate people about the merits of such undertakings, thereby changing and deepening people' attitudes toward the business, and strengthening their intentions to start the farm-stay business and inbound tourism. However, in terms of the real condition, among those who have relatively high intentions to start the business, some people care about how others feel and find it difficult to accept the tourists. Therefore, it is necessary to create an atmosphere for promoting the farm-stay business and inbound tourism in the whole area. Further, there should be campaigns to promote the business along with support for specific commercialization.

There are some limitations to the research. With regard to the factors influencing residents' intentions, other

factors can be considered for analysis that provide supplementary instructions to the TPB. The degree of influence of the population characteristics' attributes on residents' intentions should be discussed.

The research has mentioned the establishment of a group or organization to promote the development of rural tourism and farm-stays. Future studies are needed to research the relation between residents and this group, and to consider the effect of the organization's support on residents' motivations and behaviors.

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Domestic Violence among Married Thai Muslim Couples in Satun Province: Solutions from Muslim Leaders' Perspectives

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Domestic Violence Among Married Thai Muslim Couples in Satun Province: Solutions from Muslim Leaders' Perspectives

ABSTRACT

The objective of this study was to explore ways to prevent and solve the problem of domestic violence among married Thai Muslim couples in Satun Province. The data of this qualitative study were collected using brainstorming and critique meetings attended by 15 religious leaders, 15 local leaders, and 15 Muslim academics. The data were analyzed using content analysis comparing logistics with concepts, theories, research reports and context based on the grounded theory method. The results of the study showed that prevention and solution should be conducted through the use of six main activities integrated with Islamic principles. They are self-socialization, studying Islam, studying and learning the Al-Quran, religious lectures, group studies (*Halaqah*), and voluntary post-midnight praying (*Kiyamullai*). These activities emphasize behavioural analysis for self-learning, self-development, attitude and value change, behavioural change, solving problems of conflict, mind development for prosperity, morals, ethics, disciplines, happy living in society. The results of this study would be beneficial in forming policy and concrete strategies for taking preventive measures against violent behaviour between married couples and thereby bringing an end to the cycle of domestic violence.

Keywords: Domestic violence, married Thai Muslim couples, solve the problem, ways to prevent

INTRODUCTION

The problem of domestic violence is a hidden problem that has long occurred in Thai society, and the problem is increasingly more severe, complex and becoming more difficult to prevent and to solve. The problem is regarded in Thai society as an

internal problem of the family that should not be interfered, intervened, or helped by outsiders even when the problem affects the victims, family members, and their neighbours (Laeheem, 2014; Promrak, 2007). Domestic violence victims are usually physically injured from slightly to severely, and have to be hospitalized, and they are injured mentally, causing them to suffer and leaving them worried, frightened, and severely stressed. For children or younger family members who regularly witness domestic violence, they may misunderstand that domestic violence is normal and can be used to solve problems; they can even imitate such behaviour in their everyday life and extend it to their future married life and their children. As a result, there can probably be problems of a broken home, divorce, deserted children and elderly, bad attitude towards the family relationship, violent behaviour, escaping from home, and inattentive study in school. For neighbours, domestic violence can make them annoyed, moody; their way of life disturbed and results in their bad attitudes towards the family with domestic violence (Kongsakon & Pojam, 2008; Laeheem, 2014). Also, domestic violence has become a problem related to human rights violations and structural violence such as biases, male dominance, and violent husbands (Parimutto, 2011; Puawongpaet, 1994).

Domestic violence between married couples is an expression of the intended use of physical force or power to threaten or violate personal rights physically, verbally, mentally, and sexually, including threats,

limitations, and obstruction to freedom (Arpapirom, 2000; Berkowitz, 1989). It is a physical force against the other by using an authoritative relationship, threat, or shunning, which causes the victim to suffer physically, mentally, or sexually (Corsini, 1999; Pongwech & Wijitranon, 2000). Domestic violence has also been defined as a physical, mental, and sexual abuse by the husband against his wife to show his power in controlling her or to coerce the wife into compliance, as well as depriving the wife of her rights by desertion, confinement, neglect, or withholding of support (Friends of Women Foundation, 2013)

According to a survey on domestic violence among married couples in 2000 and 2001, the number of wives killed by their husbands increased two times from 30 in 2000 to 60 in 2001 (Friends of Women Foundation, 2002). 34% of wives had been physically hurt by their husbands, 30% had been sexually abused, and 50% had been either physically or sexually hurt (Archawanitkul & Im-am, 2003). In comparison, the number of women abused by intimate partners increased 36.66% in 2005 to 46.12% in 2009 or an increase of 9.46% (Violence against Children and Women and Domestic Violence Information Center, 2013). One-Stop Crisis Center (2011) reported that 8,336 wives or 36.82% were physically hurt by their husbands, of which 5,786 wives or 52.03% were hurt every day. In Pattani Province, domestic violence happened to 38.30% of Thai Muslims married couples (Laeheem, 2014).

Because the problem of domestic violence has increased in the number of incidents, more related individuals and organizations have sought and found more ways to prevent and solve the problem. However, most of them are still not relevant to Islamic uniqueness and the context of the target community of this study. Some of these guidelines for prevention and solution to the problem include improving health, safety, and parenting skills in families (Gershater-Molko et al., 2003); community capacity building as a strategy of family violence prevention in a problem-stricken community (Chan et al., 2009); prevention of domestic violence at the community level using the concept of preventive intervention to reduce the chances and to restrain the problem from spreading (Sanprasit et al., 2011); guidelines for solving the problem of domestic violence according to the teachings of Theravada Buddhism (Parimutto, 2011); and a court diversion: the family violence intervention program (Nowakowski & Mattern, 2014).

Therefore, the researcher became interested in the problem and saw the need to investigate ways to prevent and solve the problem of domestic violence, especially the problem among married Thai Muslim couples in Satun Province. The study aimed to find out suitable ways to prevent and to solve the problem of domestic violence among married Thai Muslim couples in Satun Province. The results of the study would be useful for all parties concerned to use in preventing, solving, and reducing domestic violence before it becomes more violent and a social problem that is difficult to prevent and tackle, and to help solve the problem in time.

METHODS

Research Design

This is a qualitative study that used a phenomenological research design to explain phenomena and search for a new body of knowledge and concepts for prevention and solution to problems related to domestic violence among married Thai Muslim couples. Based on the results of the first objective in this study which found that domestic violence among married Thai Muslim couples in Satun Province stemmed from five important causes namely jealousy and suspicions, alcohol and drug abuse, lack of physical and mental readiness for building their own family, lack of activities contributing to caring and understanding in the family, and husbands' values and belief in male dominance.

Key Informants

Forty-five (45) key informants played important roles in conducting the family development activities and solving domestic violent were divided into three groups: 15 representatives of religious leaders, such as *Imam* (the person who leads prayers in a mosque), *Bilal* (the person who announce prayers in a mosque), *Khateeb* (a person who delivers the sermon during the Friday prayer and Eid prayer) and Islamic committee members of the local *masjid* (mosque), 15 representatives of local leaders, such as

village headmen, assistant village headmen, Municipal Council members and Sub-district Administrative Organization, and 15 representatives of Muslim academicians from Islamic private schools and Fathoni University. These informants were jointly selected by the Provincial Islamic Committee and the Sub-District Mosque Committee in the target areas.

Data Collection

The data were collected through brainstorming and critique meetings with three groups of 15 key informants each consisting of a group of religious leaders, a group of local leaders, and a group of Muslim academics. The brainstorming meeting was conducted from January 2015 to February 2015 during which the operation was run for about 3-5 hour per group. The purpose of the brainstorming meeting was held to find out ways to apply Islamic principles in major frameworks to form guidelines for solving the problem of domestic violence. The critique meeting was conducted from March 2015 to April 2015 during which the operation was run for about 3-5 hour per group. The purpose of the critique meeting was to discuss and seek ways that were complete, concrete, and feasible for prevention and solution to the problem of domestic violence.

Data Analysis

The data were analyzed using content analysis comparing logical concepts, theories, and research reports along with the contexts based on the grounded theory method in the following steps. First, the open coding of the data collected from the brainstorming and critique meetings, including sentence by sentence coding and paragraph by paragraph coding. The coding was divided into two levels. They were coded according to data collected from verbal statements, arguments, supports, and exchanges; then the data were classified according to content and issues obtained from the key informants, and coding according to theories referring to coding the data obtained from the informants according to related theories and concepts. Secondly, topics by grouping codes that were similar or related in one way or another such as codes similar or related in terms of context, condition, or result from the analysis of the phenomenon, content, or issues obtained from the informants were written. Thirdly, the resulting topics were analyzed for their inter-relationship and context in order to arrive at the main topics, subtopics and the gist.

RESULTS

From the brainstorming and the critique meetings to find out ways to prevent and solve the problem of domestic violence among married Thai Muslim couples in Satun Province, it was agreed that in preventing and solving the problem of domestic violence, it was necessary to apply Islamic principles and concepts to beliefs and attitudes that emphasized gender equality, strengthening confidence in facing and managing the problem, thinking and behaving positively, and providing advice

and knowledge. Besides, it is necessary to have cooperation from related individuals and all parties in the community, religious leaders, local leaders, close relatives, and neighbours. Cooperation, in particular, from the couples who use domestic violence, is needed; they must be determined to change their behaviour to live together as normal and happy families. Thus, to prevent and solve the problem of domestic violence, the following six major activities should be carried out.

Self-Socialization or *At-Tazkiyah*

This activity is used to solve 3 problems which are jealousy and suspicions, alcohol and drug abuse, and husbands' values and belief in male dominance. This is a method that is used in developing and changing ethics, behaviour, and morals of married couples who use violence against each other. It is an effort to create and develop personalities of the couples to change for the better, to eliminate their ego that is the cause of being conceited and pretentious which are some important causes of the use of violence between them. It is necessary to develop their mind and take it away from evil power or being bad-tempered. This is called "self-socialization" or fighting with one's evil power. It can enable each of them to know himself or herself, eliminate his or her ill temper, to be aware of his or her consciousness all the time, to think over before using violence, and control himself or herself not to use violence against each other. Moreover, self-socialization, purifying oneself physically, mentally,

and verbally aims at making the married couples closer to Allah. Therefore, the most important thing that couples must do is to improve and change their married life in a direction away from being misled, holding wrong beliefs and feelings of jealousy, revenge, selfishness, prejudice, and self-importance, and instead move towards Allah through virtue and self-control.

The activity of self-socialization should be carried out continuously by married couples with domestic violence during their participation in the behaviour modification process as well as in their daily life with the following steps. 1) Fight with one's mind by being aware of oneself and thinking over bad behaviour in the past or that is going to happen in the future. 2) Let go of bad emotions and actions to obtain inner peace. This is to eliminate all accumulated inners, especially bad habitudes, and behaviours. It is the step of checking and getting rid of harmful behaviours. 3) Building new behaviours. After thinking it over and deciding to make a change, the couples must be determined to abandon wrongdoings and to never do them again. They must apologize to their spouse for having offended them physically, mentally and verbally. This is to have a behavioural change to be following social and religious expectations and norms. The couples are strengthened ethically and morally to strictly follow religious rules and to refrain from religious wrongdoing. It is the step of purifying the mind to an extent. 4) Condition and calm oneself. This is to encourage the couples to continuously conduct themselves according to religious

principles until they can develop themselves and know what they must do, should do and must not do which can lead them to have good behaviour, be moral and ethical, and dare not display violence against each other because it is a taboo according to Islamic principles. It is to condition or promise oneself every day that one will no longer have violent behaviour against the other, and will always keep in mind Allah's favours and that Allah sees what one does. 5) Promise oneself to adhere to the condition by being careful not to violate the contract or condition that one has made. At the end of each day, the married couples must check-in details to see if they have been honest to themselves and keep their promise, and whenever they are successful, they must thank Allah and whenever they make a mistake, they must apologize to Allah. Moreover, they must under no circumstances despair of Allah's mercy. Therefore, the more detailed the couples check their behaviour, the more fulfilling their work is. Daily self-checking enables the couples to understand themselves and be aware of what they have done, and to be well-prepared for tomorrow. Knowing the condition and situation in advance is very necessary for self-socialization.

Studying Islam or *At-Tarbiyah Islamiyah*

This activity is used to solve 3 problems which are alcohol and drug abuse, lack of physical and mental readiness for building their own family, and lack of activities contributing to caring and understanding in the family. This is an improvement process for married couples who have violent behaviour against each other to behave in a way that is suitable for the occasion and environment that have changed or to have good behaviour. The emphasis is on the process of developing knowledge, ability, attitude, and behaviour with values and morally acceptable to Muslim society. The couples are encouraged to learn and develop themselves to become good members of society through activities that are suitable for the community context. It is considered a process that promotes the couples physically, emotionally, socially and in terms of intelligence to make them members of society with high ethical standards. Thus, studying Islam is regarded as a process that promotes and develops the ability and skills of the couples, responds to the needs of life to reduce and correct violent behaviours so that they can adapt to the environments they live in. It is a process that takes them closer to Allah by emphasizing three important processes which are 1) *At-Tarbiyah* or training or socialization of the mind; 2) *At-Ta'lim* or knowledge transfer including religious and secular knowledge; and 3) *At-Ta'dib* or training on ethics and discipline. All of these are efforts to raise the awareness of people who yield to the unlimited power of Allah, to foster a learning spirit that loves learning. They provide high ethical standards which are role models of life development for the couples themselves, their families, and society.

In conducting the activity of studying Islam, three important methods or strategies are required. 1) Wisdom or *Al-Hikmah* refers to knowledge transfer with gentle

but serious speech, and with reason suitable for the situation in which the couples are faced with a problem. The emphasis is on good interaction leading to belief and confidence in each other which leads them to be complete human beings physically, mentally, and intelligently. 2) Admonition or *Al-Mauisah* refers to warning and comparison that are persuasive with gentle words to communicate with the mind of the person by giving him or her encouragement and fear of sins, and as a result, he or she practices himself or herself correctly and develops himself or herself as a good servant of Allah. 3) Argument or *Al-Jadil* refers to giving reasons and arguing with gentle words that can win the heart and inspire the spouse. Arguments should be done with a good method and reason that can make the other party believe and accept with awareness and based on reasons that are acceptable to all parties. In studying Islam, it can be carried out in many ways such as setting up a consultation clinic, promoting learning through a process of knowledge and experience exchange, providing Islamic learning media loans including books and videos, setting up groups of social creating women, setting up groups of returning to being good household leaders, organizing training related to religious principles, and organizing study visits, for example.

Studying and Learning the Al-Quran

This activity is used to solve two problems which are alcohol and drug abuse, and lack of activities contributing to caring and understanding in the family. This activity allows the couples with problems of domestic violence to study and learn the Al-Quran in terms of principles, reading practice, and understanding the texts of meanings and explanations because education in the Islamic sense is to give importance to learning the Quran to solve problems and develop the human quality of life. Studying Islam is to make man complete and successful as desired by Allah, making all man be able to do their duties as representatives of Allah, making man prosperous and complete in all aspects physically, emotionally, mentally, socially, and intelligently. The Al-Quran is, therefore, the constitution of humankind with all sections that respond to basic human needs; it can be used as the norm for religious practice and daily practice leading to success in this world and the next world.

In studying and learning the Al-Quran, the couples should select the chapters related to family and violence such as the importance of family in Islam; the roles, rights, and obligations of husbands and wives; techniques for building a good family; techniques for keeping long-lasting love, and Islam and protest against violence, for example. The couples should take part in studying and learning the Al-Quran together 2-3 times a week during the time between 19.00 and 20.00 hours. which is after praying during sunset (*Maghrib*) and before praying in the evening (*Isha*). It is important to do it continuously even though the problem of domestic violence has been solved. They should continue studying and learning the Al-Quran with the normal group as scheduled by the religious leader.

Religious Lectures

This activity is used to solve all 5 problems which are jealousy and suspicions, alcohol and drug abuse, lack of physical and mental readiness for building their own family, and lack of activities contributing to caring and understanding in the family, and husbands' values and belief in male dominance. In this activity, religious leaders or religious academics are invited to give lectures to provide knowledge and understanding, instil behaviour, promote morals and ethics, and build awareness. Case studies should be given as examples for the socialization of couples with domestic violence. This is because religious lecturing is an important way for behavioural change physically, mentally, and intelligently to make people responsible for being good servants of Allah, and able to do religious activities correctly, live to be good members of society and good citizens of the human race. In doing these, emphasis should be placed on persuasion, publicizing, demanding, giving good advice, presenting good arguments, and exchanging opinions gently and reasonably.

In this activity, the lectures should focus on topics related to family and domestic violence, especially applying the body of knowledge in religious principles. The topics can be on, for example, how important the husband or wife is, how husband and wife are like the tongue and teeth (that sometimes hit and hurt), how important parents are as role models, the rights and obligations of husband and wife in the Al-Quran, bad effects of using violence, techniques for patience, and techniques for behaviour change. The activity of religious lecturing should be held twice a month for couples with domestic violence, and other audiences can also attend depending on the readiness and management of each community.

Group Studies (*Halaqah*)

This activity is used to solve all 5 problems which are jealousy and suspicion, alcohol and drug abuse, lack of physical and mental readiness for building their own family, and lack of activities contributing to caring and understanding in the family, and husbands' values and belief in male dominance. In this group activity, the couples with domestic violence sit in a circle to exchange knowledge and discuss problems, study together about Islamic happy family life in the Al-Quran and the Prophet Muhammad as the role model. For example, they study about the importance of family in Islam, the role of husbands and the role of wives, ethics for married life, building a good family, an ideal Muslim family, the art of married life, long-lasting relationship, and building morally strong families for a happy society. They think, plan, and help solve problems of one another which is an activity that provides the couples with knowledge and understanding, raises their awareness, socializes their mind, enables them to develop themselves to have self-awareness, and encourages behavioural change so that they can live with others happily in the society. Moreover, the activity promotes social skill development and building relationship with other people in the family as well as their neighbours.

Besides, group study activities or *Halaqah* is a process that is used to prevent and solve the problem of domestic violence by emphasizing the technique of behavioural analysis to motivate self-learning, self-development, and change in the way of thinking, attitudes, and values. This is to prevent and solve problems in behaviour and conflict, to develop the mind to be prosperous with moral, ethics, and discipline so that they can live happily together in society because participating in group study activities enables participants to have more self-understanding and self-learning as well as to improve their behaviour, personality, and human relations skill. Furthermore, group study activities promote and support individuals who have similar problems to get together to help each other think, plan, and solve the problems they have aimed to solve. The activities motivate them to change their behaviour for the better so that they can live happily in society. Participants exchange their experience and seek ways to solve problems to gain learning skills using behavioural analysis techniques to develop and change their behaviour. The activities are used as guidelines for married couples who are not accustomed to the environments to develop their potential, efficiency, and adaptability to family life. Moreover, the activities help promote social skills and relationship with others from learning and contacting with each other and provide an opportunity for them to release their emotional stress.

In doing group study activities, husbands should be in one group and wives in another group, and there should be 10-15 persons in each group. The activity should be held 1-3 times a week for 1-2 hours each time, and when the outcomes improve, the activity should be conducted continuously at least 1-2 times a month or once a week to make group study activities or *Halaqah* part of their way of life.

Voluntary Post-Midnight Praying (*Kiyamullai*)

This activity is used to solve 3 problems which are alcohol and drug abuse, lack of physical and mental readiness for building their own family, and lack of activities contributing to caring and understanding in the family. This is an activity for couples with domestic violence to follow. It is what the Prophet Muhammad did as an important model to socialize the Islamic mind which is very necessary for Muslims; especially those who want to change their behaviour for great favours and rewards from Allah. Moreover, the activity shows that people who participate in it are people who see and realize the value of the activity and are determined to sacrifice the comfort of sleep for voluntary praying after midnight which is more valuable than praying at other times of day because people who pray voluntarily after midnight, particularly during the Ramadan, with faith and hope (for rewards from Allah), all their past sins will be forgiven. The reason for this is that when humans are weak physically and mentally, the best treatment is to turn to Allah, and praying makes them close to Allah. Therefore, getting up from our sleep to pray is to practice our body and

mind so that we can be close to Allah, and then our body and mind can calm down and mental security returns to us. We will gradually calm down and become stronger because praying after midnight can chase away all evil diseases from humans. More importantly, it can socialize the human mind and reduce their sadness.

Therefore, when the couples are determined to correct their violent behaviour, they must be patient and beg Allah to wake them up in order to do voluntary after-midnight prayers. Then humans will know that they can wake up to pray for Allah because it is His wish for them to do so. When they wake up, they are eager and can begin to pray enthusiastically, and whatever their suffering is, they can consult and tell Allah and ask Him to alleviate it and they should praise Allah as much as possible to make the suffering better whether it is physical or mental suffering, it will be mitigated by His approval. Allah loves all who wake up to pray for Him; there is no problem that Allah cannot solve. If we take Allah as our consultant, Allah is the true Helper. Thus, couples should be encouraged to pray together voluntarily after midnight and they should do this continually and regularly at least once a month.

DISCUSSION

The ways that can be used to prevent and solve domestic violence among Thai Muslim married couples in Satun Province are applying Islamic principles and concepts to various activities with cooperation from all parties concerned in the community

such as religious leaders, local leaders, close relatives and neighbours, especially cooperation from the couples with domestic violence. There are six main activities: self-socialization, studying Islam, studying and learning the Al-Quran, religious lectures, group studies (*Halaqah*), and voluntary post-midnight praying (*Kiyamullai*). These are techniques or processes for behavioural analysis to induce self-learning, self-development, to change attitude and value, and behaviour, to solve problems of conflict, to develop the mind to give it prosperity, moral, ethics, and discipline so that people can live with each other happily in society.

The results of the study indicate that the ways that can be used to prevent and solve the problem of domestic violence are social processes, especially socialization through religious processes applying Islamic principles to the socialization of the mind, training, exchanging, understanding, warning, and changing behaviour. They are processes that transfer knowledge, thought, attitude, ideology, culture and personality for couples with domestic violence to live their lives in such a way that is required by society, and to change their behaviour to the way that corresponds with the social norm. It can be seen from the results of the study that socialization by the religious institution is a process that can make individuals behave following the social norm and live happily together with others in society. It can also give individuals inspiration, ideology, attitude, and belief to make them united and have skills that are necessary for living with others in society (Adivatanasit,

2002; Popenoe, 1993; Thitiwattana, 2004). It is a process that provides knowledge and training with moral and ethics to make individuals become persons with good conduct who know right from wrong (Thepsitha, 1998). Islamic socialization gives knowledge, understanding, experience, training, and nurtures individuals to give them intelligence and high spirit as well as social, physical, emotional, and intelligence development. Moreover, as a result of Islamic socialization, individuals can become moral, ethical, and have discipline in living which is one way of seeking favours from Allah by developing one's behaviour and personality following religious teachings which enable them to live happily in society (Mahama, 2009; Narongraksakhet, 1997). Also, this is according to the socialization theory which states that "socialization is the process by which people acquire the social, emotional, and cognitive skills needed to function in the social community through their social interactions for which they have been learning" (Bugental & Grusec, 2006). It is in line with Mead's theory of social behaviourism, which explains "how social experience develops an individual's personality. The part of an individual's personality composed of self-awareness and self-image" (Caliwan, 2013). "Socialization refers to the process of learning new norms, values, attitudes, and behaviours which most common form occurs each time when learning something contrary to previous experiences" (Caliwan, 2013).

Furthermore, the ways used to prevent and solve the problem of domestic violence, as mentioned above, bring the body of knowledge as well as religious principles in for participants to talk and discuss through various activities so that there is a behavioural analysis that can be applied to developing and changing attitudes and behaviours. The emphasis is on a process of building skills and actual practice which corresponds with a statement that skill-building activities, exchanging experience, and practice can result in behavioural change as required and that meets the target that has been set because it is problem-solving as a result of self-learning that individuals can apply to self-development and to change their attitudes and behaviours (Khemmanee, 2002; Lhamlert, 2009; Ritnetikul, 2009).

The use of self-behaviour and religious principles used in solving and preventing domestic violence among married couples is a way to promote the married couples to understand each other and the effects on the victim, family members and neighbours which result in attitude change and good behaviour. This corresponds with the concept that religious activities organized to solve behavioural problems can make participants more aware, allow them to understand and realize their own feelings as well as the feelings of others', enable them to control themselves and change their attitude and behaviour according to the norms or expectations. Moreover, the use of self-behaviour and religious principles in solving and preventing domestic violence among married couples enhance emotional, social and attitude development, change the couple's character, personality and behaviour, and enable them to control

their emotion, respect others, and adapt to family members well (Chatsupakul, 2003; Rogers, 1970). Activities with emphasis on a religious process promote and support individuals to have social skills, to be expressive, eliminate conflict in their mind, control themselves, to be responsible, respect others' rights and adapt themselves to family members as well as others because such activities can improve discipline, moral, ethics and values that are acceptable by society, and promote practice according to social rules and norms (Department of Mental Health, 2000; Nelson-Jones, 1992).

Furthermore, activities in which religious principles are integrated are a way to instil awareness through socialization and to instil awareness according to the Islamic way which is a process that promotes the married couples to know right from wrong and feel the shame of doing wrong or not conforming to social norms. The results of this study revealed that socialization of the mind and awareness had effects on individuals' behavioural modification to meet social requirements. It is training for couples with domestic violence to live happy lives as other people; it instils awareness of knowing right from wrong, hopefulness in life according to religious principles, and improves life skills (Sereetrakul, 2009; Thitiwattana, 2004). It applies Islamic principles in constructing knowledge, understanding and realization for married couples who participate in the activities to solve the problem of violence against each other because studying Islamic principles is a duty that Muslims must perform to

gain knowledge and understand them and adhere to them as the system of life and use them in their everyday life practice. Islamic principles can protect them from different problems because knowledge can help individuals from getting lost in the environments and current social trends so that they are gentle and modest, and live their lives as designated by Islam (Laeheem & Baka, 2009; Mahama, 2009; Narongraksakhet, 1997). People with good behaviour who are recognized by family members and others in society are influenced by their knowledge, understanding, their acceptance of values and adherence to social norms. Therefore, people with behaviour per social norms are individuals who know and understand religious teachings, practice religious activities regularly, are instilled and developed with personality, moral and ethics continually and regularly (Khagphong, 2004; Mahama, 2009; Sereetrakul, 2009; Thitiwattana, 2004). Participating in Islamic activities and training are associated with Islamic behaviour, and promoting youth to participate in potential development activities that emphasize Islamic moral and ethics, and can prevent and solve problems of undesirable behaviours (Laeheem, 2013; Laeheem & Baka, 2012).

Also, some academics state that projects to change members' behaviours that give importance to religious principles to promote knowledge, understanding, to instil good attitude and to build correct ideology can help individuals behave desirably and change their behaviour per social norms. This indicates that the

most suitable method for development and correction of behaviours that are not following social norms is to apply religious principles to organizing this type of project (Adivatanasit, 2002; Narongraksakhet, 1997; Thepsitha, 1998). Applying Islamic principles to changing behaviour that is not following Islamic principles can promote individuals to behave the Islamic way (Khagphong, 2004; Laeheem & Baka, 2009; Mahama, 2009). The process of providing knowledge and understanding about Islamic principles for people with behavioural problems is a socialization process for training the mind, intelligence, body, and spirit to make them good persons with moral, ethics and discipline; they are accepted by others in society because they have become individuals with behaviour and values that meet social norms as a result of the socialization process (Laeheem, 2013; Thitiwattana, 2004).

CONCLUSION AND RECOMMENDATIONS

The ways that can be used to prevent and solve domestic violence among Thai Muslim married couples are applying Islamic principles and concepts to six main activities: self-socialization, studying Islam, studying and learning the Al-Quran, religious lectures, group studies (*Halaqah*), and voluntary post-midnight praying (*Kiyamullai*), with cooperation from all parties concerned in the community. The results of this study could help Islamic and governmental organizations in forming good policies and concrete strategies for promoting and supporting married couples with violent behaviours to return to being individuals with behaviours according to social norms and the Islamic way. The family institution, educational institution, and religious institution should be allowed to participate in development and promotion for prevention and solving domestic violence more concretely through the use of socialization in the activities found by this study. As stated in the theory that the more the married couples are attached and adhered to the religious principles, the more they can restrain themselves from wrong-doings because domestic violence is partially caused by the weakened or broken link between their feeling attached, their devotion, and belief in each other. The link is weakened or broken because their selfishness is more than their devotion to their mutual benefit, and because of their distance from the religion. Therefore, religious leaders and family members of the married couples with domestic violence must realize and give importance to the ways of preventing and solving the problem as one way of problem management before the problem of domestic violence becomes more violent and a widespread social problem and to jointly find ways to solve the problem in time.

It is recommended that future research should examine such aspects as risk factors associated with domestic violence behaviour among married Thai Muslim couples, the development of programs and activities to alleviate the problem, and the effects of these programs and activities.

ACKNOWLEDGEMENTS

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Teenage Substance Abuse: Impact on The Family System and Parents' Coping Strategies

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ABSTRACT

Substance abuse by teenagers is a disease that burdens the whole family. This study aimed at exploring how teenage substance abuse affected the family of the user, parents' efforts to curb the use; their coping strategies in relation to their children's substance abuse problem. The current study was carried out with nine parents whose teenage children abused substances and were receiving treatment for such a problem in an outpatient treatment centre in Soweto. These children were conveniently selected using non-probability sampling. Data were collected using semi-structured interviews and analysed thematically. The whole family becomes disarrayed by the discovery of substance abuse by one of their own. The spousal relationship is also adversely affected. In an attempt to contain the problem, most parents usually respond by attempting to solve the problem with their own resources such as giving parental guidance and hoping that the child would stop using drugs. Most parents do not receive the support that they require. The whole family system is negatively affected, therefore substance abuse and dependency intervention efforts should include the whole family and not just the addicted person.

Keywords: Coping strategies, family, parents, substance abuse, teenagers

INTRODUCTION

The use of alcohol and other drugs is typically initiated during the adolescence period and escalate over this developmental phase (Hernandez et al., 2015). Recent research established that young people, irrespective of their sex, initiated the use of substances as early as the age of 10 years old (Mafa et al., 2019). Ananias et al. (2019)

indicated that substance abuse had dire consequences in the lives of users, ranging from being expelled from school, lying to parents and being in conflict with the law. Due to the stigma that surrounds substance or drug use and fear of social isolation, parents and families are often reluctant to share their problems (Paylor et al., 2012).

Parents do not always promptly react to teenagers' substance use and therefore find it difficult to acknowledge it when the substance use has escalated to abuse or dependence. Choate (2015) revealed that upon the discovery of substance use, parents did not see the problem for what it was and thus sought other ways of explaining it. They sought explanations that were not substance abuse-related. Most parents dismissed the signs of substance use as being normal adolescent behaviour. These findings correlate with what Masombuka (2013) found in their study where some parents said they even resorted to taking their children to church thinking that they were possessed by evil spirits.

Substance abuse disrupts the life of the user both at personal and interpersonal levels. The family life of the person with the substance abuse problem revolves around them and their addictive behaviour. Makhubele (2012) concurred by pointing out that the impact of substance abuse surpassed the personal effects to affect healthy social relationships as well. All areas of family life adapt to addiction. It is common for family members to deny that addiction is the problem and to feel shame about it. Substance abuse is not discussed among family members or with anyone outside the family. It is this secretive behaviour that is the source of much emotional pain for all family members (Collins et al., 2010).

Studies that solely focus on the teenager as far as causes of substance use are concerned to tend to view the parents of the user negatively by placing the blame on them. Research by scholars (Benchaya et al., 2011; Matlakala et al., 2019; Njeri & Ngesu, 2014) on causes of adolescent substance use focuses on parents' inadequacies of performing their role as parents such as communication problems between adolescents and parents, non-authoritative parenting styles, as well as parents' own drug consumption. Parents are seen as playing a major role, directly or otherwise, in influencing their teenagers to start abusing licit and illicit drugs.

These kinds of studies do not take into account the experiences and feelings of parents of the substance user. Choate (2015) posited that there was little research on the impact of teenage substance abuse on family functioning. The whole family system and its dynamics are adversely affected by substance abuse by one family member. This can take its toll on everyone involved particularly the parents of the substance user. One of the greatest challenges faced by parents in today's society is learning and understanding how to manage their children's substance abuse problem (Cohen, 2014).

Addiction within the family can create an unstable family environment characterized by disharmony, disequilibrium

and conflicts (Cohen, 2014; Masombuka, 2013). Emotional intimacy and trust among family members may be lost, and parenting strategies can become less effective (Craig, 2010). Parents feel particularly frustrated if the addict is a minor as they feel solely responsible for the child's deviant behaviour (Smith & Estefan, 2014).

Teenage substance abuse affects the whole family system. Parents' increased attention on the addicted adolescent and their behaviour leaves other family relationships vulnerable. Parents would argue with each other, while other children feel neglected. This effectively results in the breakdown of communication in the family, leaving them in disarray. Parents live in constant fear of what might happen to the addicted child. They are consumed by fear that their children may die from self-harm, deteriorating physical and mental health or overdoses (Choate, 2011).

Smith and Estefan (2014) concluded that when trying to cope with one member's addiction, families developed a system that was conducive to problematic behaviour. This system enables the problem to escalate and compromises family functioning. The tendency to focus more on the person with the problem can lead to divisions or confrontations in the family. Other siblings might feel ignored and direct their feelings of resentment towards the parents. The overall quality of life and family relationships is compromised. The parent-parent and parent-child relationships are, to a certain extent, neglected, leaving the whole family in a crisis. Parents are constantly concerned

about possible violent attacks on them by their addicted adolescent and are highly concerned about other children in the family repeating the addict's behaviour (Barnard, 2005; Orford et al., 2013).

Parents' inability to cope is increased when their child's substance abuse problem escalates. They often experience heightened stress which makes it difficult to manage their lives, which in turn compounds the weakening of the relationship with the other parent (Choate, 2015). Scholars such as Usher et al. (2007) indicate that parents and family members who live with and take care of substance abusers are isolated and hidden groups, predominantly because of guilt and shame. Many services that are available focus on the needs of the substance abuser, and not on the needs of the affected parents and/or family members. The guidance, wisdom and support they need are not easily found.

This paper sought to identify and describe parents' effects in curbing their teenage children's substance abuse, the impacts that teenage substance abuse has on the family system, and their coping mechanisms

METHOD

Research Approach and Design

This study followed the qualitative research approach. Denzin and Lincoln (2003) argued that the qualitative approach sought to study things in their natural settings, and attempted to make sense of, or to interpret, phenomena in terms of the meanings people bring to them. The qualitative research

design was most appropriate as the research involved studying human behaviour in its own unique setting, which included experiences of parents of teenagers who received substance abuse treatment in an outpatient facility.

An exploratory design was used because the area of the proposed investigation is not well researched in South Africa. According to Bless et al. (2013), exploratory designs are largely qualitative and often use small, non-probability samples. This design helped the researchers to explore the impacts of teenage substance abuse on the family system.

Sampling

Data was collected from nine participants from Soweto Township, South Africa. A sample size of nine was sufficient in order for saturation to be reached. The selection criteria of this study included the following: the participants should have an adolescent child who has been abusing substances and receiving substance abuse treatment in an outpatient facility; they needed to reside in Soweto; they had to be willing to participate in the study. Convenient sampling was used to select the participants. Furthermore, this sampling technique was appropriate as the researchers believed that it would yield a comprehensive understanding of the impact of teenage substance abuse on the family system (Maree, 2007). Parents were asked to participate in the study when they accompanied their children to the centre.

Permission to Carry Out the Study

Ethical clearance to conduct the study was granted by the Turfloop Research Ethics Committee of the University of Limpopo, South Africa. Permission to conduct the study was granted by the Director of the treatment facility at which the study was carried out.

Interview Process

The research was conducted at an outpatient alcohol and drug treatment centre in Soweto, Gauteng Province, South Africa where the participants' teenage children were receiving treatment for substance abuse problems. The profile was given in terms of the participants' gender, age and their relationship to the patient. The study was conducted with nine (9) participants. Three of them were male and six were female. The ages of the participants ranged from 33 to 71. The three male participants were the biological fathers of teenage children with a substance abuse problem. Out of the six females, five were the biological mothers of the teenage substance abusers. Only one female was a guardian of the person with the problem.

Information about the study's aim was verbally communicated to the participants in their language of choice. Once the potential participants fully understood the nature of the study, and agreed to participate voluntarily, they were then issued with a consent form which clearly clarified the issue of confidentiality and the voluntary nature of their participation.

Participants were assured that they might withdraw their consent to participate in the study at any point without consequences. The researchers assured the participants that their participation in the study was confidential and that their identities would remain anonymous. The interviews were conducted in a quiet and comfortable office at the treatment centre. A semi-structured interview schedule guided the interviews which lasted for a duration of 55 minutes to two hours. These were the main questions asked by the researchers:

- What do parents do to help rid their children of substance abuse?
- What impact does substance abuse have on the family as a whole?
- How do parents cope with their teenagers' substance abuse?

Data Analysis

Thematic analysis grounded in the literature regarding phenomenological methods was used in this study. A thematic data analysis method is "a process of looking at data from different angles with a view to identifying keys in the text that will help the researcher to understand and interpret the raw data" (Maree, 2007). By using thematic analysis, the researchers were "seeking to achieve three aims: examining commonality, examining differences and examining relationships" (Harding, 2013).

Data was analysed following these steps as outlined by Blanche et al. (2006):

- Step 1: The data were transcribed, carefully read through while making notes of and attempting to make sense of the data.
- Step 2: The transcribed data was read through while looking for the underlying meaning in the storylines.
- Step 3: Similar topics were grouped together while discarding irrelevant data.
- Step 4: A code was assigned to each identified topic.
- Step 5: Themes were generated from the topic identified with each theme given a heading instead of a code.
- Step 6: Similar themes were grouped together in order to reduce the list of identified themes.
- Step 7: Sub-themes were further generated from the major themes and preliminary analysis was conducted.
- Step 8: The data analysed was then recorded according to the themes and subthemes identified.

RESULTS

The themes that emerged from the process of data analysis are presented in this section. The results are presented based on the study objectives and the main questions asked. The major themes identified are: (i) parents' efforts to curb their teenage children's substance use; (ii) the impact of substance abuse on family relationships; (iii) coping strategies; and (iv) lack of support.

Parents' Efforts to Curb the Use

This theme outlines the parents' efforts in assisting their children to stop abusing substances. The subthemes identified are parental intervention, spiritual intervention, and seeking professional help.

Parental Intervention. When parents realised that the problem with their children was escalating, they did what they could within their means to assist them. They did so as a means to gain some sense of control over their children's substance abuse problem. However, they failed to identify the user as a problem that needed the intervention of professionals. The experiences of five participants were reported as follows. According to a father, aged 52, "I set stricter rules like having curfew, I even agreed with his mother that he should not be given money, instead we would buy whatever items he needed".

This is how another participant, a mother aged 44, shared their experience, "I took him from the Free State (province) to come and stay with me so that I can keep an eye on him".

Another parent, a 49-year-old mother, shared their experience in these words:

> Like any mother would, I tried to talk to him when he was still using dagga (marijuana) and tobacco only. He promised that he would stop as he is not addicted. He also said that he was just experimenting and it was not serious. When he began with nyaope (a mixture of

marijuana and heroin), I pleaded with him to come here (treatment centre) but that did not work.

This narrative represents another parent's reaction, 38-year-old mother, to their child's substance use, "We stopped giving him money but he still smokes, in fact he is worse than before."

These responses by parents are supported by findings in Barnard (2005), where it was revealed that parents' initial impulse was to attempt to solve the problem by themselves prior to seeking outside intervention. Parents are the children's primary caregivers and are responsible for disciplining the children when they display deviant behaviours, thus they will try to deal with the problem themselves.

Spiritual Intervention. Given their spiritual convictions, it was easy for the parents to seek spiritual intervention over professional intervention. In addition to parental guidance, this is how six parents expressed their experience with regard to spiritual intervention. A mother aged 71 said, "I prayed for her and also took her to church, …. the church people continue to pray for our daughter. We sometimes hold prayer sessions for addicted people at our church."

A 46-year old father's response was recorded as:

> The pastor said he is possessed by evil spirit which makes him do things such as smoking dagga and being disrespectful towards

his parents and teachers. The evil spirits are jealous of his bright future and do not want him to prosper.

These utterances resonate with earlier studies. Masombuka (2013) and Swartbooi (2013) argued that when parents realised that their initial efforts of trying to contain the problem themselves were failing, they seeked religious counsel and prayer.

Seeking Professional Help. The substance abuse persisted despite the parents' efforts to help their children. The parents sought professional help only when external forces such as school authorities or courts of law were involved. Only two participants sought professional help without the involvement of external forces. A 33-year-old mother mentioned that:

I was advised by school authorities to bring them (twin brothers) here. The problem is, I did not know much about their use of marijuana. I would not have brought them here had it not been for their school authorities as I had no idea about their behaviour.

This is how another parent's child, a mother (71 years old), got to receive professional for their child help, "The Court ruled that she must be brought here. She was arrested after they found them (she and her friends) smoking on the street."

According to Craig (2010), the sense of shame brought about by the family

member's substance abuse problem impedes the family's willingness to seek help from external resources, cornering families into isolation and distress.

Impact of Substance Abuse on Family Relationships

Addiction not only affects the individual with the problem, but it also has negative effects on the family system as a whole. This theme exposes teenage substance abuse in the family system.

Parental Relationship. Parents reported that their children's addiction had a profound effect on their marriages. It was found that parents of the children were in disagreement about how to deal with their children. The participants expressed this as follows. A 46-year-old father stated that,

My wife and I do not agree when it comes to this issue. I believe that our son will benefit more from professional help. His mother believes and tells him that only God can cure him. I am not against her taking him to church, I just want her to also consider the professional route. She is not interested in coming here, she never came here even when he was attending (therapy) sessions here last year. She still refuses to come here even after our son was suspended from school. It seems coming here is my sole responsibility.

According to Smith and Estefan (2014), conflicts arise in marriage. Swartbooi (2013) indicated that parents were faced with the challenge of providing support for the child with a substance abuse problem, and at the same time provided a stable family environment for the other children. This leaves parents feeling overwhelmed as they have to cater to all of their children's needs.

Parent-child Relationship. One child's addiction affected the relationship between the parent and other children in the family. This is what a 49-year-old mother shared with regards to this point:

> I think I spend more time with him now than I do with his younger brother. I do not know how to divide my attention between them. I don't want his brother to think I am neglecting him. But I still spend some time with him.

This is what another parent, a father aged 46, had to say, "…..his brother also accused me of paying too much attention to him than I did to him (brother) and their youngest brother."

This subtheme and narratives are confirmed by Barnard (2005), who stated that parents felt responsible for every member of the family, including the one with addiction problems. This means that parents find it challenging in this situation to keep all the children happy, and therefore often focus on the child with the problem.

Sibling Relationship. Another major subtheme revealed during the interviews was that the addiction of one child has negative outcomes on their relationship with other siblings. The majority of the parents narrated how substance abuse had an impact on the teenage user's siblings in the following way according to a 49-year-old mother:

> The younger ones get scared when he starts shouting and demands money from me. One of them has told him that he hates him and wishes that he dies so that we can live in peace. His oldest sister no longer speaks with him, this puts a strain on me as a mother because I love all my children and I want them to get along.

This narrative is affirmed by Oreo and Ozgul (2007), who indicated that parents tended to spend most of their time, energy and resources attempting to assist the addicted family member, leaving siblings yearning for their parents' affection and attention.

Another aspect that puts a strain on the sibling relationship is theft by addicted adolescents. A father, aged 52, shared this in the following manner, "When she could no longer maintain her habit with her allowance, she began stealing from her older brother and younger sisters. She would take their money from their rooms."

Another parent, a 44-year-old mother, expressed the way in which she felt her

family was fractured through the addict's theft by uttering the following:

……he also steals from our house, he takes anything he can get his hands on: money, cellphones, laptops, food, appliances, curtains, clothes, pegs. …He has been inciting violence towards me, threatening to hurt me and his sisters if he was not given money to buy drugs.

Choate (2015) confirmed that theft caused a strain on family relationships as it was at times accompanied by assault. Parents and siblings are generally left feeling vulnerable as their possessions are at risk of being stolen (Barnard, 2005). Being a victim of theft leaves one feeling unsafe and vulnerable, moreover when the perpetrator is known to them.

Coping Strategies

The interviews revealed that parents find it difficult to deal with their children's addiction. This theme describes ways in which parents try to cope with their children's substance abuse. Almost all parents reported that they relied on their spirituality as a means of coping with their struggle of dealing with their substance abuse. The following extract from a mother aged 71, demonstrates this, "All I do now is pray. There is nothing more I can do than put everything in God's hands. It also helps to talk to the women from my church. They strengthen me by praying with me."

A 33-year-old mother pointed out, "I struggle to cope with the situation but my mother says it will be best to pray about it. So my mother and I have been praying so that God can help the boys see the light and stop smoking."

These findings corroborate previous studies pertaining to the experiences of parents with their children's substance abuse (Masombuka, 2013; Swartbooi, 2013). The findings of these studies revealed that parents often relied on religion and spirituality to cope with their challenges. Religion plays a vital role in people's lives as it brings hope hence the parents turn to their religion as they seek to understand their children's substance abuse problem.

Lack of Support

It emerged during the interviews that most of the participants did not receive the support that they required with regard to the addiction. A father, aged 52, referred to this challenge as follows:

I would feel much better if community members can stop blaming us (parents) and accusing us of letting our children behave that way (stealing and using drugs). People who do not have children who do this thing (using drugs) do not understand. I think if there was a place where all parents with children who smoke nyaope (marijuana mixed with heroin) can come together and talk, and maybe give each other advice.

Some participants required support from community members as well as individual

personal support from social workers. A 49-year-old mother expressed this need as follows:

> *……it would really help me and my family if we could get support from social workers and community members. Having a child who abuses drugs is not something that parents choose. The community should stop buying the things they (addicts) sell to them because in doing that they are supporting the addiction, but people just want a bargain, buying a phone worth R3500.00 with R200.00. Social workers should consider counselling us as parents and assist us in dealing with this issue.*

Another need for support identified by the parents was support by co-parents as well as extended family members. This is how a 46-year-old father expressed this need:

> *I wish that my wife and her sisters could support me by changing their minds about professional treatment. My wife is the person whose views I value the most but I feel like I'm fighting this alone. My wife and I need to be in this together if we are to win this battle.*

According to Choate (2015) and Masombuka (2013), in their respective studies about parental experiences with adolescent substance abuse, parents need community support, individual and family counselling as well as support groups where they can share their experiences. This will assist them in coping with substance abuse.

DISCUSSIONS

Parents are driven by their inert desire to protect and help their children. Thus when their children are involved in substance use, they would do everything in their power to curb the use. Parents initially attempt to deal with the use by using their own resources such as reprimanding the user, taking away their privileges, and even relocating them. When their immediate resources are unsuccessful in curbing the use, they explore other avenues such as seeking spiritual intervention before they could consider professional intervention. These findings resonate with what was discovered by Mathibela and Skhosana (2019) who highlighted the plight of parents in dealing with their children's substance abuse. Professional help is often sought after the involvement of either school officials or the police.

The effects of substance abuse are not exclusively felt by the user. Teenage substance abuse also has negative impacts on the families of the users. Families find themselves out of depth when trying to deal with the use as they focus their energies on assisting the substance user. This, in turn, results in other family relationships being partially neglected. The parents interviewed reported family disarray as a result of substance abuse. This is due in part to the fact that parents and family members alike are not sure what to do as

they lack knowledge of substance abuse and its seriousness.

It was established in the study that the parental relationship is affected as parents tend to blame each other for the problem. The parent-child relationship also suffers as parents focus their attention on the child with the problem leaving non-using children feeling neglected. The non-using siblings are often victims of theft by their addicted siblings, making it difficult for them to have healthy relationships. Parents are often caught in the middle of the family chaos as they have to keep the family together despite the problem.

Consequently, parents find it difficult to cope with the substance abuse and family dynamics that come with it. They predominantly turn to prayer in order to deal with the substance abuse as they evidently did not receive the necessary support in order to effectively deal with the substance abuse and its negative effects. Parents yearn to be supported by the community and professionals such as social workers. Similar sentiments are shared by Somani and Meghani (2016), who recommended the involvement of community stakeholders in the fight against substance abuse.

This body of research has shown that the whole family system is negatively affected. Therefore, substance abuse intervention efforts should include the whole family and not just the addicted person. Parents of teenagers who have a substance abuse problem need support, skills and resources in order to effectively deal with the problem. They also need help in supporting the non-using siblings to cope with the substance abuse by their siblings. This indicates that social workers or substance abuse therapists should recognise the need to include family members in their intervention, and not just work only with the person with the problem. The work by Mathibela and Skhosana (2019) affirms these foregoing findings.

CONCLUSIONS

The results of this study show that parents of teenage substance users are burdened with having to deal with the use. They usually attempt to contain the problem by talking to the user, moving them to a different location, or taking away their allowances. Parents highlighted that there was a change in the family dynamics once one member of the family was addicted to substances. Parents reported having disagreements with the co-parents on how best to deal with the problem. The relationship between siblings is also adversely affected as the non-using siblings argue with their substance-abusing siblings. The other children's relationship with their parents is impacted as non-using children argue with the parents on the treatment that their sibling with the problem receives from them.

The researchers have observed that there is a great need for the availability of formal and informal support networks for the affected parents and their families. Parents need to be made aware of the importance of support for themselves. They desperately need psychosocial support and information about teenage substance abuse to help them cope. These parents need

support to cope with, and work through, the fragmented parent-child relationship as well as other disrupted family relationships. Support groups should, therefore, also include family members affected by the problem, including parents and siblings. The support of the family unit will offer the teenager who abuses substances the best chance of recovery.

Other parents mentioned the need for support from community members and them to stop encouraging drug abuse by buying stolen items from potential abusers. Communities need to be sensitised about drugs so as to de-stigmatise families of people who are addicted to substances. Given that as seen in this study, parents have strong religious convictions, there is a need for social institutions such as churches to be involved in community drug interventions. Drug awareness campaigns should also be conducted in churches. Religious leaders should be educated and encouraged to get involved in the fight against substance abuse.

STUDY LIMITATIONS

The researchers used a convenience sample which means that all parents who took part in the study were from the same treatment centre. Therefore, the results of this research may not be generalisable to the larger population.

This study was limited to nine parents whose teenage children are abusing substances and receiving treatment at a township treatment centre. Therefore, the findings cannot be generalised to

other settlements as conditions may differ. The interview process was stopped after interviewing nine participants as data appeared to have reached saturation. The results of this study cannot, therefore, be generalised to all parents dealing with a similar problem.

All the parents involved in this research study were Africans. Therefore, they do not reflect the demography of the country as it excluded other racial groups. Future research can be conducted on the religious leaders' opinions on the causes of substance abuse.

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SOCIAL SCIENCES & HUMANITIES

Millennials as Digital Natives: Examining the Social Media Activities of the Philippine Y-Generation

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ABSTRACT

There has been an increasing interest in the millennial generation and scholars have embarked on different enquiries to understand their desired career projections, work ethic, and consumption practices. Typically, millennials are individuals born from 1981 to 2000 and the said generation has also been identified as digital natives. Consumer insight organizations illumined that millennials have a predisposition toward living a public life through social media. More specifically, millennials have the proclivity to technologically document different facets of their lives and share it on digital social networks. The present enquiry, therefore, determined the themes of what millennials from Metro Manila, Philippines shared on social media. QDA-assisted thematic content analysis on 5,000 social media posts was conducted and three life areas were delineated: culture, social relations, and work. In terms of culture, the participants most frequently tended to share posts about the self, specifically self-disclosures and selfies. Likewise, popular media such as memes tended to be circulated on the feeds of Filipino millennials. In terms of social relations, family and friends were recurrently featured on their feed most notably on special occasions or holidays. In terms of work, Filipino millennials seemingly shared their contentment and dissatisfaction with their professional and educational engagements.

Keywords: Digital natives, Facebook, Filipino millennials, generation Y, Instagram, memes, social media, Twitter

INTRODUCTION

Karl Mannheim's (1952) critical exposition on generation theory introduced the said concept as a form of social category. He opined that collective consciousness were formed through generational difference and each cohort was predisposed to unique

forms of thought, experience, and feeling. Thus, millennials as a specific generational cohort have been put into scrutiny for their seemingly distinctive way of living, that is, being surrounded by digital technology and media, social networking platforms, and extremely accessible communications tools. Strauss and Howe (1991) had shaped modern conception of generations and were among the first to coin the term "millennial." Different scholars have slightly different consideration of the year segmentation of the millennial generation: 1980-2000 (Eastman et al., 2014), 1980-2000 (PwC, 2011; Zemke et al., 2000), 1981-2000 (Delcampo et al., 2011; Velasco & De Chavez, 2018), 1982 – onwards (Ayudhya & Smithson, 2016).

Generation scholars have posited notable terminologies in their attempts to make sense of what it is to be a millennial. Hershatter and Epstein (2010) suggested the terms "greatest generation" and "generation whine" to describe millennials. The "greatest generation" is attributed to millennials because they have great inclination toward building a better future despite issues in terms of the economy, environment, and politics. On the other hand, they are also called "generation whine" because of being overprotected and overindulged. Aside from the greatest generation and generation whine description, Barnes (2009) also revealed another set of descriptors for millennials; that is, the "me generation" and the "hero generation." Millennials are branded as the "me generation" because they are perceived to be self-focused and entitled.

Conversely, they are branded as the "hero generation" due to their great self-esteem, civic mindedness, and being well rounded. Other monikers have also surfaced to depict millennials, some of which are: GenMe, generation Y (Ayudhya & Smithson, 2016); echo boomers (De Hauw & De Vos, 2010); net generation (Jones & Hosein, 2010); generation next (Delcampo et al., 2011) and digital natives (Lippincott, 2012).

Big data and consumer insight organizations have delved into demystifying millennials across the globe, looking into their desired work practices, consumption behavior, and career projections. They have, to some extent, identified and appraised certain propensities and proclivities of the said generation. Euromonitor (2015) published a strategy report on what millennials primarily desired in general. Three concepts were put forward - interactivity, value, and experience. Furthermore, in the analysis, there was a caveat in terms of the schism between millennials from developed and developing countries. Millennials in developed countries lived in the time of global recessions, have lower disposable income than their parents, and struggle financially in general. Furthermore, frugality and minimalism seem to be in vogue. That is not the case for millennials in developing countries.

In terms of the similarities, there is a collective shift toward a more individually focused way of living. This move toward a more individually focused life is often perceived by people as self-obsession, and for some, a tendency to be narcissistic.

However, it should be made clear that the milieu from which millennials came to be is "an era of self-promotion via social media, […] blogs, and an era of living a public life" (Euromonitor, 2015). Thus, for most millennials, a public life driven by communications technology intersects with their private life. Despite being considered as a self-obsessed generation, they are passionate about authenticity as shown by their strong desire for social justice and living an ethical life.

The millennial generation seems to be at the forefront in harnessing the advantages of social technologies (Johnson, 2015). Millennials are characterized by their great inclination toward the use of technology as compared to the preceding generations, like the baby boomers and generation X (Velasco & De Chavez, 2018). Hershatter and Epstein (2010) noted that millennials considered technology to be their "sixth sense." Therefore, technology has certainly permeated all aspects of their lives since birth, thus being named the Internet generation, speeders, generation next (Delcampo et al., 2011), and net generation (Jones & Hosein, 2010).

Most of them spend a great deal on their digital devices according to Euromonitor's International Global Consumer Survey. To be more specific, millennials generally spend more than three hours a day on their mobile phones. Thus, their lives are greatly intertwined with information and communication devices and technology. With their great leaning toward the use of technology, they are primarily considered to be "digital natives." This begs the question, what does it mean to be a digital native? Jones and Hosein (2010) provided a nuanced description of the term digital native, which meant individuals who had been immersed in technology since birth. Notably, millennials seem to have grown up with the Internet and with immediate access to technology (Lundin, 2016). In contrast to other generations, Alexander and Sysko (2013) asserted "members of all other generations, no matter what their individual technological proficiency may be, [preceding generations] are seen as 'immigrants'".

Thus, this strong reliance on technology is what makes millennials distinctive:

> Millennials' use of technology clearly sets them apart. One of the defining characteristics of the millennial generation is their affinity with the digital world. They have grown up with broadband, smartphones, laptops and social media being the norm and expect instant access to information. This is the first generation to enter the workplace with a better grasp of a key business tool than more senior workers. (PwC, 2011).

With technology as an inimitable feature of the millennial generation, Eastman et al. (2014) opined that social media also should be meaningfully considered as another unique facet of the millennial generation since they were "steeped in digital technology and social media, they treat their multi-tasking hand-held gadgets almost like body parts". Eastman et al. (2014) further recommended that

millennials' understanding of technology, specifically mobile technology should be further pursued.

Dannar (2013) comparably argued that technology was an integral part of the millennial generation. It is through technology and mobile devices in which they are able to participate in the global landscape. As compared to communication devices developed before, today's mobile devices totally serve multiple functions. From the perspectives of the preceding generation, these devices are deemed as niceties for a generation that is overindulged. However, from the millennials' perspective, these devices are productivity tools that are utilized to accomplish a multitude of tasks. Being the first generation to be fully immersed in an environment of continuous communication, they simultaneously form virtual and real-time presences while conducting different activities. Highlighting the concept of open source mentality, millennials assume that information can be obtained easily through their devices.

This great dependence on technology is seen by some scholars as a disadvantage. As a highly computer-savvy generation, millennials suffer from "computer overload" (Alexander & Sysko, 2013). By not knowing life without technology, they are not cognizant other forms of reality sans technology. Lundin (2016) also illumined that the constant access to social media platforms and technologies had had a substantial effect on how millennials interact with one another and the world around them. They are persistently and virtually connected with others but may have difficulties with face-to-face interaction. Millennials' intensive use of social networking applications has led to certain criticisms, specifically they are considered to be "attention hounds" (Delcampo et al., 2011). That is why mobile applications such as Facebook, Twitter, Instagram, and Snapchat, to name a few, serve as an avenue to fulfill their need to socialize and network through technology.

In essence, millennials have adapted to new technologies early on in their lives and for most non-millennials, the former have become the "experts" when using smartphones and other similar technologies (Johnson, 2015). Since millennials have a unique affinity with technology, it has implications in the way they think. Serazio (2015) put forward the notion that "technological change is remapping the very circuitry of how millennials think: that they now require rapid interactivity and graphical interface, abhor top-down exposition in favor of inductive discovery, and are equipped to multitask in a nonlinear, networked fashion".

Focusing on millennials as situated in the Philippines, Lee et al. (2013) asserted that the Philippines had a population of 92.3 million with a median age of 23. Notably, the biggest age demographic in Philippine society is the youth, which is partly composed of the millennial generation. According to the Philippine Statistics Authority census in 2010, there are 25 million millennials in the Philippines; these are Filipinos with age ranging from 15 to 29. In terms of sex difference, there are approximately 12.6

million female millennials and 12.9 million male millennials.

The use of digital technology and social media is quite prevalent among the youth in the Philippines with 78% owning a mobile phone and 59% using the Internet (Cruz, 2014). It is further revealed that there is a shift in the media preference among younger Filipinos from traditional to newer forms (Cruz, 2014). Since 2015, there has been 7% growth in the number of active internet users and young Filipinos predominantly use Facebook (Kemp, 2016). Overall, the Philippines has been deemed the social media capital of the world since Filipinos spend approximately four hours a day on social media platforms (Pablo, 2018).

However, to date, there is limited inquiry that examines Filipino millennials and their social media practices. Most of the discussion on millennials is derived from loose impression of individuals and generalized notions from the popular press. Hence, current understanding of millennials seems to be "confusing at best and contradictory at worst" (Deal et al., 2010). Therefore, this inquiry seeks to put forward a highly focused examination of Filipino millennial life as portrayed in their usage of social media platforms. More specifically, this inquiry seeks to answer the following research questions:

A. What are dominant themes exhibited in the social media posts of Filipino millennials in selected social media platforms?

B. Among the dominant themes in selected life areas of millennials, what do the posts largely convey?

Velasco (2019) illumined that, "the millennial generational cohort is increasingly becoming a significant subject of different disciplines". Additionally, millennials, according to Delcampo et al. (2011), are "quite complex and fully understanding them require continued research and analysis". As such, examining the intersections of technology, social media, and Filipino millennials would contribute to the furtherance of study of generations.

MATERIALS AND METHODS

This inquiry is primarily descriptive and is geared toward systematically examining the millennial generation situated in the Philippines. Neuman (2014) clarified that a descriptive study seeked to provide a vivid depiction of a phenomenon, which in this case, is the use of social media by the respondents. This specific research design was considered with the aim of qualitatively explicating and adequately characterizing millennial social media behavior. To create robust inferences on Filipino millennials and their social media activities, 5,000 social media posts were collected from platforms such as Facebook, Twitter, and Instagram.

Through purposive sampling guided by snowball technique, fifty participants born from 1981-2000 were recruited in this inquiry, 18 males and 32 females; all of

whom resided in Metro Manila, Philippines and employed in various industries. The respondents were requested to recommend another individual who might be willing to participate. The investigator personally approached the prospective respondents and determined whether they were within the sampling criteria a) born between 1981-2000 and b) a Filipino resident of Metro Manila, Philippines. This paved the way for the current composition of the respondent landscape of the inquiry.

Each respondent was asked which social media platform they would be willing to share with the investigator. Subsequently, the investigator established connection with the social networking platform indicated by the respondent. In the case of Facebook, the investigator added the respondent as a friend; for Twitter and Instagram, the investigator followed the respondent's account. All respondents were advised that their social media data will be utilized for an academic inquiry on Filipino millennials. In terms of the collection process, the most recent 100 posts at the time of collection were manually captured. The data collection period for this study was from February 2019 to June 2019. However, the post dates ranged from 2017 to 2019. Table 1 shows a summary of the collected data.

In analyzing the data, a pilot test was conducted on 500 posts to generate initial coding categories. NViVo QDA software was utilized to conduct thematic content analysis. Braun and Clarke (2006) clarified that thematic content analysis involved identifying, analyzing, and reporting themes in a specific data set. Themes, as contextualized in the present inquiry, are analytical constructs duly identified in the process of thematization. Essentially, thematic content analysis is a reflexive activity necessitating the investigator's active role in the knowledge production process (Braun et al., 2019). Subsequently, the practice of coding in this form of content analysis is "organic and iterative;" hence anticipation for emergent themes were considered (Braun et al., 2019). Figure 1 shows the coding framework that was utilized in thematically analyzing the data.

There are three primary areas of analysis on the social media posts by Filipino millennials, this includes culture, social relations, and work. Turner (1999) in his explication of Mannheim's work on the sociology of culture loosely defined the

Table 1

Data source description

Social media platform	Number of social media posts
Facebook	2,200
Twitter	600
Instagram	2,200
Total	5,000
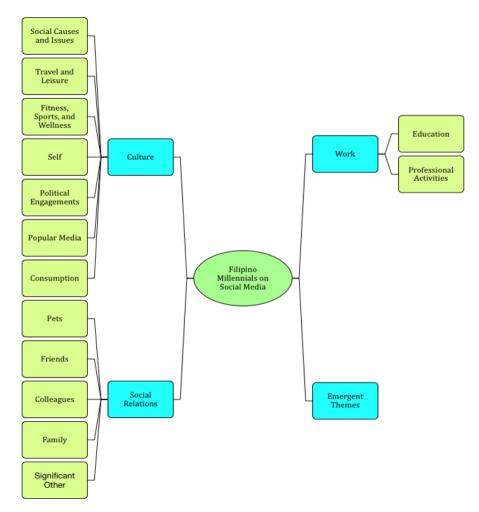
Figure 1. Social media posts thematic content analysis coding scheme

term as "symbolic and learned components of human behavior". Adapted to this present inquiry, culture is composed of the practices and forms of behaviors that have been derived from the respondents as part of a specific generational group called millennials. On the concept of social relationships, Max Weber considers it as "the behavior or plurality of actors insofar as, in its meaningful content, the action of each takes account of that of others and is oriented in these terms" (Pandey, 1983). This understanding of social relations, as adapted in this study, denotes how millennials depict and express their sentiments with other individuals within their social media networks. Hershatter and Epstein (2010) believed the millennials had a unique belief pertaining to work. Hence, the concept of work as applied to this inquiry refered to what millennials conveyed as a facet of their professional life.

As operationalized in this study, culture contains the posts which pertain to social causes and issues, travel and leisure, self, political engagements, and popular media. Social causes and issues contain posts that are in line with the dominant social issues that the said individuals support. Travel and leisure contain post that depict travelling, vacations, and other leisure activities. The theme fitness, sports, and wellbeing contain posts that are consistent with physical activities and wellness endeavors. The theme self refers to posts immediate concerns or disclosures e.g. complaints, positivity, rants, and throwbacks. Political engagements refer to posts pertaining to politics, politicians, and other forms of political exercise. Popular media refers to posts on celebrities, influencers, popular events, TV series, and movies. Lastly, consumption refers to post related to new purchases, brands, desire to purchase, food, and similar items. An area called emergent theme was also considered in anticipation for posts that may not be necessarily compatible with the initial areas.

Another major area of investigation is social relations. It has four major themes, which includes family, friends, and colleagues. Ultimately, these themes contain posts which refer to the said individuals in relation to the participants. Likewise, the theme pet is also subsumed in this area because of millennials' unique relationship with their pets. The area of work contains themes which include education and professional activities. Education pertains to post in relation to activities the participants undertake to improve their skills and qualifications which may include attending courses and graduate studies. Professional activities pertain to posts that refer to work-related activities. The coding of each post was guided by Stuart Hall's notion of preferred or dominant reading, which is the acceptance of the prevailing meaning of each post (Livingstone, 2007). The said stance was adopted since social media data tend to be polysemous and may lead to multiple interpretation. Dominant reading, therefore, alleviates possible categorical overlaps in the thematization process.

RESULTS AND DISCUSSION

Table 2 shows the coding summary of the social media posts collected from the respondents. Overall, the life area of millennial culture had the most significant share of coded posts at 3,644 (73.28%). This area was further divided into the following themes: social causes and issues with 241 posts (4.82%), travel and leisure with 792 posts (15.84%), fitness, sport and wellbeing with 123 posts (2.46%), the self with 975 posts (19.50%), political engagements with 140 posts (2.80%), popular media with 1,015 posts (20.30%), and consumption with 378 posts (7.56%). Another life area of the participants on social media is social relations, which was composed of 962 posts (19.24%). This area was further divided into the following themes: family with 276 posts (5.52%), colleagues with 59 posts (1.18%), friends with 312 posts (6.24%), partner with 137 posts (2.74%), and pets with 178 posts (3.56%).

Lastly, the life area of work contained 274 posts (5.48%), which was further thematized into education and professional

Table 2

Thematic content analysis result of the social media posts of Filipino millennials

Life area of millennials	Total post per area	Themes	Number of posts	Number of posts (%)
Culture	3,644	Social causes	241	4.82
		Travel and Leisure	792	15.84
		Fitness, Sports and Wellness	123	2.46
		Self	975	19.50
		Political engagements	140	2.80
		Popular media	1,015	20.30
		Consumption	378	7.56
Social relations	962	Family	276	5.52
		Colleagues	59	1.18
		Friends	312	6.24
		Partner	137	2.74
		Pets	178	3.56
Work	274	Professional Activities	204	4.08
		Education	70	1.40
Emergent theme	100	Spirituality	100	2

activities. The theme of professional activities had 204 posts (4.08%) and education with 70 posts (1.40%). One emergent theme had been discovered which was spirituality with 100 posts (2%). Due to the constraints in explicating all the themes in-depth, the succeeding examples would be limited to the two most frequently populated themes for each life area.

Figure 2 shows the frequency comparison of the posts that were thematized in the area of culture. In this specific area, the two most noteworthy themes in terms of frequency are the following: popular media and the self. Hence, a substantial amount of posts that Filipino millennials undertake pertains to immediate concerns and disclosure about the self. Similarly, sharing popular media on their platforms seems to be a consistent behavior. Aside from the two most significant themes in this area, the themes of travel and leisure and consumption also contain moderately considerable amount of posts. Themes such
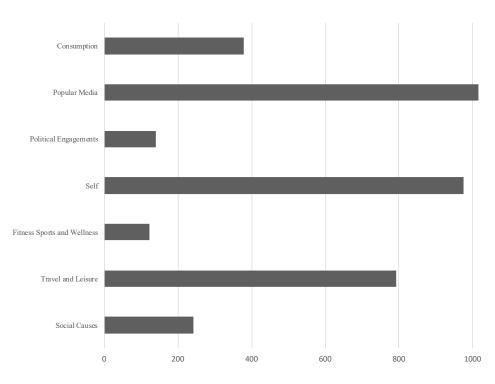
Figure 2. Frequency comparison of themes in the life area of culture

as social causes, political engagement, and fitness, sports, and wellness are the least occurring.

Figure 3 and Figure 4 reveal selected posts categorized in the self. This specific thematic category predominantly contains posts such as selfies, self-disclosures, and positivity posts. More specifically, selfies are "self-generated digital photographic portraiture, spread primarily via social media" (Senft & Baym, 2015). Figure 3 is a selfie with a caption of "feeling kewl," which is translated as, "feeling cool." Figure 4 is an example of a self-disclosure, which is simply a spontaneous update in relation to one's self; it shows an image of a specific location. Translated to English, the post signifies "Can I still hang out here?"

The hashtags (#wheninmaginhawa) and (#istambay) provides further clarity to the post. The former means "at Maginhawa," which is the location featured in the image; while the latter means "to hang out." The aforementioned posts may provide clarity on why the millennial generation is called the "me" generation because of their predilection to constantly give updates about themselves on social media.

Figure 5 and Figure 6 show selected posts thematized in popular media. Figure 5 shows particular music shared on the social media feed of the participant; the post also portrays the artist, lyrics, and the digital platform. This reveals that Filipino millennials are more inclined to appreciate media on streaming platforms, in this

Figure 3. A social media post depicting a selfie thematized in the "self"
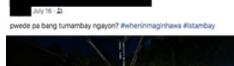
Figure 4. A social media post depicting a personal self-disclosure

Figure 5. A post depicting a particular artist and music from a media streaming service thematized in popular media

case, Spotify. The connection between the participants' social media platform and preferred streaming platform generates seamless circulation of their preferred media e.g. music, movies, and series and their social media feed. Aside from sharing streaming media, the participants also shared a considerable number of memes. Memes are distinct facets of digital culture and are considered "spreadable media that
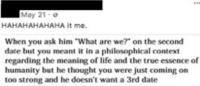
Figure 6. A post of a meme that is thematized in popular media

have been remixed or parodied" (Wiggins & Bowers, 2014). Figure 6 shows a meme that invites humour on the issue of dating; specifically, on complicated dating interactions. Memes tend to be popular

among Filipino millennials especially with highly relatable situations that reflect their own circumstance or predicament.

Figure 7 shows the frequency comparison of posts thematized in the area of social relations. The two most noteworthy themes in terms of frequency are friends and family. Therefore, a substantial amount of social media posts that the participants undertake involve family and friends. Aside from the two most significant themes in this area, the theme on pets also moderately contains a considerable amount of posts. The themes such as colleagues and partner are the least occurring.
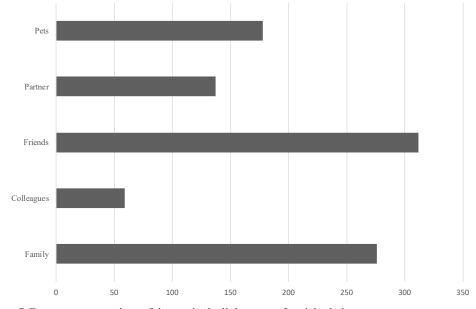
Figure 7. Frequency comparison of themes in the living area of social relations

Figure 8 and Figure 9 show selected posts that depict the participants' friends and the activities that they engage in. Figure 8 is a post exemplifying how the participants utilize social media to keep in touch with acquaintances. More specifically, a collage portraying images of the participant and certain acquaintances in observance of the friend's birthday. The caption in Figure 8, when translated to English, signifies "happy birthday to my friend. […] Friends come and go like the waves of the ocean but the true ones stay, like an octopus on your face. You're stuck with me bish!!! You know the drill. See you later!" Posts like this are springboard for other individuals to partake in this online social interaction as can be observed in the comments. Figure 9 is a post showing acquaintances on a specific gathering; the caption indicates the activity of gossiping while juicing. Majority of the participants' posts that depict their friends

Figure 8. A post depicting acquaintances during a special occasion thematized in friends

Figure 9. A post depicting socializing acquaintances thematized in friends

usually account for the extension of their interaction from real life to social media.

Figure 10 and Figure 11 show selected posts of the participants that feature family members. Figure 10, in particular, depicts a photo of an extended family during the Christmas season. The photo in itself was edited to show "Merry Christmas." The post reads, "Merry Christmas from my family, to yours… (#Christmas2018) (#beyondkagawadduties) (#family)." The hashtag (#beyondkagawadduties) when translated to English signifies "beyond government official duties" since the

participant is a government official. Figure 11, on the other hand, depicts a mother-son post to celebrate Mother's Day. Translated to English, the text reads "First Mother's Day that we're not together. Happy Mother's Day, […]. I never felt that I never had a father because you stood both as mother and

Figure 10. A post featuring the participant's extended family

Figure 11. A post featuring a participant and his mother

father to us three siblings. I saw how you gave everything to us even when you don't have enough. It's time that we give back for all the sacrifices you've made. (That's why I'm always here.) I love you and I miss you every day even if I don't always say it." For the most part, the participants post photos with their family during special occasions like Christmas, Mother's Day, New Year, and the likes. Interestingly, it is through social media where they convey some of their most personal sentiments toward members of their family.

Figure 12 shows the frequency comparison of posts thematized in the area of education. There are two themes in this area, education and professional activities. The participants share more posts that are related to their line of work. Likewise, in the theme of education, posts related to learning and attending further studies are common.
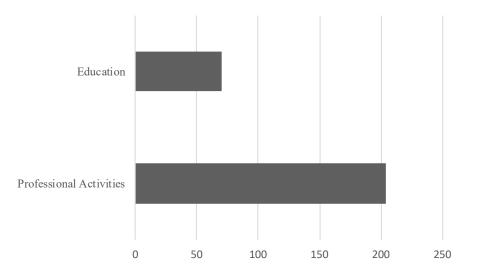
Figure 12. Frequency comparison of themes in the living area of social relations

Figure 13 and Figure 14 show selected posts of the participants that are related to their professional activities. Figure 13 is a post by a participant that draws attention to being employed at a certain company. On the other hand, Figure 14 is a post shared by a participant expressing discontent, particularly on remuneration. Overall, the posts categorized in professional activities largely reflect the participants' appreciation or frustrations with certain facets of their work. Millennials have often been criticized for their work ethic and expressing their work-related frustration on social media may add to the said generational impression (Velasco & De Chavez, 2018).

Figure 15 and Figure 16 show selected posts categorized in the theme of education. Figure 15 reveals the participant's impression toward an individual who is

similarly attending the class; much of it is exasperation against a person. As translated, the second part of the post signifies "there's one annoying groupmate." On the other hand, Figure 16 shows a post pertaining to materials that are used for studying. The

hashtags (#finals2017) and (#ausl) enriches the signification of post. The hashtags further uncover that the participant is preparing for final examinations (#finals2017) while (#ausl) is the acronym of a law school in the Philippines.

Figure 13. A post depicting being employed

Figure 15. A post describing the participant's experience of attending class

Figure 16. A post of materials utilized for learning

CONCLUSION AND RECOMMENDATIONS

This study explored and analyzed certain behaviours of Filipino millennials vis-à-vis social media. As mentioned earlier, all participants were born from 1981-2000, which is considered the millennial age category (Velasco, 2019; Velasco & De Chavez, 2018). Through the thematic content analysis of 5,000 social media posts of Filipino millennials; their activities on social media were further analyzed. This current investigation, thus, provided lucidity on participants' affinity with social media platforms as it intersected with the different aspects of their lives.

Figure 14. A post showing discontent toward remuneration

The three major social media life areas examined in this inquiry were culture, social relations, and work. Focusing on culture, the two most significant themes were the self and popular media. Euromonitor (2015) illumined that millennials seemed to live in an era of living a public life and social media self-promotion. To some extent, the data that were analyzed in this inquiry somewhat affirmed the said assertion. The participants tended to continuously post updates about their immediate experiences, self-disclosure, and selfies. Therefore, the lines between private and public life might sometimes be blurred for the participants. This phenomenon further revealed that Filipino millennials were in constant pursuit of authenticity in what they convey in their social media platforms.

Another aspect of millennial culture is the popular media that they shared on their social platforms. With the increasing availability of streaming services in the Philippines, the participants could easily partake in global flows of entertainment. By linking their social media platforms and the certain media streaming services, they had conveniently shared and circulated their preferred music, movies, and series. Aside from the said media, the participants also shared memes, especially when they could relate to it.

Focusing on the participants' social relations in social media, much of the post depicted their friends and family. Noticeably, the posts were sometimes substitutes or supplements for face-to-face interaction as similarly claimed by Lundin (2016). Posts depicting the family were usually more frequent during significant occasions or holidays. On the other hand, posts in relation to friends were more common. Connotatively, posts about friends and families are considered markers on the participant's social media feed, which shows particular facets of their relationship with select individuals within their social circles.

In terms of work, there were two aspects, specifically professional activities and education. The participants tended to share post pertaining to their professional, informing about what they did at work, or where they worked. In some instances, they also expressed their frustrations. Perhaps, social media for Filipino millennials, serve as an outlet for ideas and expressions they are unable to verbalize in real life. Likewise, the participants also engaged in activities related to education and self-improvement. Through social media, they revealed the nuances of their educational experiences vis-à-vis attending classes, preparing for exams, and even collaborating with other individuals.

Finally, this article offers a few considerations on the possible impact of gender difference, which because of space constraints, has to be offered proleptically with an eye toward future study. There may possibly be gender distinction in the way Filipino millennials digitally behave. Cruz (2014) noted that female youth tended to be more digitally wired as compared to males; however, more males tended to maintain more virtual friends. Likewise, Kemp (2016) revealed that there were more

female Facebook users than males among millennials. The current data of the present study cannot affirm the said assertions. However, social media usage difference in terms of gender could have an impact on what male and female millennials post on their social networks.

Overall, this study explored selected dominant themes in the social media activities of Filipino millennials. Likewise, the nuances of the dominant themes in each life area were further scrutinized; this led to an understanding of the participants' online behavior. In essence, this inquiry does not lay claim to absolute interpretations of the social media lives of Filipino millennials. Rather, the examination of the themes facilitated further discussion on the complex intersection of generation, technology, social media, and millennials as digital natives.

Therefore, the following recommendations are made to enrich this area of investigation:

- The posts analyzed in this inquiry are limited to three platforms i.e. Facebook, Twitter, and Instagram. Succeeding investigations may consider broadening the platform selection to further flesh out the nuances exhibited in the use of social media by Filipino millennials.
- The current study focused solely on Filipino millennials. To further enhance the understanding of generations; a comparative approach may be utilized. Specifically, the social media behavior of millennials and the succeeding generations will

pave the way for a more productive discussion.

- Using case studies will also provide a more focused understanding of Filipino millennials. By obtaining social media activities combined with real-life artifacts; this would bridge the real-life and digital divide on millennial behavior.

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Dynamics of Ethnic Relations in Malaysia

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ABSTRACT

This research sought to understand and affirm key factors that helped shape ethnic relations in a multi-cultural, ethnic and religious Malaysia. Samples were drawn from three public institutions of higher learning, namely Universiti Putra Malaysia (UPM), Universiti Malaysia Sarawak (UNIMAS) and Universiti Pendidikan Sultan Idris (UPSI) and compared to see whether different settings had significant influence on how samples responded to ethnic relations-related constructs. Findings indicated that (1) some societal structures needed to be transformed further to provide opportunities for various ethnic interaction; (2) in many instances, student samples' preferences were ethnically influenced; (3) nature of the environment that the student samples were in could influence their preferences. Therefore, policymakers need to be aware of these societal impediments and the dire need to introduce a relevant policy to address these shortcomings. Public policies for inter-ethnic relations must be formulated based on the bottom-up input, i.e. listening to people on the ground, for the former to be effective in nation-making.

Keywords: Education, ethnic relation, integration, Malaysia, nation-making

INTRODUCTION

History of more than fifty years together has not brought closeness among Malaysia's diverse ethnic communities as ethnic sensitivities, religious divides and differences continue to dominate public discourses. There are other countries with more diversities that are perhaps doing

better than Malaysia. The main issue that differentiate societies lies in different nature of human to human relations in these countries (Horowitz, 1989).

The Federation of Malaya was formed in 1948 from the merger of various Malay states or sultanates. Independence was attained in 1957 through a "contract" among its three major ethnic communities as they promised to be "good and civil to each other" (Federal Constitution, 2010; Hanna, 1964; Sopiee, 1974). This promise facilitated British's withdrawal and subsequently, independence was granted to the former. In 1963, Federation of Malaysia was formed through the coming together of Federation of Malaya, Singapore and London-administered territories of Sabah and Sarawak which further reinforced the notion that diverse communities could come together to achieve a common goal, which was independence.

However, Malaya, and later Malaysia, was not characterised by the 'togetherness' as the value of working as one began to wane over time. Malaya was formed to defeat a common enemy, the British, and that common goal made people pledged to work together to show the British their capability. When Malaysia was formed, the common enemy was communism. Again, coming together was necessary to defeat the communists. As soon as the goal was achieved, (the independence of Malaya, the formation of Malaysia or overcoming threats of communism), the people, especially their leaders, went back to their former parochialistic political and social attitudes.

Figuratively speaking, once the "common enemy" is defeated (the British by Malaya and communism by Malaysia), the people would then go after "each other's throat" like they used to prior to the formation. The fall back inevitably caused varying political and social perspectives, leading to disputes. The disputes had dire consequences and to exemplify, irreconcilable differences between the Federation and Singapore had led to the latter leaving the newly minted Malaysia in 1965.

The departure of Singapore from the Federation of Malaysia did not ameliorate inter-ethnic conflict and competition. Conflict and competition were as intense in Malaysia. Hence, this study sought answers to the question "What continues to divide Malaysia?"

Background

Ethnic relation is an ongoing challenge Malaysia faces in her nation-making processes. Before this, Malaya was locked in inter-ethnic disputes during the Malayan Union era (1946-1948). The main issue could be reduced to the single concept of power balance between indigenous Malay and latecomers, the Chinese and others, to the Malay states. British sponsored Malayan Union opened the state to fluid power configuration as liberal citizenship gave both indigenous and latecomers the same weightage in Malayan Union's power configuration. The indigenous' refusal to accept the Union's power configuration led to them forming the Federation of Malaya. Nevertheless, the formation did not end the

contestation as it spilled over into the newly formed nation, Federation of Malaysia. Issues related to political and economic powers' balance were amplified when an ethnic riot broke in 1969, six years after the birth of the nation-state. Previously, it was perceived that the balance of power in Malaya/Malaysia existed when Malays held the political reins while the Chinese held the economy. However, Malays' hold on the nation's political power was shaken when Parti Perikatan, the leading Malay-led political party, lost its 2/3 majority during the 1969 General Election. The idea of sharing and power balance with the Chinese, who was still firmly holding the economy, was deemed unacceptable. Hence, the riot and its aftermath were an opportunity to find or orchestrate a new balance and sharing of power between Malays and Chinese.

The 1969 Riot was a tragic ethnic event that resulted in loss of lives and destruction of properties. The event had been well-documented and analysed, for example, by the first prime minister (Tunku Abdul Rahman, 1969) and an official account by the government (National Operation Council, 1969). Several studies investigated the reasons behind the riot, and reports formed the basis of many affirmative actions to correct overall "imbalances" between national-foreign economic assets' ownership in the country. Power and economic balance are crucial between ethnic communities in terms of various issues such as ownership of wealth and opportunities in various industries.

Fifty years on, the state of inter-ethnic relations is found to be wanting. Why? Many explained the what or the state of the relations, but do not address the "why". Many, including foremost scholars such as the late Khoo Kay Kim, lamented that things were not as they had been for inter-ethnic relations. He was reported to have said in his last interview with a paper that the issue, i.e. ethnic relations and integration, was not easy to address and that post Malaya/Malaysia did not help when politics took to ethnic path (Lee, 2019). There is also the explanation that Malaysians prefer to be in the state of stable tension, which is clear from Shamsul's (2008) argument that this state of affairs "tongue wagging is preferable to parang wielding". Nonetheless, what and how would we categorise post 1969-period clashes where mass detention and swoops were carried out to "douse" ethnic flames and fires? Stable tension is only acceptable as a transition period until a better position can be attained. The former cannot be the preferred state of continual flux analogous to a dam withholding water and waiting for it to burst the walls.

In between seminal studies and observation by these two major scholars, there are scores of others addressing various dimensions for examples, Muhamat and Don (2016) on the assimilation of Chitty ethnic in Malaysia, Roff (1969) on the rise and demise of Kadazan nationalism, and Jawan (1987, 1991) on Dayakism and ethnic factor in Malaysian politics. They provided little windows to the larger issue and how

the big picture could be crafted by patching the little stories' success to build separated narratives.

To promote unity and tolerance among younger Malaysians, ethnic relations have been taught as a subject of many mandatory courses offered in public and private institutions of higher learning (Jawan & Ahmad, 2006). Several ethnic relations – related courses namely Islamic and Asian Civilizations; Malaysian politics and government in its various forms and names; and Moral Studies have been taught to undergraduates since the 1990s. Despite many efforts taken to address issues related to ethnic relations, controversies and divergent views continued to plague it (Muhammad et al., 2007). Most of these controversies centred on the interpretation of events, and how moving forward should be carved. In any event, interpretations are always seen in the light of the interpreter, and how that interpretation would impact the future course of direction in addressing the issues. For example, studies by Boyman (2019) and Muhammad et al. (2007) had provided some evidence on how these mandatory courses helped in cross ethnic understanding.

In any event, the 'how' to address the issue must take cognizance of the core issue in question. Hence, this is what this study seeks to do, where it aims to begin, to go back to basic and recast as a mean to move forward.

Objectives

This study sought to survey what the authors consider to be fundamental in building good inter-ethnic relations. It wanted to know who the process of inter-ethnic relations is forging on the ground and amongst the basic unit, the students, the future of multi-ethnic Malaysia. Samples were randomly drawn from three selected public universities. These three public universities were selected based on the following considerations: (1) three research collaborators have worked on the subject of ethnic relations and are based in UPM, UPSI and UNIMAS respectively; and (2) UNIMAS could reasonably represent public universities in the two East Malaysian states.

The researchers were mindful that there should be enough samples from major ethnic communities that could provide analysis on its own as well as comparative discourses among the various ethnic samples and the selected three public universities. Respondents were drawn from student population in Universiti Putra Malaysia (UPM), Universiti Pendidikan Sultan Idris (UPSI) and Universiti Malaysia Sarawak (UNIMAS). The analysis focused on frequencies of responses to selected questions and in selected cases, these were compared between university samples as well as between ethnic categories.

Basic questions and presuppositions that guided the construction of this questionnaire and study were as follow:

- First, what are the basis of promoting good inter-ethnic relations? Some thought on this helped shape questions that followed.
- Second, respondents' early backgrounds must have significant influence on their later socialization, and these include their homes and school environments.
- Third, the respondents' age. As the respondents age, their environment changes congruently with where they live, study and work in later phases of their lives.
- Fourth, some simple test of their basic understanding of issues related to inter-ethnic relations were administered.
- Finally, direct questions relating to their personal experiences with regards to the subject matter were also asked.

The questionnaire was constructed based on various experiences picked up over the years from many dialogues, seminars/conferences attended and participation in national committees coordinating 'government' courses on ethnic relations and Malaysian studies. This study represents the first attempt to test this instrument on understanding ethnic relations in Malaysia.

METHODOLOGY

Samples from three public universities were obtained through the distribution of questionnaires in various classes/courses during one of the semesters in the 2019-2020 academic year. Table 1 shows samples from Universiti Putra Malaysia (85), Universiti Malaysia Sarawak (217) and Universiti Pendidikan Sultan Idris (439).

Fairly good random samples spread across ethnic groups were obtained particularly from UPSI and UNIMAS. However, samples from UPM tilted towards all Malay/ Peninsular samples. Despite the variation, rich data and a good picture of inter-ethnic relations based on ethnic background and region would still be obtainable from these samplings.

Table 1

Samples by region and university

Region of origin	UPM No (%)	UNIMAS No (%)	UPSI No (%)
Peninsular	83 (98)	91 (42)	225 (51)
Sabah	2 (2)	24 (11)	128 (29)
Sarawak	0 (0)	102 (47)	86 (20)
Total	85 (100)	217 (100)	439 (100)

Source: Survey

Table 2

Respondents by ethnicity and university

Ethnicity	UPM No (%)	UNIMAS No (%)	UPSI No (%)
Malay	41 (48)	93 (43)	149 (34)
Chinese	18 (21)	33 (15)	70 (16)
Indian	23 (27)	4 (2)	40 (9)
Sabah: Moslem*	-	10 (5)	69 (16)
Sabah: Non-Moslem*	-	11 (5)	49 (11)
Sarawak: Dayak	-	41 (19)	37 (8)
Sarawak: Non- Dayak	-	17 (8)	17 (4)
Others	3 (4)	9 (4)	-
Total	85 (100)	217 (100)	439 (100)

Source: Survey
Note: *In Sabah, it is common to use three classifications namely, Moslem, Non-Moslem and Chinese. Non-Moslem comprises largely Kadazandusun and may include other non-Moslem natives, e.g. Dayak.

Table 3

Respondents by type of home background and university

Ethnicity	UPM No (%)	UNIMAS No (%)	UPSI No (%)
One Ethnic	11 (13)	61 (28)	126 (29)
One ethnic dominant	29 (34)	39 (18)	58 (13)
Many ethnic groups	45 (53)	112 (54)	255 (58)
Total	85 (100)	218 (100)	439 (100)

Source: Survey

Table 2 portrays respondents in terms of their ethnicities. Some selected backgrounds of the respondents are presented. A large percentage of the respondents reported that they live in a mix-ethnic neighbourhood, i.e. 58% by UPSI respondents and this was followed by 54% from UNIMAS and 53% from UPM (Table 3).

In term of characteristics of schools attended by student respondents prior to coming to UPM, UNIMAS or UPSI, they were asked to identify whether their former schools were national or national-type institutions and the nature of their former schools' student composition as well. Table 4, Table 5, Table 6, and Table 7 present the respondents' primary and secondary schools and their respective characteristics.

Most of the respondents from the three institutions attended national schools that were basically mixed in ethnic characteristics. On the other hand, a substantial percentage of respondents attended schools dominated

by one ethnicity. This can be a cause for concern as it may give rise to ignorance towards others and other cultures in later parts of their lives. Both respondents from Peninsular-based institutions show higher percentages of one-ethnic pre-university background, i.e. 56% for UPM student respondents and about 52% for UPSI compared to 46% from UNIMAS.

Table 4

Primary school attended by types

Nature	UPM No (%)	UNIMAS No (%)	UPSI No (%)
National	60 (71)	175 (80)	336 (77)
Nation-type	25 (29)	42 (19)	103 (23)
Others	-	1 (1)	-
Total	85 (100)	218 (100)	439 (100)

Source: Survey

Table 5

Primary school attended by ethnicity

Ethnicity	UPM No (%)	UNIMAS No (%)	UPSI No (%)
One Ethnic	13 (15)	35 (16)	93 (21)
One ethnic dominant	35 (41)	66 (30)	137 (31)
Many ethnic groups	36 (42)	116 (53)	207 (47)
Others	1 (1)	1 (1)	2 (1)
Total	85 (100)	218 (100)	439 (100)

Source: Survey

Table 6

Secondary school attended by types

Nature	UPM No (%)	UNIMAS No (%)	UPSI No (%)
National	70 (82)	200 (92)	381 (87)
Nation-type	15 (18)	18 (8)	58 (23)
Total	85 (100)	218 (100)	439 (100)

Source: Survey

A similar pattern of respondents' school background can be seen from Table 6 and Table 7. Majority of the three samples had had their education in national secondary schools, while between about 18%-23% had their education in religious or national-type schools. Approximately 92% of UNIMAS student respondents attended national schools, followed by about 87% from UPSI and 82% from UPM (Table 6). The clear difference from student respondents showed that 56% of UPM's samples attended a one-ethnic dominated school compared to samples from UNIMAS (40%) and UPSI (29%) (Table 7).

Table 7

Secondary school attended by ethnicity

Ethnicity	UPM No (%)	UNIMAS No (%)	UPSI No (%)
One Ethnic	14 (17)	23 (11)	65 (15)
One ethnic dominant	33 (39)	39 (18)	109 (25)
Many ethnic groups	38 (45)	154 (71)	264 (60)
Others	0	2 (1)	0
Total	85 (100)	218 (100)	439 (100)

Source: Survey

RESULTS AND DISCUSSION

Several questions in the questionnaire were basic and addressed the core of ethnic relations: how much do ethnic groups know about cultural plurality in Malaysia? Have they experienced direct discrimination? Do they know of person/ persons subjected to discriminatory acts?

Ethnic Knowledge

Respondents were asked five questions in a form of a simple test on various communities' everyday lives, namely matching festivals with the ethnic groups: Gawai (Dayak), Kaamatan (Kadazandusun), Deepavali (Indian), Hungry Ghost Festival (Chinese), and Vaisakhi (Indian/Sikh). Table 8 shows the responses of the respondents based on the three sample locations, i.e. UPM, UNIMAS and UPSI.

Generally, respondents possessed a fairly good knowledge of major festivals celebrated in Malaysia, especially those celebrated by major ethnic groups such as by the Dayak (Gawai) and Kadazandusun (Kaamatan) of Sarawak and Sabah respectively and those by the Chinese (Hungry Ghost Festival) and Indian (Deepavali in particular). Noticeably, respondents from the three institutions show a lower understanding of Vaisakhi, a Sikh festival. A high percentage of UPM respondents were not able to associate Gawai and Kaamatan to Dayak and Kadazandusun respectively in comparison

Table 8

Respondents' knowledge of main Malaysian festivals

Festival	Responses	UNIMAS No (%)	UPM No (%)	UPSI No (%)
Gawai	Correct	186 (85)	59 (69)	343 (78)
	Wrong	16 (7)	20 (24)	56 (13)
	Uncertain	16 (7)	6 (7)	40 (9)
Kaamatan	Correct	179 (82)	59 (69)	351 (80)
	Wrong	22 (10)	18 (21)	45 (10)
	Uncertain	17 (8)	8 (9)	43 (10)
Deepavali	Correct	203 (93)	83 (98)	407 (93)
	Wrong	4 (2)	1 (1)	2 (1)
	Uncertain	11 (5)	1 (1)	30 (7)
Hungry Ghost Festival	Correct	172 (79)	69 (81)	347 (79)
	Wrong	19 (9)	10 (12)	45 (10)
	Uncertain	27 (12)	6 (7)	47 (11)
Vaisakhi	Correct	89 (41)	36 (42)	215 (49)
	Wrong	52 (24)	19 (23)	107 (25)
	Uncertain	77 (35)	30 (35)	117 (27)

Source: Survey

to respondents from UNIMAS and UPSI. Although data collected from the three institutions showed that a sizeable number of student respondents were either uncertain or ignorance of the festivals celebrated in Malaysia, various cultural clubs had been formed along regional and cultural lines, and this would have contributed to these understandings.

The respondents' lack of knowledge and understanding of basic cultural elements in a plural society is of great concern.

Festivals have come far from being private celebrations as they are now viewed as political events held by politicians and political parties ("NST Leader", 2019). Festivals are also celebrated in large scales in universities to spread cultural awareness and understanding.

Perception and Knowledge of Discrimination

With regard to the issue of discrimination, three questions were posed in the

questionnaire, namely: *I have not experienced a situation when I felt that I am being discriminated due to my culture, religion and ways of lives that are different from others; There are moments/ times when I felt that comments said to me sounded racist/ ethnocentric; and I have overheard racist/ ethnocentric comments uttered by one individual to another.*

Table 9 shows a certain level of consistency regarding feelings and perceptions on the presence of discrimination. These data are matched with reports that these respondents also have personally had experienced discriminatory acts themselves. For example, many of the respondents had heard racist remarks aimed at others: about 57% of UNIMAS respondents responded in the positive, 61% and 72% from UPSI and

UPM respectively. UPM respondents were mainly peninsular-based students while UNIMAS and UPSI had a higher ethnic composition (see Table 2, above).

An equally interesting fact is that UPM recorded the highest responses from respondents who had had racist remarks targeted at them.

About 49% of UPM respondents had experienced racial-related remarks compared to UPSI respondents at 32% and UNIMAS respondents at 29%.

Consistent with the aforementioned data, UPM respondents recorded the highest percentage of respondents who said that they had been subjected to discriminatory action, i.e. about 32% compared to 16% and 17% for UNIMAS and UPSI student respondents respectively.

Table 9

Perception and experience of discrimination

Issue	Responses	UNIMAS No (%)	UPM No (%)	UPSI No (%)
Heard racist statement aimed at others	YES	125 (57)	61 (72)	268 (61)
	NO	34 (16)	8 (9)	61 (14)
	OTHER	59 (27)	16 (19)	110 (25)
Have racist statement aimed at self	YES	74 (34)	42 (49)	133 (30)
	NO	64 (29)	27 (32)	141 (32)
	OTHER	78 (36)	15 (18)	165 (38)
Have NOT being subjected to racist action	YES	137 (63)	42 (49)	228 (52)
	NO	35 (16)	27 (32)	76 (17)
	OTHER	46 (21)	16 (19)	135 (31)

Source: Survey

Who are Friends with Whom?

On the assumption that circles of close friends help influence an individual's outlook, the questionnaire asked respondents to name their best friends and their ethnicity. Many may argue that there is a natural propensity to congregate among one's ethnic group. Nevertheless, this presumption would help provide the forward outlook on the success or failure in building inter-ethnic relations. Studies have shown that having a wide circle of friends with those from diverse backgrounds, promises a better process of nation building comprising diverse elements congruent with characteristics of a plural society.

Responses to the aforesaid are presented in Table 10, Table 11 and Table 12. These tables show friends each ethnic respondent have had in their early days at their respective universities. Generally, there is a high percentage that if the respondent is a Malay, Chinese, Indian, Kadazandusun or Dayak, the larger percentage of their friends would come from their own ethnic community. The percentage is high that their friends would be of the same ethnic group such as Malay at about 80%, Chinese 89% and Indian 67%. Although the choice of friends is natural, this may have been influenced by prior background where they had come from a single or one ethnic dominated community, schools and social environment. Nonetheless, this prior environment changed as they set foot into a new, diverse university environment.

Table 10

UPM respondents' friends by ethnicity

Ethnic	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5
Malay	80	73	69	86	76
Chinese	89	78	56	78	61
Indian	67	43	48	48	38

Source: Survey. All figures are in percentages.

Table 11

UNIMAS respondents' friends by ethnicity

Ethnic	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5
Malay	54	67	69	86	76
Chinese	69	61	56	78	61
Indian	77	46	48	48	38
Sabah: Moslem	67	86	-	-	-
Sabah: Non-Moslem	73	89	-	-	-
Sarawak: Dayak	69	57	-	-	-
Sarawak: M/M	94	93	-	-	-

Source: Survey. Legend: M/M: Malay-Melanau. All figures are in percentages.

Table 12

UPSI respondents' friends by same ethnicity

Ethnic	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5
Malay	54	39	66	23	70
Chinese	69	61	55	56	69
Indian	77	46	55	44	49
Sabah: Moslem	52	86	89	81	83
Sabah: Non-Moslem	82	89	80	69	79
Sarawak: Dayak	69	57	53	61	76
Sarawak: M/M	65	93	80	73	93

Source: Survey. Legend: M/M: Malay-Melanau. All figures are in percentages.

It would be interesting if the study is longitudinal to explore how time spent at the more diverse university environments would influence selection of friends. Malay, Chinese and Indian student respondents have slightly lower percentage preference for their own ethnic in samples drawn from UNIMAS (Table 11) and UPSI (Table 12).

Contrary to the pattern observed for Peninsular samples (Malay, Chinese and Indian), Sabah and Sarawak student respondents show a higher propensity to choose their friends from their own states. These are shown in percentages especially in Table 11 and Table 12 where Sabahans (Sabah Moslem, Sabah non-Moslem student respondents) and Sarawakians (Dayak, Malay/Melanau) have higher percentages of preferences for friends from their own state/ethnic community.

Some Observations

This survey attempts to portray how the study of ethnic relations may be approached. The fundamental of ethnic relations is studying what happens at the roots, people

to people relations. People are basic units of study and to understand people and their perspectives on certain matters, learning has to start from the bottom-up path and not the other way, i.e. state or authority defined. It must be people-defined, and the top must address the infrastructure needed to bring about change to facilitate greater interaction between people on the ground. Structural change will only happen from the bottom-up approach and become a sustainable feature instead of being enforced from the top down. Any other attempts may not address the issue effectively as relations is about whether people are connecting and building networks willingly among and between themselves. Willingness is the very essence of how relations are constructed and the basic thrust in nation-building.

First, through a survey, the authors of this study wanted to explore whether the pervasiveness of basic societal infrastructures that these student respondents have been exposed to. For example, are their homes and school environment characteristically one-ethnic? This is important as this

experience will have an impact when they work in a larger environment outside their homes and schools. Results have shown that most of these student respondents come from national schools, but the influence of national-type and religious schools dominated by one ethnic continue to be significant. The latter could only undermine nation-building but thwart effort at building inter-ethnic relations between student respondents of different religions and ethnic backgrounds (Table 4 and Table 5). This is a sensitive issue that has dodged the society and its leadership because the issue is politically exploitable and could be used to bring in votes in each election.

Second, the above pattern of schooling is also not helped by home environment where substantial percentages of one-ethnic home environment are still relatively high (Table 3). This means that a substantial number of these student respondents do not have opportunities to know people of other ethnicity and religious backgrounds when they are confined to such a restricted setting. Although that might be argued as a natural phenomenon, this situation meant that nearly more than 60 years of Malaysia had not changed the façade of societal fabric that had divided and separated multi-ethnic and multi-religious Malaya/ Malaysia. Nevertheless, in the last fifty years or so, there has been significant number of improvements in term of bringing together diverse Malaysians from all walks of lives. The effort, which was accelerated by the 1970 New Economic Policy (NEP) initiatives, lasted for 20 years. Changes brought about by NEP Framework are significant as unlike the colonial period, Malaysians do not meet at bus stops, traffic lights and markets anymore, as Furnivall (1956) was fond of ascribing a plural society during colonial Burma. Malaysians of today have long-term contacts in many basic social structures such as in education, 'new' homes settlements/ housing estates and workplaces in urban and semi-urban locations.

In contrast to the less inclusive environments, there are some consolations. Student respondents across three public institutions of higher learnings showed a good level of basic understanding of cultural/ religious diversities (Table 8). Majority of the student respondents are knowledgeable of the various ethnic/ religious festival, especially those from UNIMAS and UPSI, which comes as a relief to total ignorance.

Third, although the majority of the student respondents had heard of racist statements or remarks, only a small percentage reported that they had been subjected to some discriminatory actions (Table 9). Among the three samples, UPM students recorded a higher percentage of those who reported that they had not only heard of racist statement but had also being subjected to discriminatory actions.

Fourth, the pattern of friendship differs slightly between the three samples. Generally, results show that friendship is built along the ethnic line, stronger among UPM samples and slightly lesser among UNIMAS and UPSI samples (Table 10, Table 11 and Table 12). This calls for more

vigorous investigation although overall, the student population would differ between the three public universities. UNIMAS would be more diverse in its ethnic student compositions as compared to UPSI and UPM.

The general findings are that: (1) more is needed to change the environment in various set-ups in order to provide a freer mingling that could facilitate better inter-ethnic relations. Clearly, the 1970 NEP promises have made some changes, but the changes are insufficient to proliferate ethnic mingling. While the natural home environment may not be easy to re-structure, new settlements and housing estates can consider the need to create spaces where diversities could thrive and better relations between various ethnic communities could be promoted for nation-building.

CONCLUSION

It is obvious that for successful nation-building and ethnic integration, more effort is needed to bring these various ethnic groups together in various settings such as in home/ housing environment, education and workplace. People of different ethnic backgrounds need to be put in the same settings to allow interactions to build lasting relations that would benefit nation-building. It has been shown in some studies that when diversities mix, products get better as the whole that comprises diversities benefit from the many goodnesses from different components. In political science, this occurrence could be explained by using the term "interlocking directorate", i.e.

networking produces greater good for each part that come together or strengthen each unit though togetherness (Dahl, 1961).

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Position of Islam as a Federal Religion and a Determinant of Stable Socio-Religious Relations in Malaysia: Medina Charter for Reference

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ABSTRACT

The consensus on the goodwill in the form of a social contract manifested in the Federal Constitution has become an efficacious tip for a harmonious Malaysia. It is evident that the prestigious position of Islam in Malaysia has played a role in creating stable socio-religious relations. Hence, post-14th General Election Malaysia (GE14) saw the enthusiasm of certain parties who tried to challenge the social contract and dispute the position of Islam as the country's official religion resulting in a less than harmonious situation. Therefore, this article analysed the position of Islam in the Federal Constitution according to its role as a stabilising factor in socio-religious relations in Malaysia by making the Medina Charter a reference. In order to achieve this objective, Malaysia's multi-racial background as well as efforts to pave the road to a consensus between followers of various religions that creates an understanding guaranteeing stable socio-religious relations must be thoroughly reviewed. This study adopted the qualitative approach based on the content analysis design by applying the library research method involving document analysis and the ensuing data were then analysed using the descriptive method. Findings show that the recognition given to the position of Islam in the Federal Constitution is the main factor that determines the stability of socio-religious relations as well as guarantees the country's harmony. The implication is that all parties, especially the government, need

to consolidate the position of Islam in the Federal Constitution.

Keywords: Article 3(1), Federal Constitution, Medina Charter, socio-religious, social contract

INTRODUCTION

Malaysia is a multicultural country from diverse origins. This diversity also leads to multiple religions' practices that almost all major religions in the world are embraced by Malaysians (Sharif, 2012). In the local context, the Bumiputeras are not all Muslims, especially in Sabah and Sarawak. Some are Christians, and some hold to local beliefs. According to the law, the Malays are Muslims. At the same time, the Chinese people have always been associated with Chinese religious beliefs such as a Buddhist, Confucius and Toa. In contrast, Indians are mainly of Tamil ethnic and Hindus. Also, there are Malaysians who adopt the Sikh, Bahai, Jain and Shinto religions but on a tiny scale (Ahmad, 2019). This diversity is indirectly a vital hurdle in preserving socio-religious relations as each religion and belief has a high degree of religious sensibility in sustaining its purity of faith (Meerangani et al., 2018).

In multi-religious Malaysia, Islam is sure to have a special position so much so that many questions regarding customs and traditions, politics and governance is influenced by Islam (Baharuddin et al., 2014). The special privilege accorded to Islam is enshrined in the Constitution aimed at preserving a stable society (Muslim, 2014) and as an effort to seek a balance between retaining Malaysia's historical factor as well as ensuring there is no religious oppression in Malaysia (Meerangani & Ramli, 2016). Hence, post GE 14 has seen extreme groups being very brazen in voicing their rights, with some not just questioning the Constitution but contesting the position of Islam and its decrees as well as directly meddling with the affairs of Muslims (Kassim & Hazmi, 2018; Ramli et al., 2018). Thus, if the position of Islam is not taken seriously, surely this would create a sense of instability in the socio-religious relations (Sharif, 2012).

METHOD

The research questions were fully explained using the qualitative method, which applied the library research technique to carry out a content analysis (research design) on three types of data, namely primary, secondary and tertiary data. Primary data, which became the basis for answering research questions, were the Federal Constitution and the *Fiqh al-Islami* scriptures consisting of three works by al-Qaradawi, which is *Ghayr al-Muslimin fi al-Mujtama' al-Islami* (2001), *al-Watan wa al-Muwatanah* (2010) and *Fiqh al-Jihad* (2014) and the book of *Ahkam al-Zimmiyin wa al-Musta'minin fi Dar al-Islam* by Zaidan (1988). Whereas secondary data that accelerated the understanding about socio-religious policy were books related to nationhood and *sirah* scriptures such as the book of *al-Sirah al-Nabawiyyah li Ibn al-Hisham* (1996) and the book of *al-Rahiq al-Makhtum* by al-Mubarakfuri (1976). Besides that, tertiary data from thesis,

journal articles, proceedings, working papers and internet reports related to the research questions were used to consolidate the understanding in this study. Findings obtained from the document analysis were analysed using the descriptive method in order to interpret and summarise the position of Islam in the Federal Constitution according to its stabilising role in socio-religious relations in Malaysia.

RESULTS AND DISCUSSION

The Plurality of Malaysia as a Challenge in Sustaining Socio-Religious Relations

Malaysia though a multireligious country has strong Islamic features as enunciated by the Federal Constitution as the supreme law of the land (Mahmud & Haneef, 2019). According to history, socio-religious relations in Malaysia has gradually grown in several stages (Ghani & Awang, 2017). Before the colonial era, the Malay States was a homogenous country. The number of foreigners living in the Malay States at that time, such as in Melaka, were very small (Wariya, 2010). Their presence at that time did not give rise to any problem because

they were able to create a harmonious relationship with the locals, environment and the existing socio-political-religious system, which sometimes leads to the natural assimilation of culture (Ramli, 2009). Hence, during the 19th century, after the Malay States were controlled by the English, began the large-scale exploitation of local natural resources aimed at supporting the capitalists' economic activities. The British had encouraged the entry of Chinese and Indian labourers to work in tin mines and rubber estates while enjoying the resulting economic gains and this left the original inhabitants of the Malay States to live in the villages (Institut Tadbiran Awam Negara [INTAN], 1994). Table 1 shows the multi-ethnic composition of the Malay States from 1911-1941.

Therefore, that is the illustration of ethnic diversity in the Malay States from 1911-1941, as shown in Table 1. While in Sarawak, the Chinese immigrants in 1908 were estimated at 45,000 people (10%) and increased in 1960 as many as 229,154 people (32%). While the number of Chinese residents in Sabah in 1907 was about 13,000 people and increased to 47,779 persons in

Table 1

Population of the Malay States according to ethnic background from 1911 to 1941

Ethnicity	Total Population (in thousands)			
	1911	1921	1931	1941
Malay	1437.7	1651.0	1962.0	2278.6
Chinese	916.6	1174.4	1709.4	2379.2
Indian	267.2	471.7	624.0	744.2
Others	29.3	33.0	56.1	58.4

1931. Sarawak and Sabah did not experience the influx of Indian immigrants as occurred in the Malay Peninsula. Instead, Javanese workers were brought in to work there (INTAN, 1994). This situation indicates that the arrival of immigrants due to British encouragement was the beginning of the process of pluralization among its people, thus making Malaya unique (Mohamad et al., 2019)

During the colonial era, the presence of these immigrants was not voluntary but rather due to the dire living conditions in their country of origin that had forced them to seek a better life, while the burning desire to return to their homeland had kept their hopes alive. Consequently, the immigrants failed to assimilate and blend with the local conditions and were happier to retain their original lifestyle that led them to lead an isolated life (Ramli, 2009). The phenomenon was elaborated by Furnivall (1948), who stated that a multi-racial society was characterised by disunity due to the existence of differences in ethnicity. Besides that, the separation of economic and social activities due to the Divide and Rule Policy by the British has also contributed to ethnic isolation that easily caused tensions (A'zmi et al., 2017). In this context, the Indian community was concentrated around the estates, whereas the Chinese was situated around the tin mines (Hanafi et al., 2016). The resulting ethnic polarisation due to colonial policies has changed the demographic background of the Malaya (A'zmi et al., 2017). Societal life is purposely allowed to grow in individual

cultural spheres (Amin et al., 2017) leading to the stereotyping of race and religion that has been growing until today (Ramli et al., 2018).

Most historians have mentioned that differences in attitude and the administration of each group by the British was intentional in order to tighten political and economic control of the Malay States. The implementation of this policy allowed the British to continue holding on to the status of the "middleman" so that they could solve any conflict (Ramli, 2015). Moreover, this gratifying relationship was becoming ever critical after the Japanese invasion (Ghani & Awang, 2017), which basically lead to the oppression of the Chinese (Redzuan, 1999). In reference to this, the Malays were accorded preference for helping the Japanese to administer the districts, whereas the Chinese were oppressed and until March 1940, some 40,000 Chinese, including women and children were killed (INTAN, 1994). This massacre by the Japanese was due to deep seated enmity against the Chinese as many Chinese living overseas had aided China during the Japan-China War of 1937. Moreover, the Chinese in the Malay States were equally vengeful towards the Japanese army following the cruelty shown by the Japanese towards the Chinese in mainland China (Ahmad, 2009). This resulted in the Japanese causing disputes between the Malays and Chinese, like the skirmish in Johor (Ramli, 2009).

After the Japanese surrendered on 14 August 1945, members of the Bintang Tiga, who were Chinese, had sought revenge

on the Malays because the Malays had supported the Japanese during the Japanese Occupation. A period of 14 days from 15 August to 30 August 1945 was a moment of tragedy that engulfed the Malays (INTAN, 1994). The Bintang Tiga army had begun killing mercilessly and this situation ignited the flame of racism until terrible acts of violence erupted between the Malays and Chinese (Ahmad, 2009; INTAN 1994). Meanwhile, the Indian were preoccupied with the struggle for independence in India, so much so that they were not involved with mainstream politics in the Malay States, it was as if they were not present in Malaya at that moment (Ramli, 2009). The racial tension was avoided only with the coming of the British Army. However, feeling of anger and hatred between the two races was high (Portal 1Klik, n.d.). Hence, although the British were said to have succeeded in returning peace, the Communist Party of Malaya, which had become increasingly active in widening its influence among the Chinese, began to incite the flame of racial enmity (Ramli, 2015). Not long after the anti-Federalist AMCJA-PUTERA movement was overcome by the British, there appeared the Pulau Pinang separation movement of 1948, which saw the continued Malay-Chinese conflict (Low, 2013).

Pivoting on the long-lasting turmoil from 1948, there emerged an awareness among all ethnic groups to create a formula for compromise in the framework leading to independence as a condition stipulated by the British. Therefore, in 1955, Perikatan had compromised on the issue of Islam as the official religion, the special rights of the Malays, position of the Malay Rulers and the Malay language as the national language as well as citizenship based on the *jus soli* principle (Wariya, 2010). Hence, several ethnic clashes that occurred in Pulau Pinang from 2 to 7 January 1957 had caused the death of five Chinese and injured 23, 46 Malays, 1 Indian and 4 of other ethnic backgrounds (Ramli, 2015). Post-independence saw the May 13 tragedy was the climax of the racial riots in Malaysia (Abd Khahar, 2016; Gill & Kaur, 2010). After the May 13 tragedy, there were several racial incidences, such as the Maria Hertogh case, the Singapore riots of 1964 and the Pulau Pinang riots of 1967 (Ramli & Jamaludin, 2012). However, almost 30 years after the May 13 tragedy, the nation was shocked by the Malay-Indian racial conflict in Kampung Rawa in 1997 and Kampung Medan in 2001 (Wen, 2014).

The reality is that Malaysia has never quite distanced itself from sensitive issues that can instigate racial tensions (Abd Halim, 2017; Muda et al., 2018). Muslim (2014) stated that issues, such as challenging the social contract and religious friction, which were frequently raised, could create long-standing conflict if not handled well. Now, the special rights long enjoyed by the Malays is beginning to be challenged with the interference of several devious parties who had threatened the position of Islam and religious tolerance in this country (Khambali & Haled, 2008). In fact, the Islam's position as a Federal religion plays a significant role in racial domains covering political realm (Sharil, 2018), making religion-related

subjects to be regarded as holding a more considerable impact on race relationships in comparison to other issues and thus critically affecting society in particular in the 1990s and the millennium (Rahman & Shah, 2019). According to Sofian and Hussein (2014), Yasin and Adam (2017), separate studies by Halimahton et al. (2006), Yong and Md Sidin (2010), Dafrizal et al. (2011), Yang and Md Sidin (2011, 2012) also demonstrate that religious issues are presently the pioneer component of racial unity in Malaysia.

Recently, religious upheavals have created tensions (Harun et al., 2019), and this matter appears complex, contradictory and extremely worrying (Kassim & Yakob, 2019). According to Ramli et al. (2018), this is due to the fluid pattern of interracial relations in Malaysia after GE14. In the past, each race highlights their agendas and interests. Nevertheless, currently, there has been an ultra-pluralist block across religious and ethnic groups who fights for the equality of rights ignoring the initial agreement in the social contract during the establishment of Malaysia and disregarding the provisions of the Federal Constitution. The group appears to be questioning the various rights that have been exercised, including matters relating to Islam as a national religion, even though previously it has been established by certain ethnic groups. These actions have triggered sensitive issues among the pluralistic community in Malaysia now.

Figure 1 shows the three main ethnic groups in Malaysia, namely the Malays, Chinese and Indians, each comprising 69.3%, 22.8% and 6.9% of the Malaysian population, respectively, in 2019. This statistic shows the existence of various ethnic groups in Malaysia; hence, becoming the main challenge when forming friendlier socio-religious relations. This is because ethnic group will surely have its own religion. Moreover, religion is a prominent issue of human society and is one of the main components of cultures (Khazaie et al., 2020). Hence, the religion of choice must be respected without any oppression or insult by other religions that could eventually lead to sensitivities towards that religion. Recently though, the religious element had frequently become an instrument that breeds disunity and conflict. The issue of religion surely has a negative impact on Malaysian society. The religious sensitivity that emerges would somehow or rather cause frailty in inter-racial relations if the religion that they embrace is insulted or demeaned by followers of other religions (Yasin & Adam, 2017).

The Position of Islam in the Social Contract as a Guarantee in Socio-Religious Relations as well as the Road to Independence

In the Malaysian context, socio-religious relations are built based on the consensus reflected in the Federal Constitution. According to Zainuddin (2018), the present Constitution is based on the Federal Constitution of 1948 is a fact that has been augmented by legislation and history. Another fact is that the Federal Constitution of 1948 was based on the *Kanun Melaka*, which is the core element in the Constitution
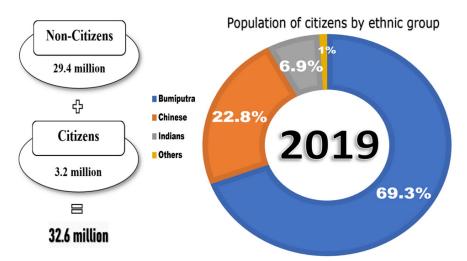
Figure 1. Current population estimates, Malaysia, 2019

of the Melaka Malay Sultanate. Moreover, there existed before this an old Malay government, complete with an Old Melaka Constitution. According to Wariya (2010), during the process of achieving a consensus for independence, the non-Malays initially wanted the Malay States to become a nation of various religions with equal rights among all. Thus, although they were reluctant to accept Islam as the country's official religion, the Malays were adamant in this issue. They reasoned that since the Malay States belonged to the Malay race, then Islam must be the country's official religion. Pivoted in this tradition, finally, the position of Islam as the Federation's religion was included in Part 1 and shows how important the provision of Islam is in the structure of the Constitution (Aziz, 2018).

Aziz (2018) asserted that the enshrining of Islam in Article 3(1) had confirmed the position of Islam as the country's official religion, which implies that Islam is dominant and influential in administrative affairs, culture, legislation, social and national politics. According to Yaakop and Aziz (2014), and Ramli (2015), the agreement to make Islam the country's official religion can be justified from the traditional and historical aspects, which are consistent with the development of the monarchy concept. Muslim (2014) emphasised that Islam was accepted as the country's official religion because it was suitable with the definition of Malay itself, in which Article 160 defines a 'Malay' as a person of Islamic faith, speaks the Malay language and practices Malay culture. According to Abas (1997), these elements of tradition reflect a characteristic that allows the Constitution to be better known and understood. Moreover, these elements are very important because if it is disputed, then there is a possibility of creating wide-spread disunity.

As a result, history has shown that the Federal Constitution was formed through a consensus of goodwill and some parts of it is referred to as a social contract that was agreed upon before independence. The social contract was based on cultural heritage, history and reality of the country's plural society by considering the fact that the Malays are the majority and the *pribumi*. Although the Constitution is not like the Holy scripture that cannot be amended due to changing times, but certain aspects that pose as the core element that maintains harmony among the races must be retained and become the unique characteristic of Malaysia (Ramli, 2009). Yaakop and Aziz (2014) mentioned that even though the term 'social contract' did not exist in the Constitution, it could still be adopted to translate the meaning of entente or unanimity regarding social justice between races as enshrined in the Constitution. According to Mahathir (as cited in Portal 1Klik, n.d.) , to say that a social contract does not exist is akin to negating or nullifying the contents of the Constitution. Ahmad (2009) asserted that the social contract was a form of unanimity regarding the norms of life of various races achieved voluntarily through negotiations, immortalised in history and presumably binding for generations to come.

When reassessing Islamic history that has long been embedded and thriving in the Malay States, Means (1978) iterated that since the 15th century, Islam had been the dominant religion in the Malay world and had become the symbol of unity, religious identity as well as culture of the Malays.

When independence came, Islam was one of the main factors when drawing the Constitution. During independence, Islam was given a special status in the Federal Constitution (Talib et al., 2014). Moreover, before the existence of the Islamic-based Laws of Melaka and Melaka Maritime Law (Redzuan, 1999), Islamic law was practiced as in Prasasti Terengganu, dated 14 Rejab 702 Hijrah or 22 February 1303 (INTAN, 1994; Muslim, 2014). After Parameswara had founded Melaka in 1400, he married Puteri Pasai and embraced Islam as well as Islamised Melaka (INTAN, 1994). Starting with this Islamization process, Islam was ingrained into the word Malay and whenever the word Malay was mentioned it became synonymous with Islam (Ramli, 2015).

Al-Attas (1972) also asserted that Islam should have an important place in Malay history and culture. This position itself shows why Islam was removed from the framework of the agreement between the Malay Rulers and the British, which began with the Pangkor Treaty of 1874 (Bari, 2005). Moreover, wholly associating religion with race is the basis of the Malay's thinking until Islam had become an important element in the definition of 'Malay', as enshrined in Article 160. Based on this position, the Malays rose to war and battled the Portuguese and Dutch to defend their religion. When the Portuguese and Dutch left the Malay States and the British took over, Islam was left to be (Abas, 1997). Hence, after World War II, the British planned to convert the Malay States into a political entity (Wariya,

2010) by changing their role from advisor to administrator (Abas, 1997). Under the Malayan Union, Malay Rulers who had the right to protect the sovereignty of the religion and administer religious affairs, had those rights revoked because all that power was now with the Governor (Ahmad, 2009; Simandjuntak, 1985).

Clearly, this move had angered the Malays. Formation of the Malay Advisory Council had challenged the sensitivity of the Malays since the Governor possessed power through an agreement whereby the Governor would administer legal matters pertaining to Islam. This action, if implemented, would have jeopardised the power of the Malay Sultans and weakened their position, who had been enjoying unprecedented power and influence on matters related to Islam (Ramli, 2015). Thus, due to this opposition, the Malayan Union was dissolved and substituted with the Federated Malay States 1948. Through this Constitution, the rights of the Sultans as the Religious Leader for their respective state, was returned to them (Muslim, 2014). In the framework for independence, serious efforts to include Islam in the Independence Constitution was fervently implemented. The history of enshrining Islam in the Constitution began with the actions of the UMNO, to include Islam as the Federation's religion in the Memorandum Perikatan, which was conveyed to the Reid Commission on 25 September 1956 (Din et al., 2017).

Besides that, several memorandums from Malays and Islamic organizations outside of UMNO had also suggested a similar move (Ramli, 2015). However, reactions of non-Malays, including the Perikatan itself, frequently exhibited dissatisfaction about this issue. Although consensus was achieved through a compromise, the attitude of non-Islamic parties opposing the position of Islam in the Constitution continues until today (Din et al., 2017). To complicate the situation, initial suggestions to include Islam as the Federation's religion in the Constitution was initially opposed by the Malay Rulers because their stand was that religion was a state matter and should be retained under the control and power of the Ruler in each state (Aziz, 2018). The reluctance of the Ruler's Council to acknowledge the enshrining of Islam as the Federal religion was because it was seen as a position contrary to theirs, which is the Religious Leader in their respective states (Ibrahim, 1983). However, Tunku Abdul Rahman successfully raised the confidence of the Malay Rulers by convincing them that the enshrining of Islam in the Federal Constitution will not jeopardise the position of Islam under the powers of the Local Governments (Din et al., 2017).

In the meantime, the Commission also received numerous requests from various non-Islamic organizations, including a confidential letter from the Secretary to the Colonies, Alan Lennox-Boyd, urging that the *Secular Nature of The State* be maintained and the freedom of religion safeguarded (Ramli, 2015). After conducting 118 meetings and reviewing 131 memorandums from various parties (INTAN, 1994), the

Reid Commission began to structure and write the draft Constitution in Rome with the excuse that the Commission should be kept free from outside influence. At the early stages, the suggestion to enshrine Islam in the Constitution was rejected by the Commission because the Ruler's Council did not give their blessing. However, during the writing of the final draft in Rome, Hakim had changed his mind and accepted the suggestion of enshrining Islam in the Constitution (Din et al., 2017). Besides this matter being accepted unanimously by the Perikatan, Hakim also stated that not less than 15 countries at that time had provided for religion in their respective constitutions, which was found not to inconvenience any party (Aziz, 2018; Ibrahim, 1983).

In order to strike a balance with the demands from the non-Muslims, Hakim suggested a provision that would guarantee the right to freedom of religion and no citizen should be deprived of something just because he is not a Muslim, should be included in the Constitution (Ibrahim, 1983; Ramli, 2009). Lastly, at the last Working Committee Meeting on 27 April 1957, the Malay Rulers gave their blessing to accept the proposal to enshrine Islam in the Federal Constitution as the Federation's official religion (Din et al., 2017). In the minutes of the meeting held in London in May 1957; the provision related to religion was not discussed at length. Conversely, the writer of the draft Constitution was given stern instructions to write a draft that was almost similar to the text written by the Working Committee related to provisions about Islam being the Federation's religion. Hence, the last version of Article 3 of the Constitution emerged after the meeting in London, which was agreed upon by the Working Committee in the Malay States (Ramli, 2015).

When debating the White Paper in the Federal Legislative Assembly on 10 and 11 July 1957, majority of members accepted the suggestion (Muslim, 2014). However, there was a last-minute effort by a small group of Chinese representatives, such as S.M. Yong, who raised the issue related to the special rights of the Malays, including the position of Islam as the Federal religion. Nevertheless, pressure by this minority did not receive any support, including that from Chinese representatives such as Tan Siew Sin and Goh Chi Yan (Ramli, 2015). Hence, suggestions related to the Constitution that was debated on 10 July 1956 and the second reading on 11 July 1957 was eventually passed unanimously on 11 July 1957, which indicates that was agreement between the various races although not all the demands from the races were met (Yaakop & Aziz, 2014). When Sabah and Sarawak joined Malaysia, this social contract was also extensively utilised in the establishment of the Federation of Malaysia on September 16, 1963, and remains operational to this date (Wariya, 2010). With the sealing of a goodwill consensus and its aspirations enshrined in the Constitution, hence, everyone should ennoble this consensus. It is evident that the pillar in this consensus has produced a solid social contract, which can be further harmonised (Ahmad, 2009).

Islam in the Federal Constitution Inspires Socio-Religious Stability in Malaysia: Reference to Medina Charter

The Medina Charter is a comprehensive document that interprets a social contract (Mahyuddin et al., 2016) that is internationalist and non-racial in upholding universal rights (Nor & Ibrahim, 2019). The Medina Charter does not make religious sentiment as a factor of social alliance, but rather the value of humanity as a factor (Md Supi, 2001). In fact, the most critical policy of the Medina Charter is the disposition of the *ummah* by understanding and explaining its various rights and obligations as an integrated society (Ibrahim & El-Qasimy, 1985). Among the important key factors towards the success of the Charter are unity and protections against human rights. Other than that, the heterogeneous society in Medina achieved peace due to respect of religion. It is important to understand that god and one *ummah* highlighted in the Medina Charter not only refer to Islam and Muslim, but also encompass the whole community regardless race and religion (Md Jani et al, 2015).

According to al-Qaradawi (2010), the main secret of the Medina Charter's success was that it upheld the supremacy of Islam and assumed the al-Quran and Sunnah as its main sources of reference. This is clearly stated in Articles 43 and 23 of the Medina Charter. By placing Islam as the nation's main policy instrument, social justice for non-Muslims was also included in the Charter, such as citizenship (Article 2), freedom of religion (Article 25), right to practice customs and tradition that do not contradict the Charter (Article 3-11), right to fair protection and assistance (Article 16), right to a trial (Article 25, 31 and 38), right to mutual corporation, assistance and guarantees in good faith (Article 37), right to neighbours (Article 41), right to conciliation (Article 44a) and right to safety and freedom of movement (Article 46). Yusuf al-Qaradawi (2001) affirmed that Islam not only provided rights but also guaranteed its implementation through faith and societal responsibilities. Hence, the provision of each right would be implemented fairly without any discrimination, as demanded by the call of Islam.

In the Malaysian context, Al-Sultan Abdullah Ri'ayatuddin Al-Mustafa Billah Shah (as cited in Official Parliament Statement, 2019) had iterated that the position of Islam as the religion of the Federation should be thoroughly understood by each citizen regardless of religion. His Highness asserted that Islam was not a religion exclusive to certain groups, rather, it was a universal way of life and carried its blessings to all of nature. According to Disa (n.d.), as a fundamental national framework, Islam has successfully proved to the world that human nature instilled in the minds of Muslims has successfully brought all the races in Malaysia, to the pinnacle of success and continuous peace. Thus, when citizens of this country are relishing the blessings of development and peace, there is no other choice then to continue to uphold the sovereignty of Islam as the national religion. Aziz (2018) stated that the history of the

Malay Settlements had strongly indicated that Islam had thus far been practiced in this country without showing any injustice to non-Muslims.

However, some separate incidents may cause non-Muslims to be concerned about their religious freedom, such as the Bible confiscation case in Selangor (Ismail et al., 2018). The findings of Vivian et al. (2018), study show that factors leading to religious intolerance are diverse but dominated by religious institutions identified with governmental powers. There are many issues, such as the use of the word Allah and cross issues in the Petaling Jaya Church, which is more politically motivated. Islam's unique position in the Constitution should be used as the best platform for manifesting Islam as a universal religion of peace. Referring to the Medina Charter, the prophet PBUH has given full independence to religious and financial matters to the Jews. Consequently, Medina Charter has emerged as an Islamic theory and practice in maintaining a pluralistic social system based on a harmonious living, tolerance, peace, tenderness, calmness, help, respect, justice and freedom of religion (al-Mubarakfuri, 1976; Ibn Hisham, 1996). In fact, the right to freedom of religion has already been clearly stated in Article 25 of the Medina Charter (al-Qaradawi, 2010).

In response to the right to freedom of religion under Islamic rule, non-Muslims are required to maintain the sensitivity of Islam and its people (al-Qaradawi, 2014; Zaidan, 1988). Thus, some restrictions such as the prohibition of spreading other religions to Muslims should be respected as they aim to protect the religion of the Muslims who are one of the *Shariah Maqasid* (Kamal, 2017) and to keep the common good from becoming a mess (Zaidan, 1988). In addition, Islam allows non-Muslims to practice their religion safely and peacefully following the assurance of religious liberty given by the prophet to the people of Najran (al-Mubarakfuri, 1976; Ibn Hisham, 1996), Umar to the people of Iliya, Khalid al-Walid to the people of Anat and Amr bin al-As to the people of Qibti (al-Qaradawi, 2010, 2014). However, Yaacub (1986) noted that even though the right to freedom of religion was guaranteed in Islam, the appreciation of the way of life in any religion was still subjected to state law so as not to lead to confusion. Malaysians should respect the assurance of freedom that is given without taking advantage of their interests (Nor, 2011).

In the Malaysian context, the right to freedom of religion as provided in Article 11 of the Federal Constitution has long been the essence of racial unity and harmony (Khambali & Haled, 2008). Besides, the right to freedom of religion can also be referred to in Article 3(1), Article 10, Article 8 and Article 12 (Aziz, 2018; Muslim, 2014). However, it is subject to a number of other restrictions such as peace and security (Article 3 (1)), which does not create a situation that could endanger public order, morality and prosperity (Article 11 (5)), not spreading other religions to Muslims thus respecting the law while maintaining the sensitivity of Muslims (Article 11 (1)&(4)),

does not compel to pay any fees (Article 11 (2)) or accept teachings or participate in any religious ceremony other than its own religion (Article 12 (3)) and has the right to be involved in religious affairs or religious institutions or its own religion's *khairat* and to be involved in its property in accordance with law (Article 11 (3)(a),(b),(c)) are included in the field of education (Article 12 (2)) (Jabatan Peguam Negara, 2010). Thus, in order to secure socio-religious sustainability, the constitutional guarantees of the practice of each religion should be a unifying mechanism of all religions in the context of freedom for each religion to practice within their group (Mahyuddin et al., 2016).

The confirmation of Islam as the country's official religion, as enshrined in the Constitution, should be respected. Similarly, the right to freedom of religion of other religions must be guaranteed as it is not only enshrined in the Federal Constitution, it is also an Islamic claim. Thus, followers of all religions should respect the eminence of the Constitution that has ennobled Islam in a special position in addition to celebrating the freedom of other religions. This position is a social contract that has been agreed upon through a consensus of goodwill that is translated in the Merdeka Constitution. No matter what the reason, the special position of Islam which also celebrates the freedom of other religions cannot be disputed. According to the policies and principles of Islam that have been ingrained in the Malays, the non-Muslims would be given citizenship rights and freedom of religion

in a peaceful manner without imposing conditions as long as the special rights of the Malays are not disputed, including the sovereignty of Islam, which has been the local religion for ages.

History has proven that Malays were willing to lose their absolute right to their own country. Nevertheless, the Malays would never allow their religion to be insulted, at any cost. Hence, although the Malay States were once coerced to accept the advice of the British, the colonisers did not interfere with the customs and traditions of the Malays and Islam (Abas, 1997). In fact, they knew that Islam had become a part of the Malay's flesh and blood and could not be separated. Efforts by colonisers to degrade the supremacy of Islam by suggesting the Malayan Union 1946 had clearly angered the Malays. Consequently, they were more confident that attempts to interfere in Islamic matters would only invite disaster upon themselves. The history of Medina also shows how the Jews were disgracefully expelled because they betrayed the social contract sealed through the Medina Charter (al-Mubarakfuri, 1976; Ibn Hisham, 1996). Yusuf al-Qaradawi (2014) stated that Islam is capable of reconciling with anyone including Jews although they had betrayed an agreement and created chaos. Therefore, all parties should understand, comply and respect the special position of Islam and the right to freedom of other religions as enshrined in the Federal Constitution. This is the source of socio-religious relations policy that has been built and proven successful in creating harmony in Malaysia. With

the nobility of Islam found in this country, hence, each individual would continue to enjoy the prosperity gained by the virtue of Islam being the country's official religion.

CONCLUSIONS

The Federal Constitution was drawn based on the development of several important events that have set the course of this country's history. It was enacted through the consensus of goodwill between differences ethnicities, which was termed as a historical bargain that translated into the give and take approach. In this case, the privileged position of Islam is justified from the historical perspective, until it was recognised by the colonisers and accepted by non-Malays who then eventually agreed to enshrine Islam in the constitution as the official religion of the country. The consensus was tied to the agreement to acknowledge citizenship to non-Malays in exchange for their acceptance of special rights accorded to Malays, including the issue of Islam being the official religion of the country. History has also recorded that any controversy regarding the consensus agreed upon could cause tensions. Hence, pivoting on the principle of the Supreme Constitution, the Federal Constitution should be the main reference for the country when sustaining socio-religious relations. In this matter, the Constitution has acknowledged the supremacy of Islam as the official religion of the country that guarantees the right to justice as well as recognises the basic rights of followers of all religions. Therefore, followers of all religions must understand

the historical background, the process of drawing-up the Constitution and the provisions stipulated to strengthen the cordiality in the context of socio-religious relations that leads to the formation of a united Malaysian *ummah*. Any form of provocation, especially one that leads to a conflict, pertaining the special position of Islam in the Constitution must be acted upon immediately.

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Short Communication

Post-Retirement Experience among Retirees: A Case Study in Malaysia

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ABSTRACT

Retirement influences the social relation, financial circumstances, time flexibility and well-being. The autobiographies of 26 Malaysians retirees from the book 'Who Says I am Retired' were analysed. The significance of this study is to enrich the information on planning for life after retirement, emphasizing the importance of active ageing. Many retirees pursued a professional career after their mandatory retirement to live with dignity and independence. Many men retirees were actively involved in community work compared to women. The retirees felt that there should be no such thing as retirement while some expressed that they were not actually retired from work but rather transit from one phase of activity to another. Notably, Malaysian retirees are undergoing evolution from true, old-style retirement to the modern.

Keywords: Ageing, post-retirement, retirees

INTRODUCTION

Malaysia is undergoing a demographic shift, where the United Nations (UN) has projected that Malaysia will become an ageing nation by 2030. There will be almost four times the expansion of the aged population in 2050 in which the UN has estimated that 23.6% of Malaysians will be over 60 years. The reduced fertility rate

and higher life expectancy in Malaysia, consecutively lead to increased older persons in the total population. As such, Malaysians are expected to live another 15 years or more after their retirement, as many people are relatively fit to remain in the workforce. On that account, the Malaysian government has increased the legal retirement age to 60 for maintaining financial security (Yusoff & Yusof, 2013). Increased percentage of the older population will lead to significant social and economic changes including the heightened burden on the healthcare, welfare and pension systems and shrinking labour forces. Recently, the concept of active ageing has gained increased attention, where Dasar dan Pelan Tindakan Warga Emas, describes active ageing as a process of optimizing opportunities and empowerment of older adults in the family, community and society for enhancing their wellbeing.

Retirement is referred to as an exit from an organizational position or career path of substantial duration, taken by people following their middle age, and taken with the purpose of declined psychological commitment to work later (Feldman, 1994). Transitioning into retirement is a key life event, which implies an individual's entry into old age, where one is no longer in paid employment and left more or less to one's own devices. At the individual level, this extended lifespan after retirement might not just indicate an increase in ''good'' years of life but also more ''bad'' years.

Also, the post-retirement phase offers a diverse range of experiences and changes concerning daily activities and hobbies. This is viewed as a unique phase, full of diversity in which it is considered as a transition from an active working lifestyle, which mainly involves reorganization of daily activities (van Solinge & Henkens, 2008). The way people use their time over retirement may vary largely based on the socio-demographic factors (Sprod et al., 2017).

In recent years, post-retirement employment is recognized as one way of participating in the labour market (Burkert & Hochfellner, 2017). Nevertheless, policymakers are not effectively including this type of work in their political strategies and reforms yet. In the Malaysian context, however, it is common for many retirees to continue working. Notably, the adequacy of retirement wealth is essential for retirees to maintain their standard of living. The wealth-need ratio demonstrated that 69 percent of households in Malaysia have an adequate retirement income, specifying that more than 30 percent of households will not be able to sustain the present level of spending during retirement (Alaudin et al., 2017). Evidence has shown that the majority of older Malaysians rely on their children for financial support (Tey et al., 2015). Another survey conducted in 2014 demonstrated that 95% of the aged parents in Malaysia received support in the form of financial assistance, companionship to the required places, food or other goods and household chores from

their children (National Population and Family Development Board [NPFDB], 2014).

The feelings of loneliness were negatively linked to coresidence with adult children and involvement in religious activities among Malaysians. Moreover, the study revealed the crucial role of the family institution in reducing the issue of loneliness among older adults (Teh, 2014). A survey reported that 74.8 percent older people in Malaysia were frequently involved in the mosque/religious activities, followed by 30.1 percent who engaged themselves in the neighbourhood association activities, 24.4 percent participated in the sports/recreational events and 15.2 percent participated in the community-based activities (NPFDB, 2014).

This paper discussed the life activities and experiences of Malaysian retirees as well as the meaning of retirement, suggestions, and advice in terms of preparedness for retirement and old age to the younger generation.

METHODS

The data collection process was commenced in 2015 via invitation through letter communication to the study participation. The study respondents were from a broad range of work, mostly academicians, and professionals from the corporate sector as well as the civil services. The analysis was based on the essays compiled from 26 Malaysians aged 60 and older about their perspectives on retirement and experiences before and after retirement, extracted from the book 'Who Says I am Retired' (Mansor et al., 2018). The participants, which consisted of 15 females and 11 males had had illustrious careers and contributed much to their respective fields during their working years and continued to have a blessed life in retirement. The essays were written based on guided key themes, which formed the main content of the book, thus the study explored the meanings of retirement from the perspectives of the retirees, how they spent their retirement years in the economic and social spheres as well as their advice to the younger generation and/or suggestions to the government about active ageing and living in retirement in Malaysia.

RESULTS AND DISCUSSION

As Malaysia is heading towards an ageing nation, nearly 1.2 million people are estimated to be aged 60 and above by 2030, in which a higher number of Malaysians will be entering into post-retirement life. Furthermore, the increasing gap between retirement age of 60 years and life expectancy, will lead to a longer duration of post-retirement life where valuable manpower and expertise go untapped. As such, during this time, retirees are facing the risk of a decline in their health and overall wellbeing. Moreover, the Employees Provident Fund (EPF) stated that most

retirees in Malaysia exhaust their EPF savings within five years after retirement. As such, most retirees pursue to explore job prospects to sustain themselves and their family.

The current study revealed that the majority of the respondents had a positive attitude towards retirement. It should be noted that the majority of the retirees in this study had a sound retirement planning. Notably, retirement planning involves awareness and a better understanding of the problems in life, where individuals' perception is crucial to achieving the highest retirement satisfaction (Xiao, 1998).

Table 1 demonstrates that study participants comprised more females than males, a higher number of Malays followed by Chinese and Indians. The majority of the participants were in senior positions in the government service before their retirement (Table 1). Half of the participants indicated their satisfaction with the mandatory retirement, while 27 percent were dissatisfied with the government policy of fixed mandatory retirement age in Malaysia. Many offered ambivalently or negatives views on having mandatory retirement. As mentioned by one participant,

> *"You must take this thing about retirement that befalls you like some disease and throw it away as far as you can."*

Hence, it was not surprising that a high proportion of them (84.6 %) continued working after their mandatory retirement.

Table 1

Characteristics of the study participants

Variable	Category	% (n)
Ethnicity	Malays	65.4 (17)
	Chinese	19.2 (5)
	Indians	15.4 (4)
Gender	Male	42.3 (11)
	Female	57.7 (15)
Pre-retirement employment	Government	62.0 (16)
	Private sector	38.0 (10)
Pursuing professional career post-retirement	Yes	84.6 (22)
	No	15.4 (4)
Satisfaction on mandatory retirement	Yes	50.0 (13)
	No	26.9 (7)
	Neutral	23.1 (6)

Meanwhile, another study conducted in Malaysia demonstrated that one-third of retirees continued working after retirement because of economic reasons (Malaysian Research Institute on Ageing [MyAgeing], 2018). This is mainly because working beyond retirement age could enhance mental health as mentioned by the study participants. Similarly, a previous study revealed that post-retirement work could enhance the mental health of older people, however, this depends on lifestyle patterns, self-esteem and own values (Maimaris et al., 2010). Evidence has shown that there is a significant association between willingness to leave the workforce, satisfaction with being out of the work function, and subsequent satisfaction with retirement (Kremer, 1985). On the other hand, anxiety concerning the nature of retirement is inversely linked with the anticipated experience and positively correlated with a later planned retirement age (Lim & Feldman, 2003). Evidence has shown that individuals who feel that retirement will be an encouraging experience are presumed to be concerned in early retirement and are also more satisfied following retirement (Gall et al., 1997; Taylor-Carter et al., 1997).

Evidence has shown that only 40 % of Malaysians are financially ready for retirement (Lin, 2017). With the changing and challenging landscape of the economy and the ever-rising cost of living, most retirees must continue to remain productive beyond the mandatory retirement. Besides, similar to other countries in Asia, the former practice of extended family is weakening in Malaysia, the tradition of children taking care of older people living with them is gradually declining (Kock & Yoong, 2011). Moreover, a previous study reported that only 38% of children are prepared to support their ageing parents (Yip, 2013). This suggests that older Malaysians have to be independent and can no longer solely expect financial support and care from their children. Consistent with this, the majority of the retirees have opted to work after retirement to remain financially independent, be able to support the family and to continue contributing to society. This is the result of not just being educated but more importantly their understanding of the benefits of being active throughout their life course. As said by one participant,

> "Working past retirement age, whether in the social or the economic sphere, definitely helps one to stay physically and mentally healthy through the stretching of the brain and the brawn."

Social support is one of the important factors that influence satisfaction after retirement and linked to one's adjustment to retirement (Taylor et al., 2008). It should be noted that supportive interactions with friends and family, as well as community involvement, have been linked with life satisfaction among retirees (Levitt et al., 1985). In general, positive forms of social support are regarded as a buffer, which reduced the effect of possible stressful events on the well-being of an individual (Cutrona et al., 1986). The participants also revealed what retirement meant to their everyday life

by describing common or typical activities. Participants wrote about their morning and evening participation in social and religious activities. These activities could be regular daily, weekly or periodical. Figure 1 illustrates the common activities of retirees. An equal proportion of females (50%) and males (50%) were actively involved in social activities and spending time with children or grandchildren (69.2%) in their retirement. While more female retirees (61.1%) indicated their interest to pursue religious activities such as attending religious classes and courses compared to male retirees (38.9%), the opposite is true on the time they spent on traveling (males 57.1% and females 42.9%). Some retirees purposefully arranged circumstances they were likely to enjoy, while others remained to stay with family and friends. The findings were in agreement with a previous study, which revealed that many retirees actively participated in community actions particularly religious activities and volunteerism (MyAgeing, 2018). The study also reported that the majority of the retirees were keen to visit their relatives and friends (76%) and vacation (domestic-62%, overseas-37%) (MyAgeing, 2018).

The active participation in various activities could be because living a longer and healthier life have resulted in a new demographic bubble of dynamic, determined individuals who are progressively making a substantial contribution to the society via working, caring, volunteering and involving in entrepreneurial activities. Similarly, this act of self-fulfilment or productivity is also evident in millions of UK citizens in recent years who are around the same retirement age (Collie, 2015).
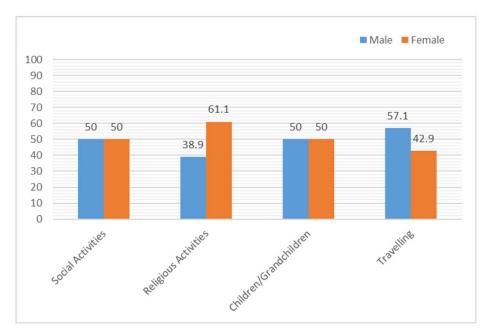
Figure 1. Routine activities among the study participants

The participants were also asked about what retirement meant to them and their responses in which the most common reply was that retirement should not exist. The participants expressed that they were not actually retired from work or that there should be no such thing as retirement. A previous study reported that in modern society, the term "retirement" does not actually exist. Retirement made people think: financial instability, freedom to pursue their own life schedule and activities; opportunity to contribute to society and a chance to enjoy and be happy with fruits of their labour (Ekerdt & Koss, 2016). This is indeed consistent with the findings of this article where retirement means the door of opportunities is open wide for them to pursue other things that bring purpose and meaning to their lives.

In general, with the shift in the concept of retirement, people themselves may want to continue working by taking up other informal or part-time jobs. Notably, delaying retirement elevates lifetime incomes by increasing the asset accumulation duration, facilitates the reduction in the retirement duration and permit retirees to support their post-retirement consumption.

The study has limitations, having been based on a small and samples in Malaysia in which the results might not be generalized to the overall retirees in the region with different cultures and practices. Nevertheless, useful lessons can be learned from the experiences of these individuals who have contributed much to their respective working worlds before their retirement and continue to remain active and productive in their retirement years.

Overall, the retirees who participated in this study demonstrated shared personalities of having a good self-efficacy, enthusiasm in helping people, and being passionate about their work and social engagement.

CONCLUSION

The findings demonstrate that Malaysia is also undergoing evolution from true, old-style retirement to the modern non-retirement similar to other countries, which is fundamentally driven by two main factors: productivity and money. The retirees' contributions to society and humanity whether directly or indirectly should be an inspiration to those nearing their time to exit from the official world of work that there are endless opportunities out there for anyone to live their retirement life to the fullest. Notably, the intervention programs for preparing the retirees for financial and emotional facets of retirement are essential to ensure the well-being of the older people in Malaysia. The strategies and programs enhancing intergenerational relationships and communication between family and community as well as youths and older adults could eradicate the issues of loneliness, hence promote the wellbeing of the retirees. There is no universal social protection coverage for older adults in

Malaysia, hence, federal support to older persons for economic independence may require foresight or revisions of political policies. The National Social Welfare Policy (1990) and the National Policy for Elderly (1995) are the two policies governing the well-being of older people in Malaysia (Zaimi, 2007). With the current state of the demographic shift towards an ageing nation, there should be a comprehensive framework covering the overall well-being including the physical, mental and social well-being of the ageing population in Malaysia.

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PERTANIKA JOURNALS

Review Article

What's Perfect and What's Not: Indonesian and Acehnese Phonemic Correspondences

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ABSTRACT

This qualitative research aimed to identify the Indonesian phonemic correspondence with Acehnese. It was based on the comparative historical linguistic theory or diachronic theory by identifying the form and regularity of sound language changes. It was limited only to phonemic correspondence between Indonesian and Acehnese without reconstructing the proto of both languages and seeing its kinship. Ten (10) Acehnese from East Aceh who fitted the criteria for this research were selected as informants to obtain data. Data collection used field linguistic methods, namely direct elicitation methods, inspection of the elicitation, and reflection. Data were analyzed using the qualitative descriptive technique. The results showed that there were 19 Indonesian phonemic correspondences with Acehnese. The phonemic correspondences were found to occur in the initial, middle, and end of vowels. Meanwhile, for the consonants, they occurred in the initial and final. From the 19 correspondence findings, three phonemic correspondences were found to be impeccable, they were s ≈ h, h ≈ Ø, and r ≈ Ø, meanwhile, 16 other correspondences were found to be imperfect, such as u ≈ εə, a ≈ o, ε ≈ i, and k ≈ g. Henceforth, the results can be used as a reference for further research on other

linguistic relations between Indonesian and Acehnese, and even alternative learning materials for Acehnese speakers who study Indonesian or *vice versa.*

Keywords: Acehnese, Indonesian, phonemic correspondences

INTRODUCTION

Aceh is one of the provinces in Indonesia. In this province, about 90% of the population is of the Acehnese ethnic (McCulloch, 2005) and they speak the Acehnese language as their heritage language and Indonesian as their national language. Acehnese itself is one of the languages that are related to the Austronesian language family (Thurgood, 2007). Acehnese's relationship with Indonesia has long been established before Aceh became part of Indonesia and Indonesia became an independent country in 1945 (Istiqamah, 2017; Reid, 2005). The neighboring Malay is related to Acehnese since Aceh was the first receptacle of "classical" Malay literature in the 17th century (Reid, 2005), or Jawi Pasai it was once called (Hermansyah, 2014). In Jawi Pasai, the system writing is Malay in Arabic script (Reid, 2005). Meanwhile, the Malay language is known as the root of Indonesian. In 1928, the Congress of Indonesian Youth used Malay as the language of the congress, but the new name *Bahasa Indonesia* (Indonesian) was first introduced as the language of future independent Indonesia from the Dutch (Paauw, 2009).

Referring back to Acehnese as one of the spoken ethnic languages out of hundreds in the Indonesian archipelago is the relationship between Acehnese and Indonesian in terms of phonemic or sound correspondence. Typically, sounds have a regular shift between languages. Since the law of sound contains the tendency of strict bonding, this term is replaced by phonemic or sound correspondence. Thus, sound correspondence was defined by Brown et al. (2013) as "two sound segments that correspond when they occur in cognate words of genealogically related languages". There is an alignment of sound in the same position found in derived languages based on basic words. Segments that correspond or align to the same gloss are both seen in terms of form and meaning in different languages compared to each other (Crowley, 1987; Hock, 1986). Therefore, sound correspondence is the result of sound changes in a language over time and is the foundation of the comparative method of historical linguistics (Brown et al., 2013). The patterns of sound correspondence have an important role in linguistic reconstruction such as "to reconstruct proto-forms and for classical phylogenetic reconstruction based on shared innovations" (List, 2018).

Phonemic correspondences between Indonesian and Acehnese are relatively systematic, e.g. phoneme /a/ in Indonesian corresponds to phoneme /u/ in Acehnese, phoneme /s/ in Indonesian corresponds to phoneme /h/ in Acehnese, and so on. In addition to its systematic occurrence, the correspondence of Indonesian and Acehnese sounds also occurs in many words. The inter-language phonemic correspondence generally occurs between vowel

phonemes, including the correspondence of the Indonesian and Acehnese phonemes. Indonesian vowels consist of two types, namely monophthong, and diphthong, and there are no nasal vowels. According to Alwi et al. (2003), Chaer (2009) and Sanjoko (2015) there are ten monophthongs as shown in Table 1.

In Table 1, it is seen that there are two types of /i/ phonemes in Indonesian, namely the low phoneme /I/ as shown in example number two, and the high phoneme /i/ as shown in example number 3. Two phonemes of /u/ are also distinguished in Indonesian; the low phoneme /ʊ/ as shown in example

number four and the high phoneme /u/ as shown in example number 5.

In addition to monophthongs, there are three diphthongs in Indonesian (Alwi et al., 2003; Marsono, 1993) as shown in Table 2.

In the meantime, there are also two types of Acehnese vowels, namely monophthong, and diphthong. Acehnese has 17 monophthongs vowels, divided into ten oral monophthongs and seven nasal monophthongs (Asyik, 1987; Durie, 1985; Pillai & Yusuf, 2012; Wildan, 2010). The oral monophthong vowels are shown in Table 3, and the nasal monophthongs vowels are shown in Table 4.

Table 1

Indonesian monophthongs (Chaer, 2009)

No.	Vowels	Examples
1.	/a/	*anak* 'children', *apa* 'what', *anda* 'you'
2.	/I/	*ini* 'this', *kiri* 'left', *pipi* 'cheek'
3.	/i/	*itik* 'duck', *tabib* 'physician', *murid* 'student'
4.	/ʊ/	*susu* 'milk', *lucu* 'funny', *aku* 'me'
5.	/u/	*kapur* 'chalk', *duduk* 'sit', *sumur* 'well'
6.	/e/	*sate* 'satay', *gule* 'vegetable', *rante* 'chain'
7.	/ə/	*kera* 'monkey', *beli* 'buy', *kabel* 'cable'
8.	/ɛ/	*hemat* 'saving', *ember* 'bucket', *karet* 'rubber'
9.	/o/	*toko* 'shop', *risiko* 'risk', *kado* 'gift'
10.	/ɔ/	*tokoh* 'figure', *bola* 'ball', *bohong* 'lie'

Table 2

Indonesian diphthongs (Alwi et al., 2003)

No.	Vowels	Examples
1.	/ai/	*pantai* 'beach', *balai* 'hall', *andai* 'if'
2.	/au/	*kerbau* 'buffalo', *bakau* 'mangrove', *kilau* 'luster'
3.	/oi/	*amoi* 'greetings for Chinese girls', *konvoi* 'convoy', *asoi* 'delicious'

Table 3

Acehnese oral monophthongs (adapted from Asyik, 1987; Durie, 1985; Pillai & Yusuf, 2012; Wildan, 2010)

No	Vowel	Example
cit	/i/	*iku* 'tail', *cit* 'also, even', *ija* 'cloth, fabric'
peut	/ɯ/	*peut* 'four', *aneuk* 'child', *leubèh* 'more'
cut	/u/	*cut* 'small, countess', *bu* 'rice', *karu* 'noisy'
pét	/e/	*pét* 'to shut the eyes', *éh* 'sleep', *padé* 'paddy'
tet	/ə/	*tet* 'burn' *le* 'many', *tahe* 'pensive'
pôt	/o/	*pôt* 'blow; to fan', *ôk* 'hair', *lôn* 'I, me'
cèt	/ɛ/	*cèt* 'paint', *bèk* 'don't', *mugè* 'sales'
göt	/ʌ/	*göt* 'good, fine', *gadöh* 'disappear', *deungö* 'hear'
cop	/ɔ/	*cop* 'sew', *pujo* 'praise', *po* 'owner'
pat	/a/	*aduen* 'brother', *pat* 'where', *saka* 'sugar'

Table 4

Acehnese nasal monophthongs (adapted from Asyik, 1987; Durie, 1985; Wildan, 2010)

No.	Vowel	Example Words
1.	/ã/	*'ap* 'bribe, feed', *s'ah* 'whisper', *'adé* 'fair'
2.	/ĩ/	*t'ing* 'sound', *sa'i* 'be alone'
3.	/ɛ̃/	*'èt* 'short', *pa'è* 'gecko', *la'èh* 'weak'
4.	/ɯ̃/	*'eu* 'yes', *ta'eun* 'plague'
5.	/õ/	*'oh* 'when', *kh'op* 'stench', *ch'op* 'stab'
6.	/ʌ̃/	*is'öt* 'slide', *ph'öt* 'the sound of fire goes out'
7.	/ũ/	*meu'u* 'plowing the fields'

There are 17 diphthongs in Acehnese (Wildan, 2010). They are divided into 12 oral diphthongs (as shown in Table 5) and five nasal diphthongs (as shown in Table 6).

Consequently, research on phonemic or sound correspondence is not new and is one of the wide research issues undertaken by researchers in linguistics education (Earle & Sayeski, 2017; Musayyedah, 2014; Sayeski et al., 2017). Nevertheless, none has worked on the correspondence between Indonesian and Acehnese sounds. This research intended to fill in the gap. The existence of a systematic description of sound correspondences in Indonesian and Acehnese is believed to be helpful and can become a reference for further research on other linguistic relations between Indonesian and Acehnese, and even alternative learning materials for Acehnese speakers who study Indonesian or vice versa. Accordingly, one of the language learning hypotheses also

Table 5

Acehnese oral diphthongs (adapted from Asyik, 1987; Durie, 1985; Pillai & Yusuf, 2012; Wildan, 2010)

No.	Vowels	Examples
1.	/iə/	*ie* 'water', *iem* 'keep quiet', *tiep* 'every, each'
2.	/ɛə/	*batèe* 'stone', *bajèe* 'clothes', *kayèe* 'wood'
3.	/ɯə/	*beuet* 'study, learn', *pageue* 'fence', *keubeue* 'buffalo'
4.	/ɔə/	*adoe* 'sister', *bloe* 'buy', *toe* 'near'
5.	/ʌə/	*lagöe* 'shocking expression', *dhöe* 'clogged up'
6.	/uə/	*bue* 'monkey', *alue* 'groove', *buet* 'work, job, action'
7.	/ai/	*gatai* 'itching', *kapai* 'ship', *jai* 'many, much'
8.	/əi/	*hei* 'to call'
9.	/ɔi/	*boinah* 'treasure', *poih* 'mail, post'
10.	/oi/	*bhôi* 'sponge cake', *cangkôi* 'hoe', *dôdôi* 'a kind of cake'
11.	/ʌi/	*lagöina* 'very, greatly'
12.	/ui/	*bui* 'pig', *phui* 'light', *tikui* 'down'

Table 6

Acehnese nasal diphthongs (adapted from Asyik, 1987; Durie, 1985; Wildan, 2010)

No.	Vowels	Examples
1.	/ĩə̃/	*p'iep* 'suction'
2.	/ɛ̃ə̃/	*'èet* 'short'
3.	/ɯ̃ə̃/	*'eue* 'crawl'
4.	/ũə̃/	*'uet* 'swallow', *c'uet* 'tighten up'
5.	/ãĩ/	*meuh'ai* 'expensive'

states that similarities in the first language (FL) learning process can influence the learning of the second language (SL) (Krashen, 1982). The language elements are obtained in the foreseen sequence where certain linguistic elements are obtained first, while other linguistic elements are obtained later (Chaer, 2003). Moreover, the knowledge on the phoneme-grapheme correspondence also contributes to language major students' understanding of the writing system principle because they are related to sound representation that deals with the systematic relations between letters and sounds (Huang et al., 2014; Larsen et al., 2020; Rangriz & Marzban, 2015).

METHODS

This research was based on the comparative historical linguistic theory developed by, among others, Bynon (1979), Dimmendaal

(2011), Driem (2018), and Hock (1986). This theory is also called a diachronic theory, which involves the analysis of the form and regularity of changes in languages equipped with sound changes, to reconstruct the language of the past, the ancient language (proto) that lived in thousands of years before that. However, this research is limited to only phonemic correspondences between Indonesian and Acehnese languages without reconstructing the proto of both languages or studying its kinship.

Following Erbach (2020), Mallinson and Blake (1981), Rasul (2018) and Swart (2016), there are three sources of data used in the study across languages, namely (1) the grammar books of the language being researched, (2) examples used by other authors who are recognized for their truth, and (3) native speakers of the language being studied. This research only uses all three of the sources. Data on sound examples of Indonesian were obtained from books and articles written by Marsono (1993), Alwi et al. (2003), Chaer (2009), and Sanjoko (2015). Data on examples of Acehnese sounds were obtained from Durie (1985), Asyik (1987), Wildan (2010), Djunaidi (1996), and Pillai and Yusuf (2012).

Data collection started by field linguistic methods, namely direct elicitation methods and elicitation check (Cortes et al., 2018; Liebenberg, 2019; Mithun, 2001). The direct elicitation method was carried out by collecting language data which began with preparing a list of Indonesian and Acehnese words that corresponded phonemically. Then, interviews with informants were done to check the number of language sounds that were still questionable. This method was the elicitation check. Three out of the four authors of this paper were also native speakers of Acehnese.

Acehnese has four main dialect groups, which are the Greater Aceh dialect, the Pidie dialect, the North Aceh dialect and the West Aceh dialect (Asyik, 1987). Acehnese linguists claim that the standard form of Acehnese is the North Aceh dialect (e.g. Asyik, 1987; Durie, 1985; Hanafiah & Makam, 1984; Sulaiman et al., 1983). This is due to its consistency in language structure and a large number of speakers. Asyik (1987) further explained that this dialect was "phonologically homogeneous" compared to the other dialects in Acehnese, which meant that there was not much variation in the pronunciation from its speakers. The North Aceh dialect is spoken by speakers residing North Aceh and East Aceh. Therefore, for this research, the speakers of the North Aceh dialect were chosen, and the data were taken from those speakers residing in East Aceh with their consent to participate in this research.

The selection of these informants was intended to describe the nature of the language speakers (Bungin, 2007). The selection was not determined by the number of speakers, but more to the quality and abilities of the speakers in mastering Acehnese. The purposive sampling of the informants was based on these criteria: (1) native speakers, (2) between the ages of 20 and 70 years old who acquired Acehnese as their first language and use it widely

with family members and fellow Acehnese (3) physically and mentally healthy (no speech impairment), (4) had consented to participate in this research. Every interview with the speaker lasted for about half an hour and they were recorded, transcribed and extracted for relevant information (Djajasudarma, 2006; Etikan et al., 2016; Suri, 2011).

    a.   Furthermore, the data was analyzed qualitatively through the following steps:

    b.   Registered Indonesian and Acehnese words that have correspondence;

    c.   Identified the phonemes of each Indonesian and Acehnese word for correspondence;

    d.   Determined the corresponding sounds that occurred between two comparable languages.

The orthography of Acehnese presented in this paper follows the conventions proposed by Pillai and Yusuf (2012) and Yusuf and Pillai (2013).

RESULTS AND DISCUSSION

The results showed a number of 19 phonemic correspondences between Indonesian and Acehnese. Each correspondence is explained in the following sub-sections.

Correspondence of /u/ ≈ /ɛə/ -

The correspondence of phoneme /u/ in Indonesian with phoneme /ɛ/ in Acehnese occurs in the final syllable after a consonant, as shown in Table 7. This correlation does not depend on one or two consonants that precede it, but it can happen to many other consonants. The examples in Table 7 shows the consonant that precedes the phoneme /u/ is /j/, /y/, /t/, /l/, /g/, /b/, /p/, /b/, /r/ /k/ and /m/. This kind of correspondence is classified as an incomplete correspondence (Mahsun, 1995) because not all words ending in the phoneme /u/ in Indonesian turn into the phoneme /ɛ/ in Acehnese. For example, the words *madu* /ma·du/ 'honey' and *ragu* /ra·gu/ 'doubt' in Indonesian remain *madu* /ma·du/ 'honey' and ragu /ra·gu/ 'doubt' in Acehnese. There are some Acehnese who say *ie unoe* /iə·u·noə/ for 'honey', but this word also means 'bee'. However, according to the Acehnese dictionary by Bakar (1985), the word *madu* is 'honey' in Acehnese. In addition, some words end with the phoneme /u/ in Indonesian but in Acehnese, they change into other phonemes, for example, *sapu* /sa·pu/ 'broom' in Indonesian become *sampoh* /sam·poh/ 'broom' respectively.

Table 7

Phonemic correspondence of /u/ (Indonesian) with /ɛə/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	clothes	*baju* /ba·dʒu/	*bajèe* /ba·dʒɛə/
2.	wood	*kayu* /ka·ju/	*kayèe* /ka·jɛə/

Table 7 *(Continued)*

No.	Meaning	Indonesian	Acehnese
3.	stone	*batu* /ba·tu/	*batèe* /ba·tɛə/
4.	fur	*bulu* /bu·lu/	*bulèe* /bu·lɛə/
5.	sago	*sagu* /sa·gu/	*sage* /sa·gɛə/
6.	cane	*tebu* /tə·bu/	*teubèe* /tɯ·bɛə/
7.	grouper fish	*kerapu* /kə·ra·pu/	*kerapèe* /kə·ra·pɛə/
8.	cashew	*jambu* /ʤam·bu/	*jambèe* /ʤam·bɛə/
9.	teacher	*guru* /gu·ru/	*gurèe* /gu·rɛə/
10.	nail	*kuku* /ku·ku/	*ukèe* /u·kɛə/
11.	meet	*temu* /tə·mu/	*teumèe* /tɯ·mɛə/

Correspondence of /u/ ≈ /ɔ/ - K #

The correspondence of phoneme /u/ in Indonesian with /ɔ/ in Acehnese occurs in the final syllable after a consonant, as shown in Table 8.

Examples in Table 8 show consonants that precedes the phoneme /u/, they are /ŋ/, /k/, /m/, /b/, /j/, and /n/. The consonant following the phoneme /ɔ/ in Acehnese is mostly the same as the consonant following the phoneme /u/ in Indonesian, except for Indonesian words ending with /s/, as in *hangus* /ha·ŋus/ 'scorched' in Indonesian becomes *angoh* /a·ŋɔh/ 'scorched' in Acehnese. This is perhaps because Acehnese does not have the sound /s/ in its sound system (Asyik, 1987; Durie, 1985). The phoneme /u/ with phoneme /ɔ/ correspondence is not perfect, meaning that not all words ending in vowel /u/ in Indonesian correspond to the phoneme /ɔ/ in Acehnese because there is also correspondence to the phoneme /ɔ/, which is explained in the next sub-section.

Table 8

Phonemic correspondence of /u/ (Indonesian) with /ɔ/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	scorched	*hangus* /ha·ŋus/	*angoh* /a·ŋɔh/
2.	bowl	*mangkuk* /maŋ·kuʔ/	*mangkok* /maŋ·kɔʔ/
3.	mosquito	*nyamuk* /ŋa·muʔ/	*nyamok* /ŋa·mɔʔ/
4.	grow	*tumbuh* /tum·buh/	*timoh* /ti·mɔh/
5.	point	*tunjuk* /tun·ʤuʔ/	*tunyok* /tu·ŋɔʔ/
6.	crumble	*remuk* /re·muʔ/	*reumok* /rɯ·mɔʔ/

Correspondence of /u/ ≈ /o/ - K #

The correspondence of phoneme /u/ in Indonesian with /o/ in Acehnese occurs in the final syllable after the consonants as seen in Table 9.

Table 9 shows the phonemic correspondence of /u/ in Indonesian to /o/ in Acehnese. The consonants that follow the phoneme /o/ in Acehnese is generally the same as the consonants following

the phoneme /u/ in Indonesian, except in Indonesian words, they end with /r/, i.e. the disappearance of this final consonant is as seen in *kendur* /ken·dur/ 'loose, slack' to *keundo* /kɯn·do/ 'loose, slack'. The correspondence of sound /u/ with sound /o/ is not perfect, meaning that not all words ending in vowel /u/ in Indonesian correspond to the sound /o/ in Acehnese.

Table 9

Phoneme correspondence of /u/ (Indonesian) with /o/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	loose	*kendur* /ken·dur/	*keundô* /kɯn·do/
2.	pass	*lulus* /lu·lus/	*lulôh* /lu·loh/
3.	break (off)	*putus* /pu·tus/	*putôh* /pu·toh/
4.	cardboard	*kardus* /kar·dus/	*kardôh* /kar·doh/
5,	nose	*hidung* /hi·duŋ/	*idông* /i·doŋ/
6.	law	*hukum* /hu·kum/	*hukôm* /hu·kom/
7.	heart	*jantung* /dʒan·tuŋ/	*jantông* /dʒan·toŋ/
8.	sea	*laut* /la·ut/	*laôt* /la·ot/
9.	shoulder	*bahu* /ba·hu/	*bahô* /ba·ho/
10.	ten	*sepuluh* /se·pu·luh/	*siplôh* /sip·loh/
11.	receding	*surut* /su·rut/	*surôt* /su·rot/
12.	door	*pintu* /pin·tu/	*pintô* /pin·to/
14.	fart	*kentut* /ken·tut/	*geuntôt* /gɯn·tot/
15.	rib	*rusuk* /ru·suʔ/	*rusôk* /ru·soʔ/

Correspondence of /a/ ≈ /o/ - K

The correspondence of phoneme /a/ in Indonesian with phoneme /o/ in Acehnese occurs in the final syllable after the consonant, as seen in Table 10.

Table 10 shows the consonant that precedes the phoneme /a/, they are /n/ and /m/. The consonants that follow is /h/. The phoneme /a/ and phoneme /o/ correspondence are not perfect because not all words ending in the vowel /a/ in Indonesian turn into /o/ in Acehnese, for example *malam* /ma·lam/ 'night' in Indonesian and *malam* /ma·lam/ 'night' in Acehnese, respectively. In addition, there are also words that end with the phoneme /a/ in Indonesian, but in Acehnese, these words are different words, for example the word *tertawa* /ter·ta·wa/ 'laugh' in Indonesian is *khem* /kɛm/ 'laugh' in Acehnese.

Correspondence /a/ ≈ /ɯ/ / - K

The correspondence of phoneme /a/ in Indonesian with phoneme /ɯ/ in Acehnese occurs in the ultima or final syllable after the consonant as shown in Table 11.

The examples in Table 11 show consonants that precedes the phoneme /a/, such as /dʒ/, /t/, /n/, /p/, /r/, /h/, /y/, and /m/. Consonants following the phoneme /ɯ/ in Acehnese are mostly the same as consonants following the phoneme /a/ in Indonesian,

Table 10

Phoneme correspondence of /a/ (Indonesian) with /o/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	soil	*tanah* /ta·nah/	*tanoh* /ta·noh/
2.	home	*rumah* /ru·mah/	*rumoh* /ru·moh/
3.	limp, weak	*lemas* /lə·mas/	*leumoh* /lɯ·moh/
4.	pus (wounds)	*nanah* /na·nah/	*nanoh* /na·noh/

Table 11

Phoneme correspondence /a/ (Indonesian) with phoneme /ɯ/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	rain	*hujan* /hu·dʒan/	*ujeun* /u·dʒɯn/
2.	forest	*hutan* /hu·tan/	*uteun* /u·tɯn/
3.	right	*kanan* /ka·nan/	*uneun* /u·nɯn/
4.	board	*papan* /pa·pan/	*papeun* /pa·pɯn/
5,	wonder	*heran* /hɛ·ran/	*hireun* /hi·rɯn/
6.	centipede	*lipan* /li·pan/	*limpeun* /limpɯn/
7.	era	*zaman* /za·man/	*jameun* /dʒa·mɯn/
8.	child	*anak* /a·naʔ/	*aneuk* /a·nɯʔ/
9.	evil	*jahat* /dʒa·hat/	*jeuheut* /dʒɯ·hɯt/
10.	hour	*jam* /dʒam/	*jeum* /dʒɯm/
11.	oil	*minyak* /mi·nyaʔ/	*minyeuk* /mi·nyɯʔ/
12.	areca nut	*pinang* /pi·naŋ/	*peineung* /pi·nɯŋ/
13.	pay	*bayar* /ba·jar/	*bayeu* /ba·jɯ/
14.	giddy	*gamang* /ga·maŋ/	*gameung* /ga·mɯŋ/

except for some words such as *gamang* /ga·maŋ/ 'giddy' in Indonesia that is said *gameung* /ga·mɯŋ/ 'giddy' in Acehnese. The phoneme /a/ that corresponds with /ɯ/ happens not perfectly because not all words ending in vowel /a/ in Indonesian correspond to phoneme /ɯ/ in Acehnese, for example, *makan* /ma·kan/ 'eat' in Indonesian is not *makun* in Acehnese, but it is *pajoh* /pa·dʒoh/ 'eat'.

Correspondence /o/ ≈ /u/ / - # K –

The correspondence of phoneme /o/ in Indonesian with the phoneme /u/ in Acehnese occurs in the penultimate syllable or the initial syllable after the consonant as shown in Table 12.

The examples in Table 12 depict consonants that precedes the phoneme /o/. The phoneme /o/ in Indonesia and phoneme /u/ in Acehnese correspondence are not perfect because not all words beginning with the vowel /o/ in Indonesian correspond to the phoneme /u/ in Acehnese. For example, *bola* /bo·la/ 'ball and *dosa* /dɔ·sa/ 'sin' /sin/ in the Indonesian remains *bola* /bo·la/ 'ball and *desya* /dɛ·ʃa/ 'sin' /sin/ in Acehnese.

Table 12

Phoneme correspondence /o/ (Indonesian) with phoneme /u/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	coffee	*kopi* /ko·pi/	*kupi* /ku·pi/
2.	hat	*topi* /to·pi/	*tupi* /tu·pi/
3.	bread	*roti* /ro·ti/	*ruti* /ru·ti/
4.	jute	*goni* /go·ni/	*guni* /gu·ni/
5.	contest	*lomba* /lom·ba/	*lumba* /lum·ba/
6.	try	*coba* /ʧo·ba/	*cuba* /ʧu·ba/
7.	prayer	*do'a* /do·ã/	*du'a* /du·ã/
8.	tail	*ekor* /ɛ·kor/	*iku* /i·ku/
9.	cheers	*sorak* /so·raʔ/	*surak* /su·raʔ/

Correspondence /i/ ≈ /ɔə/ / -

The correspondence of /i/ in Indonesian sounds with /o/ in Acehnese occurs in the ultima or final syllable after the consonant as shown in Table 13.

The examples in Table 13 show consonants that precedes the phoneme /i/, these consonants are /g/, /l/, /r/, /t/, /k/, /ʤ/ and /m/. The phoneme /i/ in Indonesian corresponds with /ɔe/ in Acehnese is not perfect because not all words ending with /i/ in Indonesian correspond to /ɔe/ in Acehnese. For examples, the word *pergi* /per·gi/ 'go' in Indonesian is not *pergo* in Acehnese, but it is *jak* /ʤak/ 'go'.

Table 13

Phoneme correspondence/i/ (Indonesian) with phoneme /ɔe/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	yeast	*ragi* /ra·gi/	ragoe /ra·gɔə/
2.	aspect, facet, side	*segi* /sə·gi/	sagoe /sag·ɔə/
3.	loss	*rugi* /ru·gi/	rugoe /ru·gɔə/
4.	tooth	*gigi* /gi·gi/	gigoe /gi·gɔə/
5,	buy	*beli* /bə·li/	bloe /blɔə/
6.	chants	*bini* /bi·ni/	binoe /bi·nɔə/
7.	rope	*tali* /ta·li/	taloe /ta·lɔə/
8.	princess	*putri* /put·ri/	putroe /pu·trɔə/
9.	minister	*mentri* /mən·tri/	mentroe /men·trɔə/
10.	alone, ownership	*sendiri* /səndiri/	sidroe /si·drɔə/
11.	replace	ganti /gan·ti/	gantoe /gan·tɔə/
12.	saw	gergaji /gər·ga·ʤi/	gergajoe /gər·ga·ʤɔə/
13.	we	kami /ka·mi/	kamoe /ka·mɔə/
14.	men	laki /la·ki/	lakoe /la·kɔə/

Correspondence /i/ ≈ /e/ / - K

The correspondence of the phoneme /i/ in Indonesian with /e/ in Acehnese occurs in the ultima or final syllables after the consonants as shown in Table 14.

In the examples above, the words are of consonants that precede the phoneme /i/; these consonants are /b/, /d/, /j/, /l/, /p/, /r/, /s/ and /t/. The consonant following the phoneme /e/ in Acehnese is largely similar in form as the consonant following the phoneme /i/ in Indonesian. Hence,

when a word ends with /s/ in Indonesian, it corresponds to /h/ in Acehnese, such as *tipis* 'thin' in Indonesian is *lipèh* 'thin' in Acehnese. The phoneme /i/ in Indonesian correspondence with the phoneme /e/ in Acehnese occurs not perfectly, meaning that not all words ending with /i/ in Indonesian correspond to phoneme /e/ in Acehnese. For example, *bersih* /ber·sih/ 'clean' in Indonesian is not *berseh* in Acehnese, but its *glèh* /gleh/ 'clean'.

Table 14

Phoneme correspondence/i/ (Indonesian) with phoneme /e/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	out	*habis* /ha·bis/	*abèh* /a·beh/
2.	love	*kasih* /ka·sih/	*gasèh* /ga·seh/
3.	skin	*kulit* /ku·lit/	*kulèt* /ku·let/
4.	scabies	*kudis* /ku·dis/	*kudèe* /ku·deə/
5.	*lupis* 'traditional cake'	*lupis* /lu·pis/	*lupèh* /lu·peh/
6.	sore	*pedih* /pe·dih/	*peudèh* /pɯ·deh/
7.	sad	*sedih* /se·dih/	*seudèh* /sɯ·deh/
8.	pull	*tarik* /ta·riʔ/	*tarèk* /ta·reʔ/
9.	thin	*tipis* /ti·pis/	*lipèh* /li·peh/
10.	required	*wajib* /wa·dʒib/	*wajèb* /wa·dʒeb/

Correspondence /ɛ/ ≈ /i/ / # K –

The correspondence of phoneme /ɛ/ in Indonesian with /i/ in Acehnese occurs in the penultimate syllable or the initial syllable after the consonant, as shown in Table 15.

Table 15 portrays that correspondence does not depend on the phoneme that precedes it. In Table 15, it is shown that the sound of /ɛ/ in Indonesian is followed by /b/, /h/, /p/, /m/, /s/, and /t/. The phoneme that

follows the phoneme /i/ in Acehnese is the same as the phoneme following phoneme /ɛ/ in Indonesian. The correspondence of phoneme /ɛ/ with phoneme /i/ is not perfect, meaning that not every word with /ɛ/ in Indonesian corresponds to phoneme /i/ in Acehnese. For example, the word *lebar* /lɛ·bar/ 'width' in Indonesian is not *liba*r in Acehnese, but rather *luwah* /lu·wah/.

Table 15

Phoneme correspondence /ɛ/ (Indonesian) with phoneme /i/(Acehnesian)

No.	Meaning	Indonesian	Acehnese
1.	different	*beda* /bɛ·da/	*bida* /bi·da/
2.	defend	*bela* /bɛ·la/	*bila* /bi·la/
3.	saving, sparing	*hemat* /hɛ·mat/	*himat* /hi·mat/
4.	silver	*perak* /pɛ·raʔ/	*pirak* /pi·raʔ/
5.	football	*sepak* /sɛ·paʔ/	*sipak* /si·paʔ/
6.	askew	*serong* /sɛ·rɔŋ/	*sirong* /si·rɔŋ/
7.	shoot	*tembak* /tɛm·baʔ/	*timbaʔ* /tim·bak/
8.	red	*mɛrah* /me·rah/	*mirah* /mi·rah/

Correspondence /ə/ ≈ /Ø/ / # -

The correspondence of phoneme /ə/ in Indonesian with phoneme removal or /Ø/ in Acehnese occurs in the penultimate syllable or the initial syllable after the consonant as shown in the Table 16.

Table 16 portrays examples that correspondence, in this case, does not depend on the phoneme that precedes it. In the above examples, the consonants that precede the phoneme /ə/ in Indonesian are /b/, /c/, /g/, /p/, /s/ and /t/. The correspondence of phoneme /ə/ in Indonesian with this phoneme removal in Acehnese is not perfect because not all phonemes /ə/ in the initial syllable of Indonesian words correspond to this phoneme removal in Acehnese. For example, the word *benang* /be·naŋ/ 'thread' in Indonesian is not *bneng* in Acehnese, but *beuneung* /bɯ·nɯŋ/ 'thread'. Nevertheless, the consonant that appears following /ə/ is the one that determines this removal; it can be said that the occurrence of /l/, /r/ and /g/ in the Indonesian words cause the elimination of /ə/ in Acehnese.

Table 16

Phoneme correspondence /ə/ (Indonesian) with phoneme removal /Ø/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	buy	*beli* /bə·li/	*bloe* /blɔe/
2.	weight	*berat* /bə·rat/	*brat* /brat/
3.	give	*beri* /bə·ri/	*bri* /bri/
4.	divorce	*cerai* /cə·rai/	*crè* /cre/
5.	glass	*gelas* /gə·las/	*glah* /glah/
6.	motion	*gerak* /gə·raʔ/	*grak* /graʔ/
7.	war	*perang* /pə·raŋ	*prang* /praŋ/
8.	stomach	*perut* /pə·rut/	*pruet* /pruət/
9.	soon	*segera* /sə·ge·ra/	*sigra* /si·gra/
10.	bright	*terang* /tə·raŋ/	*trang* /traŋ/

Correspondence /ai/ ≈ /e/ / - #

The correspondence of the phoneme /ai/ in Indonesian with the phoneme /e/ in Acehnese occurs in the ultima syllable or the final syllable after the consonant as shown in Table 17.

In Table 17, it shows that the consonants preceding the diphthong /ai/ are /r/, /d/, /t/, and /p/. The phoneme /ai/ correspondence

the phoneme /e/ is not perfect because not all words ending in /ai/ in Indonesian correspond to phoneme /e/ in Acehnese, for example *kalau* /ka·lau/ 'if' in Indonesian is *miseu* /mi·sɯ/ 'if' in Acehnese. Nevertheless, in the Indonesian oral contemporary or daily language, Indonesia pronounces [ai] sound as [e] sound, i.e. *pandai* /pan·dai/ 'smart' is said as *pandè* /pan·de/.

Table 17

Phoneme correspondence /ai/ (Indonesian) with phoneme /e/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	divorce	*cerai* /ʧə·rai/	*crè* /ʧre/
2.	smart	*pandai* /pan·dai/	*pandè* /pan·de/
3.	beach	*pantai* /pan·tai/	*pantè* /pan·te/
4.	chain	*rantai* /ran·tai/	*rantè* /ran·te/
5.	battery	*baterai* /ba·te·rai/	*batrè* /bat·re/

Correspondence /ai/ ≈ /ɛə/ / - #

The correspondence of phoneme /ai/ in Indonesian with phoneme /ɛə/ in Acehnese occurs in the ultima or final syllable after the consonant. The data is as shown in Table 18.

Table 18 displays the consonants preceding diphthong /ai/, which are /m/, /l/,

and /p/. The correspondence of phoneme /ai/ with sound /ɛə/ occurs not perfectly, meaning that not all words ending in diphthong /ai/ in Indonesian correspond to phoneme /ɛə/ in Acehnese, for example, the work *pintar* /pin·tar/ 'clever' in Indonesian is *carong* /ca·roŋ/ 'clever' in Acehnese.

Table 18

Phoneme correspondence /ai/ (Indonesian) with phoneme /ɛə/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	crowded	*ramai* /ra·mai/	*ramée* /ra·mɛə/
2.	hall	*balai* /ba·lai/	*balée* /ba·lɛə/
3.	curry	*gulai* /gu·lai/	*gulée* /gu·lɛə/
4.	lax	*lalai* /la·lai/	*lalée* /la·lɛə/
5.	trunk	*belalai* /bə·la·lai/	*beulalée* /bə·la·lɛə/
6.	storm	*badai* /ba·dai/	*badée* /ba·dɛə/
7.	shop	*kedai* /kə·dai/	*keudée* /kɯ·dɛə/
8.	squirrel	*tupai* /tu·pai/	*tupée* /tu·pɛə/

Correspondence /ai/ ≈ /oə/ / - #

The correspondence of the phoneme /ai/ in Indonesian with the phoneme /oə/ in Acehnese occurs in the ultima syllable or the final syllable after the consonant as shown in Table 19.

Table 19 only shows four consonants preceding the diphthong /ai/, they are /g/, /l/, /p/ and /s/. The phoneme /ai/ phoneme /oə/ correspondence is not perfect because not all words ending in diphthongs /ai/ in Indonesian correspond to the phoneme /oə/ in Acehnese, for examples *pakai* /pa·kai/ 'to wear' in Indonesian is *sôk* /sok/ 'to wear' in Acehnese, and *rantai* /ran·tai/ 'chain' in Indonesian is *rantée* /ran·tɛə/ 'chain' in Acehnese.

Table 19

Phoneme correspondence /ai/ (Indonesian) with phoneme /oə/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	palace	*mahligai* /mah·li·gai/	*meuligoe* /mɯ·li·goə/
2.	like	*bagai* /ba·gai/	*bagoe* /ba·goə/
3.	lax	*lalai* /la·lai/	*laloe* /la·loə/
4.	arrived	*sampai* /sam·pai/	*sampoe* /sam·poə/
5.	finish	*sələsai* /sə·lə·sai	*sələsoe* / sə·lə·soə /

Correspondence /al/ ≈ /ai/ / - #

The correspondence of sound /al/ in Indonesian with sound /ai/ in Acehnese occurs in the ultima syllable or syllable after the consonant as shown in Table 20.

Table 20 shows the consonants preceding the phoneme /al/, which are /t/, /b/, /p/, and /k/. The phoneme /al/ and phoneme /ai/ correspondence is not perfect because not all words ending with ending /al/ in Indonesian correspond to diphthong /ai/ in Acehnese. For example, the word *sebal* /se·bal/ 'irritated' in Indonesian is not *sebai* in Acehnese, but it is *palak* /pa·laʔ/ 'irritated'.

Table 20

Phoneme correspondence /al/ (Indonesian) with phoneme /ai/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	pillow	*bantal* /ban·tal/	*bantai* /ban·tai/
2.	itchy	*gatal* /ga·tal/	*gatai* /ga·tai/
3.	thick	*tebal* /tə·bal/	*teubai* /tɯ·bai/
4.	immune	*kebal* /kə·bal/	*keubai* /kɯ·bai/
5.	ship	*kapal* /ka·pal/	*kapai* /ka·pai/

Table 20 *(Continued)*

No.	Meaning	Indonesian	Acehnese
6.	thick	*hafal* /ha·fal/	*hapai* /ha·pai/
7.	memorized span	*jengkal* /ʤəŋ·kal/	*jengkai* /ʤəŋ·kai/

Correspondence /aŋ/ ≈ /ɯŋ/ / # K –

The correspondence of phoneme /aŋ/ in Indonesian with phoneme /ɯŋ/ in Acehnese occurs in the ultima syllable or final syllable after the consonant as seen in Table 21.

Table 21 shows that the consonants preceding the phoneme /aŋ/ are /r/, /s/. The correspondence of sound /aŋ/ in Indonesian with sound /ɯŋ/ is not perfect because not all words ending with ending /aŋ/ in Indonesian correspond to /ɯŋ/ in Acehnese. For example, the word *perang* /pe·raŋ/ 'war' in Indonesian is not *pereung* in Acehnese, but it is *prang* /praŋ/ 'war'.

Table 21

Phoneme correspondence /s/ (Indonesian) with phoneme /h/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	satisfaction	*puas* /pu·as/	puah, pueh /pu·ah/, /pu·əh/
2.	fan	*kipas* /ki·pas/	*kipah* /ki·pah/
3.	breathe	*nafas* /na·fas/	*napah* /na·pah/
4.	reply, response	*balas* /ba·las/	*balah* /ba·lah/
5.	glass	*gelas* /gə·las/	*glah* /glah/
6.	terrace	*teras* /te·ras/	*térah* /tɛ·rah/
7.	paper	*kertas* /kər·tas/	*kertah* /kər·tah/
8.	numb	*kebas* /kə·bas/	*keubôh* /kɯ·bôh/
9.	thin	*tipis* /ti·pis/	*lipèh* /li·peh/
10.	mouse	*tikus* /ti·kus/	*tikoh* /ti·koh/
11.	fare	*ongkos* /ɔng·kɔs/	*ongkoh* /ɔŋ·kɔh/
12.	finish, okay	*bɛrɛs* /be·res/	*béréh* /bɛ·rɛh/

Correspondence /s/ ≈ /h/ / # K –

The correspondence of phoneme /s/ in Indonesian with phoneme /h/ in Acehnese occurs in the ultima syllable or final syllable after the consonant as seen in Table 22.

Table 22 illustrates that the consonants that precedes the phoneme /s/, they are phonemes /a/, /o/, /e/, and /ɛ/. The correspondence of sound /s/ with sound /h/ occurs perfectly, that is, all words ending in consonant /s/ in Indonesian correspond to consonant /h/ in Acehnese. Moreover, the Acehnese consonants do not have the sound /s/, /f/ and /z/ (Asyik, 1987).

Correspondence /k/ ≈ /g/ / # -

The correspondence of /k/ in Indonesian with /g/ in Acehnese occurs in the penultimate or Λearly syllable silos before vowels as shown in Table 23.

Table 22

Phoneme correspondence /s/ (Indonesian) with phoneme /h/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	satisfaction	*puas* /pu·as/	puah, pueh /pu·ah/, /pu·əh/
2.	fan	*kipas* /ki·pas/	*kipah* /ki·pah/
3.	breathe	*nafas* /na·fas/	*napah* /na·pah/
4.	reply, response	*balas* /ba·las/	*balah* /ba·lah/
5.	glass	*gelas* /gə·las/	*glah* /glah/
6.	terrace	*teras* /te·ras/	*térah* /tɛ·rah/
7.	paper	*kertas* /kər·tas/	*kertah* /kər·tah/
8.	numb	*kebas* /kə·bas/	*keubôh* /kɯ·bôh/
9.	thin	*tipis* /ti·pis/	*lipèh* /li·peh/
10.	mouse	*tikus* /ti·kus/	*tikoh* /ti·koh/
11.	fare	*ongkos* /ɔng·kɔs/	*ongkoh* /ɔŋ·kɔh/
12.	finish, okay	*bɛrɛs* /be·res/	*béréh* /bɛ·rɛh/

Table 23 shows that the vowels that follow the sound /k/ are the phonemes /a/, /ɯ/, and /u/. The correspondence of sound /k/ with sound /g/ occurs not perfectly because not all phonemes /k/ at the beginning of a word in Indonesia correspond to sound /g/ in Acehnese, for example, the word *kambing* /kam·biŋ/ 'goat' Indonesian is not *gambing* in Acehnese but *kameng* /ka·mɛŋ/ 'goat'.

Table 23

Phoneme correspondence /k/ (Indonesian) with phoneme /g/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	glass	*kaca* /ka·ʧa/	*gaca* /ga·ʧa/
2.	feet	*kaki* /ka·ki/	*gaki* /ga·ki/
3.	village	*kampung* /kam·puŋ/	*gampong* /gam·pɔŋ/
4.	cotton	*kapas* /ka·pas/	*gapeuh* /ga·pɯh/
5,	chalk	*kapur* /ka·pur/	*gapu* /ga·pu/
6.	potato	*kentang* /ken·taŋ/	*gantang* /gan·taŋ/
7.	fart	*kentut* /ken·tut/	*geuntôt* /gɯn·tʌt
8.	armpit	*ketiak* /ke·ti·aʔ/	*geutiʔ* /gɯ·tiʔ/
9.	horse	*kuda* /ku·da/	*guda* /gu·da/
10.	nail	*kuku* /ku·ku/	*gukée* /gu·kɛə/

Correspondence /h/ ≈ /Ø/ / # -

The correspondence of sounds /h/ in Indonesian with /Ø/ in Acehnese occurs in the penultimate or early syllabic syllables before the vowels as shown in Table 24.

Table 24

Phoneme correspondence /h/ (Indonesian) with phoneme removal /Ø/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	out	*habis* /ha·bis/	*abèh* /a·beh/
2.	scorched	*hangus* /ha·ŋus/	*angoh* /a·ŋoh/
3.	day	*hari* /ha·ri/	*uroe* /u·rɔə/
4.	life	*hidup* /hi·dup/	*udèp* /u·dep/
5.	black	*hitam* /hi·tam/	*itam* /i·tam/
6.	rain	*hujan* /hu·dʒan/	*ujeun* /u·jun/
7.	destroyed	*hancur* /han·tʃur/	*anco* /an·tʃo/
8.	memorize	*hafal* /ha·fal/	*aphai* /a·phai/

Table 24 presents vowels that follow the sound /h/ and they are phoneme /a/, /i/, and /u/. The correspondence of sound /h/ with sound disappearance /Ø/ occurs perfectly, that is, all words beginning with consonant /h/ in Indonesian correspond to the phoneme removal /Ø/ in Acehnese.

Correspondence /r/ ≈ /Ø/ / -

The correspondence of /r/ in Indonesian with /Ø/ in Acehnese occurs in the ultima or final syllable after the vowel as seen in Table 25.

Table 25 shows the vowels that precede the sound /r/, which are phonemes /o/, /a/, /ɔ/, /e/, /u/, and /ɛə/. The phonemic correspondence /r/ with the with phoneme removal /Ø/ occurs perfectly because all words ending with the sound /r/ in Indonesian correspond to its sound disappearance /Ø/ in Acehnese.

The aforesaid phonemic correspondence between Acehnese and Indonesian languages supports the research results of Istiqamah (2017), which revealed that Acehnese and Malay (i.e. Indonesian) are two languages that have a kinship. She mentioned that out of 100 vocabularies from the Swadesh list, 48% of the words are closely related. The Acehnese and Malay (Indonesian) languages were separated about 1,650 years ago or since 367M. Based on this level of kinship (48%), there is a great possibility of lexical borrowing between both languages.

Table 25

Phoneme correspondence /r/ (Indonesian) with phoneme removal /Ø/ (Acehnese)

No.	Meaning	Indonesian	Acehnese
1.	dirty	*kotor* /kɔ·tɔr/	*kuto* /ku·tə/
2.	rotate	*putar* /pu·tar/	*puta* /pu·ta/
3.	say	*tutur* /tu·tur/	*tuto* /tu·to/
4.	leaked	*bocor* /bɔ·tʃɔr/	*buco* /bu·tʃɔ/
5.	destroyed	*hancur* /han·tʃur/	*anco* /an·tʃo/
6.	slack	*kendur* /kən·dur/	*keundo* /kɯn·do/
7.	sarcastic	*sindir* /sin·dir/	*sindè* /sin·de/
8.	patient	*sabar* /sa·bar/	*saba* /sa·ba/

Table 25 *(Continued)*

No.	Meaning	Indonesian	Acehnese
9.	lip	*bibir* /bi·bir/	*bibè* /bi·be/
10.	tomb	*kubur* /ku·bur/	*kubu* /ku·bu/
11.	carve	*ukir* /u·kir/	*ukée* /u·kɛə/
12.	kafir	*kafir* /ka·fir/	*kafè* /ka·fe/
13.	chalk	*kapur* /ka·pur/	*gapu* /ga·pu/

CONCLUSION

To conclude, there are 19 forms of phonemic correspondences in Indonesian with Acehnese. From these 19 forms, there are three perfect correspondences and they are s ≈ h, h ≈ ø, and r ≈ ø. Meanwhile, the others are not perfect correspondences and they are u ≈ ɛə, u ≈ ɔ, u ≈ o, a ≈ o, a ≈ ɯ, o ≈ u, i ≈ ɔə, i ≈ e, ɛ ≈ i, ə ≈ ø, ai ≈ e, ai ≈ ɛə, ai ≈ o, al ≈ ay, aŋ≈ ɯŋ and k ≈ g. The results further reveal that the vowel correspondences of Indonesian with Acehnese occur at the beginning, middle, and end of vowels as well as the initial and final consonants. Consequently, the findings on the Indonesian phonemic correspondence with Acehnese can be used as a reference for further research on other linguistic relations between Indonesian and Acehnese, and even alternative learning materials for Acehnese speakers who study Indonesian or vice versa.

Although the aim of this research has been accomplished; this research was not without shortcomings. This present research only focused on the vowel correspondences of Indonesian with Acehnese. Meanwhile, Indonesia is a super diverse country comprising many ethnic societies and languages. For that reason, future research studies are recommended to conduct more analysis on other vowel correspondences that may occur among the languages spoken in this country. Linguists are also able to investigate how the sound relation between languages can reveal the language history of the speakers.

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The Investigation of Flipped Classrooms on Students' Speaking Performance and Self-regulated Learning

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ABSTRACT

Over the years, few studies have investigated the implementation of flipped classrooms focusing on students' speaking performance and self-regulated learning (SRL). However, none of these studies was carried out using rich statistical and qualitative data to study both variables at the same time. This study, therefore, aims to (1) examine the effects of flipped classrooms with various technology tools on students' speaking performance and SRL and (2) explore how students develop their SRL during the implementation process. The explanatory sequential mixed-method approach was used to obtain data from 53 tenth grade students, with 27 in the experimental group and 26 in the control group by employing a quasi-experimental design and an interview method. The result showed that the students taught by flipped classrooms had better speaking and SRL scores than their counterparts in the control group. In addition, the students developed their SRL through three phases, namely *forethought*, *performance-control*, and *self-reflection*, with four possible implications for English Language Teaching.

Keywords: Flipped classrooms, flipped classrooms in speaking, self-regulated learning, speaking performance

INTRODUCTION

The advent of technology has made it possible to implement flipped classrooms in English Language Teaching (ELT) field, including in teaching speaking skills. Technology is believed to support foreign language learning (Golonka et al., 2014) as it provides various platforms that support

learning and more time to do interactive activities during class time (Bowles et al., 2015). Along with the success of Bergmann and Sams' (2012) study as the pioneer, the implementations of flipped classrooms have been proliferating. Thus, flipped classrooms are one of the relevant topics to be discussed.

Flipped Classrooms

Flipped classrooms are the recent instructional approach where the teacher creates teaching presentations or materials to be reviewed before coming to class, and Face-to-face (F2F) time is used for collaborative activities to improve students' mastery of the materials (Mehring & Leis, 2018). Reviewing material activities in flipped classrooms promotes the opportunity for the students to view and reread the content (Yeo, 2018). Accordingly, Yeo (2018) claimed that students would be more confident when coming to class and ready to do further activities to explore the content. With that being said, flipped classrooms are the instructional approach that might fit with the current education system that values a student-centered approach.

The adaptation of technology has made it possible to implement flipped classrooms to be more innovative and interactive than the earlier version of this approach (Mehring & Leis, 2018). The initial flipped classrooms implementation required teachers to record their presentations as modeled by Bergmann and Sams (2012). Up to the present time, flipped classrooms' materials have evolved and not limited to sitcom videos (Hung, 2017), *TED-ed* (Adnan, 2017; Hung,

2018), and books (Lockwood, 2014). These materials are also supported by other technology tools such as *Telegram* (Adnan, 2017; Amiryousefi, 2019), *Line* (Hsieh et al., 2017) and *Facebook* (Lin & Hwang, 2018). Accordingly, flipped classrooms have evolved into a technology-based instructional approach.

Even though flipped classrooms have been proliferating in ELT, little attention is given to its implementation in teaching speaking skills (Amiryousefi, 2019), leading to more opportunity for investigations. To date, only a few studies have devoted efforts to seek the effects of flipped classrooms on speaking (Hung, 2017; Köroglu, & Çakir, 2017; Lin & Hwang, 2018). Hung (2017) researched the implementation of flipped classrooms in a university in Taiwan in his experimental study, recruiting 43 students to seek the effect of this approach on students' oral performance. By employing an *independent t-test*, Hung then reported that students in the experimental group had better oral performance than their counterparts in the control group. In the same vein, Köroglu and Çakir (2017) recruited 58 students to seek the effect of flipped classrooms on speaking performance. They implemented *Mann-Whitney U* analysis and reported that the students in the experimental group outperformed the students in the control group. Later on, Lin and Hwang (2018) researched 33 students in the experimental group and 16 in the control group to examine the effect of flipped classrooms on students' speaking performance. Using *one-way ANCOVA* analysis, they reported that

students outperformed their counterparts in the control group in speaking performance. Even though Lin and Hwang argued that flipped classrooms help students to be more responsible for their learning, these previous studies gave no attention to investigate students' self-regulated learning.

Self-regulated Learning

The responsibility of one's own learning is often referred to as Self-regulated Learning (SRL), which is defined as the degree to which students are active and responsible for their own learning process (Zimmerman, 2008). In line with this statement, Nilson (2013) added SRL as a total involvement of multiple parts of the brain that were not cognitive. SRL is long believed to be guided by three aspects, such as metacognition, strategic action, and motivation to learn (Perry et al., 2006; Zimmerman, 2001). In earlier years of SRL discussions, Zimmerman (1998) proposed three phases of SRL that involved *forethought* (the strategic processes before the learning process happens), *performance control* (the strategic processes to monitor learning during the learning process), and *self-reflection* (the strategic processes to evaluate the outcomes after the learning process). Moreover, there are some concerns regarding the development of self-regulated learning. For instance, early ages are the best time to develop SRL (Butler, 2018; Carlson et al., 2013), dual-language students have more possibility of having better SRL than monolingual learners (Schmitt et al., 2015), and as students grow older, they will focus

more on their goals, and it will be a great source of developing SRL (Butler, 2018). Thus, these discussions shed some light on the literature of SRL, especially leading to its connection to language learning.

SRL is becoming more important and believed to be one of the affective factors of students' academic success in learning (Zimmerman, 2008). Some researchers have put efforts to research students' SRL in ELT, including its relation to learning speaking skills. For instance, Aregu (2013) researched 91 Ethiopian university students in regard to their self-efficacy and speaking performance. In this research, Aregu found that SRL could improve students' self-efficacy and oral performance. In the same vein, El-Sakka (2016) did an experimental study to research 40 Egyptian university students and found self-regulated strategies improved students' speaking performance and reduced anxiety. These findings, of course, strengthen the notion that SRL is vital for students' academic success, including learning speaking skills.

On the other hand, a growing body of studies has investigated the implementation of flipped classrooms regarding the students' SRL. Perhaps, the conversation was started by Shyr and Chen (2016) who researched the implementation of what they called as *Flip2learn* on students' SRL by conducting an experimental study. They recruited 81 sophomore students in Taiwan to obtain the data and performed *ANOVA* analysis which revealed that flipped classrooms could improve students' SRL. Moos and Bonde (2016) continued the conversation by doing

an experimental study and recruited 32 pre-service teachers to collect the data and performed *ANOVA* analysis to reveal that flipped classrooms affect students to perform more self-regulated processes. On the other hand, Wang and Zhu (2019) showed different results. They researched 36 and 37 students in two different groups to research the implementation of Massive Open Online Course-based flipped classrooms on students' SRL. They performed *ANCOVA* analysis and found that there was no statistical difference in students' SRL in both groups.

The above studies have shed some light on the effects of flipped classrooms, and it leads to the notion that flipped classrooms affect students' speaking performance and SRL. However, how flipped classrooms with various technology tools affect students' speaking performance and SRL, altogether remains unclear. Also, how flipped classrooms help to improve students' SRL in speaking classes is unknown. Thus, there is a lack of literature because the previous studies only examined those two variables separately and gave very little attention to how flipped classrooms influenced students' SRL. Such information is, of course, necessary for teachers to embrace the implementation of flipped classrooms with various technology tools when teaching speaking skills. These gaps, therefore, prompted this study to conduct this research.

This study, therefore, aims to (1) examine the effects of flipped classrooms with various technology tools on students' speaking performance and SRL and (2) explore in-depth how flipped classrooms influence students' SRL. This study employed an explanatory sequential mixed-method approach by involving 53 tenth grade students of one public high school in Indonesia to obtain the data. Furthermore, the findings in this study are expected to contribute to the literature on the implementation of flipped classrooms in teaching speaking. Thus, to guide the investigation, this study posed the following research questions:

1. Is there any effect of flipped classrooms with various technology tools on students' speaking performance and self-regulated learning?
2. How do flipped classrooms influence students' self-regulated learning?

METHODS

Research Design

This study used an explanatory sequential mixed-method approach to investigate the implementation of flipped classrooms in teaching speaking skills. This approach requires the researcher to collect quantitative data, and the results are used to inform the qualitative data collection (Creswell & Creswell, 2018). This study then combined quantitative and qualitative methods to guide the research procedure, data collection, and analysis. Such an approach was implemented since the purposes of this study were (1) to examine the effects of flipped classrooms

with various technology tools on students' speaking performance and SRL and (2) to explore how flipped classrooms influence students' SRL. Notably, to achieve the purposes, this study employed a quasi-experiment (by employing an alternative treatment posttest-only with nonequivalent groups design) and interview methods respectively. Furthermore, there were three variables investigated such as the implementation of flipped classrooms (independent variable), students' speaking performance (dependent variable), and SRL (dependent variable).

Participants

This study sampled 53 tenth grade high school students in Indonesia using intact group sampling. This school was selected following the recommendation of a superintendent to use this research site since the students are familiar with technology-based learning. Those 53 students were from two different classes in which a class of 27 students was used as the experimental group, and a class of 26 students was used as a control group. Furthermore, this study employed a purposive sampling technique to select six willing participants in the experimental class to participate in semi-structured interviews to explore their SRL.

Procedure, Data Collection, and Instrumentation

This study was started by conducting the experiment for eight weeks where the last week was used to administer a posttest (see Figure 1). In each week for seven

weeks, the students spent approximately 60 minutes for reviewing materials, 90 minutes for classroom activities, and five days to practice with peers, recording videos, uploading videos, watching other's videos, and giving comments. Both experimental and control groups studied the same content but with different approaches and activities (see Table 1). In the eighth week, each student from both groups spent five to ten minutes to take the post speaking test. The experimental group received a flipped classroom approach by using *Schoology* as the media of information-sharing and communication. This approach required the students to review online materials (*Youtube* videos and websites) prior to coming to the classroom. A discussion in *Schoology* was conducted in every meeting to make sure the students reviewed the materials. Then, F2F time was used for collaborative activities such as discussions, composing dialogues, and practicing conversations. Once they had finished those activities, they were told to practice again with their peers, record their performances, and uploaded their performance on *Flipgrid* (see Figure 2), and the teacher gave the reviews of their performances (see Figure 3). Meanwhile, the students in the control group were given a conventional teaching approach where teaching and learning happened in the classroom only.

In regard to the posttest, a modified IELTS speaking test topics, a scoring rubric developed by Amiryousefi (2019), and an SRL questionnaire were administered. Then, semi-structured interviews were

conducted with six participants to explore the students' SRL after the implementation of flipped classrooms. These interviews were conducted over one month in which each participant was interviewed twice, and each session lasted for 30 minutes. The interviews were guided by an interview guide that consisted of questions about students' experience involving *forethought*, *performance-control*, and *self-reflection*.

Table 1

Treatments for the experimental group

Meetings	Materials	Treatment & Class Activities
1st meeting	Showing Intention	Students review the materials before class Teacher and students discuss the materials Students practice language expressions with peers
2nd meeting	Showing Intention	Students review the materials before class Teacher and students discuss the materials Students do peer work to create a conversation Students practice with their peers Students record their conversation
3rd meeting	Showing Intention	Teacher and students gave comments online before the class starts Teacher and students discuss the videos Practicing the conversation again based on the comments given and recorded new videos
4th meeting	Correlative Conjunction	Students review the materials before class Teacher and students discuss the materials Students practice language expressions with peers
5th meeting	Correlative Conjunction	Students review the materials before class Teacher and students discuss the materials Students do peer work to create a conversation Students practice with their peers Students record their conversation
6th meeting	Correlative Conjunction	Teacher and students gave comments online before the class starts Teacher and students discuss the videos Practicing the conversation again based on the comments given and recorded new videos
7th meeting	Correlative Conjunction	Teacher and students discuss the students' revised videos Students practice the conversation again based on the comments given and recorded final videos

Figure 1. Diagram of the experimental design

Data Analysis

The data in this study were analyzed quantitatively and qualitatively. The quantitative data were analyzed using descriptive statistics to examine the variability of each group. Then, *One-way MANOVA* analysis was performed to test the hypotheses proposed in this study. On the other hand, the qualitative data derived from interviews were transcribed in English and were analyzed using content analysis technique. According to Krippendorff (2004), content analysis is a qualitative technique for making valid inferences from texts. Through the implementation of this analysis technique, the contents about students' SRL from the transcriptions were analyzed using *in vivo* coding by placing the actual spoken words of the participants which supported the three categories (*forethought*, *performance-control*, and *self-reflection* phases) determined in this study. Then, the results of the analysis were presented descriptively.

Figure 2. Students' recorded speaking videos
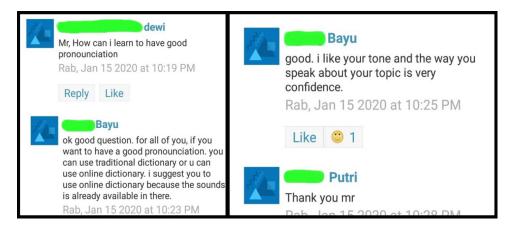
Figure 3. Teacher's comments on students' recorded videos

RESULTS

The Effects of Flipped Classrooms on Students' Speaking Performance and SRL (Quantitative Analysis)

The data collected from posttest were analyzed descriptively prior to performing hypothesis testing. Table 2 shows that the experimental group's variabilities of speaking performance are *Mean*= 83.333, *SD*= 10.160, and *Var*= 103.231. Meanwhile, the control group's variabilities of speaking performance are *Mean*= 68.885, *SD*= 8.955, and *Var*= 80.186. Table 2 also shows that the experimental group's variability of SRL are *Mean*= 115.260, *SD*= 12.446, and *Var*= 154.892. On the contrary, control group's variability of SRL are *Mean*= 103.192, *SD*= 14.114, and *Var*= 199.202.

The data analysis was continued into hypothesis testing since the data have passed the tests of assumptions such as normality, homogeneity, and collinearity. Then, *One-way MANOVA* was performed due to performing hypothesis testing with one independent and two dependent variables. Table 3 shows that $F (2, 50) = 15.318$, $p < 0.001$, *Wilk's* $Ù= 0.620$, $h_p^2= 0.990$. There were significant differences in the results of both experimental and control groups on speaking performance and SRL. The $h_p^2=0.990$ indicates that approximately 99% of the multivariate variance of speaking performance and SRL was associated with the treatments.

Since *one-way MANOVA* analysis had shown statistically significant results, the

Table 2

Variabilities of students' speaking performance and SRL

Variables	Groups	Mean	SD	Var
Speaking Performance	Experiment	83.333	10.160	103.231
	Control	68.885	8.955	80.186
SRL	Experiment	115.260	12.446	154.892
	Control	103.192	14.114	199.202

Table 3

One-way MANOVA tests' results

Tests	Value	F	df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.380	15.318	2	50	0.000	0.990
Wilks' Lambda	0.620	15.318	2	50	0.000	0.990
Hotelling's Trace	0.613	15.318	2	50	0.000	0.990
Roy's Largest Root	0.613	15.318	2	50	0.000	0.990

examination of univariate ANOVA results was performed. Table 4 shows that students' speaking performance of both groups were statistically different where $F (1, 51) = 30.078$, $p < 0.001$, $h_p^2 = 0.371$. In addition, there was also a statistically significant difference on students' SRL of both groups where $F (1, 51) = 10.920$, $p < 0.002$, $h_p^2 = 0.176$. Looking at the mean scores (Table 2), students taught by flipped classrooms had better speaking performance and SRL than their counterparts in the control group.

Even though the above statistical results have shown the effects of flipped classrooms on students speaking performance and SRL, however, how flipped classrooms helped the students to develop their SRL remained unclear. Thus, a sequential approach was then implemented to explore the roles that flipped classrooms played to influence the students in developing their SRL.

The Influences of Flipped Classrooms to Students' SRL (Qualitative Analysis)

The data from interviews were qualitatively analyzed to give an in-depth understanding of how flipped classrooms influence students' SRL. During the implementation of flipped classrooms, the students were asked to review the materials prior to coming to class. Even though the students described their reviews differently, their

Table 4

Univariate ANOVA tests' results

Variables	F	df	Error df	Sig.	Partial Eta Squared
Speaking performance	30.078	1	51	0.000	0.371
SRL	10.920	1	51	0.002	0.176

comments indicated they agreed that reviewing classroom materials before coming to school benefited them, especially in preparing them to understand discussions about the topic. One student said, "through flipped classrooms, I could understand the discussion easily because I had learned the materials at home." Another student shared, "I like the way the teacher explained the materials. I like watching videos rather than reading the textbook only." In addition, this phase also led students to find more materials independently to support their understanding of a particular topic. To support this, another said, "I have more time to search for more materials when I was learning at home. These materials helped me to be well prepared before coming to class." Also, the students claimed that the teacher's videos and explanations during F2F work effectively supported their mastery of content. Yet, another said, "the way the teacher explained the materials to me improved my comprehension even though I had learned the materials at home."

Based on the analysis, it was found that the implementation of flipped classrooms with *Schoology* as the Learning Management System (LMS) platform helped the students monitor their own learning process. As explained previously, the teacher used *Schoology* to share materials and discussion activities before coming to class. Moreover, the students also recorded their videos and shared links on *Schoology*. The use of *Schoology* enabled students to manage their learning materials, to monitor learning through a discussion forum in *Schoology*, and to access their uploaded videos through *Schoology*. One student proudly confessed, "I could manage my learning materials and monitor the conversation about a particular topic. It helped me a lot to understand that topic." With everything shared on *Schoology* before coming to school, students managed their study time. Another student declared, "I could easily manage my time to study since everything is accessible, and I could choose which material I wanted to learn first."

As flipped classrooms provide more F2F time for the students, they used that time to engage in speaking practices. Students reported that F2F time helped since it allowed for more interactive learning with their peers. One stated, "I could practice and collaborate with my friends. This activity helped me a lot to improve my speaking skills and I like this activity." These flipped practices supported students with motivation and efficacy as one student reported, "The class activity required me to practice more… and I gradually had more motivation and courage to speak from the practices."

Lastly, flipped classrooms, along with *Schoology*, enable students to improve their speaking skills not only from the practices but also from the comments they received. From the teacher's regular comments and their friends' suggestions, the students had multiple opportunities to reflect on their speaking and learning. They were able to notice their own strengths and areas in which they wanted to improve their speaking performance. One reflected, "The comments from the teacher and my friends

helped me to reflect on weaknesses in my speaking performance. Then, I know what to improve." Likewise, students reflected on their experience in F2F activities. The discussions and practicing with peers helped them to consider their performance as well as improve their speaking skills. In addition, they were looking for such activities to help develop their oral language skills. Supporting this description, one student affirmed, "I like my experience in this class… with my teacher's help and practicing with friends, I could improve my speaking."

DISCUSSIONS

Since there is a lack of information about the effects of flipped classrooms on students' speaking performance and SRL, this prompted the present study (1) to examine the effects of flipped classrooms with various technology tools on students' speaking performance and SRL and (2) to explore how flipped classrooms play its roles in students' SRL. Then, an explanatory sequential mixed-method design was used to make sure the students reviewed the materials.

The first research question examined the effects of flipped classrooms with various technology tools on students' speaking performance and SRL. The results in this study implied that flipped classrooms with various technology tools had effects on students speaking performance and SRL and could improve their speaking performance and SRL. These results confirm the findings found by previous research that flipped classrooms improve students' speaking performance (Hung, 2017, Köroglu & Çakir, 2017; Lin & Hwang, 2018) and students' SRL (Moos & Bonde, 2016; Shyr & Chen, 2016), but reject the claim made by Wang and Zhu (2019) that flipped classrooms did not affect SRL. Even though those studies sampled university students, the effect of flipped classrooms with various technology still applied for high school students, as reported in this present study.

To speculate, all of the activities with the teacher and peers in flipped classrooms with various technology tools seems to promote the students to be more active and responsible for their own learning. According to Yeo (2018), flipped classrooms enable students to engage as active participants rather than passive recipients in a traditional classroom. In regard to the technology implementation, Mehring and Leis (2018) delineated, with the adaptation of technology, the traditional teaching approach could be converted into a more student-centered, communicative approach. Therefore, the students have more opportunities to practice their speaking skills with their friends, and with technology implementation, their quality of learning is even better. However, the speculation mentioned above should be explored profoundly to provide a better understanding of how flipped classrooms influenced the students in developing their SRL.

To support the above results, especially on students' SRL, the second research question explored how flipped classrooms influenced students' SRL. It is important to be conducted since the previous studies did

not specifically explored on how flipped classrooms helped the students' SRL. Reflecting on the aggregate data, it can be speculated that flipped classrooms implemented in this study played an important role in helping the students to develop their SRL. It seems that flipped classrooms helped the students to experience the three phases model proposed by Zimmerman (1998), such as *forethought*, *performance-control*, and *self-reflection* effectively. In addition, the students' SRL also seems to be guided by metacognition, strategic action, and motivation, as claimed by Perry et al. (2006). Thus, the findings imply that flipped classrooms facilitate the students to develop their SRL effectively as supported by the quantitative data above. However, the most critical discussion is to uncover the students' thinking about how they developed their SRL through the implementation of flipped classrooms.

As the results of the interviews show, the students developed their *forethought* by reviewing the materials in the pre-class activity. As flipped classrooms provided them with time to review the materials before coming to class, the students have more opportunities to watch and rewind the materials as well as to search for more explanations or supporting materials for better understanding. In line with this, Mehring and Leis (2018) argued that pre-class time enabled the students to learn independently and used proactive techniques to expand their knowledge. Yet, it is important to note that reviewing materials will work efficiently and effectively if

the materials are interesting and easily comprehended by the students. Accordingly, with interesting materials and time to review, it will enhance the opportunity to have a better *forethought* phase.

In addition, flipped classrooms in this study provided students with opportunities to promote *the performance-control* phase. Apparently, the students showed how they did *performance-control* through managing their time of studying, playing and rewinding videos, finding supporting explanation or materials, and following the online discussions' progress. In addition, listening to the teacher's comments and practicing with friends could also be considered as the strategic activities to improve students' speaking skills. Thus, these activities presumably gave the students' great *performance-control* phase experience during flipped classrooms. However, it is important to note that the implementation of technology tools, as shown in this study, helped this phase very much. It is similar to Shyr and Chen's (2016) claim that flipped classrooms with technology tools helps students regulate their learning and eventually gain more effective performance. Technology in flipped classrooms therefore plays a vital role during the *performance-control* phase as it helps to provide a better experience.

Practicing with friends and giving comments on videos in this study seems to be the strategic actions of the students to promote better *self-reflection*. According to Moos and Bonde (2016), *self-reflection* occurs as a result of the students judging

their performance. In this study, students' reflections derived not only from self-judging, but also from teacher and students' comments and discussions. These various activities seem to help the students to realize their strengths and weaknesses as well as reducing their anxiety, especially on being afraid of negative evaluation. As a consequence, these various activities can promote students' motivation, as shown in this study. According to Yeo (2018), students in flipped classrooms are active participants who construct knowledge with their teacher and peers. Thus, flipped classrooms help the students not only to self-reflect on their performance but also reflect from their experience interacting with teachers and peers.

IMPLICATIONS

From the above discussion, there are four implications drawn to ELT. Firstly, teachers are suggested to implement flipped classrooms in their English instructions, especially in teaching speaking. As confirmed in this study, flipped classrooms promote students' speaking performance and SRL. Thus, implementing flipped classrooms will improve the quality of their students' language learning. Secondly, since technology tools are found to be helpful, it is suggested that teachers implement various technology tools to support their flipped classrooms. Moreover, teachers are expected to administer technology not only to information sharing but also for assessment activities. As McLaughlin et al. (2016) stated, technology can be used

for assessment for pre and F2F activities in flipped classrooms. Thus, diverse technology tools will improve the quality of the flipped classroom implementation. Thirdly, teachers must be able to select interesting materials for their students. As the findings revealed, interesting materials still matter for the students to comprehend the topics. If the teachers prefer to record their presentations as the only materials, it is suggested that the teachers review whether the videos are interesting or not. If possible, teachers should use a creative video editor application to create interesting and interactive videos. Nowadays, there are some video editor applications that enable teachers to create interactive teaching materials, including combining videos with assessments. Lastly, it is suggested that teachers provide communicative activities that involve teacher and peer communication. According to Yeo (2018), flipped classrooms that provide teacher and peer activities will enable students to be active participants rather than passive recipients. Thus, flipped classrooms can facilitate active learning as proponents of flipped classrooms claimed (Mehring & Leis, 2018; Roehling, 2018; Yeo, 2018).

CONCLUSION

Given the discussion above, it can be concluded that flipped classrooms have significant effects on students' speaking performance and SRL. As with the benefits and features brought by flipped classrooms, this approach helps students to improve their speaking performance and, at the same

time, improve their SRL. In addition, the implementation of various technology tools helps flipped classrooms to work best. As Mclaughlin et al. (2016) argued, technology enhances access to learning resources as well as promoting learning engagement with teachers and peers.

This study also establishes that the activities in flipped classrooms can provide students with a better experience as a source of support for SRL. Approaches such as reviewing materials, online discussions, classroom discussions, teacher and peer activities will strengthen students as they further develop during *forethought*, *performance-control*, and *self-reflection* phases. In addition, technology improves the implementation of flipped classrooms in accordance with developing students' SRL. Thus, technology plays a vital role in students' SRL development during the implementation of this approach.

The discussion also sheds light on how flipped classrooms can work best. Interesting materials, the way teachers explain materials, interesting collaborative activities, and the incorporation of technology help flipped classrooms to work best. Without such support, flipped classrooms will be merely a conventional approach that might not work effectively to improve the students' quality of learning. Therefore, it is important to note that flipped classrooms cannot be separated from such support.

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Lexical Bundles in the Discussion Section Moves of High Impact Medical Research Articles

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ABSTRACT

Findings in medical research articles (MRAs), in particular, the discussion section interest not only the discourse community but also the ordinary people. Therefore, the writing needs to be comprehensible to both experts and laymen alike. To achieve a successful writing of a MRA, the author's knowledge of lexical bundles (LBs) and rhetorical moves in MRAs are essential. Though research on rhetorical moves in RAs abounds, there is a lack of study that examines the LBs in the rhetorical moves in MRAs. This scarcity of research prompted this study to examine the LBs associated with the moves and steps in the discussion section of high impact MRAs. A total of 50 MRA discussion sections were investigated. Findings revealed that generally groups of LBs were related to the functions of the moves and steps in the discussion sections. The majority of LBs were associated with move *Stating Research Conclusion* (31%), move *Contrasting Present and Previous Outcomes* (23%) and move *Explain Specific Research Outcomes* (22%). The findings from this study can provide informed input not only to ESP writing instructors on how to navigate the writing of the discussion section in an RA but also to novice writers on how to follow the conventions of the discussion section in writing MRAs.

Keywords: Discussion section, lexical bundles, medicine research articles, rhetorical moves

INTRODUCTION

The necessity of publishing research papers in high impact journals is mandatory in most high ranking universities. Not only the academia but postgraduate students have to publish their findings in prestigious journals such as ISI (web of science) indexed journals. Publication has become a crucial requirement for the hiring, promotion, and tenure of academic staff and also for the successful completion of postgraduate studies (Flowerdew & Forest, 2009). Therefore, knowledge of writing a well-organized research article (RA) is pivotal.

One crucial factor that plays a significant role in the acceptance of an RA for publication is a well-organized structure of its various sections (Flowerdew et al., 2005). Of particular interest to this study is the discussion section as its importance has been highlighted by several scholars (e.g., Basturkmen, 2012; Dujsik, 2013; Moyetta, 2016).

Among the IMRD (Introduction, Method, Results and Discussion) sections of an RA, it has also been documented that the discussion section is the most challenging to write for both novice and experienced writers. (Amnuai, 2017, Jaroongkhongdach et al., 2012; Swales & Feak, 1994). In the discussion section, writers need to have persuasive writing skills to convince readers of the novelty of their claims (Pojanapunya & Todd, 2011). They also need to structure their discussion section appropriately to make a powerful "closing argument" (Annesley, 2010) using various information elements, such as research purpose, main findings, interpretations of the results, implications and limitations (Bitchener & Basturkmen, 2006). To do this successfully, a template of the various rhetorical moves and steps of the discussion section is crucial.

In addition, writers should also know the formulaic language in order to construct and structure the writing of this section. One form of formulaic language is the lexical bundles (LBs). Biber et al. (1999), defined LB as recurrent sequences of three or more words. Previous literature has proven that having knowledge of LBs is an indication of being a professional language user (Biber, 2009; Cortes, 2004; Karabacak & Qin, 2013; Yeganehjoo & Thai, 2012). With that being said, sufficient knowledge of LBs could help novice writers to expand their mental lexicon, and this will help them to formulate their ideas succinctly in the rhetorical moves of the discussion section. Hence, knowledge of LBs can facilitate the process of writing a well-structured discussion section that clearly and effectively presents its communicative functions.

The Relationship between Formulaic Expressions and Communicative Functions

Lexical bundles are seen as building units of discourse (Biber & Barbieri, 2007) and considered to have an essential role in achieving fluency in speaking and writing. Considering the importance of LBs in language teaching and learning, several studies have been done to examine the employment of LBs in academic writings (Biber et al., 2004; Hyland, 2008a;

Kashiha & Chan, 2014). In particular, the identification of LBs in the moves and steps of various RA sections can help academic writers better understand the role of lexico-grammatical features in the formulation of academic discourse, in particular, the writing of medical research articles (MRAs).

The relationship between rhetorical moves and lexical bundles is that both of these linguistics concepts have been viewed as building blocks that are used in the construction of discourse. Hyland (2008b) maintained that bundles had been increasingly considered as "important building blocks of coherent discourse and characteristic features of language use in particular settings". Biber et al. (2007) added that move types could be considered as the "main building blocks" of a genre. Accordingly, both lexical bundles and rhetorical moves have similar features. They function as discourse frames for the expression of new information and contribute to the meaning of particular contexts of language use as well as creating a flow and rhythm in the discourse. A description of the relationship between LBs and moves in a particular register could provide evidence towards a complete picture of the tendencies used in the organizational and lexico-grammatical patterns of a successful RA discourse This is evident in Cortes' (2013) study where the Bundle-move connection approach was employed to examine the LBs in the rhetorical moves of Introduction sections. The study found an association between the move employment and the use of LBs.

Determining LBs in the rhetorical moves and steps of the discussion section would show what language expressions are frequently employed to formulate rhetorical moves. It is pertinent then that novice writers need to have knowledge of LBs in order to initiate and construct these communicative moves. Though studies on LBs have been done, Cortes (2013) noted that "the relationship between LBs and moves needs to be further developed not only in Introductions but also in other sections of RAs." Therefore, this research seeks to investigate the patterns of occurrences of LBs and also to examine the associations of the types of LBs in the moves and steps in the discussion sections of high impact MRAs.

LITERATURE REVIEW

Many studies have been done to examine LBs across the IMRD sections of RAs. A recent research was done by Jalali and Moini (2018) who investigated the form, structure and function of LBs in the corpus of 790 MRAs discussions. They found that the most frequent bundles were *this_is_the_first*, *In_our study_the_*, *the present study we*, *In_this_study_the_*, and *In_our_study_we*. For the structural classification, clausal LBs were more frequent than phrasal LBs as they formed 49.05% of the whole corpus. Different from Jalali and Moini's (2018) study, Mizumoto et al. (2017) examined 1000 RAs in the field of applied linguistics. They aimed to create a data-driven and theory-based practical writing support tool by connecting rhetorical moves and LBs.

They found that certain LBs were associated with specific moves. For example, LBs such as *this study investigated the* and *little is known about* were more highly associated with move *Presenting the research* and move *Introduction* in the abstract section. Also, there was a strong relationship between LBs and moves across IMRD sections. On the other hand, they found that many LBs were used in more than one section in the RAs. Bundles such as *on the other hand*, *in terms of the*, *on the basis of* were generic and therefore they could generally be found in the introduction section and the discussion section as well.

In another study, Kashiha (2015) examined LBs in the moves and steps of the conclusion sections in 200 RAs written by native and Iranian non-native writers. He focused on four-word LBs as they were more common than 5-word bundles (Hyland, 2008b). Some of the examples that were used by both native and non-native writers in the conclusion section were *findings of this study, On the other hand,* and *the results of the*. Kashiha (2015) found that native writers relied more on the use of LBs in writing conclusions. Additionally, Li et al. (2020) analyzed the sentence initial lexical bundles in the moves of PhD abstracts in the field of arts and humanities. They used a corpus-driven approach to examine the five-word bundles in the moves of 3,697 abstracts. They found that most of the generated LBs can be considered as move indicators. For example, the bundle "The study shows that the" was associated with move Showing results or findings to introduced the research findings. This is in line with findings of Abdollahpour and

Gholami (2019) who also examined LBs in abstract moves but in medical RAs. In addition, it was found that the majority of the indicated moves aligned with the moves proposed for research article abstracts in previous studies. Similar to Mizumoto et al.'s (2017) study, it was also found that some LBs could be used in different moves. For example, the bundle *'the use of'* was identified in Move *Stating the current knowledge* and Move *Indicating the main purpose*.

From the above discussion, it is clear that studies on LBs have been done in certain disciplines and in different section of RAs but, no study has been done to explore the relationship between the LBs and the communicative moves in the discussion section of MRAs. Therefore, this study attempted to do that as a successful writing of the discussion section demonstrated the writing sophistication and scholarship of the writer.

METHOD

A content analysis was employed in the study in which both the quantitative and qualitative approaches were used. The quantitative approach was used to determine the patterns of occurrences of LB word types in the moves and steps of MRAs. A qualitative approach, on the other hand, enables the analysis of LBs linguistic expressions in relation to the moves and steps.

The corpus comprised 50 MRAs with a total of 54901 words. They were collected purposively and involved two phases of sampling: (i) selection of Medical journals

and (ii) selection of MRAs. For the journal selection, only high impact factor ISI (Institute for Scientific Information) indexed journals were chosen. The chosen journals were *New England Journal of Medicine (NEJM), The Lancet, The Journal of the American Medical Association (JAMA), British Medical Journal (BMJ),* and *Journal of Clinical Investigation (JCI).* The selection was based on three criteria: representativity, reputation (impact factor), and accessibility (Nwogu, 1997). Furthermore, the scope of the selected journals was not limited to a specific sub-discipline. Instead, it covered a wide range of medical sub-disciplines. This criterion mirrored the criterion adopted by Wang et al. (2008) and Jalali et al. (2015), and therefore in this study, all areas of medical sciences were included.

The selected RAs were also published in the last 5 years (2013-2017) in order to ensure the currency of publications (Ebrahimi & Heng, 2018). Only 10 RAs were selected from each journal. The selection of the articles was done according to the criteria suggested by Cheng and Unsworth (2016). Therefore, the included papers were written in the Introduction-Method-Results-Discussion-Conclusion (IMRDC) format. Published work such as review papers and meta-analyses were excluded. In addition, the selected articles were empirical studies because there is a clear sub-section on discussion in such study. Moreover, the RAs written by the same authors were not included. This is because more than one research article written by the same author may increase the chances of experiencing the use of similar language, structure, and style of writing, and that would be biased.

Analytical Framework of Move Analysis

Al-Shujairi et al.'s (2019) revised framework of move analysis was adopted because of its currency and appropriateness to the study. It was current because the model was taken from Al-Shujairi (2019) latest study and in their study too, they were investigating the moves and steps in Medical Research Articles. Table 1 demonstrates the model of moves and steps in the discussion section of MRAs by Al-Shujairi et al. (2019).

Table 1

Model of moves and steps in discussion section (Adopted from Al-Shujairi et al., 2019)

Moves	Steps
Move 1: Background Information	
Move 2: Highlighting Overall Research Outcome	
Move 3: Explain Specific Research Outcomes	
	Step 1: Stating a Specific Outcome
	Step 2: Interpreting the Outcome
	Step 3: Indicating Significance of the Outcome

Table 1 *(Continued)*

Moves	Steps
Move 4: Contrasting Present and Previous Outcomes	Step 1: Referring to Literature Step 2: Making a Claim
Move 5: Indicating Research Implications	
Move 6: Stating Research Conclusion	Step1: Strengths and Weaknesses of Research Step 2: Indicating Research Limitations Step 3: Promoting Further Research Step 4: Concluding the Main Results

Procedure of Analyzing Moves and Lexical Bundles

The hand-coding strategy was used for conducting the analysis. This strategy was also done by recent studies (Ansarifar et al., 2018; Lubis, 2019) as it generated more fine-grained results. Therefore, the analysis was done manually by examining the sentences of the discussion section. According to Holmes (1997), "the sentence was considered the unit of analysis implemented for examining moves, and the identifying feature was the linguistic realizations that were seen to realize the communicative functions of each move".

Therefore in this study, the researcher identified the rhetorical function of each unit of analysis (sentence) in order to distinguish a move from a step. This stage was done by analyzing the linguistic realizations that is associated with each move and step. Some of the important linguistic realizations that were seen to realize the communicative functions were verb tense, voice, self-mention devices, modal auxiliaries, academic vocabularies and explicit phrases (Doró, 2013; Kanoksilapatham, 2005).

These linguistic devices help to express the meaning of communicative moves in a particular text (e.g., Amnuai, 2019; Suntara, 2018). For example, the finding verbs such as *find*, *show* and *reveal* were used to realize the move *Highlighting overall research outcome*. Another example was the word *limit*. Its various parts of speech such as its noun form *limitation* and verb form *limit* were used to realize the step *Indicating research limitations*. To ease the coding process, each move and step in the text was given a code. For instance, M1 means move number one, and M2S3 means step number three in move number two. Below is an account of how the moves and steps are identified.

Ex: A *limitation* of our study is that we are *unable* to …. **(M6S2)** *Further study* of the role of…. **(M6S3)**

After the analysis of the rhetorical moves was done, each move and step found in the analysis was moved to separate files. For example, all instances of move 1 were moved to a word file named move 1. This was done to ease the procedure of identifying

LBs in each move without any overlap. Only then, the preparation of data for the analysis of LBs by the AntConc3.2.4w computer program commenced. The LBs were identified by searching for the co-occurrences of the linguistic realization of the moves. For example, the reporting verb (find) was used to realize move 2. Therefore, it was typed in the software to look for bundles that were composed from this verb.

The analysis of LBs involved the assessment of frequency and distribution, as well as factors such as overlapping bundles. Overlapping bundles were merged in order to avoid overestimating the number of occurrences of these bundles (Cooper, 2016). In this, some 3-word bundles are parts of 4-word bundles, which are parts of 5-word bundles. In this case, the largest bundle sequence was taken into consideration. For example, the bundle *studies have shown* is part of a larger bundle *studies have shown that* which is part of larger bundle *these studies have shown that*. The largest bundle sequence, which is the 5-word bundle, was considered in the analysis to avoid overlapping findings.

Regarding the frequency, the cut-off points are arbitrary depending on the scope of each study. Scholars and researchers have proposed various cut-off points. The cut-off frequency range for large corpora is from 20 to 40 times per million words (Biber et al., 2004; Cortes, 2004; Hyland, 2008a, 2008b), whereas the raw cutoff frequency range for small corpora is from 2 to 10 times in the corpus (Altenberg, 2001). The frequency of the occurrences of a bundle in a small corpus was calculated to check whether its normed rate met the specified cut-off point set for the study or not.. As the corpus of the present research is 54,901 words, an occurrence of two times in the corpus would consider a lexical bundle. According to Biber and Barbieri (2007), when counting the occurrences of a lexical bundle, the restrictions on the distribution of different texts are also taken into consideration to reduce the inflated rates. A lexical bundle must occur in a range of 2-5 samples (Biber & Barbieri, 2007; Cortes, 2004) or 10% of the samples (Hyland, 2008b) to avoid the repeated style of individual writers or speakers. In other words, a bundle must recur in at least 2-5 different samples to be considered as a lexical bundle. Any bundles that do not meet this requirement were discarded.

Reliability of the Moves Identification

An inter-rater reliability measure took place to demonstrate that the moves and steps can be coded and identified at a sufficient level of agreement. The Kappa value was calculated against three coders' agreement including the researcher in order to check its acceptability. The Cohen's Kappa value was 0.606, which falls between 0.61- 0.80 and thus considered as substantial (Lim, 2010).

RESULTS

A total of 106 LBs were found in the moves and steps of MRAs discussion. The found LBs were 3, 4, and 5 words bundles.

Figure 1 demonstrates the distribution of 3-5 words LBs in each move and step of the discussion section.

Overall, the Figure 1 shows that 4-word LBs were the most common type of bundles. It indicates that 4-word bundles were the dominant type of LBs. The number of 4-word bundles exceeded the number of 3 and 5 words bundles in most moves and steps except for move 4 step 1 (Referring to literature) where 3-words LBs were more common. According to Hyland (2008b), four-word LBs are more common than 5-word bundles in academic register and they have a clearer range of structure and function than 3-word sequences.

On the other hand, 5-word LBs were the least occurred bundles except for move 2 (Highlighting overall research outcome) and move 6 step 2 (Indicating research outcome) where 5-word bundles exceeded 3-word bundles. 5-word bundles were also found less common in past studies (e.g., Esfandiari & Barbary, 2017; Hyland, 2008b). The results of low frequency of 5-word bundles could be explained by the complexity of their production as it takes writers more effort and time to produce a 5-word bundle than 3 or 4 – word bundles. It is important to mention that no bundle was associated with move 6 step 4 (Concluding the Main Results). Instead, two-word phrases such as in summary and in conclusion were seen to be associated with this step. In addition, the analysis demonstrated that only 2 cases of 4-word LBs were associated with move 4 step 2 (Making a Claim).
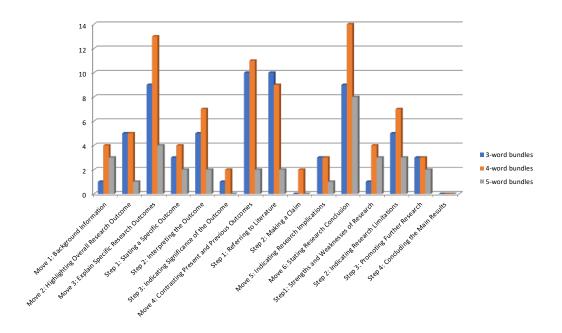
Figure 1. The frequency of 3-5 words LBs in the Moves and Steps of MRAs discussion

To address the second research question, further discussion of the LBs that appear in each move and step is presented below.

Lexical Bundles in Move 1 (Background Information)

The analysis revealed that 7.54 % of the LBs were associated with move 1 (Background information) of the discussion section. These bundles were 3 to 5 words LBs. These bundles were employed to realize the functions of move 1 which is to state the research purpose and to describe the method. The occurrence of most of the bundles in this move was twice in the discussion corpus except for one bundle (our study was) which occurred 3 times in this move. The examples below show the employment of some of the LBs in move 1 (Background information) in the discussion of MRAs.

3 word LB
Ex1: *Our study was* randomized and based on high-quality baseline imaging….(RA17/2015/JAMA)
4 word LB
Ex2: *We studied a large* UK based community volunteer sample…(RA2/2016/BMJ)
5 word LB
Ex3: The intent in *the current study was to* replicate the post…(RA3/2014/BMJ)

Lexical Bundles in Move 2 (Highlighting Overall Research Outcome)

Move 2 (Highlighting Overall Research Outcome) comprised 10.37% of the total LBs found in the corpus. The most frequent 3-word bundles in this move were *we found*

that (7 times)*, we found no* (4 times)*,* and *the rate of* (4 times). The most frequent 4-word bundle was *our study shows that* (3 times) while the rest of the bundles occurred twice in the corpus. Only one case of 5-word LBs was tagged in this move out of 11. Examples of types 3, 4, and 5 words LBs which were taken from the corpus are illustrated below.

3 word LB
Ex1: *We found no* differences between groups in quality of life….(RA4/2014/BMJ)
4 word LB
Ex2: *Our study shows that* the combination of an anti-CD20 antibody with…(RA50/2014/NEJM)
5 word LB
Ex3: *We found no evidence of* a learning curve for high-volume operators when…(RA45/2014/NEJM)

As shown in the examples, these LBs initiate move 2 (Highlighting Overall Research Outcome). Also, the 4-word bundles in move 2 mostly commenced with either the first person plural exclusive pronoun *we* or its possessive *our*. Research authors in the field of medicine tend to use these pronouns to explicitly show their voice and their claim for their findings.

Lexical Bundles in Move 3 (Explain Specific Research Outcomes)

Among the most LBs occurrences in a single move, move 3 (Explain Specific Research Outcomes) comprised 24.52% of the LBs. This amount was distributed between the three steps: Stating a Specific Outcome,

Interpreting the Outcome and Indicating Significance of the Outcome.

Lexical Bundles in Step 1 (Stating a Specific Outcome). This step comprised 8.49% of the total LBs. The 4-word bundles were the most dominant type of LBs. All bundles in this step occurred twice in the corpus except for two bundles. The 3-word LBs *the increase in* and *was associated with* frequently occurred between 3 and 7 times respectively. The example below shows the 3-word bundle (the increase in) in the context.

3 word LB
Ex1: *The increase in* mortality for heart failure and…(RA12/2017/JAMA)

It is interesting to note that most LBs in this step start with verb to *be* in its past form such as *were common in the* and *was no difference in the*. Despite the similarity in function between move 2 (Highlight overall research outcome) and move 3 step 1 (Stating a Specific Outcome), the LBs employed in them were quite different. While the bundles in move 2 commenced with a subject and were located at the beginning of the sentence that carries the function of the move, LBs in step 1 of move 3 started with verb (be) and they were embedded in the sentence. This finding is important as it provides a clue to to differentiate between move 2 and move 3 step 1.

4 word LB
Ex2: Grade 3 or 4 adverse events *were common in the* two study groups, which was an expected finding…(RA48/2014/NEJM)

5 word LB
Ex3: There *was no difference in the* rates of hepatic resection between groups… (RA17/2014/JAMA)

Lexical Bundles in Step 2 (Interpreting the Outcome). The step comprised 13.20% of the total LBs. 4-word bundles were the most dominant in this step followed by 3-word bundles and 5-word bundles. The most common LB in this step is *the effect of* (4 times)*.* Most LBs bundles in this step had model verbs (*might, may, could*) which are devices used to employ the hedging strategy. Hedging strategy is important in explaining the results as the writers need to mitigate the claims made by giving reasons and elaborations. Examples of LBs with model verbs were *this may explain*, *this might be because*, and *may be due to the.* Examples of the three types of LBs in the context of step 2 (*Interpreting the outcome*) are presented below. It can be noticed that LBs in this step do not only come as sentence initiatives but also embedded in the middle of the sentences.

3 word LB

Ex1: *The effect of* oral contraceptives on mental health, including…(RA6/2014/BMJ)
4 word LB
Ex2: However, given that there were only 20 SIDS deaths of mothers with obesity grade 2-3, the association between maternal BMI and SIDS *could be due to* chance. (RA10/2014/BMJ)

5 word LB
Ex3: Rapid and profound B-cell depletion

by obinutuzumab *might be the reason for* the greater frequency and intensity of… (RA50/2014/NEJM)

Lexical Bundles in Step 3 (Indicating Significance of the Outcome). Only 2.83% of the LBs were found to be associated with this step (Indicating significance of the outcome). Those bundles were of types 3-word and 4-word. The most frequent bundle is *the importance of* with 3 times occurrence in the corpus. As shown in the examples below, words such as *important* and *significant* are the main elements of these LBs. They reflect the function of this step (Indicating significance of the outcome), which is to show the importance of results. According to Salazar (2014) who examined biology and biochemistry theses, *significance* and *importance* are the keywords of identifying these LBs and such bundles (the significance of, the importance of) function as descriptors.

3 word LB
Ex1: The findings of no significant difference in weight loss in genotype-matched vs mismatched groups in the current study highlights *the importance of* conducting large, appropriately powered trails. (RA11/2017/JAMA)
4 word LB
Ex2: *Our study adds important* new information about the increased risk of… (RA8/2015/BMJ)

Lexical Bundles in Move 4 (Contrasting Present and Previous Outcomes)

It was found that 21.69% of the LBs were associated with this move. The LBs were found in step 1 (Referring to Literature) and step 2 (Making a Claim).

Lexical Bundles in Step 1 (Referring to Literature). The analysis revealed that 19.81% of the total found bundles were associated with step (Referring to literature). Most of the bundles (20) were 3 to 4 words bundle types while only two were 5-word bundles. These LBs were utilized as devices to compare and contrast the findings of a study to findings of past studies. The following examples illustrate the occurrences of LBs types that were associated with step 1 of move 4 in the MRAs discussion.

3 word LB
Ex1: Our findings *are consistent with* those of the University of Michigan. (RA49/2014/NEJM)
4 word LB
Ex2: This finding is potentially *consistent with previous studies* suggesting that antibiotic prescriptions for…(RA1/2017/BMJ)
5 word LB
Ex3: Increased deaths from breast cancer with longer durations of use, which *is in line with the* most recent meta-analysis… (RA6/2014/BMJ)

Lexical Bundles in Step 2 (Making a Claim). Overall, only 1.88% of the bundles were associated with this step (Making a claim). This could be due to the low occurrence of this step in the corpus analyzed. Hedging such as modal verbs was the central component of the LBs in this step (Making a claim). This is not surprising as when making a claim, the convention of academic writing warrants the authors to hedge their claim and be cautious about their generalizations.

4 word LB

Ex1: In agreement with this conclusion, *our results indicate that* neither magnitude of expansion nor the…(RA22/2017/JCI)

Lexical Bundles in Move 5 (Indicating Research Implications)

Only 7 (6.60%) LBs were found to be associated with this move. Four of these bundles began with the plural possessive pronoun "our" such as *our study provides a* and *our study has important implications*. This can be attributed to the discipline under investigation, which is medical science. Authors in the field of medicine tend to explicitly show their voice through the use of first-person pronoun "we" and its possessive "our". The pronoun "we" was followed by a verb that is illustrated in the present time or future aspect. This makes sense as the function of this move is to provide future implications. Besides, these bundles commonly initiate the sentences that carry the function of the said move (see examples 1, 2 and 3 below).

3 word LB

Ex1: *Our study will* also help to elucidate molecular processes of…(RA24/2017/JCI)

4 word LB

Ex2: *Our study provides a* mechanism to TGF-β pathway activation in PC through FOXA1 downregulation…(RA26/2017/JCI)

5 word LB

Ex3: *Our study has important implications* for the management of all…(RA8/2014/BMJ)

Lexical Bundles in Move 6 (Stating Research Conclusion)

The highest number (29.24%) of LBs was shown to be associated with this move. This move has 4 steps namely; Step1 (Strengths and Weaknesses of a Research), Step 2 (Indicating Research Limitations), Step 3 (Promoting Further Research), and Step 4 (Concluding the Main Results).

Lexical Bundles in Step 1 (Strengths and Weaknesses of a Research). In this step, 7.54% of LBs were found typical. Words such as strength and weakness are the main construct of the bundles in this step. This clearly reflects the communicative purpose of this particular step, which is to state the strengths and weaknesses of research. These LBs usually initiate the sentences that carry the function of move 6 step 1. Examples below show the different types of LBs in step 1 of move 6.

3 word LB

Ex1: *A key strength* of the PARACHUTE trial was that it was…(RA3/2017/BMJ)

4 word LB

Ex2: *Strengths of our study* include a small proportion of patients lost to…(RA20/2015/JAMA)

5 word LB

Ex3: *Our study had several strengths.* (RA6/2014/BMJ)

Lexical Bundles in Step 2 (Indicating Research Limitations). This step comprised 14.15% of the total bundles. The most frequent bundle occurred was the 3-word bundle *we did not*. This bundle occurred 8 times in the corpus. The rest of bundles tagged twice in the corpus. It can be noticed that the word *limitation* is the core element in most of the found bundles. This is in line with the communicative function of this particular step, which is to indicate the limitations of research. Thus, these bundles are typical to step 2 of move 6. Again, the constructed bundles were seen to be initials of the sentences that carry the function of this step.

3 word LB

Ex1: *We did not* assess the efficacy of first-line treatment with…(RA44/2014/NEJM)

4 word LB

Ex2: *Our study has limitations.* (RA8/2015/BMJ)

5 word LB

Ex3: *This study has several limitations.* (RA47/2017/NEJM)

Lexical Bundles in Step 3 (Promoting Further Research). Similar to step 1, 7.54% of the bundles were associated with

this step. Future indicator words such as *further* and *future* were seen in most of the LBs in this step. This is not surprising because the main function of move 6 step 3 is to indicate a recommendation for further research. The LBs in this step were also characterized by the use of the modal verb "will" to suggest an action will be done in the future (see examples below).

3 word LB

Ex1: Further follow-up *is needed to* assess whether idelalisib is safe for long-term use. (RA48/2014/NEJM)

4 word LB

Ex2: *Additional studies will be* necessary to define the most effective use of these new agents….(RA48/2014/NEJM)

5 word LB

Ex3: *More work is needed to* confirm p.C282Y homozygous associations with… (RA2/2017/BMJ)

Lexical Bundles in Step 4 (Concluding the Main Results). It is important to note that no lexical bundles were associated with move 6 step 4 (Concluding the Main Results). Instead, phrases such as *in summary* and *in conclusion* were the central construct of this step. These phrases usually initiated the sentences that carry the communicative function of this step.

Ex1: *In conclusion*, we observed an increasing incidence of… (RA48/2014/NEJM)

Ex2: *In summary*, we reported a class of anti-CTLA4 Ab whose…(RA30/2017/JCI)

To summarize the above results, a list of 3-5 words lexical bundles in the respective moves and steps is shown in the appendix.

DISCUSSION

The current research paper examined the association between the lexical bundles and the rhetorical moves and steps in the discussion section of MRAs. The analysis showed that among 3-5 word bundles, 4-word bundles seem to be more frequently used in all moves of the discussion section. The analysis indicated that the tagged LBs could be put into groups to play the role of typicality for the rhetorical moves and steps of MRAs discussion. In other words, groups of 3-5 words LBs were found to convey the functions of the moves and steps in the discussion. This finding is consistent with the findings of the studies done by Mizumoto et al. (2017) and Wongwiwat (2016) that examined the moves and LBs across IMRD sections and conference abstracts and found that some LBs were strongly associated with certain rhetorical moves. For example, bundles such as *results showed that* and *the results showed* addressed the research results. The most rational reason behind such findings is that LBs are formulaic expressions that can serve as a building block and therefore; can be crucial in forming the communicative functions of a research article. Moreover, most of the found bundles were employed as initiatives in that they were employed at the beginning of the sentences. Such bundles (i.e., *our study shows that*, *Future studies to assess*) trigger the communicative moves.

This was also noted by Kashiha (2015) who analyzed the LBs in the conclusion moves of RAs. Considering the findings of this study and the past studies, it can be claimed that the use of certain LBs is closely linked to the rhetorical moves in the various sections of an RA.

Although few 5-word LBs were found in the present study, the finding is an asset to the existing literature of LBs. Previous studies (i.e., Cortes, 2013; Kashiha, 2015) mostly examined 4-word LBs as they did not identify 5-word LBs. The finding of 4-word bundles was in contrast with most previous research (i.e., Alamri, 2017; Cortes, 2013; Hyland, 2012; Mizumoto et al., 2017). The difference in the results could be due to the 4-word bundles in the field of medicine which initiated a move. As explained earlier, first-person plural pronoun "we" and its possessive "our" initiated a large amount of 4-word bundles. This could be that unlike other disciplines, using first-person plural pronoun is common among medical authors due to the multi-authorship of their published work (Kafes, 2017). It can be argued that the found 4-word bundles in the present study were also in contrast with the finding of Jalali et al. (2015), who also examined MRAs. This contradicted finding can be rationalized by the investigated section of RAs. While the present paper analyzed the discussion section, Jalali et al.'s (2015) focused on the introduction section. Therefore, LBs such as *our study showed* that *and we have found that* were not expected to be found in the introduction section; instead, these

bundles are more aligned to the results and discussion sections.

Finally, the findings of 3-word bundles such as *the rate of* and *we found that* were in line with the findings of past studies such as Jalali and Moini (2014), Mbodj-Diop (2016), and Salazar (2014). A number of 3-words bundles (i.e., further studies are, our results showed) was shown to be similar to the study conducted by Jalali and Moini (2014) who also examined medicine RAs. Three word bundles are the shortest type of LBs and their employment could be noticed in any discipline of sciences. Thus, the result of 3-word bundles were similar not only to studies done in the field of medicine such as Jalali and Moini (2014) but to other field of sciences such as food science and technology RAs (Esfandiari & Moein, 2016), economic, education, history, and sociology RAs (Bal, 2010). Additionally, according to Biber et al. (2004), bundles like *we found that* and *our results suggest* are commonly employed in the results and discussion sections of RAs irrespective of the discipline.

Although this study has yielded some interesting results, it is not without any limitations. First, this paper investigated only a particular discipline of science, which is the medical science. Further studies could look at various disciplines not done in past studies such as Computer science and Engineering. Second, the present sample was collected from one specific type of journals which was high impact ISI (recently, Thomson Reuters) indexed journals. Perhaps, future studies can investigate other types of journals such as Scopus indexed and compare and contrast between two types of journal databases. Such effort will enrich the existing literature on LBs in scientific writings.

CONCLUSION

To conclude, the results obtained in this study are significant as they have several important implications. The list of lexical bundles with their associated rhetorical moves (see the appendix) is a contribution to the field of academic writing. The list could serve as a guide in their writing particularly the discussion section of RAs. Postgraduate and novice writers in the field of medicine could also benefit from the said list. These LBs can help them to initiate and construct meaningful and persuasive discussion section in their RAs. Furthermore, unlike most past studies, the findings of the present research managed to reveal the inter-connectedness between the communicative moves and lexical bundles in the discussion section of MRAs. The study had also examined not only 4-word bundles (like in the study of Kashiha (2015) and Jalali and Moini (2018) but also 3 and 5 words LBs. Although, 4-word bundles were found to be dominant, the occurrences of shorter string (3-word) and longer string (5-word) were noticeable in the moves and steps of RAs discussion section in the field of medicine.

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The High and Low-Context Communication Styles in Refusal Strategies by Jordanian Arabic and American English Speakers

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ABSTRACT

The aim of this study is to identify the refusal strategies produced by Jordanian Arabic (JA) and American English (AE) speakers. It also aims to examine the influence of high and low-context communication styles on the production of refusal strategies by the two participating groups. A Discourse Completion Test (DCT) was adapted to collect data from AE group and an equivalent Arabic version to collect data from JA group. The data were analysed and classified based on the classification of refusal strategies. Results showed that although both groups portrayed similar preferences in using two of the strategies, namely, the indirect strategy and adjunct strategy; they seemed to differ in lights of the content and number of semantic formulas used. Results also showed that participants' cultural backgrounds influenced the number and content of semantic formulas of their refusals. For instance, JA group provided more vague and ambiguous explanations than those made by the AE group. The findings of the present study would be useful in future intercultural comparison studies.

Keywords: DCT, high and low-context, refusals, semantic formulas, speech acts

INTRODUCTION

It is a recognized fact that communication has an important role in peoples' life. It is a social process by which humans express their feelings, thoughts, ideas, and relay messages (Mahajan, 2015). Undoubtedly, the process of communication is an essential phenomenon between people

as it enables them to share information and build relationships. Hence, the significance of communication cannot be ignored. In our daily life, we communicate with different people including our families, friends, and colleagues, or even strangers. Communication takes different modes such as verbal communication, non-verbal communication and mass communication. In verbal communication, people communicate with each other face to face. It is believed to be the best way of communication because the person can express his feelings directly to others. However, people avoid speaking and tend to communicate using eye contact, body language, gestures with hands, and facial expressions in the non-verbal communication style (Dilnoza & Nurmaxamatovna, 2019). Over the years technology has been growing fast, changing the medium of communication among interlocutors. These include e-mail, video calls, short messaging system, and WhatsApp.

The different ways of communication people use between them represents their own different cultural background. So, the cultural differences between individuals form every phase of global communication. In his book *The Silent Language*, the pioneer of intercultural communication, Hall (1959) proposed the area of intercultural communication. First, the book was mainly the interest of general public, but later it became the interest of researchers in the area of cross cultural and intercultural communication. Hall (1959) defined the concept of intercultural communication

as a way of communication by sharing knowledge between individuals representing different social groups and cultures. Within the framework of intercultural communication, he discussed the concepts of high-context and low-context cultures, which placed contexts as the crux of people's behavioural and communicative patterns. Communication in a high-context culture essentially relies heavily on the context of the communication. Essentially, while context is at least as important as what is actually said, what is not being said can carry more meaning than what is said. Hence, interactions tend to be more implicit, indirect, and less verbal. Low-context cultures on the other hand, rely strongly on the verbal messages, as most of the information is contained explicitly in words. Here, what is said is more important than what is not said. Hence, low context cultures exhibit less implicit communicative style. High context cultures are also associated with collectivism, while the low context cultures are attributed to individualism. The differences affect the overall ways of communicative patterns between these cultures. If someone is not conscious of the different communication styles between high and low context cultures, he can simply get into trouble that can lead to serious communication breakdowns when communicating with individuals from another culture. Countries that represent high context cultures include Japan, Arabic countries, and some Latin American countries, while Germany, the United States of America, and Scandinavia

represent countries of low context cultures. These and other countries of the world are in a continuum of the High Context and Low Context attributes. The cultural differences initiated the interest to investigate the impact of different communication styles (high and low-context) on the performance of refusal among speakers of Jordanian Arabic and speakers of American English; two countries on both ends of the cultural continuum.

Refusals

The act of refusal has attracted the attention of many scholars (Al-Kahtani, 2005; Al-Shalawi, 1997; Al-Shboul & Huwari, 2016; Beebe et al., 1990; Çiftçi, 2016; Jasim, 2017; Johnson, 2014; Nelson et al., 2002; Rezvani et al., 2017). It is the act that occurs when a speaker responses 'no' in a direct or indirect way to invitation, request, offer, or suggestion. Cohen (1996) stated that the act of refusal was usually performed using indirect strategies, and it needed a high competence and a great knowledge of pragmatic. It had also been classified as a high-risk face-threatening act because of the damage that resulted on the face of both the speaker and the hearer and of a possible incapability to refuse appropriately that could threaten the speakers' interpersonal relations. Refusals involve different strategies as a way to avoid offending the interlocutors. These strategies depend greatly on the interlocutors' linguistic and cultural background (Al-Eryani, 2007). Hence, they should be familiar with the appropriate forms and their functions. Similarly, Al-Kahtani (2005) indicates that

the social functions of speech acts rely greatly on each speech community and their cultural-linguistic values.

The participants of the current study include Jordanian speakers and American tourists visiting Jordan. Hence, the problem emerges when Jordanian speakers engage in conversations with native speakers of American English. In such real situations, communication difficulties may arise due to their lack of the necessary social and conversational norms involved in the production of speech acts in general and particularly the speech act of refusal. So, these difficulties in understanding the social and conversational norms would cause serious intercultural and interethnic communication breakdowns. Moreover, the researchers of the present study have concentrated on the speech act of refusal due to the fact that it is mainly rich in the social meanings involved in its uses. With this respect, Al-Shalawi (1997) stated that the act of refusal was regarded as a rich source of information of the sociocultural values of a speech community and provided an important insight into the social and cultural norms that were embedded in cultures. Compared with other speech acts such as greetings and leave-taking, the act of refusal seems to be complex and more difficult to perform because it consists of more sociocultural variables (Chen, 1996).

Consequently, this study is important because it offers new data in the fields of intercultural and sociopragmatics. Moreover, it improves our understanding on the Jordanians and American sociocultural

values. Hence, it would be important to examine the way two different cultural-linguistic nations realize refusal in order to increase both Jordanian and American speakers' cultural and pragmatic awareness. More specifically, how the performance of refusal speech act by Jordanian and American speakers is influenced by high and low-context communication styles.

Literature Review

The speech act of refusal has been examined from different viewpoints including comparative studies on refusals across different languages and cultures and also the production of refusal in the target language by non-native speakers (NNSs). The following paragraphs summarized these different viewpoints with a focus on the impact of different communication styles (high and low-context) on the production of refusal strategies across different cultures and languages.

In a comparative study, Beebe et al.'s (1990) study is believed to be the most influential research in the framework of refusal. The researchers compared the speech act of refusal between American English native speakers and Japanese native speakers. The research examines the concept of pragmatic transfer among Japanese participants responding in English. A Discourse Completion Test (DCT) was used as a data collection instrument. The DCT consists of 12 situations. Findings revealed that the status of the interlocutor influenced the strategies used by the participants. Japanese tended to use more

indirect strategies when refusing a higher status person and more direct strategies when refusing a person of lower status than their Americans counterparts. In addition, findings showed the occurrence of pragmatic transfer among Japanese learners of English. By contrast, Americans used less direct strategies when they had to refuse a request made by a person of higher, equal, and lower status.

In Turkish context, Çiftçi (2016) examined refusal performed by Turkish and Americans. The study examined the concept of pragmatic transfer among Turkish EFL learners responding in English. The study consisted of three participating groups categorized according to the following: 15 Turkish EFL learners of English represent the target group of the study. Moreover, 15 Turkish native speakers and 15 American English native speakers who were recognised as the reference groups of the study. The participants responded to an adapted version of DCT proposed by Beebe et al. (1990). Data were analysed in terms of pragmalinguistic and pragmatic competence of the learners (Thomas, 1983). The findings of the study revealed that both groups of Turkish used 688 refusal strategies where r*easons or explanation* were the most frequent sematic formulas used by them. However, there were differences among the three participating groups in terms of the directness and the semantic formulas' content. Although *Statement of alternative* was used by the three participating groups when refusing a higher status person, it was used more frequent by both reference

groups than the target group. Additionally, the American English group used *negative willingness* more frequently than both groups of Turkish who tended to refuse with this strategy in almost the same amount. Finally, the American group used less *explanations or reasons* with their higher status interlocutor than both groups of Turkish.

In another comparative study, Rezvani et al. (2017) investigated the performance of refusal speech act by English Language teaching students at Eastern Mediterranean University in Famagusta, Cyprus. The participants were fifty postgraduate students from four different ethnic groups, namely, Arab, Persian, Turkish and Kurdish. Data were collected by means of DCT established by Beebe et al. (1990). Next, the researchers followed Beebe et al.'s (1990) classification system in their classification of data. The findings revealed that the participant preferred indirect refusal than direct and adjunct strategies. Moreover, male students tended to refuse a lower status person more directly than the female students did. By contrast, female students used more direct strategies when they had to refuse an equal status person. In addition, male students used less adjuncts strategies than their female counterparts in all three situations. Finally, Turkish students tended to use more direct strategies, while Persian students preferred more adjuncts strategies than the other groups of participants.

In another cross-cultural pragmatics study, Johnson (2014) investigated German and American English refusal strategies.

Data were collected using DCT proposed by Beebe et al. (1990), and analysed following refusal the classification taxonomy, also by Beebe et al. (1990). Fifteen (15) native speakers of American English (AE) from the USA (11 females and 4 males) and 15 native German Speakers of German (GSG) from Germany (7 females and 8 males) responded to the questionnaire. Results revealed that the two participating groups used more indirect strategies than direct strategies. More specifically, AE participants used 87.3% indirect strategies compared to 12.7% direct strategies. Similarly, GSG participants used 88.4% indirect strategies compared to 11.6% direct strategies. However, the AE group utilized a slightly less amount of the semantic formula (24.8 %) compared to GSG group (27.9%). In addition, Americans tended to use more statements of alternative (15.1%) compared to their German counterparts (10.4%).

In Arabic context, Al-Shalawi (1997) examined Saudis and American refusal strategies from a cross-cultural perspective. Data were collected from 50 Saudis and 50 American males using a written open-ended DCT, and were analysed with the classification of refusal strategies proposed by Beebe and Cummings (1995). In addition, the researcher counted the frequency of all semantic formulas made by the participants followed by a t-test. Findings revealed that Saudis produced more semantic formulas compared to their American counterparts. However, both groups refused a higher status person using more semantic formulas. The participants also refused suggestions

with a fewer number of semantic formulas when compared to their refusal of requests, invitations, or offers. This particular finding reflects deeply rooted cultural values.

In another study in Saudi context, Al Qunayeer (2019) identified refusal strategies performed by Saudi EFL learners. The study aimed to investigate pragmatic transfer in the responses of Saudi EFL learners in English. The same group of participants were asked to refuse situations with four different scenarios including invitations, requests, offers and suggestions in their first language (Arabic) and second language (English). Hence, 44 third-year English major female students responded to a written Discourse Completion Task (DCT) that involved situations to people with low, high and equal social status. Moreover, data were analysed based on the classification of refusal strategies proposed by Beebe et al. (1990). The results of the study showed that the participants tended to refuse using less direct strategies in Arabic compared to their responses in English. In other words, they tended to refuse with more statement of regret, care for the interlocutor's feeling, and giving reasons. However, the participants used more direct strategies when they had to refuse a person with lower social status. In addition, the participants' responses in English tended to be too direct and mainly inappropriate and inaccurate. This is could be attributed to the participants' lack of knowledge about the role of social status when refusing a person of higher social status. The results also showed that the participants tended to be indirect using

reasons or explanations when refusing in their first language (Arabic). Finally, the study recommended that frequently used speech acts should be taught to the students, mainly those used in their daily conversation with professors and classmates.

In Egyptian context, Nelson et al. (2002) compared the production of refusal speech act between American English and Egyptian Arabic. The researchers collected the data from 25 Egyptian Arabic and 30 American English using a modified version of open-ended DCT designed by Beebe et al. (1990). Unlike Al-Shalawi's (1997) study, the data were collected orally by which each situation was read to the participants by an interviewer who asked them to respond to these situations orally. In order to show if there were any statistically significant differences in the responses of the groups of the participants, the researchers ran inferential statistical tests. In addition, data were analysed in terms of the influence of the interlocutor status, frequency use of strategies in general and frequency/type of indirect strategies in particular. Findings revealed that both groups of participants were found to refuse using similar semantic formulas and similar number of indirect and direct strategies. Yet, Egyptian participants tended to refuse with more direct strategies than Americans in the equal status situations. By contrast, Americans tended to use more expressions of *gratitude* than their Egyptians counterparts. The scope of this study is believed to be relevant to the current study in lights of the variable examined (high and low-context communication styles), the

data collection as well as the data analysis methods. Therefore, the findings by Nelson et al. (2002) would be used as a comparison to the present study.

In Iraqi context, Jasim (2017) examined how Iraqi Arabic and British English refused requests and offers. The participants were similarly divided into three groups of 20 native speakers of Iraqi Arabic, 20 Iraqi EFL of English, and 20 native speakers of British English. An open-ended role plays and DCT were adopted to collect data from the participants. The participants were asked to refuse situations to people with different gender, social distance, social status, and rank of imposition. The data were coded into strategies and then classified based on the Beebe et al. (1990) scheme of refusals. Data were also categorized in lights of (im) politeness super strategies proposed by Brown and Levinson (1987) and Culpeper (1996). The findings revealed that the participants' cultural background influences their choice of refusal strategies. For example, both groups of Iraqis were more influenced to status and distance than their British counterparts who were influenced to status and gender. In addition, both groups of Iraqi tended to refuse using more direct strategies compared to the British participants.

Finally, Al-Shboul and Huwari (2016) investigated the influence of the individualism and collectivism cultural dimensions on the production of refusal by speakers of Jordanian Arabic (JA) and American English (AE). 15 native speakers of JA and 15 native speakers

of AE participated in the study. For the purpose of data collection, Al-Issa's (1998) Discourse Completion Test (DCT) was adapted. Regarding the analysis of the data, sequences of semantic formulaic and the refusals' taxonomy proposed by Al-Issa (1998) were used. Findings show that the two participating groups preferred indirect strategies, adjunct strategies, and direct strategies respectively. Nevertheless, Americans made more direct refusal strategies than Jordanians who used more indirect refusal style. Table 1 briefly summarises the studies presented above and their main results.

To sum up this section, the researchers reviewed these studies because they are relevant to the current study regarding the design, data collection, and data analysis technique. Moreover, they reviewed these studies to compare their findings with the findings of the present study. Hence, it can be seen that the research reviewed above included three inter-language refusal studies that investigated the realization of refusal speech act performed in English by EFL learners comparing the production of refusal by Japanese native speakers and native speakers of American English (Beebe et al., 1990), and how this speech act is performed in English by Turkish EFL learners and compared their production to that of Turkish native speakers and American English native speakers (Çiftçi, 2016), and how refusal is realized in English by Saudi EFL learners as compared to the production of that made by Saudi native speakers and native speakers of American English (Al

Table 1

Research investigating the speech act of refusal

Research	Focus	Data collection method	participants	Results
Beebe et al. (1990)	Refusing in Japanese L2 ESL	Written DCT	20 Japanese ESL, 20 Japanese NSs, and 20 Americans NSs.	- Occurrence of pragmatic transfer among Japanese learners of English.
Çiftçi (2016)	Refusing in Turkish L2 EFL	Written DCT	15 Turkish EFL, 15 Turkish NSs, and 20 Americans NSs.	- Occurrence of pragmatic transfer among Turkish learners of English.
Rezvani et al. (2017)	Arab, Persian, Turkish and Kurdish	Written DCT	15 Arabic, 9 Persian, 14 Turkish and 12 Kurdish	- Participant preferred indirect refusal than direct and adjunct refusal.
Johnson (2014)	Refusing in German and American	Written DCT	15 German NSs, and 15 Americans NSs.	- The two groups of participants used less direct strategies than indirect strategies
Al-Shalawi (1997)	Refusing in Saudi and American	Written DCT	50 Saudi males and 50 American males	-Saudis used more semantic formulas and provide fewer explanations.
Al Qunayeer (2019)	Refusing in Saudi	Written DCT	44 third-year English major female students	- Occurrence of pragmatic transfer among Saudi learners of English.
Nelson et al. (2002)	Refusing in Egyptian and American	Oral DCT	25 Native Speakers of Egyptian Arabic, and 30 Native Speakers of American English	-Americans used less direct strategies in status-equal situations than Egyptians. -Egyptians used more indirect strategies in equal/lower status situations.
Al-Shboul and Huwari (2016)	Refusing in Jordanian and American	Written DCT	15 Jordanian NSs, and 15 Americans NSs.	- Americans made more direct refusal strategies than Jordanians who used more indirect refusal style.

Qunayeer, 2019). These studies have shown the occurrence of pragmatic transfer among EFL learners of English.

Moreover, the studies reviewed above included five inter-cultural speech act studies that compared the realization of the speech act of refusal in Arabic and American English (Al-Shalawi, 1997; Al-Shboul & Huwari, 2016; Nelson et al., 2002), in German and America English (Johnson, 2014), and between Arab, Persian, Turkish and Kurdish (Rezvani et al., 2017). Generally speaking, the participating groups in these five studies used more indirect strategies than direct strategies. Regarding the data collection method, all of the studies reviewed above used the DCT to collect the data which is the instrument that elicited single-turn responses.

In addition, the above studies are reviewed in a way that shows the contribution of the present study and bridged some of the gaps in the literature. Consequently, previous research on Jordanian refusals were either interlanguage studies (Al-Issa, 1998; Huwari & Al-Shboul, 2015) or intercultural studies (Al-Shboul & Huwari, 2016) to examine the intercultural communication of refusal speech act and based on Hofstede's (1991) individualism and collectivism cultural dimensions. Hence, this study will enrich the speech act studies on production in general and of refusal in particularly; in the field of inter-cultural awareness generally and among Jordanian and American speakers specifically. It will focus to enrich inter-cultural understanding and communication awareness. More

specifically, the current study is expected to add empirical findings with regards to the production of refusal by Jordanian Arabic and American English in relation to high and low-context communication styles.

Research Questions

The research was guided by the following questions:
1. What are the refusal strategies produced by Jordanian Arabic and American English?
2. How do high and low-context communication styles influence the production of refusal strategies by Jordanian Arabic and American English?

METHODOLOGY

Participants

The participants of the present study were 30 Jordanian native speakers of Arabic (JA) and 30 American native speakers of English (AE). The first selection of American participants involved a purposive random sampling within four months period of non-Arab speakers visiting Jordan. This group of participants initially consisted of 53 speakers with different ethnic and linguistic backgrounds. Eventually however, 23 of them who were not AE speakers (7 were speakers of Dutch, 5 French, 6 British, 4 South African and 1 New Zealand) were excluded. Hence, the remaining, who were 30 male AE speakers ranging from 25-50 years old. The Jordanian speakers were all citizens of Amman. The researchers met the speakers from both groups in the same locations (i.e., Amman, Jerash and Petra).

The number of the Jordanian speakers was also reduced from initially 41 to 30 male speakers aged from 25-45 to meet the equivalent number of the American participants. All 60 Jordanian and American participants have at least completed their Bachelors in different academic programmers. Hence, the participants of both groups are recognized to be somehow homogeneous concerning their cultural, academic level, and ethnic backgrounds.

Instrument and Procedure

Similar to Nelson et al. (2002) who used a modified version of Beebe et al.'s (1990) DCT to be completed by the American English and then they translated it into Arabic (with very slight modifications to fit Arabic context) to be completed by Egyptian Arabic. The researchers of the present study used two types of Discourse Completion Tasks as its instrument of data collection. The first was a modified version of DCT proposed by Beebe et al. (1990) to be completed by the American native speakers of English. Jordanian Arabic native speakers on the other hand responded to the equivalent Arabic version adopted from Nelson et al.'s (2002) study. The researchers selected the DCT instrument because it was considered as a useful device in cross-cultural comparison research and can be run to participants with a great number in a non-elaborative time edge. In addition, Blum-Kulka and House (1989) indicated that such instrument helped the researchers to completely control a number of social and contextual variables. Moreover, Beebe

et al. (1990) had made a pilot study to the instrument in order to achieve the validity and reliability of the 12 situations involved (three offers, three requests, three suggestions, and three invitations) and intended to a lower, equal, or higher status person in each situation.

Regarding the procedures of data collection, the researchers visited different locations in Jordan such as Amman, Jerash and Petra seeking American tourists visiting Jordan to complete the questionnaire. Hence, the researchers met them and administrated the questionnaire over a period of four months. For the Jordanian Arabic group, the researchers located and saw the participants only in Amman the capital of Jordan. More specifically, they met them in two famous cafes located in downtown Amman. The average time taken by participants to complete the questionnaire was around 10 minutes. The researchers explained the purpose of the study to both participating groups and clarifying the tasks in some details. The researchers asked the participants to read each situation carefully and try to react to it naturally by imagining themselves in these situations, before writing the responses.

Upon completion of data collection, the researchers analysed these data in lights of the sequences of semantic formulaic and then classified them following the classification taxonymy of refusal strategies established by Beebe et al. (1990). The concept of semantic formula is defined as "a word, phrase, or sentence that meets a particular semantic criterion or strategy,

any one or more of these can be used to perform the act in question" (Cohen, 1996). For instance, refusing a dinner invitation by a friend by saying "Thanks a lot for your invitation; I have something to do, let's make it another day.", was analysed as involving three semantic formulas (as shown in the parentheses):

- Thanks a lot for your invitation (gratitude).
- I have something to do (Excuse, reason, explanation).
- 'Let's make it another day (Promise of future acceptance).

Nevertheless, the classification system of the present study was slightly modified to fit the data by omitting semantic formulas listed in Beebe et al.'s (1990) that did not appear in the present data and adding categories that were not in its original framework.

After the first round of data analyses, two well-trained professors of English linguistics were invited as independent raters as a measure of ensuring a high level of reliability to the classification made on the data. During this process, there were differences of opinion in classification types, decisions were made based on agreement between the researchers and the two raters.

It was during this process too that some new categories were found, noted, and added as new findings. Only after the classifications were agreed upon and completed, the researchers ran descriptive statistics analysis to acquire the patterns of the classifications that would assist further analysis.

RESULTS

Table 2 shows the semantic formulas produced by both participating groups. The researchers calculated the rank (R.), number (No.), and frequencies of these semantic formulas. It can be seen that both groups of participants performed total number of 1827 written refusal strategies. More specifically, the JA participants made 961 written Arabic refusal strategies. By contrast, the AE participants' responses to the questionnaire resulted in 866 written English refusal strategies. Generally speaking, both groups of participants demonstrated preferences for indirect strategies, adjunct strategies, and direct strategies. In the following section, the researchers show and discuss in some detail the semantic formulas produced by both participating groups.

Table 2

Rank, number, and frequencies of the semantic formulas

Semantic formula	JA			AE			Total	
	R.	No.	%	R.	No.	%	No.	%
Direct								
Performative	-	-	-	14	2	0.2	2	0.1

Table 2 *(Continued)*

Semantic formula	JA			AE			Total	
	R.	No.	%	R.	No.	%	No.	%
No	7	22	2.3	6	26	3.0	48	2.6
Negative willingness/ ability	4	82	8.5	3	152	17.6	234	12.8
Indirect								
Statement of regret	3	116	12.0	4	81	9.4	197	10.8
Wish	17	5	0.5	8	16	1.8	21	1.1
Excuse, reason, explanation	1	363	37.7	1	290	33.5	653	35.7
Statement of Alternative	5	46	4.7	7	19	2.2	65	3.5
Set condition for future or past acceptance	11	13	1.3	10	8	0.9	21	1.1
Promise of future acceptance	15	7	0.7	-	-	-	7	0.4
Statement of principle	8	21	2.2	8	15	1.7	36	2.0
Philosophy	20	1	0.1	11	5	0.6	6	0.3
Criticize	13	11	1.1	13	3	0.3	14	0.8
Let interlocutor off the hook	12	12	1.2	13	3	0.3	15	0.8
Unspecific or indefinite reply	10	14	1.4	-	-	-	14	0.8
*Swearing to God	14	8	0.8	-	-	-	8	0.4
*Self-defence	18	4	0.4	-	-	-	4	0.2
*Praying for God's blessing	16	6	0.6	-	-	-	6	0.3
*Define relation	6	40	4.2	-	-	-	40	2.2
Silence	15	7	0.7	15	1	0.1	8	0.4
Physical departure	17	5	0.5		-	-	5	0.3
Postponement	19	2	0.2	10	8	0.9	10	0.5
Repetition of part of request		-	-	13	3	0.3	3	0.2
Adjuncts to Refusals								
Statement of positive	9	15	1.6	5	32	3.7	47	2.6

Table 2 *(Continued)*

Semantic formula	JA			AE			Total	
	R.	No.	%	R.	No.	%	No.	%
opinion/feeling or agreement	9	15	1.6	5	32	3.7	47	2.6
Pause filler	17	5	0.5	9	12	1.4	17	0.9
Statement of gratitude or appreciation	2	156	16.2	2	186	21.5	342	18.7
Statement of empathy	-	-	-	12	4	0.5	4	0.2
Total	-	**961**	**100.0**	-	**866**	**99.9**	**1827**	**99.7**

*Additional types of semantic formulas found in the corpus of the current study.

DISCUSSION

Research Question One: What are the refusal strategies produced by Jordanian Arabic and American English?

The first research question was set to identify the refusal strategies made by Jordanian Arabic and American English native speakers. Regarding JA participants, a total number of 961 written Arabic refusal strategies were made by them. Unsurprisingly, the participants give *excuse, reason, explanation* (e.g. "I will be busy at that time", سوف اكون مشغولا في ذلك الوقت) as the most frequent strategy in around 37.7% of the strategies (n = 359). The participants' use of *gratitude or appreciation* (e.g. "thank you"; شكرا لك) was the second most frequent strategy in approximately 16.2% of the strategies (n=156). *Expressing regret* using semantic formulas such as (e.g. "I'm really sorry"; انا حقا اسف) was the third most frequently strategy made by JA participants in almost 12.0% of the strategies

(n=116). The participants' use of *negative ability/willingness* (e.g. "I cannot do this"; لا استطيع فعل ذلك) was fourthly adopted in approximately 8.5% of the strategies (n=82). As the fifth most frequently used strategy, the JA participants used *statement of alternative* (e.g. "I prefer to stay in the current position instead of moving to the new one"; بدلا من الانتقال الى المكان الجديد انا افضل البقاء في المكان الحالي) in approximately 4.7% of the strategies (n=46). The JA participants' use of the strategy *define relation* (e.g. "my dear boss"; مديري الفاضل) was the sixth most frequent strategy in approximately 4.2% of the strategies (n=40). The participants' frequency use of the remaining strategies appeared respectively as the following: *"no"* 2.3%, *statement of principle* 2.2%, *Statement of positive opinion/feeling or agreement* 1.6%, *Unspecific or indefinite reply* 1.4%, *Set condition for future or past*

acceptance 1.3%, *Let interlocutor off the hook* 1.2%, *Criticize* 1.1%, *Swearing to God* 0.8%, *Promise of future acceptance* 0.7%, *Praying for God's blessing* 0.6%, *Wish* and *Pause filler* 0.5%, *Self-defence* 0.4%, *Postponement* 0.2%, and *Philosophy* 0.1%.

By contrast, the AE participants' responses to the questionnaire resulted in 866 written English refusal strategies were made by the AE participants. Similar to the JA group, *excuse, reason, explanation* (e.g. "My kids and I have a party that day.") was ranked as the most frequently strategy performed by the participants in almost 33.5% of the strategies (n=290). This is in accordance with Jordanian Arabic refusal studies such as Al-Shboul and Huwari (2016) who found that both Jordanians and Americans used *excuse, reason, explanation* more than any other strategy. *Expressing gratitude or appreciation* (e.g. "I highly appreciate your offer.") was also the second most frequent strategy made by AE participants in around 21.5% of the strategies (n=186). As the third most frequently used strategy, the AE participants expressed *negative ability/ willingness* (e.g. "I cannot make this at the moment") in approximately 17.6% of the strategies (n=152). The AE participants' use of *regret* (e.g. "I'm sorry…") was the fourth most frequently used strategy by them in almost 9.4% of the strategies (n=81). The participants show *statement* of positive opinion/feeling/agreement (e.g. "I'd love to...") in their responses to questionnaire as the fifth most frequent strategy used by them in around 3.7% of the strategies (n=32). The participants' use of *direct refusal "no"* (e.g. "No") was the sixth most frequent strategy used by them in approximately 3.0% of the strategies (n=26). The participants' frequency use of the remaining strategies appeared respectively as the following: *statement of alternative* 2.2%, *wish* and *statement of principle* 1.7%, *Pause filler* 1.4%, *Set condition for future or past acceptance* and *Postponement* 0.9%, *Philosophy* 0.6%, *Statement of empathy* 0.5%, *Let interlocutor off the hook, criticize*, and *Repetition of part of request* 0.3%, *Performative* 0.2%, and *Silence* 0.1%.

Research Question Two: How do high and low-context communication styles influence the production of refusal strategies by Jordanian Arabic and American English?

The second research question was formulated to investigate the influence of high and low-context communication styles on the Jordanian Arabic and American English production of refusal strategies. Although both groups of participants agreed in their preference of refusal strategies, they differ in the content and number of semantic formulas. Hence, the participants of both groups tended to

use indirect strategies (excuse, reason, explanation) followed by adjunct strategies (Statement of gratitude or appreciation). Other examples of the most frequent strategies used by the participants included *statement of regret* and *statements showing negative ability/willingness*. These particular findings seem to be similar to those reported by Al-Shalawi (1997), Nelson et al. (2002), and Al-Shboul and Huwari (2016). The following paragraphs discuss how the participants' cultural backgrounds influence the number and content of semantic formulas.

Hall (1976) indicated that the nature of message and communication in high-context (HC) cultures was little coded, implicit, and only part of the message was conveyed in which most of the information was kept by the person. By contrast, the communication in a low-context (LC) is directly coded, explicit and much of the information is unambiguously expressed. Similarly, Samovar et al. (1998) indicated that while members of high-context cultures appeared to communicate with others in an ambiguous way, members of low-context cultures tended to express their messages in detail, clear cut, and definite way, feeling not relaxed with vagueness and ambiguity.

This appeared clearly in the participants' responses to the questionnaire. For example, the JA group provided more vague and ambiguous explanations than those made by the AE group. More specifically, Jordanians' responses did not include specific times or places when refusing someone using explanations. For instance, when refusing an invitation by a boss (higher social status) inviting to attend a little party (situation 4), while Jordanians provided responses such as "I have very important appointment at the same time", AE participants were more likely to say "I have a birthday party that day." In addition, JA group responds using similar unspecific time and place explanations by saying "I have to do something else after work", "I need to go somewhere after the meeting", or "I have many things to finish right after meeting", when they tended to refuse a boss's (higher social status) request to spend an extra hour or two to finish meeting agenda (situation 12). By contrast, AE group tended to give more specific responses when they had to refuse the same situation. Examples of their responses include "I have to pick up my son from school" or "I have a family reunion at home this evening." These findings are in agreement with those recorded in other research on Arabic refusal research. For instance, Al-Shalawi (1997) found that the Saudi participants' explanations/excuses were less specific in detail as to time, place and parties involved (i.e., "I have another appointment at that time.") compared to their American counterparts.

These differences represent deeply rooted cultural values and how the

differences between high and low-context cultures could influence the participants' production of refusal speech act. That is, Americans, as a low-context culture, provide detailed, clear-cut, and definite messages such as "I have to pick up my son from school." they also provided specific time and place by responding "I have a family reunion at home this evening." On the other hand, JA participants, as a high context culture, provided vague and less specific in detail as to time (i.e., I have to do something else after work) and place (i.e., I need to go somewhere after the meeting). Gudykunst and Ting-Toomey (1988) stated that people of high-context cultures were most likely to get engaged in an affective communication style compared to people in low context cultures who tended to get involved in an instrumental communication style. Thus, members from cultures of affective communication styles are most likely to refer to their "intuitive sense to interpret the multifarious nuances that are being transmitted in the ongoing dialogue" (Gudykunst & Ting-Toomey, 1988). The use of this type of affective communication style by JA group could reflect deeply rooted linguistic behaviour in giving highly contextual messages in interactions, in this case, refusing an invitation. Thus, Jordanians being used of this type of affective communication style feeling more comfortable with being indirect, vagueness and ambiguity and do not seem to feel they

have to provide as many of the details about their lives in general and in their giving the explanations in particular.

CONCLUSION

The current study adds to our knowledge about the production of refusal in two different cultures with two different languages as well, namely Jordanians and Americans. It also contributes to our understanding of how speech acts in general and the speech act of refusal in particular represent deeply rooted cultural orientation and the social norms of people with different cultural backgrounds. The differences raised because of the influence of high and low-context communication styles on the production of refusal strategies could be serious and lead to misunderstanding or communication breakdowns between Jordanians and Americans. Hence, results of the current study would be useful for designers of Arabic and English language curricula and for those who are teaching and learning Arabic and English as second/foreign languages. In addition, a good understanding of the inter-cultural awareness would be useful for people working in tourism and hospitality, especially for those who have direct contact with tourists such as staffs in customer service, administrative and management positions.

The findings of this study would enrich the production studies of refusal in the

field of inter-cultural awareness. It is also useful in understanding the inter-cultural and communication awareness and would add empirical findings with regards to the production of refusal by Jordanian Arabic and American English in relation to high and low-context communication styles.

Finally, although the present study provides evidence on the impact of high and low-context communication styles on the way Jordanian Arabic and American English produce the act of refusal, it has some limitations that need to be recognized. One of these limitations appears in the instrument of data collection (DCT) compared to the data collected from natural contexts. Yuan (2001) noticed that the responses of DCT were shorter, simpler, less emotional, and less face-attentive. In addition, the use of only one instrument to collect data would not be enough to highlight every phase of participants' refusal response. Rose and Ono (1995) insisted that it was unexpected to obtain all the needed insights of speech acts by means of only one data collection instrument. However, the DCT situations would allow researchers to control many variables, hence possibly decreasing the validity of the findings. In future research, researchers are highly recommended to replicate the present study using different data collection techniques including ethnographic technique, analysing discourse, videotaping, and role plays.

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A Comparative Study of EFL Listening Difficulties in Public and Private Ecuadorian High Schools

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ABSTRACT

The teaching of English in public and private institutions in the Ecuadorian context has been the subject of research since there are substantial differences in both educational systems. Thus, the purpose of this study was to compare the main difficulties that listeners from public and private high schools face when doing listening comprehension activities due to the importance of this skill for communication. It is important to remark that the conditions in terms of teachers' methodology are different in both types of institutions. The participants were 1536 Ecuadorian senior-high school students enrolled in 12 high schools, and 10 English as a Foreign Language (EFL) teachers. We used a descriptive mixed-method approach, which included the application of students' questionnaires and teachers' interviews to know their perceptions about listening difficulties in the classroom. The data analysis method was used to evaluate the answers to the students' questionnaires and the teachers' interviews. Findings indicate that students in public high schools face more difficulties regarding listening comprehension activities, especially while trying to understand main ideas, predicting content, comprehending general ideas when listening for the first time, feeling anxious when they do not understand a passage, and using background knowledge of a topic to understand listening activities.

Keywords: EFL learning, listening comprehension difficulties, public and private high schools, students' and teachers' perceptions

INTRODUCTION

In language acquisition, listening, speaking, reading, and writing are necessary skills to be developed. However, listening skill is an essential component that mainly contributes to master the language (Renukadevi, 2014). In addition, listening has been considered an important skill in language learning because it plays a significant role in daily communication and educational process (Pourhosein & Ahmadi, 2011). Furthermore, Worthington (2012) asserted that the development of listening comprehension influenced directly on the improvement of other language skills (speaking, writing, and reading). Likewise, Hamouda (2013) emphasized the role of listening comprehension as a fundamental skill in language learning and daily communication.

Nonetheless, learners face several challenges regarding listening comprehension, which have a significant impact on students' academic performance, especially in an English as a Foreign Language (EFL) context. Thus, investigating listening difficulties and learners' perceptions would be a suitable way to be aware of their needs so that teachers can plan appropriate listening activities for successful language learning.

Over the last decades, there have been many studies on the listening comprehension difficulties that students face when learning English (e.g. Bano, 2017; Bingol et al., 2014; Chen, 2013; Mahmoud, 2013; Nowrouzi et al., 2015). They have acknowledged several factors that influence listening comprehension including vocabulary, pronunciation accent, lack of concentration, bad quality of recording, among others. However, a contrast between private and public high school students' perceptions regarding listening comprehension difficulties is an issue that has not been widely researched, especially in the Ecuadorian context.

In this respect, there is a socio-economic inequality in Ecuadorian private and public education since the public system is free and works with a limited state budget; while the private system is financed by people who can afford it. This inequality affects the access of most Ecuadorian students to better education (Ecuadorian Ministry of Education, 2016). As a result, English language learning in public institutions is also influenced by the lack of teachers' training, facilities, resources, among others. Therefore, the conditions of these institutions limit the appropriate development of the students' English language skills.

Based on the aforementioned context, the purpose of this study was to compare the main difficulties that students from public and private high schools face when performing listening comprehension activities since the conditions in terms of teachers' methodology are different in both types of institutions. This situation happens because the resources used by teachers are limited in public institutions, which does not allow educators to apply novel strategies to teach the target language. The findings of the present research will help teachers understand the difficulties students have so that appropriate activities can be planned

considering EFL students' needs. Thus, the following research questions guided this study:

- What are the main difficulties that listeners from private and public high schools face when doing listening comprehension activities?
- Which listeners have more difficulties in comprehension, private or public high school students?

LITERATURE REVIEW

Listening Comprehension

Listening, as a receptive skill, is a complex process due to the level of comprehension and interpretation that is required to understand a passage (Hasan, 2000). Thus, unlike a mere listening process, which does not require analysis, listening comprehension involves aspects such as reaction or interpretation to understand the message. In this respect, Hamouda (2013) stated that this process required elements such as perception, attention, cognition, and memory to comprehend oral input.

The development of listening comprehension influences directly on the improvement of speaking, writing, and reading skills (Pourhosein & Ahmadi, 2011; Worthington, 2012). In addition, Hamouda (2013) asserted that listening comprehension played a paramount role to achieve proficiency in speaking, which made it a fundamental skill in language learning as well as in daily communication. Listening comprehension is the main channel to acquire input; thus, it is an essential factor

that allows people to learn a language or communicate their ideas (Barclay, 2012).

The Listener, The Speaker, and The Listening Passage

The listener's role, according to Stadler (2013) is more passive than the speaker's because what the listener has to do is just to receive information. Contrary to Stadler's idea, Hartley (2016) asserted that the listener played an active role because it involved participation in conversations through responses that showed the level of understanding; thus, those responses or comments became an important factor since they allowed the speaker to know how the message was understood by the listener (Verderber et al., 2012).

With respect to the speaker, Krizan et al. (2008) posited that the role of the information sender was to provide a comprehensible message by using words or gestures in order to persuade the listener. In addition, the speaker must take into account some aspects to transmit a clear message such as the correct volume, pitch, quality, rate and pause (Gutierrez, 2009).

Regarding the listening passage, it can be defined as the message that contains the speaker's thoughts, which can be transmitted directly or indirectly (Krizan et al.,2008). Additionally, Wilson (2008) claimed that the listening passage must contain some elements that made it understandable for listeners such as interest factor, entertainment, cultural accessibility, speech acts, discourse structures, density, language level, delivery, length, quality of

recordings, speed and number of speakers, and accent.

Research on listening elements (the listener, the speaker, and the listening passage) has indicated that students have a variety of problems in regards with these factors due to the ineffective use of listening strategies (Hasan, 2000). In addition, Hamouda (2013) also found that the aforementioned listening elements were some of the factors that affected students' listening comprehension.

EFL Learners' Listening Comprehension Difficulties

Listening comprehension difficulties have been widely discussed during the last decades because of the implications they have for language learning. According to Underwood (1989), there are seven obstacles to efficient listening comprehension. These obstacles are the students' lack of control of the speakers' speed to deliver a message, learning situations in which word repetition is not always provided to students, listeners' limited vocabulary, failure to recognize the signals that indicate speakers' transitions from one topic to another, absence of mutual knowledge and common content in the speech, interruptions on listeners' attention, and students' anxiety when trying to understand every word.

Another difficulty in listening is related to the accent. In this regard, Munro and Derwing (1999) stated that too much accented speech could lead to an important reduction in comprehension. In addition, Goh (1999) asserted that the speaker's accent

was one of the most significant factors that affected learners' comprehension. Moreover, Buck (2001) indicated that when listeners heard an unfamiliar accent such as Indian English for the first time after studying only American English, they would encounter serious difficulties in listening.

Bingol et al. (2014) mentioned three additional difficulties. When listening to unknown words, it would be very difficult and confusing for students to understand them since many words had more than one meaning depending on the context. In addition, they explained that, in some classes, teachers tended to use recorded materials that had poor quality, which could impact comprehension on behalf of the learners. Furthermore, they believed that students' proficiency could have a significant impact when they listened to long passages and had to keep all information in their mind.

Other factors that make listening comprehension difficult are restricted vocabulary, poor grammar, misinterpretations about listening tasks (Graham, 2006), and pronunciation of words that is different from the way they appear written (Bloomfield et al., 2010; Walker, 2014). Hasan (2000) also stated that unfamiliar words, difficult grammatical structures, and the length of the spoken passages were some of the factors that hindered learners' listening comprehension. He went further and explained that clarity, lack of interest, and the demand for complete answers to listening activities were other crucial issues of students' listening comprehension.

Based on Hasan (2000), the present study focuses on the students' listening comprehension difficulties related to listeners' cognition such as experience and background knowledge, prediction, listening for main ideas and details, holding dialogues after listening to a passage, and anxiety produced by lack of understanding. These types of difficulties are similar to the ones observed in the Ecuadorian context (Gonzalez et al., 2015).

Strategies and Activities to Develop Listening Comprehension Skills

With respect to strategies, Nation and Newton (2009) mentioned two types of useful strategies for training in listening. The first type (communication strategies) is related to assist comprehension, for example making predictions before listening, listening selectively, knowing how to interrupt politely, amongst others. While the second one (learning strategies) deals with noticing language forms in the listening input; for example, negotiating (seeking clarification), listening for patterns, and focused listening.

Richards (2008) identified two types of strategies on how to listen: cognitive strategies (mental activities for understanding and storing input in working memory or long-term memory), and metacognitive strategies (conscious or unconscious mental activities for the management of cognitive strategies). He also mentioned two strategies for listening as acquisition. The first one includes noticing activities, which involve returning to the listening texts that serve as

the basis for comprehension activities and language awareness. The second one refers to restructuring activities including oral or written tasks that involve productive use of selected items from the listening text.

According to Field (2009), activities for teaching listening can be divided into three stages: pre-listening, during listening and post-listening. In the pre-listening stage, we can pre-teach vocabulary, establish context, and enhance motivation. In this step, Harmer (2007) mentioned activities such as reading aloud, story-telling, interviews, and conversations. Finally, the post-listening activities include functional language in the listening passage, inferring vocabulary, and a final play in which learners look at the transcript.

Nation and Newton (2009) mentioned experiences with meaning-focused listening as a basis for L2 development. A typical activity for meaning-focused input is listening to stories, in which the teacher chooses a graded reader, sits next to the board and slowly reads the story to the learners. The main objective of this activity is to follow and enjoy the story. They also mention other activities such as oral cloze exercises, the picture ordering, the "What is it?" technique (the teacher talks about something and the learners have to explain what is being described), same or different exercises in pairs, and listen and choose activities. They also state that it is important to assist learners by giving them support when they do a listening activity. This support can be provided by sharing the previous experience with

aspects of the text, by guiding the learners during listening, by setting up cooperative learning arrangements, and by providing means through which learners can achieve comprehension by themselves.

Previous Studies about Listening Comprehension Difficulties

There has been some previous research conducted on the field of listening comprehension difficulties which constitute the basis to identify the different students' perceptions on their own problems while acquiring EFL listening skills.

Chen (2013) conducted a study to identify students' listening problems over time as they developed their listening strategies. The participants were 31 Taiwanese EFL college students who received listening strategy instruction (two hours per week for 14 weeks). The general listening strategies taught were metacognitive, cognitive, and social/affective. The methodology involved quantitative and qualitative methods that were used to examine listening problems faced by students and how they dealt with them over a period of time. Results showed that there were important differences in students' listening problems after the strategy instruction they received. The main problems encountered dealt with unfamiliar vocabulary, rapid speech rate and linking sound between words.

Mahmoud (2013) examined the listening comprehension strategies used by learners to cope with aural problems in EFL classes. The participants were fourth-year students of the English Department in Menoufia University. Students were classified in two groups (20 advanced and 20 intermediate) who were administered a test based on two listening passages before the study. In order to obtain information from the participants' listening processes and strategies, the "Think Aloud" technique was used during forty sessions (one session per participant). Results showed that participants faced six problems: hearing an unknown word, known words with no connection to the topic, words with multiple meanings, inability to recognize proper names and places, hearing words incorrectly, and inability to understand numbers.

Hamouda (2013) conducted a study to investigate the listening problems encountered by a group of first year English major students of Qassim University. Sixty students who took the listening course in 2012/13 were selected for the study. Data was gathered by means of questionnaires and interviews. The results of the study showed that accent, pronunciation, speed of speech, insufficient vocabulary, different accents of speakers, lack of concentration, anxiety, and bad quality of recording were the major listening comprehension problems encountered. Understanding students' learning difficulties may enable EFL teachers to help students develop effective learning strategies and ultimately improve their English listening abilities.

Wang and Fan (2015) studied and compared teachers' and learners' perceptions regarding the sources of listening difficulties experienced by low-proficiency Chinese learners of English. A 38-item questionnaire

and semi-structured interviews were employed to elicit the participants' beliefs. Findings show that in general the teachers and learners share the view that listening specific text-and processing-related variables have potentially the greatest impact on L2 listeners' comprehension, indicating the importance of giving priority to developing weak listeners' bottom-up perception abilities before higher-level processing skills should be attempted.

Nowrouzi et al. (2015) explored the listening comprehension problems of a group of EFL learners. The survey method was followed to collect data from a group of Iranian tertiary level EFL learners (n = 100) by using a questionnaire. The results indicated that the learners experienced from moderate to high levels of difficulty in three categories of listening comprehension problems: perception, parsing, and utilization. The findings provide useful implications for syllabus designers and teachers who intend to address the listening comprehension problems of EFL learners.

Bano (2017) carried out a pedagogical exploration into listening comprehension skills and examined the problems faced by students when practicing this skill in the EFL classroom. The participants were 24 female students and eight teachers from a University in Saudi Arabia. The methodology used included tests, observations, recordings, interviews and dictation tasks. In addition, two processes namely top-down (driven by the listener's expectations and understandings of the context, the topic, and the nature of the world) and bottom-up (triggered by the sounds, words and phrases which the listener hears as he or she attempts to decode speech and assign meaning) were applied to teach English lessons. The results demonstrate that the top-down process was productive because students used their background knowledge to make sense of what was said in the class. On the other hand, the bottom-up process was not really effective because students were well-versed in English skills and in English structure, so they were already able to understand the meaning of texts in context.

After discussing the approaches and results of the previous studies related to our research theme, it can be observed that they have been conducted in contexts in which the educational situation is different from Ecuador. Thus, the current study attempts to fill a gap in research in the Ecuadorian context where this topic has not been thoroughly explored.

METHOD

Setting and Participants

This research was conducted in 12 high schools (8 private and 4 public) from four cities in Ecuador, including the Highlands and Coast regions. The sample included 10 EFL teachers (7 female and 3 male) and 1536 senior-high school students (740 private and 796 public). Teachers' age ranged from 30-50 years old. Their teaching experience went from 6 to 25 years; they all held a Bachelor's Degree in EFL teaching; 2 of them held a Master's Degree in TEFL.

With respect to students, their age range was 16-17 years old. Students' proficiency levels varied between A2 (public high schools) and B1 (private high schools) according to the Common European Framework of References for Languages (CEFR) (Council of Europe, 2001). It is important to remark that the expected proficiency level, according to the Ecuadorian Ministry of Education (2016), is B1 for senior high school; however, students from public education usually have a lower level (A2). They received an average of 10 hours of EFL instruction per week. In addition, 12 secondary researchers, who were pre-service teachers from a distance EFL program at a private university, contributed by collecting data.

Instruments

Students' questionnaires were adapted by the researchers taking some of the listening difficulties identified by Hasan (2000) since they are similar to the ones observed in the Ecuadorian context. Thus, a Likert scale instrument that consisted of 9 items were applied. These items were selected to measure students' listening difficulties in terms of understanding main ideas, content prediction, anxiety, and background knowledge. Additionally, a teachers' structured interview (see Appendix 1), which aimed at finding out their own perceptions about listening difficulties in the classroom, was used.

Procedure

The data for this study were gathered for a period of 5 months in the academic year 2016. A descriptive mixed-method approach was used in order to carry out this research. According to Creswell (2015), a combination of quantitative and qualitative methods allows the researcher to have a better comprehension of the research problem than using only one approach.

The students for this study were selected through purposeful sampling from five important cities of the country since those cities were more representative and provided further information about the problem. In this respect, purposeful sampling is useful to intentionally select participants and sites in order to learn or understand the research problem (Creswell, 2015). Secondary researchers approached the chosen high schools, located at their place of residence, to apply the students' questionnaire and the teachers' interviews. Before administering the questionnaires, the Cronbach's alpha coefficient was used to test the reliability of the students' questionnaire, showing a result of 0.8, which means that this instrument is reliable. In terms of validity, the questionnaire was piloted with 26 students from a public and 26 from a private high school. The results of the piloting process allowed us to modify certain questions that were not clear enough in terms of vocabulary and interpretation. After the data were gathered from the questionnaires, the results were statistically analyzed using SPSS software;

thus, descriptive statistics were used, and the results were compared and contrasted. As for the teachers' interviews, they were also piloted with a group of professors in order to correct errors in questions and ensure its validity. The information gathered from these interviews was coded and classified in accordance with the most common opinions from the teachers (see Table 3).

RESULTS

In the section below we present Table 1, Table 2, and Table 3, which contain information in regards to students' questionnaires in public and private high schools, and the teachers' interview.

Table 1 and Table 2 present the responses given by the students regarding the factors that affect their listening comprehension. In Table 1, the first item shows that 40.32% of participants sometimes used their experience and background knowledge to understand the listening passage. Additionally, 29.64% said that they seldom used their experience to comprehend the text. On the other hand, Table 2 shows that many more students (67.86%) sometimes used their previous knowledge and experience to understand listening activities. Regarding the teachers' interview in both private and public high schools, the use of strategies for activating prior knowledge was frequent.

Table 1

Students' questionnaire (public high schools)

Item no.	Statements	Never %	Seldom %	Sometimes %	Often %	Always %
1	I use my experience and background knowledge of the topic to understand the listening passage	11.96	29.64	40.32	12.78	5.25
2	I listen to every detail to get the main idea of the listening passage	3.57	10.71	42.86	32.14	10.71
3	I find it difficult to do listening activities because of my lack of knowledge of English language	3.57	25	32.14	39.28	0
4	After my teacher stops the recording, I find it difficult to predict what will come next	3.57	21.43	42.86	25	7.14
5	I find it difficult to hold a short dialogue after listening to a passage	3.57	28.57	46.42	21.42	0

Table 1 *(Continued)*

Item no.	Statements	Never %	Seldom %	Sometimes %	Often %	Always %
6.	I find it difficult to get a general understanding of the message from listening for the first time	3.58	28.57	28.57	32.14	7.14
7.	I feel nervous and worried when I do not understand the listening passage	7.14	21.43	21.43	32.14	17.86
8	I find it difficult to understand listening passages related to topics that are not interesting to me	30.08	36.44	19.64	8.6	4.84
9	I find it more difficult to listen to a recorded text than to my teacher reading aloud	20.72	26.08	28.6	16.92	7.28

Table 2

Students' questionnaire (private high schools)

Item no.	Statements	Never %	Seldom %	Sometimes %	Often %	Always %
1	I use my experience and background knowledge of the topic to understand the listening passage.	0	14.29	67.86	17.85	0
2	I listen to every detail to get the main idea of the listening passage.	13.4	30.74	27.48	20.3	8.08
3	I find it difficult to do listening activities because of my lack of knowledge of English language.	21.36	30.68	31	12.56	4
4	After my teacher stops the recording, I find it difficult to predict what will come next.	14.76	32.36	30.56	14.36	7.56
5	I find it difficult to hold a short dialogue after listening to a passage.	22.4	31.16	28.24	13.76	4.24

Table 2 *(Continued)*

Item no.	Statements	Never %	Seldom %	Sometimes %	Often %	Always %
6.	I find it difficult to get a general understanding of the message from listening for the first time	17.36	33.86	28.62	15.4	4.56
7.	I feel nervous and worried when I do not understand the listening passage.	23.16	25.8	23.8	16.48	10.16
8	I find it difficult to understand listening passages related to topics that are not interesting to me.	25	42.86	14.29	17.86	0
9	I find it more difficult to listen to a recorded text than to my teacher reading aloud.	7.14	42.86	28.57	10.71	10.71

Table 3

Summary of the teachers' interviews

Listening difficulties	Public teachers' interview	Private teachers' interview
Experience and background knowledge	Application of strategies to encourage the use of students' background knowledge in listening activities so that they can improve their understanding.	Activation of prior knowledge before doing listening tasks because students can assimilate the target language in a better way.
Listening to every detail to get the main idea	Repetition of the listening passage many times because students want to listen to every word to understand the complete message.	Students do not have many difficulties to understand messages in context.
Lack of knowledge of English language	Students find it hard to understand listening passages because they do not have a good English proficiency level.	Students do not have a good English proficiency level, thus they have some difficulties to understand the activities.

Table 3 *(Continued)*

Listening difficulties	Public teachers' interview	Private teachers' interview
Prediction	Students have many problems to predict the ideas that they are going to listen in class. Not all the students practice the use of prediction when they study.	Encouraging students to use prediction as a listening strategy.
Holding dialogues after listening to a passage	Students often find it difficult to have conversations in the target language after listening to a passage.	Students are able to hold dialogues after listening to a passage.
Getting the general understating of the message from listening for the first time	When students listen to a passage for the first time, they usually have problems to understand its general message because of their low proficiency level.	Most students do not have difficulties to understand the message when listening to a passage for the first time. They have a lot of learning opportunities to practice.
Anxiety produced by lack of understanding	Students often feel nervous when they do not understand a listening passage.	Some students feel worried when they are not able to comprehend a listening passage.
Difficulty to understand listening passages that are not of students' interest	The majority of students do not have problems when they listen to topics that are not interesting for them.	The majority of students have difficulties to understand listening passages when the topic is not appealing to them.
Difficulty to listening to a recorded text	Students may not fully understand a recorded text; they prefer teachers reading the text aloud.	When students listen to a recorded text, they sometimes have difficulties to understand it.

In the second item (Table 1), 42.86% of students sometimes need to listen to every detail to get the main idea of the listening passage, and a significant percentage (34.14%) often have this difficulty during listening tasks. Conversely, in Table 2, the trend changes to seldom (30.74%) and sometimes (27.48%). As for the teachers' interview, the results show that students in public high schools had a low proficiency level, which led them to try to listen to every single word instead of listening to the whole message in context.

With respect to the third statement, 32.14% of students in public institutions sometimes found it difficult to do listening

activities because of their lack of knowledge of English language, while 25% seldom considered that these activities are hard. The percentages of these two options in Table 2 are almost similar, except for the option "often" in which 39.28% of students in public high schools found difficulties to do listening tasks. In a similar way, most of the teachers in both public and private institutions agree that their students have difficulties to do listening activities because of their low proficiency level.

In the case of the use of recordings to practice listening skills in public high schools (item 4), 42.86% of students sometimes found it difficult to predict what would come next after the teachers stopped the recording, and 25% of learners often found it difficult. The results in Table 2 indicate lower percentages in the same options; however, there is an important percentage (32.36%) in the option "seldom". According to the teachers' interview, students in public institutions have more difficulties for predicting ideas after listening to the passage than students in private institutions.

In item 5 (Table 1), it is evident that students could hold a short dialogue after listening to a passage (46.42% "sometimes" and 28.57% "seldom"). Similarly, the percentages in table 2 do not differ too much, except for the percentage in the option "sometimes", which is higher in public high schools. Regarding private high school teachers' beliefs, students do not find it difficult to hold short dialogues in the target language, while teachers from public

institutions perceive that their students often have this kind of problems.

In public institutions, most of the students had selected the options "often" (32.14%), "sometimes" (28.57%) and "seldom" (28.57%) regarding difficulties to get a general understanding of the message from listening for the first time (sixth item). On the other hand, students in private high schools selected the alternative "seldom" (33.86%) as the most significant one. As for the teachers' interview, students in private institutions did not have too many problems to get a general understanding of the message when listening for the first time.

In item 7 "I feel nervous and worried when I do not understand the listening passage", the percentage observed in the option "often" (32.14%) is the most significant one in public high schools. As for students in private institutions, the most important percentage was in the option "seldom" (25.8%). With respect to the teachers' interview, in public institutions, students often felt nervous when they did not understand a listening passage. Likewise, learners in private high schools felt worried when they were not able to comprehend a listening passage.

Regarding item 8, which is about the difficulty to understand listening passages related to topics that are not interesting for students, the results show that a significant portion of learners in public institutions (30.08 % - "never" and 36.44% - "seldom") did not have problems in this aspect. In the same way, students in private high schools expressed that they never (25%) and seldom

(42.86%) had difficulties regarding the aforementioned issue. Regarding teachers' beliefs, students in public institutions did not have major problems when they listen to topics that were not appealing for them. Surprisingly, this same aspect was mentioned as difficult for students in private institutions.

In the last item concerning difficulties to listen to a recorded text in both types of institutions, we can see similarities in the percentages of the option "sometimes" (28.6% - public and 28.57% - private) and differences in the rest of alternatives. The option "seldom" (42.86%) was higher in private high schools, and "often" and "never" were higher in the public ones. With respect to teachers' perceptions, students in public high schools preferred that their teachers read a text instead of listening to its recorded version. On the other hand, students in private institutions sometimes had difficulties when listening to the recorded versions of a passage.

DISCUSSION

Students in private institutions usually have a good command of the target language in terms of using their experience and background knowledge of the topic to understand the listening passage (item 1). In this sense, prior knowledge may facilitate students' attempt to understand incoming information by relating what they already know with new knowledge (Pourhosein & Ahmadi, 2011). This is justified by the fact that teachers in private high schools have better professional preparation, which

allows them to foster students' previous knowledge through well-designed didactic resources that help them comprehend listening passages. Conversely, teachers in public institutions do not use them as frequently as in private high schools.

Public high school students pay more attention to every detail in the listening passage than the students in private high schools. This situation might occur because students in private institutions have been trained to develop their reading comprehension skill in previous levels of instruction, so they are able to easily identify the main idea of the listening passage. With respect to this aspect, Brown (2006), emphasized the importance of helping students listened for specific purposes; also, this author explained that focusing on main ideas was more important for comprehension than listening for details.

Considering the main difficulties that listeners from private and public high schools have in listening comprehension activities, we will start by saying that learners from private high schools seldom have problems when it comes to do listening activities due to the lack of knowledge (item 3). On the other hand, more students in public high schools experience difficulties in the aforementioned activity. This difference might be explained because students in private high schools are exposed to a better learning environment than in public institutions. In addition, private high school students have more opportunities to practice the target language due to some factors such as the exposure time, the number of

students per class, and the availability of didactic resources, which contribute to better instruction.

In item 4, students from private institutions are better prepared to predict what will happen next in a listening passage without necessarily listening to all the information. These students apparently have had experience in the practice of pre-listening activities that activate their schemata. These schemata allow the students to make predictions about the situation and the discourse, thus helping them integrate new information (Jensen & Hansen, 1995).

Students of private institutions perceive that they are able to hold short dialogues after listening to a passage because they have a better understanding of what they listen to in the target language than students from public high schools do; this fact is also corroborated by the teachers' opinions since they claim that the students' speaking performance fits their language proficiency level. In fact, practicing listening as a receptive skill plays a significant role when acquiring speaking skills (Hamouda, 2013).

Regarding learners' difficulties to get a general understanding of the message from listening for the first time, students in public high schools often experience them. On the other hand, students in private institutions seldom have problems related to this aspect. Likewise, teachers in public institutions report students' difficulties to get a general understanding of the message from listening for the first time. This might be due to the number of hours (4 hours a week) devoted to teach this language, and the number of

students per class. In fact, most public high schools in Ecuador have larger classes than private ones.

With respect to item 7 related to feeling nervous and worried when students do not understand the listening passage, learners in public institutions experience these feelings with a higher frequency than students in private ones. It is evident that students in both types of institutions typically feel nervous or worried when they do not understand the listening passage even though this skill can be stressful for language learners (Goh & Taib, 2006). According to the teachers' interview, there are many factors such as psychological problems, lack of knowledge and confidence, and others that cause anxiety at the moment of performing listening tasks.

In item 8, which is related to the difficulty to understand listening passages about topics that are not interesting for students, it seems that learners in both types of institutions do not have any problems when facing this issue. According to teachers' opinion, these results might be caused by the exposition of students to a variety of topics that allow them to improve the listening skill.

In the last item, regarding students' difficulty to listen to a recorded text, learners in private institutions considered that they seldom find it more difficult to understand recordings than listening to the teacher reading aloud. These results show that students' listening comprehension skill is acceptable because they are more exposed to authentic audio materials which include different English accents. In this regard, Goh

(1999) asserted that the speaker's accent was one of the most significant factors that affected students' comprehension. On the other hand, in public institutions, students are less exposed to authentic audio materials, which does not allow them to have a good command of the listening skill (Bingol et al., 2014).

Based on the aforementioned discussion, we can notice that the students in public institutions are the ones who experience more difficulties in listening comprehension.

CONCLUSIONS AND IMPLICATIONS

The main difficulties that listeners from public high schools face when doing listening comprehension activities include not using their experience and background knowledge of the topic to understand the listening passage, trying to listen to every detail to get the main idea of the passage, lacking knowledge of English language, predicting content, understanding general ideas when listening for the first time, and feeling anxiety when they do not understand the passage. The most significant problem among the aforementioned issues is that students are unable to get the main idea of a listening passage because they try to listen to every detail.

Students in private high schools usually have access to high-quality didactic resources, technologies, and teachers with appropriate training, which results in better command of the target language. As a result, learners involve their experience and background knowledge to comprehend listening activities. However, a significant amount of them feel anxious when they do not understand a listening passage.

Students in public high schools seem to have more problems regarding listening comprehension than their peers in private institutions. This can be observed in the data analyzed in which the percentages show higher incidence of difficulties in public high schools. This fact might be explained in terms of the learning environment, opportunities to practice the target language, class size, exposure time, and didactic resources.

A limitation to remark in this study is that we worked with a partial sample of the country which included the Highlands and Coast regions, further studies should consider participants in other Ecuadorian regions to have a more complete perspective of this issue.

Although this study has provided insights on the difficulties students have in listening comprehension, and has contributed to the development of education in Ecuador, further research on the reasons that cause those problems regarding the aforementioned issues should be conducted. In addition, teachers must seek self-improvement in terms of professional development by looking for opportunities to receive training in the field of EFL teaching. Finally, teachers should design classroom activities so that learners are trained to use strategies aimed at overcoming the listening difficulties discussed in this study.

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APPENDIX 1

Teacher's interview

1. Do you activate students' experience and background knowledge when they have to do listening activities? Why?

_____

_____

2. Do your students have any difficulty when listening in context? Why?

_____

_____

3. Does your students' English proficiency level influence their understanding of listening passages?

_____

_____

4. Do your students use the prediction strategy to understand listening passages? Why?

_____

_____

5. Do your students find it difficult to maintain short dialogues after listening to a passage? Why?

_____

_____

6. Do your students find it difficult to get the general idea of a passage when listening to it for the first time? Why?

_____

_____

7. How do you students feel when they do not understand a listening passage?

_____

_____

8. Do your students find it difficult to understand listening passages that are not of their interest? Why?

_____

_____

9. Do your students find it more difficult to understand a recorded text or a read-aloud text? Why?

_____

_____

Assessment of Household Happiness in Slum Environment Using the Expected Value Rules

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ABSTRACT

A slum environment is an area that commonly has characteristics of unhealthy house conditions and tends to create a crowded condition among residents. This study is intended to measure the happiness level of the household. This study also suggests an instrument that can be used to understand the happiness level. The dimensions and indicators of happiness factors were derived from Statistics Indonesia, including the dimensions of life satisfaction, feelings, and the meanings of life. The research was conducted in several slum areas in Indonesia, such as in Kali Baru Village, Cilincing District, North Jakarta Municipality, DKI Jakarta Province. The sample comprised 100 households selected using multistage random sampling. The assessment of household happiness applied the expected value rules based on the composite index. The major finding of this study is that 100% of unhappy household were unemployed.

Keywords: Assessment of happiness individually, slum environment, the expected value rules, unemployed

INTRODUCTION

The urban areas have a greater risk of experiencing high levels of inequality and require more resources to achieve a minimum level of socially acceptable welfare. Therefore, the location of residence affects the way individual views of happiness status (Sumargo & Novalia, 2018). Happiness is felt subjectively for

everyone, and it depends on the degree to which they positively assess the quality of their entire lives. According to Veenhoven (Kalmijn & Veenhoven, 2005), there are two components to measure happiness, namely the useful and cognitive components. The useful components are related to the extent to which individuals feel positive about themselves (the level of hedonic influence), while the cognitive components are inacquaintance with the level of an individual's satisfaction. Happiness is an indicator to measure individual well-being, including aspects of good and positive emotions and life that is meaningful and fulfilled (Crabtree, 2012). In other words, happiness is an experience of positive emotions combined with feelings deeper about the meaning and purpose of life.

Various meanings of happiness are commonly understood by society. Some people defined happiness as feeling happy and satisfied with something that is considered noble (Kahneman et al., 1999). Others mentioned happiness as an effort to fulfill the potential and goals of one's life (Forgeard et al., 2011; Franklin, 2010; Martin, 2012; Seligman, 2002, 2005, 2011). Happiness can also be interpreted as an evaluation of life that someone feels towards certain aspects of life by considering the influences including emotional experiences (Organisation for Economic Co-operation and Development [OECD], 2013), and *eudaimonia,* which refers to someone as well as psychological functions that can work well (Clark & Senik, 2011; Deci & Ryan, 2008; Huppert, 2009; New

Economics Foundation, 2011). In contrast, the portrayal of unhappy people who intend to seek happiness in their interpretations needs special attention (Ahmad, 2015). Due to the fact that happiness encompasses complex life phenomena and from a variety of correlated determinants, the assessment of happiness index requires a framework that includes 19 indicators that cover three dimensions of life, namely dimensions of life satisfaction, dimensions of feeling, and dimensions of the meaning of life. The dimensions of life satisfaction are divided into sub-dimensions of personal and social life satisfaction (BPS-Statistics Indonesia, 2017).

Based on the previous explanation, the BPS-Statistics Indonesia (2017) determines the measurement of happiness with three dimensions, including the dimensions of life satisfaction consisting of personal subdimensions and social subdimensions, the dimensions of feeling and the dimensions of the meaning of life (*eudaimonia*). The results of the 2017 Happiness index showed that the dimensions of life satisfaction were about 71.07, where scores of each personal subdimension and social subdimensions were approximately 65.98 and 76.16, respectively. Meanwhile, feelings and meanings of life scores were about 68.59 and 72.23. Furthermore, the happiness index measurement for each dimension of life satisfaction, feelings, and meaning of life in respect was about 34.8%, 31.18%, and 34.02%. In other words, the average contribution in each dimension of happiness is relatively the same, which is around 30%.

The value of Indonesian happiness is 70.69, and the happiness index in DKI Jakarta Province is greater than the Indonesian happiness index (71.33). It implies that the happiness of the population in DKI Jakarta province is in the moderate category. The unhappy society is commonly experienced by people who live in slum areas. However, to present, there is no standard of measurement to examine the happiness index in the slum areas. Therefore, it cannot be compared with the national happiness index. These findings could be engaged as the basis to develop a measurement model for happiness index, particularly in the slums circumstance such as in North Jakarta. Based on this explanation, this study applied a multidimensional measurement of happiness, namely micro perspectives, by detecting individuals or households, whether happy or unhappy. Multidimensional happiness means that many factors cause a person or household to be happy. Additional indicators can influence happiness, the more complex the essence of happiness itself is, between individuals or households.

The life satisfaction dimension has personal sub-dimension and social sub-dimension. The indicators of personal sub-dimension are the drop out of school (Carr, 2004; Scoppa & Ponzo, 2008); being unemployed (Carr, 2004, Clark & Oswald, 2013; Di Tella et al., 2001; Gerlach & Stephan, 1996); having no fixed income per month (Carr, 2004; Righi, 2014); having chronic diseases (Carr, 2004; Carrieri, 2011); and home-ownership (Carr, 2004). The indicators of social sub-dimension are a harmonious family (Carr, 2004), having leisure time for family (Biswas-Diener & Diener, 2009); having no conflict with a neighbour (Carlisle & Hanlon, 2007; Carr, 2004; Cassel, 2009; Diener & Ryan, 2009; Grossi et al., 1995); and not being victims of crime (Main, 2014).

The indicators of feeling dimensions (Forgeard et al., 2011; Franklin, 2010; Martin, 2012; Seligman, 2002, 2005, 2011) are feeling happy (Chekola,1974; Crabtree, 2012), feeling worry or anxious (Carr, 2004), and feeling depressed (Carr, 2004; Goldings, 1954). In addition, the indicators of the meaning of life (Clark & Senik, 2011; Deci & Ryan, 2008; Huppert, 2009; New Economics Foundation, 2011) are family not being independent (Main, 2014); stress due to the environment (Carr, 2004), poor relationships with others (Carr, 2004), having a purpose in life (Ryff & Essex, 1992), and self-acceptance or being in control of emotion (Carr, 2004; Crabtree, 2012; Fordyce, 1971).

LITERATURE REVIEW

The Understanding of Happiness

In general, prosperity is not only meant to promote material welfare but also to increase the happiness of all Indonesian citizens. Happiness is the degree to which a person positively evaluates the quality of his whole life. Another term for happiness is subjected to well-being, excellent and positive emotional feelings, and life satisfaction (Crabtree, 2012). Happiness as a positive emotional experience combined with a more profound feeling about the

meaning and purpose of life. In happiness, there are two positive moods about the present and their views about the future. A study by Seligman (2005) is a pioneer in positive psychology, and it has confirmed that people who pursue mere pleasure can only benefit from temporary happiness and do not answer the meaning of happiness intrinsically (Huang, 2008).

The word subjective well-being used for happiness is due to the term being used as a natural umbrella to explain the satisfaction and meaning of life as a whole in life. Happiness can be identified by a number of the main dimensions of aspects of happiness. There are eight main dimensions of happiness, as will be explained. First, perspective, which is a personal view on life that gives rise to optimistic and positive feelings. Second, equilibrium is the stability felt by someone about feeling secure, feeling trusted, not afraid to lose their livelihood, feeling like they have ownership, and being able to express themselves. Further autonomy, which is the ability of someone to direct themselves about how, when, and where they can express themselves, develop, and be trusted in the scope of their activities and lives. Fourth, mastery, including the ability to develop skills that match their activities or work; Fifth, objectives, namely feelings of harmony between general goals and their personal values, feeling involved, finding meaning in their activities as the primary motivators of their activities. Next, progress, which is to achieve progress from day to day that leads to achieving their life goals. Seventh, culture is the existence of

mutually supportive cultures in interpersonal relationships so that a sense of belonging grows. Lastly, appreciation, namely the implementation of a climate of positive openness accompanied by recognition and mutual respect (Huang, 2008).

Happiness Factors

Factors that influence a person's well-being, viewed from the perspective of psychology, include demographic factors, social support factors, evaluation of life experience, locus of control, and religiosity factors. Some demographic factors that influence the well-being of psychology such as age, gender, socio-economic status, and culture. Ryff and Keyes (1995) found that the dimensions of mastery of the environment and autonomy dimensions increased with age, especially from young adults to middle adulthood. The dimensions of positive relationships with others also increase with age. Conversely, the dimensions of life goals and personal growth show a decrease with age; this decline mainly occurs in middle to late adulthood.

Gender according to Ryff and Keyes (1995), when compared to men, women have higher scores on the dimensions of positive relationships with others and dimensions of personal growth while socio-economic status also affects the condition of the psychological well-being of an individual. Data obtained from the Wisconsin Longitudinal Study show social gradations in well-being conditions in middle-aged adults. The data show that higher education and employment status increase psychological

well-being, especially in the dimensions of self-acceptance and life goal dimensions (Ryff, 1989). Those who occupy high social classes have more positive feelings about themselves and their pasts and have more sense of direction in life compared to those in lower social classes.

The research on psychological well-being carried out in America and South Korea shows that respondents in South Korea have higher scores on the dimensions of positive relationships with others and low scores on the dimensions of self-acceptance. This can be caused by a cultural orientation that is more collective and interdependent. In contrast, American respondents had high scores in the dimensions of personal growth (for female respondents) and dimensions of life goals (for male respondents) and had low scores in the dimensions of autonomy, both men and women. Individuals who receive social support have a higher level of psychological well-being (Ryff, 2014).

Social support is defined as a sense of comfort, attention, appreciation, or help that is perceived by an individual to obtain from another person or group. This support can come from various sources, including partners, family, friends, colleagues, doctors, and social organizations. Studies by Cobb (1976), Cohen and McKay (1984), and Schaefer et al., (1981), mentioned that there were four types of social support, namely emotional support, award support, instrumental support, and informational support. Emotional support involves empathy, caring, and attention to someone. This support provides a sense of comfort,

security, ownership, and love for individual recipients, especially in times of stress.

Award support comes from expressing positive appreciation, encouragement or approval of thoughts or feelings, as well as favorable comparisons between individuals and others. This support builds self-esteem, competence, and feelings of respect, while instrumental support involves concrete action or giving help directly, and informational support includes giving advice, guidance, advice, or feedback on a person's behavior. Ryff (1989) suggested that specific life experiences could influence the condition of the psychological well-being of an individual.

These experiences cover various fields of life in various periods of life. Individual evaluation of his life experience has a significant influence on psychological well-being (Ryff & Keyes, 1995). This statement is supported by research conducted by Ryff and Essex (1992) regarding the influence of individual interpretations and evaluations on his life experience on mental health. The self-evaluation mechanism proposed by Ryff and Essex (1992) follows several factors, including social comparison, reflected appraisal mechanism, behavioral self-perceptions, and psychological centrality mechanism. In social comparison mechanisms, individuals learn and evaluate themselves by comparing themselves with others. This comparison can lead to positive, negative, or neutral self-evaluations, depending on the standards used for comparison, which in this case are usually people or reference

groups. Meanwhile, the reflected appraisal mechanism follows the symbolic premise of interactionists, which argue that individuals are influenced by the attitudes shown by others towards themselves so that over time, individuals will see themselves according to other people's views of themselves. In other words, the feedback that individuals perceive from the view of others as long as they experience a particular life experience is a self-evaluation mechanism.

Behavioral self-perception is part of the process by which individuals give meaning to their life experiences. Those who perceive a positive change in themselves are expected to be able to view experiences more positively so that they can show good adaptation. In addition, the psychological centrality mechanism is composed of several components that are arranged hierarchically and are self-centered. In other words, there is a more centralized component than other components, where the more centered a component is, the higher the effect on self-concept.

Therefore, to understand the impact of life experiences on the psychological well-being conditions, it should also be understood to what extent the events and their effects on the main components of one's self-concept. If the experience only affects the main components, then the social comparison mechanism, the manifestation of rewards, and self-perceptions of behavior have less influence on psychological well-being. However, if a life experience influences the core components of self-concept, then the social

comparison mechanism, the manifestation awards, and self-perceptions of behavior will significantly affect psychological well-being. To obtain the information about the core of the identity of an individual, it can be asked how important the different components of life, such as health, family, and friends. In this research, the researcher can ask how important the meaning of marriage and family is for an individual.

The Organisation for Economic Co-operation and Development (OECD) measures happiness using the Better Life Index approach, which covers 11 dimensions including housing with indicators of the number of rooms per capita and the percentage of households that have their own defecation facilities; income with an indicator of the average household disposable income and the average value of financial assets owned by the household; work with indicators of the number of the working population and long-term (one year) disturbance rate; community with indicators of the number of friends, neighbors, or other close relatives who are willing to help if the population is in need; education with indicators of educational attainment and students' ability to read; an environment with air pollution level indicators; government with indicators of election participation rates and figures for transparency and openness of government in making regulations; health with life expectancy indicators and reports on general population health; and life satisfaction. The OECD has conducted a separate survey to find out how people evaluate their lives

in general based on their positive and negative experiences; security with the level of attack indicators experienced by the population and the murder rate of every 100,000 inhabitants; time balance with female level indicators that have school-age children working; the percentage of working residents who have long working hours (more than 50 hours a week); and free time and time to pamper oneself.

MATERIALS AND METHODS

The research was conducted in several slum areas in Indonesia, including in Kali Baru Village, Cilincing Subdistrict, North Jakarta Municipality, DKI Jakarta Province. The sample included 100 households and was selected using a random sampling technique. Then, the enumerator had interviewed the eligible respondents with an instrument survey-worksheet for assessment of household happiness.

In this study, the happiness index was measured based on three dimensions, namely the dimensions of life satisfaction, feelings, and meanings of life. The Life Satisfaction dimension includes: (1) sub-dimensions of personal life satisfaction include education and skills variables: (a) main work/business/activities, (b) household income, and (c) health; conditions of housing and house facilities; (2) sub-dimensions of social life satisfaction include variables of family harmony, availability of leisure time, social relations, environmental conditions, and security conditions. The Affect dimension includes: (1) feelings of happiness, (2) feelings of worrying, and (3)

feeling of not depressed. The dimensions of Meaning of Life (*eudaimonia*) include (3) independence, (b) environmental mastery, (4) self-development, (5) positive relationships with others, (6) life goals, and (7) self-acceptance.

The three dimensions of the measurement of happiness in question have their respective weights at 1/3, and each indicator in the dimensions is also weighted equally. Therefore, the researchers got the indicator weight as the dimension of life satisfaction weight consisting of 11 indicators valued at 1/33, the weight of the feeling dimension consisting of three indicators valued at 1/9, and the weight of the meaning of life consisting of six indicators worthed 1/18. Everyone who was assessed using a worksheet with indicators. The assessment consists of a dummy 0 or 1. When a person fulfills the happiness assessment according to multidimensional marine indicators, then one point is given, the assessment continues to be carried out on each indicator. After getting an assessment of twenty indicators, it would be calculated based on *E(I)* a dummy random variable with a probability mass function w (I), the expectation value of *I {E [I]}*, which is defined following this formula (Sumargo et al., 2019):

$$E(I_i) = W_1I_1 + W_2I_2 + \ldots + W_pI_p \qquad (1)$$

Where $I_i = 1$, if someone is hit by indicators *I*, and $I = 0$, if not.
Wj is the weight of the indicator with a total of *n* = its weight is worth 1.

The expected value of a random variable indicates its weighted average. The expected value should be regarded as the average value. When *I* is a discrete or dummy random variable, then the expected value of *I* is precisely the mean of the corresponding data.

Then the *E(Ii)* value is compared with a weight of 1/3 because of three dimensions: life satisfaction, feelings, and meaning of life. If it is bigger than 1/3, then the household is categorized as *happy*. Based on the dimensions of happiness in the Statistics Indonesia version, this study will detect poor households that have happiness and those that are not happy. The development of detection is conducted by giving a score of 0 (*No/None*) or 1 (*Yes/Existing*) for the indicators in each dimension; see Table 1.

RESULTS AND DISCUSSION

The general description of household heads in RW 012, Kali Baru Village, Cilincing District, North Jakarta Municipality consisted of 75.3% males, and 72.2% were over 40 years of age. As many as 67% graduated from junior high school (SMP), and 51.5% were smokers. Then household detection was done, which could be categorized as having multidimensional dimensions.

Multidimensional happiness detection was determined by comparing the multidimensional happiness scores of each household with the existing three dimensions. Specifically, it was known that there were 11 households (11%) multidimensionally, for which the expected

values were 0.3485, 0.4293, 0.3737, 0.3434, 0.4040, 0.8788, 0.4293, 0.3384, 0.3484, 0.4243, and 0.3737, respectively.

Unhappy households indicate that they had problems with the dimensions of life satisfaction, both personal and social, feelings, and quality of life and meaning of life. Based on the findings, it is known that unhappiness in life satisfaction is found where 100% of household heads are unemployed or have chronic disease (90.9% of households), non-permanent income per month (63.6% of households), or less-harmonious families (63.6% of households). Ironically when asked if they felt happy, all of them responded as being happy. However, as many as 27.3% of households were worried, and 18.2% of households felt depressed. The unhappiness of the household in the dimensions of life's meaning occurred with problems of not being independent (90.9% of households) and being environmentally stressed (90.9% of households).

Household unhappiness occurred in households where expenditures were below 1 million rupiah, ART never travels (63.6% of households), ART who worked less than 50 hours a week (54.5% of households), households not helping one another (54.5% of households), awful smelling households (54.7% of households), and dirty homes (72.7% of households).

CONCLUSIONS

Based on the results of the previous analysis and discussion, there are some conclusions. First, approximately 11% of

Table 1
Worksheet for assessment of household happiness

Dimension / Subdmension / Indicator	Sample of Household (Hh)				Weight (Wj)
	Hh. 1	**Hh. 2**	**Hh. 3**	**… Hh.**	
	Ii = 1, if a household member is hit by indicators I and I = 0, if not				
LIFE SATISFACTION					*3*
Personal Subdimension:					
1. Nobody dropped out of school	1 or 0	1 or 0	…	…	1/33
2. Some have participated in skills training	1 or 0	1 or 0	…	…	1/33
3. No one is unemployed	1 or 0	1 or 0	…	…	1/33
4. There is a fixed income per month	1 or 0	1 or 0	…	…	1/33
5. No one has a chronic disease	1 or 0	1 or 0	…	…	1/33
6. Own home ownership	1 or 0	1 or 0	…	…	1/33
Social Life Satisfaction Subdimension:					
7. Harmonious family	1 or 0	1 or 0	…	…	1/33
8. Lots of free time for family	1 or 0	1 or 0	…	…	1/33
9. No one has ever had a conflict with a neighbor	1 or 0	1 or 0	…	…	1/33
10. Comfortable environment	1 or 0	1 or 0	…	…	1/33
11. Never experienced a crime	1 or 0	1 or 0	…	…	1/33
FEELINGS (Affect)					*3*
1. Feeling happy	1 or 0	1 or 0	…	…	1/9
2. Feeling of worriness or anxiousness	1 or 0	1 or 0	…	…	1/9
3. Not feeling depressed	1 or 0	1 or 0	…	…	1/9
MEANING OF LIFE (*Eudaimonia*)					*3*
1. Independent family	1 or 0	1 or 0			1/18
2. No stress due to the environment	1 or 0	1 or 0	…	…	1/18
3. Developing a sense of self	1 or 0	1 or 0	…	…	1/18
4. There is a positive relationship with other people	1 or 0	1 or 0	…	…	1/18
5. Have a purpose in life	1 or 0	1 or 0	…	…	1/18
6. Can control emotions (there is self-acceptance)	1 or 0	1 or 0	…	…	1/18
$E(I_i)$ = Expected value of I, i = 1, 2, 3, … , p	**C_1**	**C_2**	**C_3**	**…**	
Happy (H) categories if $E(I_i) \geq (1/3)$. Note: There are three dimensions	***H or not***	***H or not***	***H or not***	**…**	

households were detected to be unhappy in a multidimensional manner. Second, the characteristic of household unhappiness in the social dimension was that the family was less harmonious, not independent, and the household members had never helped each other. Third, the characteristics unhappiness household were being unemployment (100% of the heads of households), had no fixed income, had an average expenditure

per month under one million rupiah, had never travelled before, and ART who worked less than 50 hours a week. Lastly, the characteristics of unhappy household in the environmental dimension were chronic disease, stress and unpleasant smelling homes which were dirty.

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Psychometric Properties of the WHO Quality of Life Disability (WHOQOL-DIS) among Persons with Disabilities in Malaysia

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ABSTRACT

The main objective of this paper is to test the psychometric properties of the World Health Organization's instrument (WHOQOL-DIS) in assessing the quality of life (QoL) in a sample of persons with disabilities in Malaysia. The sample consisted of 300 respondents who were stratified based on types of disabilities (hearing and speech, visual and physical impairment). Classical and modern psychometric methods were used to assess the reliability and validity while Cronbach's alpha (α) and Item-total correlation matrix to test the instrument scales and subscales for reliability. Construct validity of the WHOQOL-DIS instrument was assessed using both convergent and discriminant validity. Validity DISQOL module was evaluated using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The WHOQOL-DIS was found to have acceptable levels of reliability and validity for persons with disabilities within the sample. Cronbach's alpha ranged from 0.60 to 0.83 across domains with alpha scores greater than or equal to 0.6 considered acceptable and of adequate internal consistency. Convergent and discriminant validity were satisfactory. Significant correlation was found between each item and the domain to which it had been assigned. The instrument was able to discriminate between healthy and unhealthy respondents for all domains. EFA and CFA revealed similar models of DISQOL module on par with the original version. The results provide satisfactory evidence of the validity

and reliability of the WHOQOL-DIS as an instrument in assessing the QoL of Persons with Disabilities in Malaysia.

INTRODUCTION

The number of Persons with Disabilities (PWDs) in Malaysia has grown substantially in recent decades with the increase in the Malaysian population. In 2017, there were a total of 453,258 disabled persons in Malaysia who were registered with the Department of Social Welfare (Department of Social Welfare Malaysia, 2017). However, the figure is less than that estimated by WHO, since PWDs registration with the Department of Social Welfare is on voluntary basis (The Economic and Social Commission for Asia and the Pacific, 2017). Based on the current trend, the number of PWDs in Malaysia is expected to match that of other countries in Asia and the Pacific due to factors such as ageing of population, natural disasters, chronic health conditions, road traffic injuries, poor working conditions and better identification and measurement of disability through new methodologies (Islam, 2015). With a rising number of PWDs and concerted government welfare initiatives, assessing the quality of life (QoL) of PWDs has become increasingly important.

As there is no consensus with no single definition in interpreting quality of life (Felce & Perry, 1995; Kimura & Silva, 2009; Lazim & Osman, 2009), numerous

instruments have been developed over the years to measure it. Quality of life cannot be defined specifically as it covers many aspects of life and researchers agree that the definition of QoL is a multidimensional character definition (Dučinskienė et al., 2003; Kane, 2003; Taillefer et al., 2003). Reviews from previous research found that there are over 44 definitions of quality of life and over 800 tools for measuring the quality of life which include those developed for people with intellectual or other cognitive disability and some for use by families (Baker, 2012). The lack of agreement on a concept of QoL across disciplines has hindered attempts to create a multidimensional measurement (Bowling, 2010). Research on populations of PWDs has also suffered from a lack of generic QoL instruments that are truly applicable to this group.

WHOQOL team has developed several generic instruments to measure QoL for different groups of people. One of the instruments is known as WHOQOL-DIS. WHOQOL-DIS is a generic instrument developed specifically to measure QoL of PWDs and is suitable for use cross-culturally. This instrument consists of an existing WHOQOL-BREF and WHOQOL-100 as well as the incorporation of a supplementary disability module (Power & Green, 2010). Many researchers in other countries have used this instrument to measure QoL of PWDs.

Although there have been several studies on QoL in Malaysia using the instruments developed by WHOQOL group

such as WHOQOL-BREF and WHOQOL-HIV Bref (Bandar et al., 2014; Hasanah et al., 2003; Saddki et al., 2009; Shaik et al., 2015), WHOQOL-DIS is still considered new in this country. The WHOQOL-DIS instrument, measuring the generic, cross-cultural quality of life of PWDs can be useful in the development of interventions designed to meet the needs of this population and contribute to rational allocation of resources (Bredemeier et al., 2014) . Even though the Malaysian government seems committed to improve the QoL of PWDs at the policy level, empirically however, there are no specific instruments that could assess the QoL of PWDs in this county. Therefore, this cross-sectional study aimed to take the first step at extracting evidence on the validity and reliability of WHOQOL-DIS as an instrument for measuring the QoL of PWDs in Malaysia.

MATERIAL AND METHODS

Participants

A cross-sectional study was designed where 300 PWDs, stratified into three groups - Hearing and Speech Impaired, Visually Impaired and Physically Disabled - participated in this research. A list of potential respondents was procured from several sources including associations and organizations such as Department of Social Welfare Malaysia, Development Organization for the Blind Malaysia, Society of The Orthopedically Handicapped Malaysia, Malaysian Deaf Muslim Association and Social Security Organization (SOCSO). Assistance from

these organizations was sought to locate PWDs as potential participants for the survey. The exclusion criteria were: PWDs <18 years of age and those in the mental illness category. Official permission and letters or emails seeking for appointments together with documentation regarding the study were submitted prior to data collection. Data collection was mostly carried out at the venue where the respondents were located. Participation in the survey was voluntary with confidentiality of information assured and would be used for research purposes only. Participants in this study were briefed on the purpose of the study and informed consents were obtained prior to commencing the survey. Assurance was given to participants that they would not be exposed to any kind of harm, physical or psychological as well as social or economic. Face-to-face interview was conducted with the visually impaired respondents, a sign interpreter was employed to assist those with hearing impairment while self-administered questionnaire was administered to the physically disabled respondents. On average, face to face interviews as well as interviews using sign interpreters took approximately one hour, while self-administered took around 45 minutes to complete the questionnaire.

Instruments

The WHOQOL-DIS was implemented by administering of the WHOQOL-BREF together with the disability module. WHOQOL-BREF consists of two global items (overall QoL and general health) and four domains namely physical health (7

items), psychological health (6 items), social relationships (3 items) and environment (8 items). The disability module comprises 12 items that function as a single domain (DISQOL module) with one additional global item which assesses the impact of disability. Overall, WHOQOL-DIS consists of 39 items, including 36 items which were grouped into five domains and 3 global items.

One item within the social relationship domain, pertaining to sexual activity has been removed since there was a high number of missing responses, perhaps due to cultural sensitivities in the Malaysian context. Therefore, a total of 38 items were used in this study. All 38 items contain five Likert response scale, where one indicates low and five indicates high quality of life. As such, higher scores denote a better quality of life. However, there were a few items which were scaled in the negative direction, these items were reversely scored to ensure consistency of the measure of quality of life. All scores were transformed to reflect 4–20 for each domain with higher scores representing higher QoL. Both English and Malay languages were used in the questionnaire. WHOQOL-BREF was available in Malay version (Hasanah et al., 2003), while the DISQOL module was translated into Malay independently by four professionals who were fluent in both languages.

Statistical Analysis

The data were analyzed using SPSS software, version 18.0. Descriptive analyses were generated in the form of frequencies, percentages and means. Reliability of WHOQOL-DIS was assessed through internal consistency check using item-total correlation (Wieland et al., 2017). Internal consistency was measured using Cronbach's alpha for each domain of the WHOQOL-DIS instrument. Cronbach's alpha has a value between 0 and 1 where a value greater than 0.7 is considered acceptable with 0.6 as the lowest acceptable threshold and that reliability increases with increasing Cronbach's alpha value (Sekaran, 2000; van Griethuijsen et al., 2015). An Item-total correlation matrix assessed the reliability of summed scale where several items were summed to form the total scores. The items should be correlated with the total, the corrected item-total correlation should be greater than 0.3 and items with low correlation may have to be dropped (Brzoska & Razum, 2010; Maltby et al., 2007).

Construct validity was assessed by examining both convergent and discriminant validities. The method for assessing convergent validity is by calculating Pearson's Correlation Coefficients between the items of the WHOQOL-DIS and its five domains. Convergent validity is satisfied if the correlation between the items and the domain is strong. Literature suggests values over 0.3 as an acceptable level of correlation (Skevington et al., 2004; Streiner et al., 2015).

Discriminant validity or the ability of the WHOQOL-DIS domains to differentiate among groups was assessed by comparing between the five domains of WHOQOL-

DIS with self-evaluated health conditions. Since the self-evaluate health condition was grouped into two categories (healthy and unhealthy), the difference in the mean score was analyzed using independent sample t-test or the Mann-Whitney U test. Pearson Correlation Coefficients was also used to examine the pattern structure coefficient to determine whether the five domains in WHOQOL-DIS instrument are empirically distinguishable, with an acceptable discriminant validity if the measure of the domain is not too highly correlated with other domains (Sekaran, 2000).

Both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed to test construct validity of the DISQOL module. Exploratory factor analyses were carried out using principal component analysis with Varimax rotation and Kaiser Normalization. Confirmatory factor analysis (CFA) was used to investigate construct validity of the DISQOL module using Analysis of Moment Structure (AMOS) 22 version. Various standard fit indices were used to confirm whether the observed data fit the original structure of DISQOL module: Goodness of fit index (GFI), adjusted goodness of fit index (AGFI), Comparative fit index (CFI) and Root mean squared error of approximation (RMSEA) were also performed. The acceptable scores for a good model fit are: GFI ≥0.90, AGFI ≥0.90, CFI ≥0.90 and RMSEA ≤ 0.08 (Byrne, 2016; Hair et al., 1998; Hu & Bentler, 1999).

Ethical Clearance

Ethical approval for the study was obtained from the University of Malaya Research Ethics Committee (Reference Number: UM.TNC2/UMREC-190). All the participants agreed to participate in this research by signing the informed consent formed.

RESULT

Socio-Demographic Characteristics

A total of 300 Persons with Disabilities (PWDs) participated in the study with a mean age of 31.93 years (standard deviation = 13.29); 68.3% were male and 65.6% of them have completed secondary education. Of the total sample, 30.0% had hearing impairment, 16.0% were visualy impaired and 54.0% were physically impaired. About 17.5% of the respondents were living alone and majority had a household income of less than RM3000 monthly (Table 1).

Table 1

Socio-demographic characteristics

Variable	Frequency	%
Gender		
Male	205	68.3
Female	95	31.7

Table 1 *(Continued)*

Variable	Frequency	%
Age Group		
18 - 24	124	41.3
25 – 39	93	31.0
40 – 60	69	23.0
60 >	14	4.7
Education Level		
Primary school	15	5.0
Secondary school	196	65.6
College/University	88	29.4
Types of Disabilities		
Hearing and speech impaired	90	30.0
Visually impaired	48	16.0
Physically disabled	162	54.0
Living Arrangement		
Living alone	51	17.5
Living with family	170	58.2
Friends	71	24.3
Monthly Household Income		
< RM1000	87	34.1
RM1000 – RM3000	101	43.6
RM3000 >	37	14.5

Descriptive Statistics

The scores of all 36 items WHOQOL-DIS ranged from minimum four to maximum twenty (Table 2). The mean of the domain scores was 14.42 (SD 2.28) for the physical domain, 14.97 (SD 2.29) for the psychological domain, 15.48 (SD 2.79) for the social relationships domain, 14.70 (SD 2.51) for the environment domain, and 13.71 (SD 2.07) for the disability module domain.

Reliability

Internal consistency (Cronbach's α) coefficients were 0.60 to 0.83 at domain level (Table 2) and 0.91 for the whole questionnaire. As shown in Table 1, overall the value of Crobach's α of this study did not differ much from the study conducted by WHOQOL Group (Power & Green, 2010), except in physical health domain. Even though all alpha scores were considered acceptable, however, the scores in physical

Table 2

Cronbach's Alpha

The WHOQOL -DIS domain	Number of Item	Mean	sd	Skewness	Kurtosis	Cronbach's Alpha	
						Malaysia	WHOQOL
Physical health	7	14.42	2.28	-0.365	0.217	0.67	0.82
Psychological	6	14.97	2.29	-0.388	0.919	0.72	0.82
Social relationships	2	15.48	2.79	-0.256	-0.373	0.60	0.62
Environmental	8	14.70	2.51	0.148	-0.184	0.83	0.79
DISQOL module	12	13.71	2.07	-0.047	0.281	0.74	0.85

health and social relationship domains were found to be lower than 0.7. Lower reliability on the social relationship domain has been consistently reported by other researchers and may be related to the smaller number of items (2 items) compared to the number of items included in other domains (Bandar et al., 2014; Bredemeier et al., 2014; Lucas-Carrasco et al., 2010; Skevington et al., 2004). While the value of Cronbach's α for the physical health domain is acceptable,

it is somewhat lower than WHOQOL value and those found in previous research (Bredemeier et al., 2014; Lucas-Carrasco et al., 2010; Usefy et al., 2010; Yao et al., 2002). After further analysis using item-total statistics (Table 3), one item, 'pain and discomfort' had a Cronbach's α of 0.67 which is slightly less than 0.70. However, the item was retained because 'pain and discomfort' is an important of the physical health domain.

Table 3

Corrected Item-Total Statistics Physical health domain

Physical health items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Pain and discomfort	22.10	13.78	.15	.70
Dependence on medication or treatments	21.98	12.85	.22	.69
Energy and fatigue	21.39	12.48	.46	.61
Mobility	21.54	12.13	.46	.61
Sleep and rest	21.58	12.08	.40	.63
Activities of daily living	21.44	11.56	.64	.56
Working capacity	21.56	12.70	.42	.62

Convergent Validity

Table 4 shows the correlation between the items of the WHOQOL-DIS instrument and its five domains. As expected, all the items had strong positive correlations with the domains to which they had been assigned except for two items in DISQOL module in which the correlation was less than the accepted criteria of 0.30. Acceptable thresholds for corrected item-to-total correlations range between 0.20 to 0.40 (Hagell & Westergren, 2006). These items are advocacy and future prospects. Since the DISQOL module can also be divided into 3 domains (Discrimination, Autonomy and Inclusion), further analysis using both exploratory factor analysis (EFA) and Confirmatory factor analysis (CFA) were performed to examine this issue.

Table 4

Item-scale correlation matrix for the five WHOQOL-DIS measures

	Physical Health	Psychological health	Social Relationships	Env.	DISQOL module
Physical Health					
Pain and discomfort	**.406**	-.061	-.072	-.165	.079
Dependence on medication or treatments	**.490**	-.130	-.069	-.139	.053
Energy and fatigue	**.624**	.510	.374	.483	.350
Mobility	**.640**	.397	.415	.486	.401
Sleep and rest	**.605**	.384	.375	.440	.286
Activities of daily living	**.758**	.541	.619	.585	.482
Working capacity	**.589**	.499	.504	.476	.468
Psychological health					
Positive feelings	.351	**.756**	.393	.532	.455
Spiritual/ religion/ personal beliefs	.332	**.778**	.426	.504	.480
Thinking, learning, memory and concentration	.287	**.696**	.405	.503	.373

Table 4 *(Continued)*

	Physical Health	Psychological health	Social Relationships	Env.	DISQOL module
Physical Health					
Bodily image and appearance	.433	**.698**	.357	.380	.400
Self-esteem	.462	**.642**	.611	.439	.421
Negative feelings	.026	**.336**	.080	.013	.148
Social Relationships					
Personal relationships	.450	.510	**.834**	.530	.536
Social supports	.396	.484	**.855**	.537	.398
Environmental					
Physical safety	.265	.506	.369	**.644**	.397
Physical environment	.270	.396	.347	**.668**	.383
Financial resources	.308	.420	.381	**.704**	.451
Opportunities for acquiring new information and skills	.426	.424	.374	**.694**	.436
Leisure and recreation	.357	.484	.416	**.666**	.522
Home environment	.369	.364	.551	**.646**	.409
Health and social care	.325	.297	.482	**.712**	.417
Transport	.382	.409	.510	**.731**	.410
Disability module					
Discrimination	.139	.099	.053	.046	**.303**
Advocacy	.042	.035	-.043	-.061	**.195**
Future prospects	.111	.106	-.026	-.011	**.251**
Control	.312	.293	.270	.366	**.424**
Choice	.343	.282	.339	.304	**.534**
Autonomy	.221	.236	.254	.281	**.438**
Communication ability	.339	.443	.484	.485	**.677**
Social acceptance	.336	.461	.439	.490	**.709**
Respect	.337	.445	.481	.595	**.693**
Social network and interaction	.360	.460	.469	.573	**.705**

Table 4 *(Continued)*

	Physical Health	Psychological health	Social Relationships	Env.	DISQOL module
Social inclusion and contribution	.363	.492	.469	.605	**.732**
Personal potential	.309	.411	.384	.425	**.596**

*Correlations ≥0.30 was considered acceptable. Env. = Environmental

Discriminant Validity

Pearson's correlations (r) tested for significant inter-domain correlations in the total sample. Overall, the range of the correlations between the domains was 0.424 to 0.631, none of the correlation achieved a value 0.70 (Table 5). This study demonstrated that the strongest correlation was observed between the environmental and the social relationship domain (r = 0.631), followed by the relationship between environmental domain and DISQOL domains (r = 0.626). The weakest relationship was observed between physical health domain and overall QoL.

PWDs in healthy condition showed consistently significant higher scores than PWDs in unhealthy condition in all domains (Table 6). Therefore, the WHOQOL-DIS instrument was able to show excellent ability in discriminating between healthy and unhealthy PWDs in all five domains. It is important to note that the DISQOL module domain was the lowest in the unhealthy group, followed by the physical health domain. These show that the health

Table 5

Pearson's correlation coefficients of WHOQOL – DIS domain

	Overall QoL	Physical Health	Psychological health	Social Relationship	Env.	DISQOL module
Overall QoL	1.00					
Physical Health	.424	1.00				
Psychological health	.598	.481*	1.00			
Social Relationship	.470	.488*	.579*	1.00		
Environment	.499	.488*	.604*	.631*	1.00	
DISQOL module	.445	.494*	.584*	.550*	.626*	1.00

* Correlation is significant at the 0.01 level (2-tailed). Env. = Environmental

condition of PWD's indicated a high reading on the DISQOL module and the physical health domain.

Factor analysis on DISQOL module was verified by the Kaiser-Meyer- Olkin (KMO) to measure the sampling adequacy (0.820), and Bartlett's test (p < 0.001); both criteria supported the use of this analysis (Table 7). The exploratory analysis revealed the

same model from the original cross-cultural model developed by the WHOQOL-DIS group (Power & Green, 2010). There are three factors with eigenvalues greater than one, which were exactly the same as the original model. About 63% of the total variance was explained by the three factors commonly known as discrimination, autonomy and inclusion.

Table 6

Comparison of WHOQOL-DIS domain between PWDs health condition

| Domain | Self-evaluate Health Condition | | Mean difference (95% CI) | p-value |
	Healthy (n = 193) Mean (SD)	Unhealthy (n = 107) Mean (SD)		
Physical Health	15.03 (2.04)	13.33 (2.32)	1.69 (1.18, 2.20)	0.001
Psychological health	15.68 (1.98)	13.68 (2.26)	1.99 (1.50, 2.49)	0.001
Social Relationship	16.04 (2.75)	14.46 (2.60)	1.58 (0.93, 2.22)	0.001
Environment	15.37 (2.49)	13.49 (2.08)	1.87 (1.31, 2.43)	0.001
DISQOL module	14.10 (2.10)	12.97 (1.82)	1.13 (0.64, 1.61)	0.001

Table 7

Exploratory factor analysis of DISQOL module

| Item | Component | | | Orginal factor in DISQOL international |
	1	2	3	
37 - Interaction	0.885			F3
36 - Respect	0.861			F3
38 - Inclusion	0.808			F3
35 - Acceptance	0.808			F3
39 - Potential	0.662			F3
34 - Communication	0.467			F3
30 - Future prospects		0.811		F1
29 - Advocacy		0.777		F1

Table 7 *(Continued)*

Item	Component			Orginal factor in DISQOL international
	1	2	3	
28 - Discrimination		0.653		F1
32 - Choice			0.906	F2
33 - Autonomy			0.826	F2
31 - Control			0.704	F2

KMO: 0.820
Bartlett's test: p < 0.001
Explained variance: 63.02%

Figure 1 shows the result of the measurement model fit for the three domains. The three-domain structure model with a higher-order factor fit well (GFI = 0.918, AGFI = 0.874, CFI = 0.917 and RMSEA = 0.08, χ^2 =160.29, df = 51, p < 0.001) in line with the WHOQOL-DIS module's development.
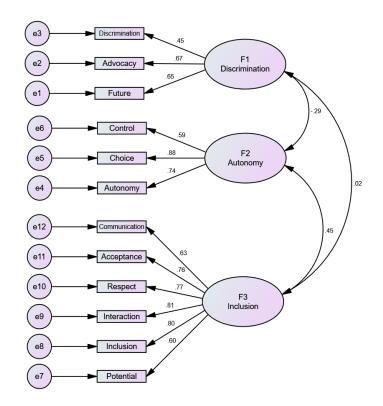

Figure 1. CFA analysis of the three-factor model for the DISQOL module

DISCUSSION

The aim of this paper was to examine the psychometric properties of the WHOQOL-DIS in terms of internal consistency and validity on PWDs in Malaysia. The result suggested that the WHOQOL-DIS is a valid and reliable instrument to assess the quality of life of people with physical impairment, hearing impairment and visual impairment in Malaysia, although some areas warrant more analysis and attention. The study reported Cronbach's alpha of minimum 0.60 and maximum of 0.83 for five domains of the WHOQOL-DIS. Cronbach's alpha value greater than or equal to 0.6 are considered acceptable and has adequate internal consistency (Bandar et al., 2014; Loewenthal, 2004). Low Cronbach's alpha value for the social relationship domain was also found in other research and may be related to the number of items included (Bandar et al., 2014; Chung et al., 2012; Saddki et al., 2009; Skevington et al., 2004).

Examining construct validity through convergent validity analysis showed the item-scale correlation matrix for the five domains had a significant correlation coefficient with their respective items, except for two items in the DISQOL module domain. Further analysis using EFA and CFA support that 12 items in DISQOL module can be divided into three different domains; discrimination, autonomy and inclusion. Moreover, the validity of the WHOQOL-DIS instrument in this study was also supported by the discriminant validity. The analysis of data indicated that PWDs in a healthy condition have a better quality of life compared with their unhealthy counterparts. The condition of health is closely related to status of health and the definition of the quality of life is specifically extended to issues related to the condition of health and health related issues on the quality of life (HRQoL) (Abdullah & Jamal, 2011).

CONCLUSION

In conclusion, we can ratify that the WHOQOL-DIS has adequate psychometric properties and is, therefore, an appropriate instrument in assessing the quality of life of the PWD population in Malaysia. Nonetheless, the major limitation of this WHOQOL-DIS instrument is the measurement of physical health with different types of impairment which requires further research in determining the items in the respective domain. This study may be expanded further by identifying items reflecting the local items such as job opportunities and education opportunities that could be added to this generic WHOQOL-DIS instrument in order to measure the QoL of persons with disabilities.

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Relationship between Alienation and Suicide Ideation among Malaysian Indians

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ABSTRACT

In response to the high rates of suicide instances among the people of Malaysian Indian ethnicity, a mixed-methods approach was employed to examine the relationship between alienation and suicide ideation among this segment of Malaysian society. A total of 234 Malaysian Indians aged 20 – 40 were recruited for this study. Dean's alienation scale was used and semi-structured interviews were conducted with 15 participants. The qualitative data was thematically analysed and was used for explanatory purposes. A correlation analysis showed that powerlessness and normlessness had a significant positive correlation to suicide ideation. A hierarchical multiple regression analysis, however, showed that powerlessness appeared to be the strongest predictor in explaining suicide ideation, followed by age and income level. From a social perspective, the qualitative data revealed financial hardship and interpersonal comparison and from a cultural perspective; coping with pride, mental health and horoscope belief, contributed to a feeling of powerlessness. It is recommended that in future studies, researchers take into account the social and cultural dimensions when considering suicide prevention strategies.

INTRODUCTION

The increase in suicide rates since 2012 (World Health Organization [WHO], 2014) has become a global public health concern. Suicide rates are highest in East Asian countries such as Korea, Japan and China

with South Korea ranking first in 2004 and 2005 (Kim et al., 2010). Several countries in Asia including Sri Lanka, China, Japan and South Korea have accounted for the greater part of the world's suicides, which have amounted to an epidemic in Asia (Kwok et al., 2015). The World Health Organization (WHO) estimates that approximately 1.53 million individuals worldwide will die due to suicide by the year 2020; which means in every twenty seconds at least one person will die due to suicide (Sinniah et al., 2014b).

There has been an exponential increase in the rate of suicides in Malaysia over the past 45 years (Ibrahim et al., 2014). This recent significant increase including suicidal behaviour is being considered a major health issue. Sinniah and colleagues (2014b) who had conducted a systemic review on suicidal attempts in Malaysia, over the period from 1969 to 2011, reported that the suicide rate had increased by 60% over the past 45 years. This is approximately 12 persons per 100,000 of the population. However, the actual figure could be higher, because most of the attempted suicide cases being reviewed were only those that were provided in formal reports from government hospital charts and pathological records (Sinniah et al., 2014b). This suicide rate has increased since then and appears to be an emerging social problem in Malaysia. Here, the suicide rate is highest among young adults. The Malaysian Psychiatric Association estimated that approximately seven people, mostly youths and young adults killed

themselves every day (Ibrahim et al., 2014). These are indeed worrying statistics.

LITERATURE REVIEW

Contributing Factors to the Prevalence of Suicide among Malaysian Indians

Personal characteristics such as cognition, emotional and behavioural dimensions are increasingly being studied as contributory factors to suicidal ideation (Khan et al., 2014; Kwok & Shek, 2010). In Malaysia, stress experienced by individuals when faced with academic pressures and relationship issues (Khan et al., 2014) are found to have associations with suicide. Many researchers have also investigated the correlations between psychological factors and suicide. A sense of helplessness, deep depression, negative effects (Khan et al., 2014); suicidal ideas and the enormity of solving social problems (Kok et al., 2015) are some of the examples.

Based on the narrative synthesis of 39 reviewed empirical studies, Armitage et al. (2015) concluded that suicidal behaviour in Malaysia was mainly associated with interpersonal conflict. The relationship and interpersonal difficulties were found to have caused most incidents of suicide and self-harm among Malaysian youths. However, for instances of suicide among older adults, following a review of all recorded suicide related cases from the National Suicide Registry Malaysia (NSRM) in 2009, a report was made listing the contributory factors to suicide among them as due to social factors

such as isolation, life events or stressors like the death of loved ones, mounting debt, physical illness and health issues, and neurological disorders (Rahimi et al., 2015).

Besides attributing factors to a psychological and interpersonal perspective, Shamsuddin and his associates (2013), found that older students from lower-income families in the rural areas were significantly more prone to suicide ideation as compared to those from cities and middle-income families. These findings highlight the influences from the macro living environment including the socio-economic background and geographic location that have added distress to these individuals.

Many studies specifically mention that Malaysian Indians have a higher risk of suicide (Khan et al., 2014; Rathakrishnan et al., 2012). Studies by Armitage et al. (2015) reported that one of the core reasons was the transition from a rural agrarian to an urban-industrial economy that caused people with low incomes, especially those who live in the rural parts of the country to feel marginalized due to the lack of resources. This finding is echoed by Sinniah and her team (2014a) who provided the main explanations for suicide which included poverty. Sinniah et al. (2014a) explained that the majority of Malaysian Indians were from the lower social class and were entrenched in alcoholism, psychical morbidity, caste issues, social stress and several cultural and religious factors which make them more vulnerable to suicide.

Although a minority ethnic group – only 7% of the total population, (Department of Statistics Malaysia, 2019), Malaysian Indians registered the highest number of suicide attempts (Sinniah et al., 2014a) and completions (Bahar et al., 2015) among the three major ethnicities in Malaysia. The suicide rate amongst them was more than two times (more than 20 per 100,000) as compared to the national average suicide rate which is 10-12 suicides per 100,000 people (Ministry of Health Malaysia, 2011). As such, ethnic Indians in Malaysia have been over-represented in the suicide statistics for over 2 decades since 1990 (Bahar et al., 2015; Habil et al., 1992; Vijayakumar, 2004).

The socio-economic background and the wider environments in which these individuals had been entrenched and embedded in, apparently has a strong influence towards suicidal tendencies and behaviours (Armitage et al., 2015, Khan et al., 2016). It is suggested that culture has a strong influence on suicidal behaviour as different religious and socio-cultural values provide worldviews and interpretations of life experiences (as cited in Bahar et al., 2015). Chen and his associates' study (2005) reported that the significantly high suicide rates among Indians could be due to certain beliefs in Hinduism, for example, reincarnation, where some religious interpretations may see suicide as "a route to a better life" (Khan et al., 2016). Studies of suicide in Malaysia, therefore, need to understand the macro environment

and the cultural contexts of the target groups (Milner & Diego, 2010).

Background of Malaysian Indians

Rapid industrialization and urbanization had changed the lives of Malaysian Indians. Most Indian families, predominantly Tamils from India and Sri Lanka, are descendants of the migrants to Malaysia after the 1890s, when the then British rulers expanded the number of Chinese and Indian immigrants; creating an artificial occupational segregation along ethnic lines (Malays in agriculture, Chinese in commerce, and Indians in the plantation sector) (Oorjitham, 2006; Sandhu, 2006). This had reinforced a sense of inter-ethnic divisions; and, thus, prevented any kind of solidarity among these major ethnic groups. The British colonial administration initially settled these Malaysian Indians in rubber estates and plantations. They were also employed in road and railway construction. While many saw economic growth in Malaysia in the late 1980s, these Malaysian Indians were trapped working as plantation labourers and were left behind. Nagarajan (2008) held that the Indian community in Malaysia felt they had been marginalized as the majority of them were trapped in the exploitative plantation economy.

The socio-economic information on Malaysian Indians appears to be contradictory. Official statistics report that the Indian community is quite well off and it has a disproportionately high number of doctors, lawyers and veterinary surgeons given its small population. Malaysia's richest man, Anantha Krishnan, is an Indian. However, the disparity of inequality across and within their ethnic groups would be undermined if we only look at the few richest Indians or being misled by the overall picture of the Malaysian Indian's household incomes. The income inequality among Malaysians was found to have widened between 1957 and 1976 across all ethnic groups. It was found that the income of the top 10% of Malays had increased by 9.9% while the income of the poor at the bottom 40%, had declined by 6.9%, while among the Indians, those at the top 10% had increased their income by 10.5%, whereas those at the bottom 40% found their income had decreased by 6% (Grove, 1986). Tikamdas (2006) reported the stark reality of many Indians living in poverty due to unemployment, which further had led to alcoholism and other social crimes. More than 300,000 Indians were uprooted from their plantation settlements between 1950 and 1967 when the British sold the plantations (Sandhu, 2006). Due to urbanization and industrialization, many of them had to accept low wage jobs such as security guards, drivers, gardeners or cleaners. Furthermore, many Indians were reported to have become involved in gangsterism (Baxstrom, 2005). Many may view themselves as being victimized as the majority found themselves serving as unskilled workers in the low wage sector.

Alienation and Suicide

As mentioned earlier, both psycho-social and macro socio-economic and cultural environments have contributed to suicidal

behaviours. Given the high suicide rates among Malaysian Indians and the mentioned socio-economic environment, the traditional sociological theory on suicide initiated by Durkheim's (1897/1951), was adopted. Durkheim proposed that the core issue of suicide is a lack of social integration. Over the years, it has been shown that integration was inversely associated with the suicide rates in European countries and the United States. It was proposed that poverty, educational failure and disruption of relationships are important indicators of the lack of integration. Kubrin (2003), who investigated young black males, held that some environmental factors, associated with externalized violence, will apply to violence against the self, which is suicide. Sampson and Wilson (1995) suggested that social isolation will create a sense of hopelessness.

Alienation. Alienation, a term adopted from a sociological perspective with its sociological root in Durkheim's, and used by Seeman; and which identifies three components: powerlessness, social isolation and normlessness (Seeman, 1959). Dean (1961) developed an "alienation scale" to measure the levels of social isolation, powerlessness and normlessness. Powell (1994) and Wenz (1979) suggested that social alienation was one of the factors that correlate with suicide.

Seeman (1975) defined powerlessness as an individual perception that one's behaviour could not predict the results, which means there was no control over his/her own destiny. There is a strong helpless feeling of being manipulated for purposes benefiting others than one's own self. "Normlessness" is a class terminology from Durkheim's concept of "anomie." It also refers to the absence of values or clear guidelines to the purpose of life and the strong feeling of uncertainty due to conflicting norms. The concept of "isolation" used by Dean (1961) refers to low social participation. This term is very close to Durkheim's sociological concept of integration, as low social integration will result in isolation and withdrawal from the situation (community or society) in which the individuals are embedded in (Graeff & Mehlkop, 2007).

In this study, the concept of "alienation" initiated by Seeman and employed by Dean in his "Dean's alienation scale", was adopted to investigate the relationship between alienation and suicide ideation among young Malaysian Indians (Refer to Figure 1). Indian youths aged 20 – 40 years, according to the definition adopted by National Youth Development Policy (Ministry of Youth and Sports, 2015) are also included. We aim to investigate and unravel the relationship between alienation (isolation, powerlessness, normlessness) (Dean, 1961) and suicide ideation.

METHODS

It is difficult to find a single method approach to adequately capture this very pressing social phenomenon of suicide. A mixed-
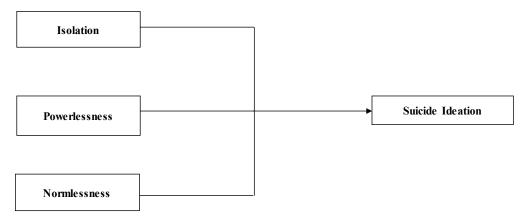
Figure 1. The framework of the relationship of alienation and suicide ideation among Indian adults in Malaysia

mode method was used for data collection. This approach triangulates ecological and individual data from multiple sources of data collection to investigate the extent to which what happened in the environment affects the individuals. A survey questionnaire was used to collect quantitative data and semi-structured interviews were used to collect qualitative data for explanation and triangulation purposes. Durkheim's original theory was frequently criticized as it lacked social and cultural meanings (Wray et al., 2011). This mixed-method design is sequential explanatory in nature. Two student research assistants of Malaysian Indian ethnicity involved in the interview process approached Malaysian Indian people in various restaurants in a town in the state of Perak and Kuala Lumpur to recruit participants. After completing the quantitative survey, they would invite the participants who were available for a half-hour interview. Using Tamil, the common spoken language by Malaysian Indians, they attempted to build a better rapport

with the research participants to be able to capture and solicit for their perceptions on the issue of suicide. Initially, it was planned to have 12 participants for the interview session, however, due to the emergence of new themes, the interviews were continued until data saturation (Creswell & Creswell, 2018) and when the number had reached 15 participants (6 males and 9 females). Seven (7) of them were from a town in Perak and eight (8) from Kuala Lumpur. It was hoped that the qualitative data collected through the interviews could provide in-depth explanations for the data collected in the quantitative phase to provide possible explanations for the findings.

Quantitative Study

Samples. The respondents of the study were 234 Malaysian Indian adults aged 20 to 40 years old (see Table 1). The respondents were recruited using a convenience sampling method using a paper and pencil survey questionnaire. The gender distribution was 50% for each gender. The respondents

reported incomes of more than RM 2,000 per month (estimated USD491) were 53.8% while 46.2% of them had monthly incomes below RM 2,000. More than half of the respondents had a university degree qualification (59.4%), followed by Diploma (23.1%) and a secondary education (17.5%).

Procedure. The targeted respondents were briefed on the objectives of the study, their rights as respondents, the benefits and risks of participation, as well as the privacy and confidentiality issues. The respondents were requested to sign the consent form as an agreement of participation. All the procedures were reviewed and approved by the Institutional Scientific and Ethnical Review committee.

Questionnaire. Dean's alienation scale (Dean, 1961) was used to measure the individual's alienation. This scale, which consists of 24 self-rated items with a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), also comprises three subscales namely, social isolation (9 items), powerlessness (9 items) and normlessness (6 items). The total score was computed; with high scores indicating high alienation on that specific subscale. The Cronbach alpha coefficient of the sub-scales ranged from 0.666 to 0.843.

The Scale for Suicide Ideation (SSI; Beck et al., 1979) was used to measure the current intensity of specific attitudes, behaviours and plans to commit suicide. Having a reliability score of 0.866, this 19-item scale was measured using a 3-point

Table 1

Demographic information of respondents (N=234)

	n	%
Age (year old)		
20 – 29	169	72.2
30 – 39	65	27.8
Gender		
Male	117	50.0
Female	117	50.0
Education Level		
Secondary	41	17.5
Diploma	54	23.1
Degree	139	59.4
Family Income		
< RM2000	108	46.2
≥ RM2000	126	53.8

scale ranging from 0 to 2 (no ideation to strong ideation) to rate the respondents' suicidality and tendencies. The total score was computed; with high scores indicating high suicide ideation.

Qualitative Study

Semi-structured Interview. Fifteen Indian participants aged between 27 and 40 years were recruited for this study. Respondents from the quantitative study who were willing to share narrative of suicide cases they knew were invited for an interview session. The interview questions included:

1. Do you have a friend or a relative who has committed suicide? (For those who did not have, the interview would be: "Do you know someone from your community who has committed suicide?"
2. If you can, tell me more what happened?
3. Can you think of some of the reasons why the suicide rate among the Indian community is quite high?

The aforesaid semi-structured questions aim to serve as a guide to invite participants to share their thoughts and feelings on the possible events or reasons that could have triggered and have given rise to the increasing suicide ideation and incidence among Malaysian Indians. With the permission of the participants, all the interview sessions were audio-recorded. After transcribing the audio-recordings, the transcripts were discussed and analysed using the thematic approach whilst complying with the procedures suggested by Braun and Clarke (2019).

RESULTS

Quantitative Data Analysis

The correlation analysis of the variables is presented in Table 2. Both powerlessness and normlessness showed a significant positive correlation with suicide ideation. Malaysian Indians with high powerlessness and normlessness tend to harbour and display high suicide ideation. Interestingly, social isolation also appears to have an

Table 2

Correlation analysis among social isolation, powerlessness, normlessness, and suicide ideation

Variables	Mean	Standard Deviation	1	2	3	4
1. Social isolation	27.07	4.797	1.00			
2. Powerlessness	31.42	6.228	.416***	1.00		
3. Normlessness	20.36	3.805	.269***	.751***	1.00	
4. Suicide ideation	9.35	6.638	.111	.317***	.253***	1.00

Note: *** $p < 0.001$. $n = 234$.

insignificant relationship with suicide ideation.

Hierarchical Multiple Regression Analysis. A hierarchical multiple regression analysis was performed to assess the ability of powerlessness and normlessness in predicting suicide ideation, after controlling the effect of age, gender and income level (refer to Table 3). Preliminary analyses were conducted to rule out the assumptions of normality and multicolinearity, and the predictors were tested at bivariate levels to ensure the relationship. The respondents' demographic information was included in the first model to explain the 4.8% of the variance in suicide ideation.

The inclusion of both powerlessness and normlessness in the second model, where the total variance explained by the model as a whole was 15.1%. $F(5, 228) = 9.289$, $p < 0.001$. The two predictors explained an addition of 10.9% of the variance in suicide ideation, after controlling the effect of age, gender and income level, R^2 change $= 0.111$, F change $(2, 228) = 14.963$, p < 0.001. In the final model, powerlessness ($\beta = 0.318$, $p= 0.001$) appeared to be the strongest predictor in explaining suicide ideation, followed by age ($\beta = 0.242$, $p < 0.001$) and income level ($\beta = 0.144$, $p= 0.021$). According to Cohen's (1988) effect size calculation, effect size of 0.13 indicated a small to medium effect for the predictors in explaining the suicide

Table 3

Summary of hierarchical multiple regression analysis for variables predicting suicide ideation

Variables	b	$\hat{a}$	SE B	b	$\hat{a}$	SE B
Model 1						
Age (0= 20-29 years old; 1= 30-39 years old)	3.074	0.208**	0.973	3.578	0.242***	0.925
Gender (0=Male; 1=Female)	1.800	0.136*	0.857	1.369	0.103	0.836
Income Level (0=Less than RM 2,000; 1=More than RM 2,000)	1.836	0.138*	0.869	1.916	0.144*	0.823
Model 2						
Powerlessness				0.339	0.318**	0.098
Normlessness				0.037	0.021	0.165
Adjusted R^2		0.048			0.151	
F		4.910**			9.289***	
f²	0.13					

Notes: $n = 233$. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$. f^2= effect size.

ideation among the Malaysian Indian population (refer to Table 3).

Qualitative Data Analysis

According to Creswell and Creswell (2018), qualitative data helps to provide insights for better understanding of the results of the quantitative data. Almost all of the participants interviewed knew someone from their family, neighbourhood or community who had committed suicide. They described those who committed suicide as 'coward', 'selfish', 'dumb', 'irrational', 'do not think of others especially their family members. "He could have taken a moment to think about his wife and 3 children, nope, he didn't. All he did was to die."

Most participants shared that suicide ideation and behaviours might have been pushed forced onto them by the environment. They believed that when people feel trapped and are not able to find a way out, it can lead to feelings of powerlessness and hopelessness and consequently towards committing suicide. In the data analysis process, religious beliefs which provide a worldview for an interpretation of life events was classified under the theme of culture. The intergeneration gap was also classified as a cultural dilemma as it is a part of Malaysian Indian hierarchy culture to believe there should be honour and respect for older family members. However, the younger members could have been influenced by the values of a modern society. Therefore, as it is quite obvious that the two prominent themes were related to the social

and cultural aspects these themes were grouped under social and cultural aspects. In order to elaborate on these aspects better, their income details are included together with their directly quoted verbatim.

Social Aspect.

Financial Hardship. The hardships faced in their lives included financial burdens and hidden debt. Participants shared that Indian families very often incur debts to support their children's education and for funding their children's marriages. Most of the time, only the parents know about the family debt. Suddenly, when the parents commit suicide, only then do the children come to know of the parent's debts to other people. Sometimes, parents are known to take loans from loan sharks at ridiculous interest rates just to fund a grand wedding for their children.

> My aunty took her EPF money for her son to get married. For girls' family it is even worse. The normal practice is for girls to give not less than 10 pounds of gold. It will be about RM 14000, not inclusive workmanship. The traditional practice is, since your girl is coming to our house, so what does she bring. Besides, comparing of consume, saree during engagement ceremony…50 to 80 thousands changing rings etc… The stress could make parents suicidal. (Male, a policeman, aged 40, earning RM2000 per month, from Puchong, KL).

Interpersonal Comparison. A few participants volunteered examples of interpersonal comparisons, such as comparing lifestyles and their ability to pursue their desires and dreams. They felt that their life was not as good, has been underrated or unappreciated. It was observed that the participant felt powerless, hopeless and useless due to so many restrictions set on them from outside, be it by family members and relatives, the community, society, and from religious and cultural taboos.

> Suicide is an option when someone feels powerless to act and couldn't accomplish what he/she desires in life. This is like they are always losing the battle…this makes them feel they might just quit fighting… so taking own life is one of the ways to escape. (Male, aged 30, cafeteria helper, earning RM600 per month).

Cultural Aspects.

Coping with Pride. It is a cultural tradition in Malaysian Indian families that the oldest male child in the family has to take up the responsibility to provide for the family. This first-born has to bring up the family, take care of the aging parents and younger siblings. One participant knew of an Indian man, a chef, who borrowed money to support his family. Only when he committed suicide, his family members knew that he

was deep in debt. She explained that Indian people are very concerned about what other people would think about them – this is cultural pride. They need to look good and feel proud in front of others, in the community and in society.

Honour and shame are very important for Indian families. The family will feel shameful in cases of a broken relationship. Parents feel worried if their daughter is in a relationship. Like what if the guy leaves their daughter then later the daughter will feel ashamed as the Indian community is very small, everyone will know about it. (Female, age 32, a lecturer in a university in Perak)

Mental Health Issues. Culturally, Malaysian Indians see poor mental health as taboo and there is a strong stigma attached to those afflicted by mental health issues (Tuti et al., 2009). This belief is a cultural belief, peculiar to the Malaysian Indian ethnic group and is therefore classified under the cultural dimension. High stress causes incapacity to cope, resulting in stress/ anxiety/ depression-related disorders. The shame of being stigmatized, aggravates the situation and leads to acute mental health issues.

An Indian female (30-year old, mother of two young children, working part-time in a restaurant in KL shared her experience):

> She was my relative. As family members all could see so obviously she suffered from poor mental health as she imagined

bad things that might happen to her young children. We all saw it was not realistic. But later after she committed suicide, the family members think that it is better for her to end her life that way than living because living was too painful for her.

Horoscope Belief. Malaysian Indians tend to put their trust and believe in horoscopes. One woman (government civil servant, aged 33), shared how her cousin who committed suicide had been affected by this traditional Indian belief. The poor lady had attempted suicide because of her misplaced belief in the horoscopes. Her sister had always been thought to bring good luck but she was being seen as bringing bad luck and misfortune to her family. She attempted suicide but fortunately, was saved.

> …horoscopes, this is the belief of most Hindu in Malaysia and this is our culture. It's based on the time and date of birth. There is no specific horoscope that will bring bad luck. it depends on the planet's rotation around the sun. So the bad luck or good luck of the horoscope of a person changes according to that particular planet (such as Leo, Cancer) place from the sun when you were born. The people from the temple can help you to know exactly about your fate. This horoscope will also dictate which month is considered unlucky to have a wedding or deliver a baby. Indian months again are different from that English calendar. they tend to start the middle of the month for

example 15 July to 14 August is what we call *adhi* month. It's supposed to be a month for prayers. not allowed to get married or is consider if have a baby during this month the child or the family will encounter difficulties such as bad financial situation of bad health. May be my cousin was born having bad luck, or may be she didn't go to the temple to do her remedy properly. There are prayers or rituals in the temple to get better luck….

This lady explained that although the present younger generation may not believe in horoscopes but due to their parent's beliefs and concerns, they had to adhere to them, especially when it concerned marriage. The belief is that the horoscopes of the bride and groom must be compatible. Otherwise, the marriage may end up in disaster for the couple. As such, when and if there is an unfortunate suicide incident, it is blamed on the incompatible, unmatched horoscope. Hence, the importance of trust and belief in horoscopes as a cultural dimension.

Generation Gaps. A few participants lamented on the generation gap between the young and older generations. The following narrative relates to the cultural aspect where it is a common practice in Asian society for grown-up children to continue to stay with their parents, in spite of the frequent squabbles, flare-ups and frustrations due to the generation gap.

> Traditionally eldest son should provide and stay with parents, however, my

aunty let her son married with an educated girl, now the daughter-in-law doesn't want to stay with the parents". There were incidences of grown-up sons staying with parents but not paying. Therefore, uneducated parents face financial issues that effected their

wellbeing. (Female, 24, sale person, from KL).

As a summary, Table 4 shows how both the quantitative and qualitative findings can be integrated when the emerging themes from the qualitative study help to provide explanations for the quantitative findings.

Table 4
Themes from both quantitative and qualitative findings

Significant findings from quantitative study	Major themes from qualitative study	
Powerlessness	Social	Economic Interpersonal Comparison
Normlessness	Cultural	Coping with cultural pride Mental health Horoscope Generation gaps

DISCUSSION

The aims of this study were to examine the relationship between alienation and suicide ideation among members of the Indian ethnic group in Malaysia. This alienation includes three dimensions: social isolation, powerlessness and normlessness. Findings from correlation analysis of the variables indicated that both powerlessness and normlessness were significantly and positively correlated to suicide ideation. There were significant correlations between powerlessness and normlessness and suicide ideation among the Malaysian Indians.

Powerlessness

Powerlessness appeared to be the strongest predictor in explaining suicide ideation

followed by income level. In explaining this finding, Durkheim's sociological perspective which established a tradition for considering socio-economic factors associated with suicide is indeed very relevant (Durkheim, 1897/1951; Taylor, 1982). Durkheim provided evidence of correlations between suicide and measures of social integration and social regulation, defined as the moral and normative demands of society on individuals (Endo et al., 2017; Hoffman & Bearman, 2015). Durkheim conceptualized that equality in income and wealth was protection from suicide. He argued that income inequality threatens social integration and results in anomie. The demographic findings showed that the respondents' income level of less than

RM2000 was low. Most of the respondents belonged to the lower income group, and, it could be said that their lack of economic resources had contributed to their powerlessness. This finding is consistent with previous studies where Armitage et al. (2015), and Khan et al. (2016) held that the socio-economic aspect had a strong influence on suicide.

The qualitative findings further explain the ways economic hardship from a social condition had contributed to the feeling of powerlessness among those of Indian ethnicity. Most of the participants came from low-income families and their lack of economic wellbeing made them powerless to act and make changes. Economic factors have also been found to be associated with suicide rates (Isabel et al., 2017). Nagarajan (2008) also wrote about the general poverty levels of the Indians in Malaysia and how it affected their feeling of alienation. However, from the sharing of the participants, there was no mention about the political issues; most of them were more concerned with the social, economic and cultural issues. Economic hardship such as poverty has created a sense of powerlessness. Income inequality among the different ethnic groups in Malaysia needed to be looked into. Policymakers need to work on improving the economy of the country to reduce both the intra-and inter-ethnic inequality. Durkheim's analysis of economic crises says that economic downturns cause suffering, which then leads to an increase in the suicide rate. Nonetheless, Durkheim's economic observation can be divided into two claims.

First, sudden economic changes result in anomie. Second, wealth increases the risk of anomie and since these desires are more easily satisfied; the imagination grows and the individual is accustomed to satisfaction, and cannot cope with frustrations of desire when they arise (Max, 2014).

The feeling of powerlessness was not only triggered off by financial hardship but also interpersonal difficulties. It was found that from the participants' narratives that interpersonal comparisons (for instance, the comparison between the rich and the poor) gave rise to feelings of powerless, despair and depression. Khan et al. (2016) also showed that socio-economic status and religion were correlated to suicide ideation and depression. Participants felt powerless not solely by the economic difficulties they encountered, but also from the consequences of the economic hardships. Previous studies have shown that mental health problems among Indians were due to economic issues. Depression is an alienating experience (Kok & Lai, 2017) and many depression and suicide cases among Malaysian Indians were related to low-income and non-religious factors (Khan et al., 2016). However, even with religious supports, the spiritual interpretation may also provide misleading interpretations that could lead to a delay of medication (Kok & Low, 2019). Different religions provide different worldviews and interpretations. As an important cultural component, religion plays a role in suicidal behaviours. For a Muslim, to attempt suicide is a serious breach of the faith (Morris & Maniam, 2001), while for a Hindu believer,

he/she may see suicide as "a route to a better life" (Khan et al., 2016) as indicated by one participant who mentioned that after her successful suicide attempt, the deceased was in a better world. Apparently, the Hindu religion has traditionally sanctioned certain forms of suicide (Maniam et al., 2013).

Normlessness

Suicide ideation and suicide behaviours may be precipitated by some environmental stress, but it also involves other psychosocial and cultural issues, such as interpersonal comparison, belief in horoscopes and traditional norms of honour and shame that underlie suicide risks that have contributed to the feeling of powerlessness. Indian religious and cultural practices do not seem to serve as a protecting factor from suicide. Therefore, some might see suicide as a way out to escape the stressors of lives. It is important to note that cultural values shape our shared frame of reference. While cultural pride upholds the dignity of providing for one's family, economic hardship prevents them from doing so, resulting in feelings of powerlessness which become a further detriment to mental health that could result in suicide.

Cultural norms have been found important in providing direction and guidance to lives, without which individuals feel normless. This view is supported by researchers Chen and his team (2005) and Khan et al. (2016). However, it was found that when social changes occur and cultural norms become disintegrated, a rigid application of cultural norms without intergenerational communication, could cause confusion and frustration. The qualitative findings reveal various cultural themes, namely, coping with pride, attitude towards mental health, and horoscope belief were cultural beliefs. Upholding family pride to resist the feeling of being defeated by the external economic hardship of wanting to be successful are noble values for Asian people. However, as described by some participants, traditional values may be disrupted and religious guidelines may become a less normative restraint and resulted in general gaps. As society progresses, there seems to be a paradigm shift in the understanding of generation gaps, the stress of staying with parents and of traditional horoscope beliefs.

The significance of this study is that, it highlights the macro socio-cultural environment that has influenced suicide ideation amongst the Malaysian Indian population. It further provides insights on some of the sociological and cultural perspectives to understand better the high rates of suicide ideation and suicide incidences. In his theory of alienation, Durkheim notes passingly that alienation happened when anomic suicide is generated by a lack of regulation. However, the findings from this study have provided detailed description of the social and cultural dimensions that have led to it. On top of that, these findings have also added a richer understanding to the theoretical framework of alienation theory proposed by Dean and which originated from Durkheim's theory. Lastly, this study implies that suicide

prevention programmes need to include not only psychological services, but also education on the awareness of how social factors and cultural values affect the ways we view life and death.

CONCLUSION

The disproportionately high suicide figures among Malaysian Indians is a worrying phenomenon. This quantitative study shows that there is a positive co-relationship between alienation and suicide ideation amongst the Indian population in Malaysia and powerlessness appeared to be the strongest predictor in explaining suicide ideation. The qualitative analysis provided explanations from a social and cultural dimension. Due to the specific social-cultural contexts of the samplings, the findings of this study may not be generalized. It is hoped that suicide prevention strategies should include social and cultural dimensions to address the challenges faced by this Indian ethnic group in Malaysia. These findings should also encourage future research to investigate the ways social and cultural aspects influence on suicide ideation. The community-based programmes can focus on educating parents on the importance of parent-child communication from a social-cultural dimension.

A social and public health approach acknowledges that suicide is preventable and promotes a framework for systematic interventions across multiple levels within society including the individual, family, community, and health care systems. A key step in such an approach involves modifying attitudes towards suicide via educational efforts. These results provide important implications for the direction of future research into the factors associated with Indian youth suicidal behaviours, as well as in designing intervention and prevention programmes.

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PERTANIKA
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Psychometric Properties of an Adapted Yemeni Version of Rejection Sensitivity Questionnaire

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ABSTRACT

Rejection sensitivity is a predisposition to anxiously expect, perceive, and strongly react to rejection. This study aimed to evaluate the psychometric properties of the adapted Yemeni version of rejection sensitivity questionnaire (Y-RSQ). The social anxiety (SA) questionnaire was used as a criterion for determining the validity of the Y-RSQ. The questionnaires were completed by a sample of 571 Yemeni students (males and females) at Sana'a University. The overall reliability of the Y-RSQ is 0.82, which indicates that 67% of the explained variance in observed total scores is due to the common factors. A Pearson product moment correlation was performed between the Y-RSQ and social anxiety scores. The analysis indicated a moderate, but significant positive relationship between Y-RSQ and social anxiety ($r = 0.50$, $p < 0.01$). The findings of the confirmatory factor analysis revealed that the structure of the Y-RSQ factors could be explained by a bifactor model in which rejection sensitivity is the general factor and two group factors, namely rejection anxiety and rejection expectancy. The findings suggested that the construct validity of the Y-RSQ is acceptable and the way people understand and respond to rejection signs varies due to bias caused by rejection anxiety and expectation of rejection. This study provided psychologists, scholars, and

counsellors with a Yemeni culture-based instrument that can help them measure rejection sensitivity among the Yemenis.

INTRODUCTION

Belongingness is an essential need which most people strive to achieve in their environment. If this objective is not accomplished, a feeling of being rejected is generated which is considered an unpleasant experience. Both theoretical and empirical studies have implied that rejection sensitivity emerges from early neglected and rejected experience with others, including caregivers and close friends (Sun et al., 2014). The individuals who encounter or face consistent rejection from parents during childhood are anxious (Yu et al., 2016), and they develop expectations that people will reject them when they look for an acknowledgement. They also have a high incentive to avoid rejection in their relationships with others (Erozkan, 2009). Rejection sensitivity is a construct developed from attachment and social cognitive learning perspectives that is conceptualised as a tendency to protectively predict (i.e., angrily or anxiously), promptly perceive, and excessively react to experiences of potential rejection in social situations (Innamorati et al., 2014). It also refers to the individual's vulnerability to anxiety about rejection in meaningful relationships, for example the relationships with parents, peers, siblings, instructors, and spouses (Yu et al., 2016). Individuals

who are highly sensitive to rejection have an inclination to be excessively mindful of social refusal signs and regularly react improperly to their own understanding of rejection. They have been found to have a long history of frequent rejection experiences and, therefore, are susceptible to psychological anxiety (Rosenbach, 2013).

Several studies have investigated rejection sensitivity in different cultural contexts. The literature review implied that rejection sensitivity has been observed to have a relationship with various psychological disorders, fundamental social anxiety, depressive symptoms, neuroticism, and borderline personality disorder (Rosenbach & Renneberg, 2011). According to Posternak and Zimmerman (2002), rejection sensitivity is also found to have a significant relationship with distress, avoidant personality disorder, and psychopathology. Based on the diagnostic and statistical manual of mental disorders (DSM-IV), rejection sensitivity is an untypical feature of the disorder of major depression. In addition, people who have social anxiety or a borderline personality disorder are very susceptible to negative evaluation and social rejection (American Psychiatric Association, 2013). The longitudinal relations between rejection sensitivity and loneliness, anxiety, and depression are stabilised over time (Gao et al., 2017).

Affirming the connection between rejection sensitivity and depression, rejection sensitivity scores have been positively correlated with symptoms of

depression (Gilbert et al., 2006). Moreover, the interpersonal variances in rejection sensitivity and hypervigilance for rejection cues predict depression (Ayduk et al., 2000). Depressed individuals are more vulnerable to potential cues of rejection. Additionally, it is possible that the behaviour of individuals with depression causes rejection, for instance by dysfunctional social interaction conducts such as extreme reassurance pursuing (Joiner et al., 1992), social withdrawal (Ayduk et al., 2000), and less eye-contact. Thus, rejection sensitivity and depression have a reciprocal relationship, resembling a vicious cycle (De Rubeis et al., 2017). A positive association was also found between social anxiety and rejection sensitivity symptoms (Rosenbach, 2013). Rejection sensitivity is a possible proxy for social anxiety disorder (Pachankis et al., 2008). Therefore, many studies have used anxiety measures and depression measures to validate the rejection sensitivity questionnaire (e.g., Downey & Feldman, 1996; Innamorati et al., 2014; Rosenbach & Renneberg, 2011).

On the other hand, several studies have been conducted to validate the rejection sensitivity questionnaire (RSQ) in different cultural contexts such as the Italian version by Innamorati et al. (2014), the German version by Staebler et al. (2011), the Persian version by Khoshkam et al. (2012), the Korean version by Lee (2016), and the Turkish version by Erozkan (2009). These studies concluded that RSQ is a valid and reliable measure which could be used to measure rejection sensitivity. According to Özen et al. (2011), RSQ is a culture-based

instrument as they assumed that rejection expectancies may be culture specific, thus they added more items to it based on common Turkish situations. However, to date no study has been carried out to investigate the psychometric properties of the RSQ with reference to the Yemeni culture in particular and the Arab culture in general. Further, there is no instrument yet based on the Yemeni culture that can be used to measure rejection sensitivity. In addition, there is a disagreement between the results of Downey and Feldman (1996) in which they accounted for the RSQ outcomes in favour of a one-factor model and the results of Innamorati et al. (2014) in which they explained the RSQ outcomes in terms of a bifactor model.

According to Sana'a-Center For Strategic Studies (2017), the current political conflicts in Yemen are connected to the increment of sensitivity and the prevalence of different psychological disorders, especially anxiety and depression. As both of these disorders are linked to rejection sensitivity, it is thought to play a role in the increment of these disorders. The problem of the current study lies in the persistent demand to provide psychiatrists, counsellors, and researchers with a tool that can help them to test or measure rejection sensitivity among the Yemenis. This is because having a valid measure for rejection sensitivity that is suitable for the Yemeni culture would lead to accurate measurement among Yemenis. Accordingly, this would assist in using some interventions that would help in reducing the rejection sensitivity

effects and reducing the possibility that rejection sensitivity leads to mental health disorders such as anxiety and depression. As the RSQ was developed and administered in a foreign culture (i.e., the United States), which is completely different from the Yemeni culture, and assuming that the RSQ is a culture-based instrument, the application of this scale might be inappropriate for the Yemeni environment. That is because it contains some items that are incompatible with the Islamic rules and the customs which prevail in the country. For example, the item "You ask your boyfriend/girlfriend to move in with you" is related to dating and it is inconsistent with Islamic rules and society customs.

Therefore, there is a need to fill the gap in the lack of a valid and reliable instrument for rejection sensitivity that could be successfully applied in the Yemeni context. This study aimed to adapt and validate the RSQ that was developed by Downey and Feldman (1996) and confirm the number of the factors of Y-RSQ by applying the instrument on university undergraduate students in the Yemeni societal culture.

METHOD

Participants

The participants were recruited from six faculties in Sana'a University because it is the first and largest public university in Yemen and includes students from all the Yemeni provinces. Sana'a University is considered a study destination for many Yemeni students. Systematic random sampling was employed to choose the

participants. Based on the list of student enrolment in the university for the academic year 2017/2018, the researchers divided the total number of students by the sample size (27905/630= 44). Then they selected every 44th on the list to achieve the required sample size. The response rate in this study was 95%. In total, the Y-RSQ and social anxiety questionnaire were distributed to 630 students. However, only 600 students returned the questionnaires and a total number of 29 questionnaires were discarded due to either non-responses for one of the scales or a set of responses. After the final check, sorting out, and numbering the responses, only questionnaires from 571 undergraduate students (253 males and 318 females) aged between 20-25 were found to be completed and were used for the analysis.

Measures

Rejection Sensitivity Questionnaire. The RSQ was developed by Downey and Feldman (1996). This questionnaire comprises 18 presumptive situations in which a participant makes a request to other people that makes him or her susceptible to rejection. For example, "You ask someone in class if you can borrow his/her notes" and "You ask your parents for help in deciding what programmes to apply to". The respondents were required to select the degree of their consent to each vignette on a six-point Likert scale. They illustrated (a) their level of anxiety about being rejected ranging from 1 ("very unconcerned") to 6 ("very concerned") and (b) rejection expectancy by indicating

their subjective possibility which assesses that the individual(s) in each situation will truly react in a positive way to their request ranging from 1 ("very unlikely") to 6 ("very likely") (Ayduk et al., 2008). Three scores could be obtained from the RSQ: the anxiety score (ranged 1- 6), the anticipation of rejection score (ranged 1 - 6), and the general score of rejection sensitivity (the score of anxiety level x the reversed score of rejection expectancy [7 - expectancy of acceptance]). Scores can range from 1-36 (Rosenbach, 2013).

In other words, each item is evaluated by two different Likert scales. The first one evaluates their anxiety about being rejected by others while the second one evaluates their expectations of rejection. The psychometric properties of the original RSQ are as follows: all the 18 RSQ items loaded at 0.30 and above, while the internal consistency was reported as 0.83 which indicates high internal consistency. Many studies validated the RSQ in different cultures and most of these studies reported quite similar psychometric properties to what Downey and Feldman (1996) have proposed (Ayduk et al., 2008; Erozkan, 2015; Ritu & Anand, 2016; Rosenbach, 2013).

The adaptation process of RSQ began by obtaining permission from the author to use this questionnaire and making some changes to make it suitable for the Yemeni culture. The researchers translated the RSQ into formal Arabic language. In order to replace the six situations (2, 4, 5, 12, 16, and 18) that are related to dating and the Western lifestyle, the researchers distributed open-ended questions to get more information about what kinds of situations that the Yemenis expect to be rejected. Furthermore, three situations have been added. On one hand, there are more situations that can make people sensitive to rejection in the Yemeni culture. For example, "You asked your friends to come to your house so that you introduced them to your family". This situation was added according to the Yemeni context as some families are very concerned about their children's friends and they do not allow them to go to their friends' houses, especially girls. If a girl is invited to one of her friends' house, her mother or older sister should accompany her.

On the other hand, the adaptation of RSQ was crucial to make the instrument valid for use not only in a school setting but also in a general life setting because many items in the original RSQ are related to school life. To confirm whether the inclusion of these three items is valid for use in general life settings, the researchers referred to the experts' judgement during content validity check. The first version of Y-RSQ consisted of 21 items.

The translated version was submitted to two lecturers who were familiar with the content of the instrument and were also experts in the English language. They were asked to check the accuracy of the translation, make corrections to the spelling and grammatical mistakes as well as to check the content. Based on the English language experts' opinions, the required amendments were made, and

the grammatical mistakes were corrected for all the items. Then the researchers handed the Y-RSQ to two experts in the Arabic language to check the structure of the sentences. Based on their comments, the researchers made some changes to the structure of the sentences. In the final step, to gain a sense of how effective the translation was, back-translation was used by asking another independent expert in the English language to blindly translate the translated questionnaire back into the original language (English) to confirm the accuracy of the RSQ translation.

To score the Y-RSQ, the researchers followed the original scoring method that was provided by the authors of the original scale. The researchers first obtained the score of rejection sensitivity for every scenario by weighing the expectation of possible rejection by the level of anxiety over its incidence. Particularly, the score of expectancy of acceptance was reversed to indicate rejection expectation (rejection expectation = 7 - expectancy of acceptance). After that, the score of rejection anxiety was multiplied by the reversed score of expectancy of acceptance. Second, the researchers computed the rejection sensitivity scores across all the situations for every participant by computing the rejection sensitivity scores for each situation and divided it by the total number of situations (21).

Social Anxiety. The social anxiety questionnaire comprises 29 items. It was developed by Radwan (2001). The questionnaire measures social anxiety using five components: (a) physical symptoms of social anxiety, (b) difficulty of communication and self-expression, (c) fear of social situations and interactions with them, (d) attention deficit or dispersion of ideas, and (e) lack of self-confidence. The participants were requested to respond on a four-point Likert scale from 1 (never), 2 (often), 3 (rarely), and 4 (always). The social anxiety questionnaire was scored by computing the score of each item and divided it by the total number of items (29). The scores of this scale range from 29-116 (Radwan, 2001).

Radwan (2001) employed three different methods to test the reliability of social anxiety questionnaire. The first method was test-retest after six weeks and the result was 0.74, which is considered a good index for the reliability. The second method was Cronbach's alpha which value was $\alpha = 0.92$. The third was split-half method and the reliability value was 0.82. To validate the social anxiety questionnaire, he used criterion-related validity and the result was 0.81, while factor analysis indicated that there were five factors with eigenvalue more than one, and the 29 items loaded with 0.40 and above.

In this study, the social anxiety questionnaire was adopted and used as it is because it was developed based on the Arabic context. Therefore, the researchers tested only the reliability of social anxiety. The overall Cronbach's alpha for social anxiety in the current study was $\alpha = 0.92$. This result is similar to the score that

Radwan had reported in his study, which indicates high reliability.

Procedures

There were some procedures which needed to be undertaken prior to the conduct of the current study. The first step was submitting a cover letter of data collection to Sana'a University explaining the aim and process of data collection. Then, the researchers obtained permission from the dean of each faculty to proceed with data collection. The names of the students who were selected from the list to take part in this study were recorded. Next, the researchers looked for those students in their classes by referring to the timetable of each department. The objectives of the study were briefed to the lecturers, who were asked to give the researchers 25-30 minutes at the end of their classes to administer the questionnaires to those who had been selected from their classes. Data collection started in May 2018. An explanation was provided to the students clarifying why only some of them had been selected. In addition, they were informed that their data were confidential and would be used for research purposes only. Then, the questionnaires were distributed to the students from all the faculties.

To preserve confidentiality, the questionnaire package was anonymous and not marked or numbered in any way. Instructions were also provided on the first page of each questionnaire to guide students on how to do it and to inform students that there is no right and wrong answer. In the instruction section of the Y-RSQ,

the researchers emphasised that students should answer each situation by choosing an answer for each Likert scale of Y-RSQ to clearly indicate their concerns about the rejection of their request in the first place and then to what extent they expected others would reject their request. Each participant was given two questionnaires, namely the Y-RSQ and social anxiety questionnaire. Both questionnaires were self-administered and took 25-30 minutes to be completely answered.

RESULTS

Validity

Validity was evaluated via three methods, namely content validity, criterion-related validity, and construct validity.

Content Validity. Content validity refers to what extent items in a measure reflect the universe of content to which the instrument is to be generalised (Taherdoost, 2016). Using this method, the experts were provided with a number of questionnaire items and they were asked to determine individualistically whether the aspects of rejection sensitivity are measured by the underlying items. In other words, whether these items are suitable or not suitable to measure the rejection sensitivity construct.

However, there were no indexes established for content validity. Alternatively, items were revised by going through two rounds of review. In the first round, a group of four experts was selected to conduct the initial validation and check or revise the questionnaire relevance.

The Y-RSQ contained 21 items with two different Likert scales and the judges had to indicate the accuracy of the translation. In the second round of review, based on the comments from the revision in the first round, a more refined version of the Y-RSQ was submitted to two experts in psychology who are bilingual in the Arabic and English languages for further content validation. Their tasks were to check whether each item was (a) suitable or (b) unsuitable to measure rejection sensitivity and which items could be discarded. Based on the first and second round of reviews, items were rewritten and refined, and no items were deleted.

Criterion-Related Validity. Criterion-related validity refers to what extent a measure is connected to an outcome. It evaluates how good one measure expects an outcome for another measure (Taherdoost, 2016). If the test scores can give a basis for accurate prediction of some criteria, that means these scores are useful. Criterion-related validity has two types, which are predictive validity and concurrent validity. In this study, concurrent validity was implemented. It is usually defined as a relationship between a measure and the relevant criteria (Lin & Yao, 2014).

Rejection sensitivity indicates the sense of personal insufficiency and misunderstanding of others' behaviour, in which perceiving rejection leads to discomfort and fear. This concept is directly linked to a fear of being negatively evaluated by other people and a fear of embarrassment, which are the key features associated with

social anxiety (Fang et al., 2011). Therefore, the researchers have used the social anxiety questionnaire as a criterion to check the concurrent validity because there are many common features between social anxiety and lately established construct of rejection sensitivity within social psychology. Consequently, cognitive biases related to rejection, increased emotional arousal in certain interpersonal circumstances, and behavioural consequences such as interpersonal problems underlie both rejection sensitivity and social anxiety (Downey & Feldman, 1996; Downey et al., 1998).

To obtain the concurrent validity, Pearson product-moment correlation (r) was used to calculate the correlation between the scores of the Y-RSQ and social anxiety questionnaire scores. The result revealed that there is a statistically significant and moderate positive relationship between Y-RSQ and social anxiety scores ($r = 0.50$, $p < 0.01$). The concurrent validity is achieved as there is a relationship between the two variables.

Construct Validity. Construct validity indicates how well you transformed, explained, and operationalised an idea, concept, or behaviour that is a construct into a functioning and operating reality (Taherdoost, 2016). The present study explored the factor structure of Y-RSQ via factor analysis in an attempt to assess whether the original factor structure described by Downey and her colleagues was replicated with the current sample. Previous findings of the Downey and Feldman's study (1996)

interpreted the results in favour of the unidimensionality of the RSQ. However, the current study aimed to confirm whether the adapted Y-RSQ represents a one-factor model as some changes have been done to the original questionnaire.

Confirmatory factor analysis (CFA) was used to check the construct validity. The researchers have run the analysis first for the one-factor correlated model, second for the two-factor correlated model, and finally for the bifactor model. Based on the recommendations of (Hu & Bentler, 1998), the model fit for the Y-RSQ was gauged using a combination of fit indexes with empirically derived cutoff scores. Precisely, a good fit is indicated by the root mean square error of approximation (RMSEA) $\leq$ 0.06, standardised root mean square residual (SRMR) $\leq$ 0.08, and the comparative fit index (CFI) ranging from 0 to 1. Higher values indicate better model fit (Themessl-Huber, 2014), CFI $\geq$ 0.95 (Zawilinski, 2011). The chi-square (CIMN) value is 2 or as high as 5 to indicate a plausible fit (Marsh & Hocevar, 1985). The results of each model are presented in a detail as follows.

Measurement Model Assessment as a one-factor Correlated Model. Fit statistics for the Y-RSQ as one-factor correlated model were $\chi^2(463) = 1673.713$, $p < 0.001$, goodness of fit index (GFI) = 0.843, adjusted goodness of fit index (AGFI) = 0.821, RMSEA= 0.068. The value of CMIN/DF was 3.615, $p < 0.001$. Some of the indices such as GFI and AGFI were closer to the minimum acceptable range of model fit of 0.80 (Maulana & Rufaidah, 2014; Shevlina

et al., 2000). The CMIN/DF value of < 3 denotes a satisfactory fit between sample data and hypothetical model (Kline, 2005) and CMIN/DF < 5 demonstrates a plausible fit (Marsh & Hocevar, 1985). The SRMR value was 0.066. A SRMR value of less than 0.08 is mostly considered a good fit (Hu & Bentler, 1999) (see Table 1). CFI and Tucker-Lewis index (TLI) did not meet the expected fit index cutoffs (Hu & Bentler, 1998). The factor loading for an item has to be at least 0.30 on its factor. Out of the of 21 situations, five situations with low factor loading of less than 0.30 were excluded as recommended by Tabachnick and Fidell (2007) due to their poor contribution.

Measurement Model Assessment as a Two-factor Correlated Model. Fit statistics for the Y-RSQ as a two-factor model are similar to the one-factor model. The value of $\chi^2(463) = 1673.713$, $p < 0.001$, GFI = 0.843, AGFI = 0.821, RMSEA= 0.068. The value of CMIN/DF is also 3.615, p <.001, SRMR= 0.066 (see Table 1). The aforementioned indices such as GFI and AGFI are close to the minimum acceptable score of 0.80 (Maulana & Rufaidah, 2014; Shevlina et al., 2000), while CFI and TLI did not meet the expected fit index cutoffs (Hu & Bentler, 1998). The loadings of the subscales in the two-factor model were all statistically significant at $p < 0.001$ and ranged in magnitude from 0.317 to 0.578. However, factor loadings for five items were lower than the minimum acceptable range of 0.30, so these items were discarded from the analysis.

Measurement Model Assessment as a Bifactor Model. A bifactor measurement model for particular responses for a set of items indicates that the correlations between these items could be explained by (a) a general factor exemplifying the common discrepancy between all the items and (b) a set of group factors where the discrepancy is shared between the general factor and the subsets of items that are supposed to be largely similar in content. It is frequently presumed as well that the general factor and group factors are orthogonal. The general factor represents the comprehensive fundamental construct intended to be measured by an instrument, while group factors represent more theoretically particular subfactor constructs (Rodriguez et al., 2016).

Fit statistics for the Y-RSQ as a bifactor model are as follows: $\chi^2(432) = 1456.184$, $p < 0.001$, GFI = 0.863, AGFI = 0.833, RMSEA= 0.065. The value of CMIN/DF was 3.371, p <0.001, SRMR= 0.065 (see Table 1). The GFI and AGFI indices were close to the minimum acceptable score of 0.80 (Maulana & Rufaidah, 2014; Shevlina et al., 2000) although CFI and TLI did not meet the expected fit index cutoffs (Hu & Bentler, 1998). According to Page (2007), even if these indexes do not conform to Hu and Bentler (1999) rule of thumb for good

approximate fit, they indicate moderate approximate fit by their standards and thus provide mediocre support for Y-RSQ. In general, "the fit indexes that were obtained indicate overall acceptability but without being an excellent fit" (Moss et al., 2015). In some cases, the poor fit may result from items similarly phrased or appearing adjacent to each other (Lee, 2016).

Using these criteria, the large majority of items have acceptable factor loadings on their subscale factors in the one-factor model, two-factor model, and bifactor model. The results of the one-factor model and the two-factor model are similar but the outcome of the bifactor model is higher. The fit indexes that were obtained in this study indicated overall acceptability but without being an excellent fit. The results of the current study also indicated that Y-RSQ is better represented by a bifactor model because the fit indices of bifactor model are higher compared to the other two models; 16 items out of 21 loaded significantly with factor loading of 0.30 and above, while five items loaded lower than 0.30 so that these items were deleted. In applied research, factor loadings higher than or equal to 0.30 or 0.40 are often interpreted as salient, which is an indicator that these are meaningfully related to a primary or secondary factor (Timothy, 2006).

Table 1

Fit statistics for rejection sensitivity model sample (N=571)

Measure	CIMN	Probability	GFI	AGFI	RMSEA	SRMR
One-factor model	3.615	0.000	0.843	0.821	0.068	0.068
Two-factor model	3.615	0.000	0.843	0.821	0.068	0.066
Bifactor model	3.371	0.000	0.863	0.833	0.066	0.065

Reliability

Reliability analysis was performed after the validation analysis including the remaining 16 items from the CFA. Reliability was performed on each of the subscales and the total scale of the Y-RSQ in order to ascertain the consistency of the construct by using Cronbach's alpha. Cronbach's alpha coefficient is one of the most common methods to evaluate internal consistency.

The Cronbach's alpha values for each of the rejection sensitivity subscales and the overall reliability are good, whereas rejection anxiety's Cronbach's α = 0.78, the rejection expectancy's Cronbach's α = 0.82, and the overall reliability's Cronbach's α = 0.82 (see Table 2). These coefficients suggest that the total scale score displays adequate internal consistency for research purposes (Funk, 2004).

Table 2

Reliability of the adapted Yemeni version of rejection sensitivity questionnaire and social anxiety questionnaire

Factors	Cronbach's alpha	Number of items
Y-RSQ first subscale (Rejection Anxiety)	.78	16
Y-RSQ second subscale (Rejection Expectancy)	.82	16
Overall Y-RSQ reliability	.82	32
SA questionnaire reliability	.92	29

DISCUSSION

This study provides an instrument that is empirically designed and appears to be a reliable and valid. The final version of the Y-RSQ consists of 16 items. A total of five out of 21 items were deleted from the scale because of the low factor loadings. The results of this study indicated that the Y-RSQ is a reliable measure since Cronbach's alpha values are very good and the item-total correlation for each item is within the acceptable range. In general, 67% of the variances were explained by these factors (rejection anxiety and rejection expectancy). The Cronbach's alpha value in this study is comparable to the reliability coefficients that were reported in the literature review using different samples from different cultures (e.g., Bergevin, 2003; Chaudoir et al., 2017; Downey et al., 2000; Erozkan, 2009; Innamorati et al., 2014; Kraines et al., 2018; Tuskeviciute, 2017).

Based on the findings of content validity, all experts agreed that the Y-RSQ was an appropriate measure for rejection sensitivity and the selected items for the subconstructs were appropriate in general. Thus, content validity at this level is considered satisfactory. This result indicated that content validity is good and consistent with the earlier studies (e.g., Erozkan, 2009; Innamorati et al., 2014; Khoshkam et al., 2012) in which they confirmed and followed the same subconstructs or factors and the same items with few modifications according to the culture.

The criterion-related validity of Y-RSQ was evaluated by correlating the Y-RSQ with another measure, which is the social anxiety questionnaire. The findings implied that the measure of Y-RSQ was significantly and positively correlated with the measure of social anxiety. The significant positive relationship between Y-RSQ and social anxiety provided strong evidence of criterion-related validity. This result was not surprising as previous research has shown a strong and positive relationship between rejection sensitivity and social anxiety both in young and older adolescents (Tsirgielis, 2015). This finding is supported by the theory purport that rejection sensitive individuals have a predisposition to anxiously or angrily expect, perceive, and overreact to rejection. It follows, then, that these individuals may exhibit social anxiety when they perceive interpersonal rejection (Edwards, 2014).

Construct validity was used as another method to determine the validity of the Y-RSQ by using CFA. The findings of the CFA provided insights into the construct validity of Y-RSQ that might be influenced by culture bias. The Y-RSQ achieved an acceptable score. However, due to culture bias, it might not be able to capture the real state of rejection sensitivity among the Yemenis, which might be due to the sample size as well as the credibility of respondents' answers. Having some fit indices such as CFI and TLI lower than the standardised cutoff scores for the Y-RSQ might be interpreted due to cultural differences. That is because the Yemenis and Arabs generally tend to be more collectivists because of the

Islamic teachings and Arab customs that show respect to family members, value group loyalty, and encourage to help others and remain humble while interacting with others. This might also be attributed to the appealing picture that people try to draw for themselves in front of others and therefore they do not give genuine answers for each situation. Some of the students' responses showed that they tried to show indifference in case the others in the scenarios did not fulfil their request.

The results of this study showed that all the fit indexes for the three suggested models of Y-RSQ are comparable. However, the bifactor fit indices are higher, which indicate that Y-RSQ is better represented by a bifactor model. This study supports the finding of Innamorati et al. (2014), who validated the extracted version of the adult RSQ on a sample of Italian students. They stated that the bifactor model had an acceptable fit to the data and rejection sensitivity was best represented by a general factor and two groups of factors.

Özen et al. (2011) assumed that rejection expectancies might be culture-specific. Thus, the current study provided scholars and psychologists in Yemen with an instrument, Y-RSQ that is culture fare. Furthermore, schools and institutions could use Y-RSQ to measure students' rejection sensitivity to avoid its influence on students' ability to form healthy relationships and interact smoothly with others in their surrounding area. It could probably be used to avoid the possible impact of rejection sensitivity on their academic performance.

Kim (2015) denoted that college students with high rejection sensitivity had appeared to exhibit a high propensity to repress their own feelings on account of fear of rejection and this was a critical element of suicide-related incidents.

CONCLUSION

The aim of this study was to adapt and validate the RSQ of Downey and Feldman (1996) to make it suitable for the Yemeni culture. Validity was assessed by using three methods, namely content validity, concurrent validity, and construct validity. Items were refined based on the experts' opinions in the content validity stage, and then concurrent validity and construct validity were investigated through administering the questionnaire to a sample of Yemeni students. The result of concurrent validity indicated that Y-RSQ is a valid instrument as it correlated significantly with the social anxiety questionnaire, while the CFA results showed that the Y-RSQ is best represented by a bifactor model. Items in the Y-RSQ have loaded significantly into their designated dimensions, namely rejection anxiety and rejection expectancy. The results of this study also indicate that Y-RSQ is a reliable measure. Overall, the results show that the Y-RSQ meets the main requirements for measurement tool in social science, and it is suitable for application in the assessment of rejection sensitivity among students in the Yemeni context and other culturally similar contexts.

Limitation and Future Directions

This study was limited to the validation of Y-RSQ on a sample of undergraduate students from one university and one district. The findings of this study suggest that future studies could be done to investigate further why the Y-RSQ resulted in acceptable fit indices in the current sample. It is recommended that future studies could further modify the items. Though the Y-RSQ has been demonstrated to be valid and reliable, researchers still need to develop better ways to assess the variation in the students' responses. In addition, there is a need to contextualise the RSQ to be used among adults in general and not only students.

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The Member of 'Quality' and the 'Other': Colonial Fallacy and Othering in James G. Farrell's *Troubles*

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ABSTRACT

The present article examines the longstanding strife between the Irish Catholics and Anglo-Irish Protestants through James Gordon Farrell's historical novel, *Troubles* (1970). By focusing on the character of Edward; a representative of Anglo-Irish Ascendancy in the novel, this study argues that the representation of the native Irish Catholics suffers from "othering". The study relies on the concepts formulated and explicated by postcolonial critics like Fanon, Said and Spivak in their critical works as its theoretical premise. The article first traces the epistemological creation of the native Catholic Irish as the "other" by the British and secondly; it investigates its role in grooming Edward's ideology of othering the natives. Further, the paper argues that Edward's position regarding the "other" is not sudden; instead, it is an outcome of the long tradition of the British colonial fallacy about the native Gaelic-Irish.

Keywords: Anglo-Irish Ascendancy, Catholics, Ireland, J. G. Farrell, othering, Protestants

INTRODUCTION

The history of colonization of Ireland can be traced back to the middle of the twelfth century when Henry II invaded County Wexford. This first attempt of colonization was later followed by the expansionist motives of several monarchs, that resulted in the complete subjection of Ireland under the English Crown. The introduction of the settlers, serving British interest, on the

Irish land is very crucial in Irish history as the plantation policy and the subsequent replacement of the Irish landlords by the settlers, resulted in the shift of power from the insiders (natives) to outsiders (settlers). The settlers generally comprised the aristocrats and the army officers, primarily Presbyterians and Protestants from Scotland and England respectively. Resultantly, over time, a new class, the Protestant Ascendancy, emerged in Ireland out of the social, political, economic oppression, discrimination and colonial subjugation of the native Irish population, which was dominantly Catholic. This new Protestant ruling class was critical of the faith and practices of the Catholics, which resulted in a clash between the two sects, a conflict of ideologies which continues till date. This tension between the two may appear obvious and ordinary due to the difference in religious beliefs and practices, but when analyzed critically and intimately, this clash appears to have emerged, gained momentum and, and persists because of the colonial practises by the British settlers, during the initial phases of Irish colonization.

Edward Said, in his path-breaking work, *Orientalism* (1978), talked about the epistemological creation of the "Orient" by the West. He sees colonialism in the East, as a military-political project that has been backed up by the ideas, knowledge and opinion, the West (Europeans) has created, documented, and disseminated about the "Orient". Said, saw "Western scholarship on the Orient (a term that encompassed the Middle East in particular and Asia in general) as disparaging and demeaning,

treating non-Western peoples as childlike and uncivilized, belonging to backward cultures that were in need of enlightenment — from the West" (Lary, 2006, p. 3). The Europeans, Said, was referring to were the British and the French, the two great imperial powers and colonizers across the world till the twentieth century. Elucidating the binary relationship between Europe and Orient, Said (1978/2003) wrote,

> The Orient is not only adjacent to Europe; it is also the place of Europe's greatest and richest and oldest colonies, the source of its civilizations and languages, its cultural contestant, and one of its deepest and most recurring images of the Other. In addition, the Orient has helped to define Europe (or the West) as its contrasting image, idea, personality, experience. (Said, 1978/2003, p. 2)

"The idea of European identity as a superior one in comparison with all the non-European peoples and cultures" (Said, 1978/2003, p. 8), helped the Europeans to construct the Orient as primitive, savage, pagan, uncultured, uncivilized and exotic in their episteme. They made it a basis, and justification, for their presence and colonization of the East. What Said had pronounced was the binary opposition of the West and the East, concerning the European colonization process in the Orient countries. He, however, does not recognize the colonization of Ireland by England, both part of the West. In fact, what the British did later in the East they had already done in Ireland long before. According to Colley (1992), "Ireland was in many respects the laboratory of the British empire" (p. 327) where they tested their preliminary colonial exercises.

Scott Cook also voices a similar opinion, "Much of the legal and land reform that the British sought to implement in India, for example, was based on experiments first implemented in Ireland" (qtd. in Colley, 1992, p. 327).

Similarly, the British established their epistemological domination over Ireland long before they did so in the East. What Said, observes about the Orient is also applicable in the context of Ireland. The British settlers projected the life, manners and practices of the Irish people in a negative light, apparently to disparage them, in their literature in an attempt to reinforce their cultural, ideological and literary supremacy over them. This epistemological domination by them has played a key role in forming the sensibility of the English protestants and Anglo-Irish protestants of the later generation.

The social tension emerging out of the interaction between the two communities, Catholics and Protestants, in Ireland is visible in James Gordon Farrell's historical novel, *Troubles* (1970), as it voices out the settler-native experiences in Ireland during the early twentieth century. Farrell showed the perennial tension between the native Catholic Irish and the settler Protestants in the novel through characters like Edward Spencer, an Anglo-Irish Protestant, and Sarah and Murphy, both native Catholic Irish. The present article traces the epistemological creation of the native Catholic Irish as the "other". By focusing on Edward as a typical colonial-settler persona, it is being argued how religion has been used as a form of "othering". It is further concluded that Edward's prejudice against the natives is not sudden; instead, it is an outcome of the British epistemic tradition, which has always projected the Irish as the inferior other.

MATERIALS AND METHOD

The paper critically examines *Troubles*, the first novel of Farrell's Empire trilogy, which exposes the prejudiced attitude of the Anglo Irish Protestants towards the native Catholic Irish by engaging them into a series of historical events. A critical reading of the novel reveals that the native Catholics suffer "othering", an ideological discrimination by the Anglo-Irish Protestants, because of their different religious practices. "Othering" is the outcome of a "discursive process by which a dominant in-group (in this case the Anglo-Irish Protestants) constructs one or many dominated out-groups (in this case the Gaelic Catholics) by stigmatizing a difference – real or imagined – presented as a negation of identity and thus a motive for potential discrimination" (Staszak, 2008, p. 2). The present paper explores the ideological othering of the native Irish, in the novel, by using the avant-garde postcolonial critical formulations such as Frantz Fanon's concept of "the other", Gayatri Chakravorty Spivak's idea of "othering", Edward Said's concept of "Orientalism" and Louis Althusser's (1971/2001) notions of "interpellation", "Ideology", and "Ideological State Apparatuses". Besides, literature since the sixteenth century has also been adverted to develop the idea of "episteme", which plays a very vital role in the propagation of "othering".

RESULTS AND DISCUSSIONS

Tracing the Episteme

The first colonizing project of Britain starts with its neighbouring country, Ireland. In fact, "Ireland has often been described as both the first and the last colony of the British Empire" (Kenny, 2004, p. 1). The British Empire had always exercised its authority and dominance on a foreign land by tactics. One of that was to slander the natives in the name of religion. First, they besmirch their religious faiths and practices as unscientific and pagan. Then they denigrate them as uncivilized, creating a space for themselves to rule them, in the name of civilizing them. They did the same in Ireland to colonize them. But the case in Ireland was quite different and complicated compared to the Orient because Ireland was a "colony whose subject population was both 'native' and 'white' at the same time" (Gibbons, 1991, p. 95). The Irish were Catholics, following at least one form of Christianity, as opposed to the Orient nations where people had altogether different faiths. So the binary (in this case) in which a western country (England) was looking at another western country (Ireland) was that of right/wrong path of Christianity.

Reformation in England had ended the dominance of the Roman Catholic Church and changed the perspectives of people regarding its practices in the sixteenth century. The publication of *Ninety-five Theses* in 1517, by Martin Luther in Germany, played an important role in the inception of Protestant faith across the world. The Act of Supremacy in 1534 and

The Act of Uniformity in 1558 further helped in the extensive spread of Protestantism in England from the sixteenth century onwards. Accordingly, people of England found Protestantism as an alternative to the Roman Catholic faith. Although the struggle between the two beliefs, for monopoly and dominance, continued; the disposition of James II in 1688 and the failure of Catholics in the Glorious Revolution jeopardized any chance of reestablishment of Catholic power in England forever. The Catholics in England were proscribed from many social and political opportunities, and Protestantism was propagated as the best form of Christianity. Later, it became a touchstone for the English to determine the civility of people of other faith when they embarked on their colonizing mission.

In Ireland, where the population was dominantly Catholic, this segmentation in Christianity became a crucial factor in determining the civility of the native Irish. The settlers hated the Irish Catholics and their doctrines. According to Garry Waller (1994), "Catholic doctrine was viewed as intellectually corrupt, its practices worldly, its clergy lazy, ignorant and venal" (p. 54) by the settlers as opposed to their Protestant doctrine. Edmund Curtis (1942) notes that the settlers at first "burned Irish abbeys; destroyed sacred relics; and attempted to root out the papacy by every possible means" (qtd. in Hechter, 1972, p. 184). Later on, Papal Laws were enforced on the Catholics to control them. However, J. C. Beckett (1966) is of the view that the laws were "not to destroy Roman Catholicism but to make sure that its adherents were left in a position of social, economic, and political inferiority" (qtd. in Hechter, 1972, p. 184).

Nicholas P. Canny in his article "The Ideology of English Colonization: From Ireland to America" (1973) had traced the anti-Catholic Irish literature of the sixteenth century by its early settlers like Henry Sidney, Carew and other Protestants. They had branded the Catholic population of Ireland as "pagan" due to the variance in their religious practices with the Roman liturgical system. Canny had referred to texts like "On the Disorders of the Irishry" (1572), by an unknown Palesman, "Notes on Ireland" (1571), by Tremayne, *A Short Survey of Ireland* (1609), by Barnaby Rich, *De Republica Anglorum* (1685) by Thomas Smith and many other written records by Sir Henry Sidney, Charles Blount, Sir George Carew, Sir Peter Carew and Sir John Davies to establish his claims. These narratives represent the Irish as anti-God, blasphemous, wicked, unclean, nomads, savage, brutish, uncivil and barbarous. Years before these settlers' documentation of the manner and life of the Irish, Giraldus Cambrensis in his *Topographia Hibernica* (*The Topography of Ireland)* had already presented a similar picture of the native Irish. For him, the Irish are far from civilized nations and "they learn nothing, and practice nothing but the barbarism in which they are born and bred, and which sticks to them like second nature" (Cambrensis, 1913/2000, p. 70). It is quite possible that the settlers of Renaissance might have read this treatise in Latin and may have tailored their prejudices against the Catholic Irish.

Famous renaissance poet, Edmund Spenser (1596/1934), in his work *A View of the Present State of Irelande* noted about the Irish, "They are all Papists by their profession, but in the same so blindly and brutishly informed for the most part as that you would rather think them atheists or infidels" (qtd. in Canny, 1973, p. 585). His treatise outlines the "abuses and cultural inferiority of the Irish, necessitating their transformation into reasonable subjects" (Hadfield, 1994, p. 2). G. W. Kitchin had argued that his epic-poem "The Fairie Queen" (1596) is a "manifesto to shew the right of England over Ireland in the days of Queen Elizabeth and to justify her severe measures, in which Spenser had necessarily taken some part" (qtd. in Fitzpatrick, 2000, p. 61).

These documents where the Catholic Irish are shown as brutish, uncivilized and subhuman, form convincing evidence of the propagandist iconography of the British. One apparent reason for the Protestants' hatred of Catholics in Ireland seems to be the belief that priests drive the Catholics. The priests during that time were treated as agents of enemies of Great Britain, i.e. the Spanish and the French, which were Catholic countries. It is believed that these priests were in touch with foreign enemies and were trying to establish themselves in Britain and reclaim the church. The allegations of the connection of the Catholics with the adversaries caused the Protestants to brand them as traitors and enemies. Resultantly, a large number of Catholic priests were executed in Ireland.

Besides religion, "manner" turns to be another key factor in the "othering" and determining the civility of the native Irish. Ireland has been an agrarian country with a majority of rural population. For the English, who had traversed Renaissance, and drunk "life to the lees" (Tennyson, 1911, p. 6), the rusticity and the provinciality of Ireland was contemptuous. They were able to pursue their

argument further when they witnessed the appearance of the native Irish, their habits, customs, and agricultural methods (Canny, 1973, p. 586). The British settlers projected themselves as racially superior and religiously correct while the "Irish were frequently cast as racially inferior" (Kenny, 2004, p. 2) and religiously on the wrong path.

Despite the integration of Ireland and Britain under one Crown through the Act of Union in 1800, the vile biasness of the British towards the Irish continued, as is evident from the following quote by nineteenth-century historian and novelist, Charles Kingsley:

> I am haunted by the human chimpanzees I saw along that hundred miles of horrible country. I don't believe they are our fault. I believe that they are happier, better, more comfortably fed and lodged under our rule than they ever were. But to see white chimpanzees is dreadful; if they were black, one would not feel it so much, but their skins, except where tanned by exposure, are as white as ours. (Kingsley, 1877, p. 308)

According to John Coakley (2004), "the English effort to create a unified sociopolitical community by Act of Union was rather unsuccessful" (p. 3) as the British failed to assimilate with the Irish. He said, "the most demanding question, then, relates not to the failure of the Irish to become British but rather to the failure of the English to adopt the peoples of the United Kingdom as their "imagined community" and to create a shared nation with them" (Coakley, 2004, pp. 3-4). Said (1978/2003), in his book, *Orientalism,* said, "The relationship between Occident and Orient

is a relationship of power, of domination, of varying degrees of a complex hegemony" (p. 6). This argument regarding the Occident and Orient relationship is also valid with regard to British and Irish as we can see that a network of power and hegemony has been fabricated by the British through literary representation.

The fallacious episteme created by the people like Cambrensis, Henry Sidney, Edmund Spenser, Charles Kingsley, among others has played a significant role in framing the sensibility of the protestants of later generation. The continuing power of the notion that Catholics were the hereditary enemy needs to be stressed because it is sometimes supposed that it receded after 1700 in the face of growing rationalism and literacy (Colley, 1992, p. 318) but unfortunately it did not. The British never assimilated with the Catholic Irish, and that the Irish are uncivilized, barbaric and pagan, became the tenet of the protestant English. Linda Colley (1992) noted, "Catholics as a category remained in popular mythology an omnipresent menace" (p. 317) and the Anglo-Irish protestants still perceive, if not believe wholly, the Catholics, as "other", "different" and "inferior" in comparison to them. This phenomenon of conflicting variance brings tension between the two communities in Ireland, and it continues to the present day.

Edward Spencer: An Upshot of the Fallacious Episteme

Religion qualifies as the foremost factor, among others, that is responsible for the longstanding unrest in Ireland, which has erupted time and again. Irish Civil War (1919-21), which is also the setting of *Troubles,* is the most crucial attempt in

this regard. The Catholic community in the early twentieth century, overwhelmed with great nationalistic fervour, demanded autonomy and independence for Ireland from the British control. However, the ruling Protestants did not agree with Catholics regarding the freedom of Ireland. Farrell mentions the tension in *Troubles* at great length where on the one hand the native Catholic characters show their solidarity with the contemporary political situation; by engaging themselves in activities against the Crown, while on the other hand, Edward Spencer, a protestant, considers this as an act of treachery and betrayal to the Majesty and Britain and is in strong opposition to the Catholics.

Frantz Fanon instancing the "other" in his book, *The Wretched of the Earth,* says that the governing race is first and foremost those who come from elsewhere, those who are unlike the original inhabitants, "the others" (Fanon, 1961/1963, p. 40). Farrell presents the long-existing dichotomy between the members of "quality" and the "other" in the novel. Edward Spencer, who is an Anglo-Irish Protestant, sees the native Irish Catholics as the "other" and himself as the member of "quality". He is Farrell's "chief representative of the Anglo-Irish Ascendancy and British Imperial attitudes" (McLeod, 2007, p. 44). He sees the Catholics from a vantage point and is very much critical of them, their manners and behaviours. When he is introduced to the readers for the first time, he is described as having a "craggy face with its accurately clipped moustache and broken nose" (Farrell, 1970/2009, p. 20). The "broken nose", which is a key identifier of his personality bears a

connection with his anti-Catholic and anti-native traits. Farrell focuses on his broken nose while describing his personality:

> The broken nose, for example, was the result of having boxed for Trinity in a bout against the notorious Kelvin Clinch, a Roman Catholic and a Gaelic speaker whose merciless fists had been a byword in those days. The savage Clinch, mouthing incomprehensible oaths through his bleeding lips, had got as good as he gave, until he had finally succeeded in flattening "Father" (Edward) with a lucky punch. Time and again the elder Spencer had been battered to the canvas, time and again he had risen to demonstrate English pluck and tenacity against the superior might of his Celtic adversary. (Farrell, 1970/2009, p. 20)

The "broken nose" of Edward is a trope used by Farrell to acquaint the readers about the latter's anti-Catholic nature, the aspect which hinges throughout the novel. In fact, Edward's identity which is established by the description of his physical appearance, in the early pages of the novel works as an appetizer for the readers who are going to encounter Edward's aversion to the native Catholic Irish in details, further in the novel.

Edward is a staunch Protestant with least sympathy towards the Catholics. He is a man of principles and cannot violate it, even for his son. He shudders at the thought of his son's marriage with Maire, when her father, Mr Noonan, comes to meet him to talk about the wedding. He is against their relationship because Maire is a Catholic. He believes that the difference between Roman Catholicism and Protestantism is like

an unbridgeable chasm, for he hates Catholic manners and practices. Farrell depicts his inner conflict in the following words:

> Edward's thought turned to the main and unbridgeable chasm, the Roman Catholicism of the Noonan's: the unhealthy smell of incense, the stupefying and bizarre dogmatic percepts, the enormous family generated by ignorance . . . he absurd, squadron of saints buzzing overhead like chaps in the Flying corpse supposedly ever ready to lend a hand to the blokes on the ground, the Pope with all his unhealthy finery, the services in a gibberish of Latin that no one understood, least of all the ignorant, narrow-minded and hypocritical priests. (Farrell, 1970/2009, p. 121)

Edward's thought about Catholicism in the above quote has a similar tone to that of the Palesman, Tremayne and Sidney, the early settlers, who had regarded Catholicism as vile and the priests as papists in their treatizes.

Later in the novel, Ripon runs off with Maire; marries her and lives in some other place reluctant to come back to his father. When Major inquires about Ripon's homecoming, Edward shows a willingness to accept him but with conditions. He can forgive him once, going against his wishes, for soiling his name and reputation by marrying a Catholic, the "other", but he cannot accept his grandchildren to be brought up in Catholic way. He says, "I don't want grandchildren of mine to be brought up believing all that unhealthy nonsense they teach them" (Farrell, 1970/2009, p. 159). This aversion to Catholic faith and manner in Edward is not simply because of the difference in religious

beliefs and practices, rather it is the result of his "delusive superiority", a sense that he has inherited from his colonial predecessors. The narrative that had been set by them seems to form his sensibility because of which he is not ready to assimilate with the native Catholics. Farrell writes, "such thoughts do not actually have to occur by a process of thinking; they run in the blood of the Protestant Irish" (Farrell, 1970/2009, p. 121).

Edward's sense of religious superiority does not allow him to recognize the Catholics as equal. He believes that there is an "impossibility of making progress in a country ridden with priests, superstitions and laziness" (Farrell, 1970/2009, p. 68). The Catholic faith of the natives is at the centre of his criticism when he is making such a disparaging remark. His attitude towards the natives is similar to that of the earlier colonial-settlers/masters who considered their subjects as inferior, uncivil, and savage. His perception is the result of the perennial stigmatizing of the Irish as barbaric, by Sir John Davies and others, to justify the imperial initiatives of the Crown. It is also an observable point that Edward Spencer's name is similar to the poet, and secretary to the Governor of Ireland, Edmund Spenser, who, as discussed earlier, had presented a bigoted view of the Irish in his treatise *A View of the Present State of Ireland*. There are marked similarities between the opinion of the two on the Irish people. In this regard, John McLeod (2007) noted, "By aligning the fictional Edward Spencer with an Elizabethan personage, Farrell subtly links events in 1919-1921 with a much longer history of Anglo-Irish conflict that dates back at least to Elizabethan period" (p. 44). Such significant

linkages consolidate an implicit relationship between Edward's attitude and his colonial predecessors. Farrell appears to be convinced with the perpetual presence of the biased view of the Protestants for the Catholic Irish by aligning Edward with Edmund.

The Protestant superiority of Edward acts as an Ideological State Apparatus for the native Catholics. It interpellates Sarah and other minor Catholic characters in the novel. "Quality" becomes a characteristic that differentiates the Anglo-Irish from the Gaelic-Irish or native Irish. The Anglo-Irish have the "quality" while the Gaelic-Irish lack it. A member of "quality" bears characteristics like English parentage, Protestant faith, sophisticated lifestyle, conspicuous display of money and clothes, elitism, etc. However, among all "faith" is of utmost importance for qualifying to be a member of "quality". Sarah is interpellated by the ideology that she belongs to a category which lacks "quality", and therefore she is categorized as the "other". She bears it consciously that the Protestants would never accept her as equal for the fact that she is a Catholic.

Spivak (1985), in her essay about Rani of Sirmur, had identified at least three primary forms of "othering" by the British of Indians based on race, class, and gender. Unlike colonial India, where the "othering" of the subjects has also been done through caste (Rani & Kumar, 2020, p. 6), the case in colonial Ireland relates more to religion. The notion of "Catholics" is so loathsome to the Protestants that even its mention is considered an ignominious act. When Major meets Sarah for the first time and says that he knows few things about her (Angela had mentioned about her in her letters to Major)

Sarah's "interpellated being" conjures up. She says that you missed the important thing, "The fact that I'm a Catholic. Yes, I can see that she told you but that you regard it as a fact too shameful to mention. Or perhaps you regard it as good manners not to mention such an affliction" (Farrell, 1970/2009, p. 28). Sarah's bitter experiences with Edward, who calls the Catholics "fish-eaters" and "Holy Romans" and so on in a sarcastic manner, pollutes her mind to such an extent that she even adjudges Major, a recent arrival from England, through the same lens. But when he clarifies her that he is not so bigoted and has not abandoned his reason, Sarah suspects him and predicts that he, too, will develop a prejudiced opinion like the Spencers over a period of time. She says, "So will you, Major, when you're among the "quality". In fact, you'll become a member of the "quality" yourself, high and mighty, too good for the rest of us" (Farrell, 1970/2009, p. 29).

Murphy is another character who is a victim of the bigoted view of Edward. Edward's notion regarding the Catholics as slavish encourages him to treat Murphy inhumanly. He conducts his biological researches on him and tries to indemnify his acts by offering the poor with some quid. In his first experiment, he forces Murphy to swallow a balloon while in his second experiment on thirst, he fires at Murphy just to observe him in a frightened state. The dehumanizing nature and the mechanical approach of Edward are apprehensible in the lines below, where it becomes clear that he is more concerned about attaining success in his experiments rather than the life of Murphy:

For a moment, I was afraid he was going to pass out, which would have ruined the

whole thing. I had to keep him talking for a while so that he could get a grip on himself . . . but not too much of a grip. Told him the first thing that came into m' head . . . that is his service had been unsatisfactory and so forth, and that he had to be dealt with. Then I pulled both triggers. It made one hell of a noise . . . even scared me . . . Anyway, I dropped the gun and got him to spit out what saliva he could manage into the measuring glass. D'you realize that he could only produce four c.c.? It's incredible! Here, have a look. It may seem a bit more than that because I'm afraid a few drips of rain got into it before I realized what was happening. (Farrell, 1970/2009, p. 313)

After his experiments, Edward tries to mollify Murphy by giving him some quid. He thinks that he is obliging the poor by making a payment. But this act is persuasive evidence of two things; first, the prevalence of exploitation of the native poor by their rich masters in the Irish Ascendancy and second, their inhuman nature, blinded by money. When Major asks about the firing, Edward crassly says, "I gave him a couple of quid, so I don't suppose he has any complaints. He will be as right as rain in an hour or two" (Farrell, 1970/2009, p. 312). Another instance of his bestial treatment of Murphy is seen when Edward organizes a ball in the Majestic. Murphy, the "uncouth old manservant," is instructed to keep himself out of the way until the guests depart, for Edward fears that his cadaverous appearance would upset the ladies.

The lens through which Edward sees the natives provides no opportunity for a contestable opinion. The difference in religious faith, language and culture (Kitishat, 2019, p. 2521), motivates him to inculcate antipathetical view. The natives are not only denigrated as inferior in all aspects of life; they are also thought incapable of self- governance. He is a stereotypical colonialist for whom, the "others" are subjects and need to be mastered always because they cannot govern themselves. He complies with "White Man's burden *for the whites*" (Kipling, 1998, p. 311; my italics) and believes that it is his responsibility to take care of the native Gaelic-Irish who are vulnerable. Here, Edward shares a similar stance with the Collector in Farrell's second novel of the trilogy, *The Siege of Krishnapur* (1973/2007), who is the "stereotype of a nineteenth-century English man in India, and a believer of British colonial policies and of the white man's burden" (Kalpakli, 2009, p. 12). Asserting his role in the amelioration of the native peasants, Edward said:

I lease them the land at a price that's so cheap they laugh at me behind my back. I mend their roofs for them and give them seed corn and potatoes in return for a miserable percentage of their crop. I send them the vet when their cows get sick. I help them make ends meet when they spend all their money in the pub. (Farrell, 1970/2009, p. 60)

Later on, when Major informs Edward about Dr Ryan, a native Irish, badmouthing about him and his policies towards his tenants, he exasperatedly retorts, "I only lease them the land because I have to; they'd starve if I didn't" (Farrell, 1970/2009, p. 61). The idea of self-reliance has been projected as very far from the

reach of the native Irish peasantry. Poverty and hunger among the Irish has become a common trope to describe them. Gustave de Beaumont reverberated the same when he said:

> I have seen the Indian in his forests and the negro in his irons, and I believed, in pitying their plight, that I saw the lowest ebb of human misery; but I did not then know the degree of poverty to be found in Ireland. Like the Indian, the Irishman is poor and naked; but he lives in the midst of a society which enjoys luxury, honours and wealth. The Indian retains a certain independence which has its attraction and a dignity of its own. Poverty-stricken and hungry he may be, but he is free in his desert places; and the feeling that he enjoys this liberty blunts the edge of his sufferings. But the Irishman undergoes the same deprivations without enjoying the same liberty, he is subjected to regulations: he dies of hunger. He is governed by laws; a sad condition, which combines the vices of civilization with those of primitive life. Today the Irishman enjoys neither the freedom of the savage nor the bread of servitude. (qtd. in Gibbons, 1991, p. 98)

Farrell presents a stark contrast between the Anglo-Irish Ascendancy and the native Catholic peasants. To use Marx and Engels' (1848/1967) terms, the Anglo-Irish Ascendancy is the "bourgeoisie" class while the native Irish peasants are the "proletariats". The Majestic (a Big House) and the "wretched stone cottages" present the two contrasting world of the two classes in the novel. The former is the house of the members of "quality" while the latter accommodates the "other". The conflict between the two classes is manifested in the novel when the peasants refuse to work in the farmland of Edward and try to arrogate the lands on which they work. This unexpected act of the peasants disturbs Edward who has been living in an illusion that he is doing an act of philanthropy by giving them work on his land, which ironically, is the land of the natives usurped by the Ascendancy. He is disappointed by the fact that the beneficiaries (his tenants) instead of being grateful are creating troubles for him. At one point he gets frustrated with the happenings around him and submits, "I certainly wouldn't choose to be a landlord in Ireland. One gets no thanks for it" (Farrell, 1970/2009, p. 62).

The sense of superiority in him is not only because of his Anglo-Irish identity but also because he has done service to His Majesty, the King. He proudly shows his battle mark, to Major, which he has received while fighting from the King's side. Two things that Edward seems to expect from the native Irish are, first, Protestantism, and second, loyalty to the Crown. The absence of the former in the natives minimizes the possibility of the latter. Although it is a fact that hundreds of Catholic Irish have served in the British Army, Edward refuses to consider them as loyal subjects. He does not acknowledge the claim made by Dr Ryan that the Irishmen have also fought from the British side in many wars in defence of the Empire. He ruthlessly refutes the claim, by saying that, those who fought and died, were from the Unionist families, clearly defending his staunch belief and prejudices, against the native Irish people.

Edward is not only anti-Catholic, but he is also against the Sinn Féin and their

nationalist proclamation of free Ireland. His imperiousness blinds him from looking at the natives as capable of self-rule. In this regard, it is pertinent to quote Joe Cleary (2004) who says, "the Irish, like other colonized peoples, had been dually constructed, both as a virile, military race, exercising its natural martial qualities in the wars and adventures of Empire, and as an essentially emotional, irrational, and feminized people incapable of self-government" (p. 261). Although the Crown deploys them in military exercises, it refuses to acknowledge their manhood when it comes to independence and self-rule. Edward mocks at the natives by saying, "education is what these people need. And they think they're fit to govern a country" (Farrell, 1970/2009, p. 121).

One instance in the novel proves that he does not want the Crown to lose the colonial grip over Ireland. We see that he is very protective of the statue of Queen Victoria, which is installed in front of the Majestic. When the unrest in Kilnalough increases, he puts a notice written in bold, "TRESPASSERS FOUND TAMPERING WITH THE STATUE OF QUEEN VICTORIA WILL BE SHOT ON SIGHT" (Farrell, 1970/2009, p. 399). This act of protecting the statue of Queen Victoria takes us to a broader picture of the mechanism working behind it. James Murphy in his book, *Abject Loyalty: Nationalism and Monarchy in Ireland during the reign of Queen Victoria,* notes, "To Queen Victoria, all Irish nationalists who called for self-government were implicitly rebels, without political legitimacy" (Murphy, 2001, p. xv). Edward's protection of Queen's statue; a symbol of authority and governance of the Crown in Ireland, establishes the fact that he was

of no different opinion than her regarding the Sinn Féin. He fears that the grip that the Empire has on Ireland till now will loosen if the natives were given the opportunity to freedom. In that case, the existing power relations will turn upside down, that nobody in power wishes to lose.

CONCLUSION

Troubles portrays the religious tension existing between the Anglo-Irish Protestants and Catholics in Ireland, which continues even in the present times. Through the character of Edward, this article has tried to probe into the reasons for such disruption. It can be said that the ideological construction of the Irish as pagan and subhuman, by the settlers as well as later British intellectuals, as discussed in this paper, has played an important role in framing the sensibilities of the contemporary British and Anglo-Irish Protestants; of whom Edward Spencer is a representative. He is enmeshed in fallacious colonial episteme that stigmatizes the native Catholics as "others" who ought to be subjected to dominion by the members of "quality". The article also shows that religion acts as a basis of "othering" the natives. It also reveals that Edward's attitude/behaviour towards the Catholic echoes the bigoted view of the settlers which is not sudden, instead, it is an outcome of the long tradition of the British colonial fallacy about the native Gaelic-Irish.

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SOCIAL SCIENCES & HUMANITIES

The Transformative, Dialectical Anti-Colonial Discourse in Lillian Horace's *Angie Brown*

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ABSTRACT

Drawing on postcolonial theory and adopting the perspective of critical race theory, this article argues that Lillian Horace's posthumously published novel *Angie Brown* (1949) depicts a transformative, dialectical anti-colonial discourse. This stems from the fact that Horace's people in this novel undergo an internal colonial experience. In addition, the novel strikingly demonstrates and resembles various aspects of anti-colonialism. To challenge internal colonialization, the novel presents two aspects of anti-colonial agency: negation and affirmation. Negation is used to destabilize the colonial racist subjectivity, and affirmation is employed to construct an alternative postcolonial subjectivity. In all of its breadth, Horace's transformative discourse is rendered through three phases: economic empowerment and independence, educational fulfilment and progress, and political participation and representation. My contention is that Horace's challenge to racism is part of a larger umbrella of challenging colonialism and imperialism. Moreover, I am driving at dialogic intersectionality of African American liberating thought and anti-colonial discourse, as demonstrated by Horace's novel. As I am concerned throughout with analysing the institutionalized and systematized racist ideology implemented by white racist people to subjugate black Americans, I also scrutinize Horace's anti-colonial and anti-slavery discourse.

INTRODUCTION

African American fiction writers have played a very significant role in the history

of black Americans' struggle towards liberty. They wrote for liberating their people, for gaining their rights, and for maintaining the black dignity. In early twentieth-century America, black writers and thinkers had to face white supremacy which always portrayed black Americans as inferior and Other. One of their missions was to write back to dismantle the racist stereotypical images of black people and to represent their true identity. Accordingly, writing became a medium of struggle to challenge the discourse of power. One of the relatively neglected black American authors, who defied racism and segregation in her writings, is Lillian B. Horace (1880-1965). Strikingly, as a brilliant black American female writer, Horace has not received much concern from researchers as she deserves. Neglecting her utopian piece *Angie Brown* is something to be taken into consideration, as this novel was written during a very significant period and its author lived in a racially stratified society.

The importance of Lillian Horace in African American literary studies lies in the fact that she was the earliest black female novelist from Texas. Her novel *Five Generations Hence* (1916) is "the earliest novel on record by a black woman from Texas" and her second novel *Angie Brown* is regarded "the earliest utopian novel by a black woman before 1950" (Kossie-Chernyshev, 2013a, p. 1). In fact, because of excluding her from the African American literary canon, not much has been written about her and her works. The only secondary literature available on her novels

thus far is Karen Kossie-Chernyshev's edited book *Recovering Five Generations Hence: The Life and Writing of Lillian Jones Horace* (2013). Most of the articles in this book focus on rediscovering Horace as a Southwestern female author and on canonizing her works.

In "To Leave or Not to Leave: The Boomerang Migration," Kossie-Chernyshev (2013b) examined Horace's life and works from the perspective of her migration pattern, which Kossie-Chernyshev called "Boomerang migration." Kossie-Chernyshev shed light on Horace's early education, her migration to the North, and her return to Texas to help her people. Therefore, to some extent, this study addresses Horace and her works as migration narratives. The strength of Lillian Horace as a black female individual, which reflected on her female protagonists, is addressed by Boswell (2013) in "The Double Burden: A Historical Perspective on Gender and Race Consciousness in the Writings of Lillian B. Jones Horace." Boswell (2013) highlighted the drastic effects of racism on African American people. She argued that telling other people about their sufferings was a major catalyst behind writing her novels. *Angie Brown* demonstrates a successful story of an African American woman without the help of institutions. However, the institutionalization of racism in the novel is not given attention. The study does not dig deep into analyzing the counter-discourse which the novel presents.

One of the relevant studies on Horace's *Angie Brown* is Bryan M. Jack's

"Confronting the Other Side: Everyday Resistance in Lillian B. Horace's Angie Brown." In this essay, Jack (2013) argued that African American resistance went beyond organized movements to include domestic workers. He analyzed the novel as an example of indirect resistance, using "migration, stereotypes, their intellectual, persuasion, and friendship to challenge the daily indignities of a system designed to control African Americans economically, politically, and socially" (Jack, 2013). In fact, the dialectical, transformative discourse which is embedded in *Angie Brown* is neglected by Jack's article.

In line with rediscovering Lillian Horace and her works, I present this article to unravel Horace's vision in *Angie Brown* by scrutinizing its transformative, dialectical discourse in facing white supremacy. I argue that Horace's vision was ahead of her time and this discourse is better understood from the postcolonial perspective. This stems from my argument that the black experience in America represents an internal colonial experience. Given the fact that Horace touched on crucial contemporary issues, especially in her diaries, such as the African American identity, World War II, the political representation of African Americans, and the persecution of the Jews, this article expands the boundaries of the discussion outside the Southern canon to colonial and anti-colonial spheres.

MATERIALS AND METHODS

The racist discourse of othering black Americans has been long established in America, adopting the same colonial stereotypical discourse of Self versus Other. Self versus Other dialects is one of the fundamental ideas of postcolonial studies, and it characterizes the basis of epistemological enquires in many fields that dissect power relations. In *Orientalism*, Said (2003) built on Michel Foucault's discourse on knowledge and power. Said declared that the imperial powers of the 18th and 19th centuries used a great deal of their colonial instruments to have full supremacy over the colonized nations in Asia and African. This supremacy was maintained through time by establishing a colonial discourse, forming the image of the Other, the colonized nations, in contrast with the Self, the imperial European powers. The purpose of this discourse "is to construe the colonized as a population of degenerate types . . . in order to justify conquest and to establish systems of administration and instruction" (Bhabha, 1994, p. 70). It was the same discourse that brought Africans as slaves to America and, later, robbed them of their liberty and rights. It is based on "the idea of European identity as a superior one in comparison with all the non-European peoples and cultures" (Said, 2003, p. 7).

Constructing the image of the Other has been one of the colonial agencies that reinforced discrimination against black Americans. The counter ideology of resistance included, in addition to militant movements, an anti-colonial black literary discourse that resisted othering black Americans. Within this theoretical framework, this research paper intends

to analyze Horace's *Angie Brown* and its transformative, dialectical counter-discourse. *Angie Brown* raises the question of how the colonial system of agency can be effectively destabilized. On the other hand, it raises the question of what constructive trajectories can be established as a positive postcolonial agency without falling into the same colonial fallacy. The study shows how the novel subverts the white discourse of supremacy, replacing it with a more positive transformative one.

I am driving at a dialogic intersectionality of African American liberating thought and anti-colonial discourse. Despite the reservations that some critics hold against mixing African American criticism with postcolonial theory, I align my argument with that of Said's:

> We must be able to think through and interpret together experiences that are discrepant, each with its particular agenda and pace of development, its own internal formations, its internal coherence and system of external relationships, all of them co-existing and interacting with others. (Said, 1994, p. 32).

Baraka's assertion "In America, black is a Country … America is as much a black country as a white one" (Baraka, 2009, p. 104) implicitly confirms that what black Americans have been facing is characterized as internal colonization. In *Colonialism/Postcolonialism*, Loomba (2005) reiterated, "'Colonialism' is not just something that happens from outside a country or a people, not just something that operates with the collusion of forces inside, but a version of it can be duplicated from within" (p. 32). That is to say, black Americans' experience of slavery has been transformed into another phase which can be described as internal colonization.

Understanding black Americans' experience in terms of internal colonization calls for international solidarity with other oppressed minorities. Such connections could expand the boundaries of black identity and Blackness. At the first Congress of Black Artists and Writers held in 1956, Aimé Césaire (2010) expressed this pan-universal notion of solidarity in his speech 'Culture and Colonization:'

> Even an independent country such as Haiti is in fact in many respects a semi-colonial country. And our American brothers themselves are, by force of racial discrimination, artificially placed at the heart of a great modern nation in a situation is comprehensible only in reference to a colonialism. (Césaire, 2010, p. 127).

In her foreword to *Black Cultural Traffic*, Tricia Rose (2005) emphasized the power of African American thought in bringing about new venues for exploring power relations in the age of globalization and neo-imperialism:

> Always a key player in the world of racialized cultural exchange in the modern world, black cultures are playing an increasingly visible and complex role in this latest stage of globalization, a stage fueled primarily

by the export of cultural products as Trojan horses of neo-imperialism. (Rose, 2005, p. vii-viii).

In *The Identity Question in Black Drama and Its Existential Manifestations*, Al-Jarrah (2017) addressed the idea of appropriating Blackness and the African American experience by non-African American writers outside the United Sates. Al-Jarrah pointed out that appropriating Blackness by other groups around the world created a universal collective Black representation and identity.

That said, I argue that Horace's protagonist, Angie, struggles against internal colonization which is characterized as structural, political, and economic inequalities between different races or ethnic groups in the same country. To challenge internal colonialization, the novel presents two aspects of anti-colonial agency: negation and affirmation. Negation is used to destabilize the colonial racist subjectivity, and affirmation is employed to construct an alternative postcolonial subjectivity. In all of its breadth, Horace's transformative discourse is rendered through three phases: economic empowerment and independence, educational fulfilment and progress, and political participation and representation. These three phases represent the sequence of the discussion and the major subsections of this article.

RESULTS AND DISCUSSION

The Colonial Ideology of Separation vs. Angie's Desire to Be

The colonial ideology of separation is presented from the beginning of the novel. As the novel unfolds, we see that the town is divided into two parts: The Flat, "a river bottom area to which the colored people of Sandsworth were restricted," (Horace, 2008, p. 6) and the Other Side of the whites. This has become an essential part of the epistemic articulation of imperial discourse and the expropriation of the Other through history. Young (1995) argued, "the construction of knowledges which all operate through forms of expropriation and incorporation of the other mimics at a conceptual level the geographical and economic absorption of the non-European world by the West" (p. 3).

The first chapter of the novel serves as a panorama of the segregational atmosphere. The Other Side is placed in the centre whereas The Flat is totally marginalized. The line that separates the two divisions—the eastern and the western sides of the town—signifies a state of segregation and discrimination: "This was a sandy elevation which nature long since in arranging the topography of that section had made a geographical division of the east and west sides of the town, and man, later, made it a social and economic one as well" (Horace, 2008, p. 6). The imperial binary of the civilized, the Other Side, as opposed to the primitive, The Flat, is established through this line of land. This line not only separates the two groups and prevents assimilation and coexistence, it also restricts the mobility of black Americans and embodies the power relations. It confines them in underdeveloped areas. Massey and Denton (1993) argued, "White prejudice and discrimination restrict

the residential mobility of black and confine them to areas with poor schools, low home values, inferior services, high crime, and low educational aspiration" (p. 150).

More importantly, this line serves as the identity signifier and works line by line with the ontological ideology of power and subjugation. In *Orientalism*, Said (2003) pointed out that imperial powers divided the world adopting the Darwinian hypothesis of the biological inequality of races, which divided people into "advanced and backward, or European-Aryan and Oriental-African" (p. 206). This geographical line is to be recognized within the colonial, ideological framework as it is necessary for white people to distance themselves from their slaves. Angie observes this segregational line at Mr. Paker's house where she works as a maid: "Mrs. Parker, it seemed to Angie, made extra and unnecessary effort to keep the line sharply drawn between the servants and the family." (Horace, 2008, p. 33).

The focus on connecting the external appearance with internal prejudice is part of the colonial discourse that is well established in the colonized nations. When Angie arrives at the hospital with her sick child, she does not notice that there is a special entrance for Negroes. Angie, accompanied by her black friend, Belle, is about to enter the southern entrance of the hospital when they are stopped by the white guard, giving them a gesture to take the rear entrance. The guard's unwillingness to speak to them, along with his inferiorizing gaze, explains the situation: "With rising resentment this

person had gazed with bewildered eyes at the approach of 'those people' to the front entrance" (Horace, 2008, p. 1). The guard's inferiorizing look gives Angie a sense of being servile. Angie's being is determined from the outside; she is made an Other by the white gaze. In *Being and Nothingness*, Sartre (1943/1956) explained that "the Other objectifies me and steals my being through his look, which confers meaning upon me form the outside." (p. 364). The emphasis on signs and gestures throughout the novel is a discourse that instills agency in the racist ideology of silencing the Other. The guard does not consider Angie and Belle as human beings capable of resistance and understanding. In *The Wretched of the Earth*, Fanon (1961/1963) evinced, "The black man has no ontological understanding and resistance in the eyes of the white man" (p. 83). As silence is broken: "'Can't you read that sign?' He pointed. 'Go around to the rear'" (p. 1), Horace makes what is invisible visible. Silence in the novel is countered by an active interpretation of racist encoding. In her book *Feminism and Theatre*, Case (1988) pointed out, "Cultural encoding is the imprint of ideology upon the sign—the set of values, beliefs and ways of seeing that control the connotations of the sign in the culture at large" (p. 116).

In fact, Angie's body is enmeshed in white institutions and, therefore, her identity is contextualized within a racist environment. It is the racist discourse that assigns meaning to her body in the same way as it assigns meaning to the guard's inferiorizing gaze. "Negro Entrance," the

sign written on one of the City-County Hospital, is a very clear indication of the deeply institutionalized racist, colonial policy and it is decoded by the white nurse on duty. When Angie and Belle are asked to pay the five-dollar fee, Belle claims that it is "'a free place,'" but the white nurse scorns them, "'We have no blood we can use for Negroes'" because "'it is against the law to use white folks' blood for Negroes'" (Horace, 2008, pp. 3-4).

On various occasions in the novel, Angie is dehumanized and treated as an inferior Other. Inside white institutions, black Americans are treated as objects not as subjects. In *Sartre and Colonialism*, Fatouros (1965) discussed Sartre's argument of systematizing the colonial policy and enslavement, "The basic attitude involved here is the same as in the case of slavery . . . Perceiving other persons as objects rather than subjects, or, in Kantian terms, as means and not ends, is a common way of mankind" (Fatouros, 1965, p. 707). This situation imbues Angie with a sense of marginality and estrangement. Her experience echoes Fanon's (1967) description in *Black Skin, White Masks*, "I came into the world imbued with a will to find a meaning in things. and then I found that I was an object in the midst of other objects" (Fanon, 1967, p. 82). Angie feels the burden of her responsibility toward herself, her race, and her people, emulating Fanon's experience of being an object of the white child's gaze on the train: "It was no longer a question of aware of my body in the third person but in a triple person … I was responsible at the same time for my

body, for my race, for my ancestors" (Fanon, 1967, p. 84). Therefore, Angie must depend on her own potentials to find her path in life and to confirm her identity.

Angie takes it upon herself to challenge whiteness and its racist ideology. Throughout this journey, she is supported by other black women. She becomes an activist searching for economic independence, investing in education and politics. This articulates Angie's progressive transformative anti-colonial trajectory. The purpose of this trajectory is to re-establish an authoritative black presence on American national scene. Sartre explicates the existential manifestations that result from the confrontation between the self and the Other. In this confrontation, the self is faced with difference and negation as being different from others, which leads to its estrangement. However, the desire to unite with the Other expresses the desire to transcend difference (Sartre, 1943/1956). The Other is necessary for the subjectivity-formation process; the Other makes me aware of my *being* as it appears to the Other (Sartre, 1943/1956). Establishing her subjectivity is thus the catalyst for Angie's transformative actions.

The dialectical anti-colonial discourse is presented clearly at the outset of the novel. When Angie refers to white people, she uses the term Other. This term is always associated with slaves, the colonized, and with black people. It characterizes the relationship between European (Us) and non-European cultures (Other). It is a power relationship based on domination and hegemony (Said, 2003). We can markedly observe Angie's

resistance against internal colonization, as she refuses to be an Other. Angie inverts the terms in order to be subverted. Horace uses this term to dismantle the hierarchy of the colonial discourse which is built on the stereotypical binary oppositions. By using the term Other to refer to white people, Angie asserts her identity as the self, resisting her alienation and refusing the stereotypical images that whites ascribe to black Americans. It is very clear as Nellie and Angie discuss such negative images, "Negroes just weren't supposed to think, to feel, to react, only to respond when called, and immediately. Angie was learning that it took a lot of intelligence to fill that order" (Horace, 2008, p. 54).

Negation signifies difference and, in turn, difference signifies otherness. Otherness connotes inequality and indigeneity. It is the kind of negativity which is necessary to overcome Angie's ontological lack. This lack is to be overcome within social constructions instigated by Angie's desire to affirm her being. Sartre (1943/1956) affirmed that "fundamentally, man is the desire to be" (p. 565). The desire to be entails the negation of the stereotypical images of black Americans, "Such stereotypes, which denied the recognition of individuality and social aspiration, were the counterparts of 'invisible Negro' syndrome" (Everett, 1999, p. 230). To establish this new order and to challenge that antithetical dialectic, Angie sets off her mission throughout the events of the novel to define herself and to assert her identity as the self and as part of the larger American self. She follows an anti-racist

and anti-colonial strategy. Firstly, we see her accompanied by her black friend looking for economic empowerment and independence, second, they pursue academic success, and, third, they tackle the problem of representation through politics.

Economic Empowerment

The first phase of defying systematization of racism is Angie's quest to achieve economic empowerment and independence. Angie's mission is twofold: first, to lay bare the ideology of power and racism within white institutions and, second, to demonstrate counter strategies that help black Americans in general and black American women in particular to understand their situation. The shock that Angie experiences makes her recognize her situation as an oppressed, disfranchised Other: "She moved like one with a purpose. 'Yes, I'll face 'em cause I know I'm right.'" (Horace, 2008, p. 9). Here is a moment of disalienation and encounter with otherness. She sits alone and contemplates her cause, "The memory of her little son who had died; it was a memory of an old lost life. It was of home" (Horace, 2008, p. 11). The racist situation and the low economic status of Angie are linked with Angie's social condition as a black woman, as "the effective disalienation of the black man entails an immediate recognition of social and economic realities" (Fanon, 1967, p. 4). Therefore, after her son's funeral, Angie significantly replies to the minister's question of what she needs by confirming that she needs "some class" (Horace, 2008, p. 16).

This adds another burden to Angie's struggle in the subjectivity-formation process due to the multiple identifications she embodies as a person of color and as a woman. It is so significant to see the loss of Angie's son linked with the image of her home, her mother, and her husband. She starts recalling memories from her past when she lied to her mother that she was pregnant for the sake of marrying Jim. She remembers how she was deserted by her mother and her husband: "'Why honey, you oughter done that. What they goin' to think o' me?'" Jim replied (Horace, 2008, p. 14). Her husband is not concerned with what her family will think of her, but he is solely concerned with what they will think of him. This articulates a double project for the black woman: against male chauvinism and against racism.

Angie becomes a representative of the postcolonial woman. Young (1995) argued that the postcolonial feminist concern is

> with those that affect whole communities. For this reason, it places greater emphasis on social and political campaigns for material, cultural, and legal rights; equal treatment in the law, education, and the workplace; the environment; and the differences between the values that feminists outside the west may encounter and those that they may wish to stand by. (Young, 1995, p. 115)

Horace dissects the typology of the black society to pave the way for the emergence of Angie as a female pioneer and to criticize middle-class blacks. In Chapter Five, we are introduced to the Blue Bonnet group, who exemplifies the men of The Flat as a social group. We see them engaged with a wide range of conversations, but "no subject was too deep, too" (Horace, 2008, p. 17). There is a multidimensional discourse behind this social centre. Some of these black Americans are engaged with investment and industry and unconcerned with their people's turmoil, such as Lance, the owner of the Blue Bonnet store, and Bill Chester, the owner of the pool hall. Horace introduces Lance while "His attention seemed drawn toward a smart Ford car he saw rolling along in the dust of the unpaved street, rather than to the queries" (Horace, 2008, p. 17). He does not interfere in the problems that his people have been facing, "For business reasons, if for no other, Lance apparently remained neutral on most subjects" (Horace, 2008, p. 20). People of The Flat criticize Lance's carelessness toward his own folks: "If Lance was sticking to his people the way the Other Side store-folks are sticking to theirs, we would have plenty sugar and white flour, too" (Horace, 2008, p. 22).

The Flat serves as a marketplace for the Other Side to sell their goods. We see how Horace describes them carrying their guns when they come to The Flat as if they were going to a battlefield: "With guns shining from their holsters, and swear words rippling from their tongues, policemen sometimes came to get accused offenders, sometimes to round-up 'vags' for the cotton fields" (Horace, 2008, p. 23). The Flat becomes 'a career' for The Other Side, to

give homage to Said's quote of Benjamin Disraeli's *Tancred* in his *Orientalism*. The colonial ideology of this scary scene is "to keep these people 'in their places,'" as Horace evinces (Horace, 2008, p. 23).

Part of the racist ideology of keeping blacks in their places is restricting black women's jobs to housemaids. In "Double Jeopardy," Beal (1970) explained this ideology, "the black woman likewise was manipulated by the system, economically exploited and physically assaulted. She could often find work in the white man's kitchen, however, and sometimes became the sole breadwinner of the family" (Beal, 1970, pp. 109-110). The job Angie gains marks the beginning of her quest and strategy to move from being a property to the phase of being an owner of property, challenging the stereotypical image of the black American woman. Angie gets ten dollars a week, giving her a kind of freedom and independence, as she tells Belle, "I'm going to give you something so---o-o nice. You'll be glad some day that you were good to me" (Horace, 2008, p. 29). As a traditional black female character, Belle's perspective of empowerment and independence differs from Angie's revolutionary vision. Belle advises Angie to marry Mr. Chester, or "'Folk'll say you must be playing 'round with the Other Side" (Horace, 2008, p. 30). But Angie's vison is beyond this patriarchal discourse: "'I would die before I'd let Mr. Chester or any other man buy what I freely gave and was then betrayed.'" (Horace, 2008, p. 30).

To dismantle the stereotypes of both blacks and whites, which perpetuate the colonial binary opposition that determines the power relationship between blacks and whites, Horace provides us with exceptional white characters. Angie works at Mr. Parker's house where she befriends Gloria and her younger sister, Stelle. She discovers that Mr. Parker's family are not what she used to think of them. She explains to Belle, "I didn't know white folks could be so nice to you. But the biggest surprise to me is to find out that white folks have troubles." (Horace, 2008, p. 32).

Horace's transformative, constructive vision builds a reciprocal dialectical discourse of Other represented by the relationship between Angie, Gloria, and Stelle. This reciprocal othering makes the 'dividing line' between blacks and whites shrink. To some extent, Gloria and Stelle share a similar story as Angie's. They are abandoned by their husbands, and they seek independence, not only by challenging their family's class system, but also by challenging their mother's racist tendencies. This friendship enables Gloria and Stelle to progress psychologically and racially. Being depressed, Gloria attempts suicide but saved by Angie. The three ladies become friends due to their shared unhappiness. They become completely aware that "their troubles are tied to their investment in an antiquated race and class system that no longer serves them in post-Reconstruction, post-World War I America." (Watson, 2013, p. 228). This friendship gives Gloria

and Stelle the opportunity to see their miseries through Angie and enables them to search for new alternatives. Watson (2013) argued, "it is Angie's resilience after being abandoned by her husband and during the death of her child that offers Gloria a different way to think about womanhood, and eventually African Americans" (Watson, 2013, p. 203). After Horace establishes the idea of economic empowerment of women, she adds another dimension to the transformative, constructive discourse of anti-colonial and anti-racist ideology, which is education.

Education

In colonized nations, as illiteracy is used as an ideology to impose hegemony, education becomes an arena of struggle toward liberation and social uplift. Education is used to articulate the power relations in the colonized areas. In his speech, "Culture and Colonization," Césaire (2010) highlights this colonial practice, "With regard to intellectual functions there is no colonial country that is not characterized by illiteracy and the low level of public education" (p. 135). Decolonizing education helped those revolutionaries fight against colonial ideologies as a tool for racial uplift.

In America "not more than 139 years ago it was illegal for Blacks of any age to be taught to read" (Jenkins, 2006, p. 132). Due to the systematization of colonial ideology, education in The Flat stops at the seventh grade. We see that Horace's women embody the idea of progress. They begin to have a sense of individuality and independence.

For example, Betty's mother's vision shocks those people around her and even draws much attention from the Other Side as she sends her daughter, Betty, to complete her education. Later on, Betty becomes the principal of the school in the town. Betty becomes a determined American female character, working according to her will rather than under the necessity of limitations. She has "an air of independence, individuality . . . she would be herself in spite of her locale or the people on either side of Sand Hill" (Horace, 2008, p. 42).

In their ontological struggle to establish their subjectivity, Horace's women must strive to control the means of economic and cultural productions. It is very indicative to see Angie and Betty as friends. Betty is determined to improve her status in life. Ironically, people of The Flat start warning Betty's fiancé, Lance, against her wishful thoughts as an educated girl: "She had ideas of her own and this, older men told him, was dangerous" (Horace, 2008, pp. 45-46). At the end, Lance abandons her and marries Sadie Blake. This kind of black people sees progressive black women as a threat against their manhood and masculinity. Frances M. Beal characterizes this notion: "Those who are exerting their 'manhood' by telling black women to step back into a domestic, submissive role are assuming a counter-revolutionary position" (Beal, 1970, p. 113).

The control of education was always used to maintain the white supremacy over black Americans in order to show that blacks are ignorant and idiots. In "*Confronting Institutionalized Racism*," Camara Jones

(2002) argued, "Institutionalized racism manifests itself both in material conditions and in access to power . . . examples include differential access to quality education, sound housing, gainful employment, appropriate medical facilities, and a clean environment" (Jones, 2002, p. 10). As a result of Belle's efforts to defy this institutionalized racism, we see that education starts to improve in terms of facilities and innovations in teaching methods.

Authorship and Representation

Part of Angie's transformative discourse is the interest in authorship and representation. It stems from her belief that black Americans should represent themselves not to be represented by the Other Side. In *Racism: From Slavery to Advanced Capitalism*, Garter A. Wilson (1996) explained the systematized phenomena of defaming black Americans, which "are transmitted through television, newspapers, movies, and literature. They function to reinforce racial oppression" (pp. 28-29). Therefore, Betty decides to write a book that exposes the inner life of black Americans who live in The Flat: "'I would have my audience know that Negroes are just people—no better, no worse than other people'" (Horace, 2008, p. 69). Angie reconstructs the cultural politics of education to enable her marginalized people to be the authors of their own lives. This proves Angie's belief in education as a necessity to be a social reformative agent. Within this perspective, authorship can be seen as a fundamental part of regaining the black voice, which is part of the empowerment process.

Horace's emphasis on the need for black Americans to publish on their own is akin to anti-colonial discourse. Writing about black Americans would inspire writing about other oppressed and colonized people as Betty tells Angie after being busy searching for a vision, "'I would have to study other groups in other localities, under other circumstances, these I know; it is about them I shall write'" (Horace, 2008, p. 152). As a result, the final stage of achieving the strategic fulfillment of anti-colonial discourse is the investment in self-representation both in authorship and in politics.

The true representation of black Americans is strongly related to the idea of belonging; to be part of the American self. Belonging is not a matter of citizenship; it is a philosophy of life. In the conversation between Angie and Betty, Horace deconstructs the white superiority as citizens, using her anti-racist discourse. Betty quoted an educated black Negro addressing white people:

> I belong here. So carefully was my past obliterated by those who hate me for what they did to me, I have no memories of a land other than this to cherish. I'm of a new race, a race born to America. I come up with the new land. I fed its people; clothed them. I cut down forests, I built roads and railways, I provided the leisure that gave them culture… I am an American. (Horace, 2008, p. 152)

Horace emphasizes that in the colonial paradigm, history is seen as successive power structures. These power structures are used to ostracize black Americans. The quotation mentioned above presents the clash between the universal concept of rights and the colonial one, which was presented by Foucault in his theory of power. The black history in America is built on specific colonial circumstances which subjugate black Americans. The educated Negro that Betty quotes strives to dismantle this colonial claim and replace it with a more universal concept of belonging.

In fact, the systematized segregation in America was wide enough to include black American soldiers. Those soldiers faced racial discrimination on multiple levels. They were not full-fledged soldiers in terms of getting promoted and accessing facilities and recreation means to the extent that German prisoners were treated more respectfully than black American soldiers (Gibson & Huntley, 2005, pp. 141-145). Horace discusses this issue when Mr. Wreedy ignores the achievements of black American soldiers who participated in the Second World War: "'You did well and we're proud of you, but don't forget you've come back to the life you left. There's no change here'" (Horace, 2008, p. 156). Jack Starks, a journalist in *The Item*, is expelled from the town because he expressed his opinion and criticized Mr. Wreedy's speech that undermines black soldiers' efforts. Indeed, Mr. Wreedy's speech embodies the systematized colonial ideology of enslavement of white institutions.

In politics, white people use another ideology to systematize their internal colonialization of blacks. They use some black bosses as their agents to keep black people subjugated. In the novel, we see them paying Mr. Fuddles, a black boss, a high salary. He has a fine car and some apartments "for keeping those people from turning out and breaking up his and old Benjamine's machine" (Horace, 2008, p. 192). Angie becomes an activist, supporting her people's welfare and their cause. She is successful in convincing black people to vote freely for Roosevelt to "'use our vote to put into office persons who would have interest in what we need'" (Horace, 2008, p. 192). Participating in breaking the solid system of segregation against black Americans represents a new victory for Angie in politics. Earlier, Black Americans were forced to vote with their white masters. A planter in Claiborne County, Mississippi, says, "I have five or six Negros on a plantation that I venture to say will vote side by side with me always because . . . they are dependent on me for every morsel they eat" (Hahn, 2003, p. 229). To systematize Angie's role in politics, after Roosevelt wins the presidential election, she starts joining welfare jobs as she "was given the job of juvenile officer" (Horace, 2008, p. 199). As a result of Angie's and Belle's efforts, "Streets and sanitation had been improved . . . in addition to supervised skating rink being operated; negotiations were begun for the purchase of two square blocks of the sum area which was to be landscaped, beautiful, and used as a park" (Horace, 2008, p. 201).

As opposed to white separatists who tend to reinforce the segregation policy, Horace is able to systematize and institutionalize the call for the freedom of black Americans in a positive way. In *The Golden Age of Black Nationalism*, Moses (1978) argued, "Separatists often strove to build black institutions that were imitations of white institutions. They were contemptuous of African institutions and they tended to think of the Afro-American masses as degraded" (p. 23). Angie opens a motel for colored people. The vision leaves a hope that coexistence could be possible between black Americans and white Americans as the letters, written on the motel's sign, indicating the motel as being for colored people, become smaller and smaller: "People passing the place a few weeks after Christmas read the freshly painted sign: Angie and Aaron's Modern Motel. In tiny letters underneath, For Colored" (Horace, 2008, p. 247), rejecting a dichotomous notion of the American race and rejecting perpetuating the antithetical binary opposition. Angie's recognition of her identity as an Other marks the basis for her quest for equality and social progression. However, by the end of the novel, Horace confirms that this social transformation must be achieved through integration and harmony. That is, difference must be eventually dismantled in order to pave the way for progression and reconciliation of the larger identity (American).

CONCLUSION

Through her novel, Horace successfully defies the colonial racist discourse of power employed by systematized and institutionalized whiteness. Angie employs two aspects of postcolonial agency: 'negation' and 'affirmation' through her ontological struggle to confirm her subjectivity. Through the subjectivity-formation process, Angie adopts an anti-colonial transformative trajectory undertaken through three phases: the phase of economic empowerment and independence, the phase of educational enlightenment, and the phase of representation both in authorship and in politics. These three phases are the cornerstones of the social transformative progress for black Americans in the novel. Angie refuses to be Other and rejects falling into the fallacy of perpetuating the colonial, racist discourse of Self/Other dichotomy. Denying this imperial dogma becomes a catalyst for Angie's anti-colonial quest in the novel. This is culminated at the end of the novel as we see the inscription on Angie's motel becomes tiny, giving hope for eliminating the letters completely by the quest of other black Americans.

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Nature and Urban Life – A Juxtaposition in the Short Story Anthology *Keinginan Kecil Di Celah Daun*

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ABSTRACT

Literature and the environment have had a long history of relationship. Indeed, our lives are defined by what is around us and what we find in front of us, whether this means accepting, dealing with or changing it. In *Keinginan Kecil Di Celah Daun*, various issues of sustainability and the attempts of urban man to deal with them, are creatively highlighted by the writer. In this anthology of short stories, the author illuminates about the environment especially flora and fauna. Moreover, the elements of nature are well portrayed in this anthology. This study is focused on the manner in which environmental issues are utilized by Balakrishnan to successfully present an urban landscape using 12 short stories from *Keinginan Kecil Di Celah Daun*. Balakrishnan has successfully injected some understanding of urban life through literature. The themes and issues relating to city life are intriguing. An analysis of Balakrishnan's short stories shows that the interplay of urban life is influenced by the characters created or vice versa. This study shows that Balakrishnan consistently created an image reflecting the psychological and sociological burden of modern society and post-modernity in Malaysia through her short stories. It is appropriate to suggest that the stories are loaded with knowledge and information; stories such as these are able to sow seeds of awareness of the need to appreciate and take care of our environment. Moreover, there are lot of other literary works which deal with similar themes and issues of nature across the globe.

Keywords: Balakrishnan, nature, short stories, sustainability, urban life

INTRODUCTION

Environment, is a topical issue under much scrutiny. The attitude of mankind towards its environment and the massive worldwide exploitation of nature has led to serious ecological problems that threaten the sustainability of the environment (Sobian, 2011) and the very existence of man himself (Schumacher, 2011). A closer examination of the urban lifescape reveals the deterioration of man's relationship with his environment and its natural processes at both physical and cognitive levels. The foundering of harmony between human beings and nature is a direct effect of the lifestyle choices of the urban populace. This is very often reflected in their behaviour towards the environment, an attitude based on sketchy knowledge and shallow understanding of natural processes, caused in part by too much engagement in the pursuit of life (Hester, 2006). Ruthless exploitation of natural resources for maximisation of profits has resulted in the urban man's losing his innate connectedness to nature (Rahman & Hashim, 2010).

Literature and the environment have had a long history of relationship. Indeed, our lives are defined by what is around us and what we find in front of us, whether this means accepting, dealing with or changing it. It is clear that nearly everything that a human does is in fact stands as a response to the environment. To illustrate this, one can see that, the author, Balakrishnan (2003a) is alive to every movement of the flora and fauna around her, and the sky and the clouds. She makes excellent use of nature, making it part of her narration. Her artistry is revealed in making nature reflect the moods of men. Also, the environment-friendly productions are stated in her short stories. She further charmingly describes with her protagonists that she is against the destruction of the forests and nature. Zainal (2016) claimed that "literary works, after all, are literally and/or imaginatively situated in places usually characterised by a number of environmental attributes and conditions" (p. 38). Moreover, Roos (2011) said that environmental literature should stress the link between nature and culture and relate them to more global perspectives. Various research studies and their findings are found related to literature and environment carried out in different languages across the globe. Another scholar of environmental literature, Simal-Gonzalez (2020) paid attention to the ecocritical potential of Asian American writing through natural elements such as mountains and flora. Hence, environment and nature are associated with the literature.

Ergin (2017) argued that thinking across established categories of nature/culture led to a profound shift in our thinking about the (post) human as well as the nonhuman environment. Mamat (2009) proposed that the utilisation of the elements of nature as part of a writer's literary work resources was not only to bring life to the writing landscape but also had other challenging roles to play. It is able to strengthen the literary work for its use as imagery, it is also a platform for thought processes, and to a certain extent a demonstration of semiotic aspects that

require perceptiveness to define or interpret, on the part of readers. Balakrishnan in this context reflects that:

> …In all honesty, the green nature beauty of this green Earth is an undeniable inspiration… although it will not be true if I were to say that my writing began because I wanted to protect the fate of the thousands of flora and fauna that surround my soul… No that wasn't what made me write initially, but now I am drawn towards that. (Balakrishnan, 2003b, p. 7).

The writer's statement here is a clear indication of the dominant inclination in her writing; her stories are anchored on a desire to weave themes or backgrounds imbued with elements of nature. In discussing the same issue, Maniam is of the opinion that "in all her short stories, she has been able to put forward the need to conserve the environment" (Maniam, 2003, pp. 9-10).

Another researcher also comments on the preponderance of elements of nature in Balakrishnan's writing: "… an aspect that is obvious in the stories of Balakrishnan is the seeming inclination to talk about the environment, its flora and fauna. In fact, nature has an intrinsic part to play in her stories. She has this tendency of integrating aspects of nature in her writing," (Raman, 2010). This paper is an attempt to explore the stories in *Keinginan Kecil di Celah Daun* from the writer's perspective of ecocriticism.

Background of the Study

In Malaysian literature, the environmental discourse, on environmental issues is getting some attention. Most of the studies done in line with what Buell (2005) characterised as "the second wave environmental criticism". Mamat (2009) had done a number of research studies on the environment in Malay literary works. Her research in *Jurnal Melayu* 2015 under the title "Environmental Ethics from Natives' Perspective in Novels Written by Jong Chian Lai" analyse the ethical interactions between the indigenous community in Sarawak and nature and how they are translated into creative literature. Her previous research in 2012, titled "Persaingan Antara Spesies Dalam Novel Sarawak" studies competition between species that includes competition among those of the same species, as well as competition between different ones that Sarawak writers depict in their novels. This study finds that the competition depicted in the novels are mainly driven by interests and the need for survival. The environment discourse is found in Chinese literature too. Lee (2019) in the article, *The Silence of Animals: Writing on the Edge of Anthropomorphism in Contemporary Chinese Literature* stated that the traditional cultural writings in Chinese literature had shifted to environmental issues and natural elements in premodern literary works. The author also clarified that in modern Chinese literature, the role of nature characterisation especially animal characters were found less. Moreover, the author said,

"No animal characters leap out of the pages of modern Chinese literature" (Lee, 2019, p. 1). Even in Australian literature, these can be seen. Potter (2005) had mentioned about the environmental awareness in Australian literature. When compared to other pieces of literature mentioned here, Malaysian literature has more concern towards environmental issues.

Zainal (2016) addressed environmental concerns, in four contemporary Malaysian novels in English. He argued that the writers exhibited a concerned attitude towards the environment, positioning their work as 'lessons' in nation-building, attesting to the tensions inherent in developing a country while maintaining and protecting the environment. Hashim and Faizal (2016) research titled Psychogeography of Kuala Lumpur in Nassury Ibrahim's Selected Poems is related to this work. In this research, psychogeography was used as an analytical tool to examine how Kuala Lumpur affects the mental states and behaviours of the people living in the heart of the urban city. Hashim and Faizal (2016) found that Nassury's poems dealt with many aspects of urban life which included poverty, pollution and humanity. Apart from Kuala Lumpur, other cities are influenced by the environment and nature. Morey and Crider (2019) in their book, *Hyperanimals: Inverting nature through 'Pokemon Go'* stated the creator's love of Tokyo and the interaction with wildlife. And also, how the natural elements are involved in creating it is presented. Zi et al. (2015) described the snowfield of China in the famous poem *Words West of the Vineyard*. How the environment affected snowfield was described. Another Chinese literary contributor She (2001) mentioned the urban Beijing had changed due to technology and environment. It can be seen as, "Shameless Beijing has changed, cause of change: technology and environment…" (She, 2001, p. 193). Further, Thumboo labeled the urban, Changi in another way. The poet described the beach as, "Sea-snake swimming in his image in the water swallowing a poison grub" (Tiang, 2001, p. 22). The poem clearly shows how much the urban has been polluted.

Writings on urban areas in Malay literature are quite extensive but the study of them is somewhat less attentive. Some comprehensive studies of nature in literature are found to have no overall impact. Many studies on nature and environment in Malaysian literature world appear to be focusing more on man's relationship with the environment in general and looking at how this relationship has impacted their life. Only Hashim and Faizal (2016) studied in Malay literature touched on the urban context. In fact, in modern and post-modern literature, the city is an almost universal setting.

An overview of the literature shows that Balakrishnan has been examined by some previous researchers. Suratman's (2001) study titled "Karya-karya Cerpen Penulis Generasi Baru" found that Balakrishnan had used the flora and fauna of her environment as an image in most of her works. But this study does not take it deeper. Che

Man (2012) focused on the aspects of Balakrishnan's authorship style. This study only highlights the aspect of the stylistic presentation in the Balakrishnan short stories in *Keinginan Kecil Di Celah Daun* short stories. Kuppusamy (2014) had reviewed the elements of social phenomena in Balakrishnan works using sociological approaches. An overview of past studies shows that environmental issues are not widely discussed in these studies and the focus is more likely on other elements in this short story or Balakrishnan as an author.

This study is focused on the manner in which environmental issues are utilized by Balakrishnan to successfully present an urban landscape. The interplay of urban life and the complex questions of survival and sustainability are skilfully captured in literary documentation. Two aspects are the focal point of study in this paper: (i) the presence of urban landscape or towns in literature as a means to show an urban environment, and (ii) the characters portrayed in the stories as an instrument of presenting the essence of urban life and sustainability.

METHODOLOGY

This study is based on text analysis. It is one of the research approaches used to collect information from a written or recorded text. Through this, the researcher read the selected anthology in depth to understand better what was said by the author to the audience or readers. The aim of using this was to describe the content, structure and function of the texts. The

vocabularies, themes or concepts found in the selected anthology were analysed using content analysis method since it suited to the present study. The researcher used the framework of content analysis proposed by Sundarabalu (2008). It is a framework which includes content exposure and content coverage. The exposure and coverage of the content provided in the text as phrases or vocabularies or themes or concepts can be identified easily. Moreover, the semantic interpretations are simple and easy to implement, hence this framework has been selected. No issues are faced while interpreting the data using this framework. Balakrishnan's short story published by Dewan Bahasa dan Pustaka had been used to collect data for the purpose of predicting and analysing the relationship between literary and urban images. A sample study was done using 12 short stories from *Keinginan Kecil Di Celah Daun.* This study is qualitative in approach and analyses the stories according to the four phases prescribed for data definition by Titscher et al. (2000), general reading, analytical re-reading, clustering and organising of ideas, and interpreting ideas and deriving conclusions. Based on the qualitative and content analysis, the selected text was read, collected the required data, interpreted with ideas and analysed.

ANALYSIS AND DISCUSSION

The existence of a city is often seen as in opposition to nature. But in eco-critic studies, the city has been seen part of the environment. This kind of study tends to explore the relationship between the city

and the ecosystem surrounding urban life in an effort to understand the city's lifestyle and culture. There are various perspectives created by the urbanization process affecting the social and economic, productivity, and the local governance of the communities that inhabit these urban areas. In this section, the discussion will see an overview of urban life in selected short stories either directly or indirectly.

Nature and Sustainability

Climate change, for instance, is a critical concern of modern day man, and this issue is succinctly underlined in the story 'Di Sepenjuru Pantai Peru'. At the core of this story is an orphaned baby sea lion named Inka against the backdrop of the El Nino- ravaged beaches of Punta San Juan in Peru. This natural disaster has rendered the beaches and sea-front inhospitable to a vast number of land and sea species. El Nino, the weather conditions that occur between the months of June to December caused by changes in wind patterns (Pidcock, 2014). Of extreme hot winds trigger shifts and reactions between cold and hot oceanic areas which in turn produce abnormally high sea temperatures is described in an evocative manner in the extract, "…Everything has changed. This place is looks different now. Before, this little peninsular was heaven to creatures like us… but now it has become hell, a burial ground." (Balakrishnan, 2003a, p. 83).

In this story, Balakrishnan provides the reader with an insight into the life of an animal endangered by the attitude of a society that is oblivious to its environment and the deeper issues of sustainability. The character Inka concomitantly creates awareness for the El Nino phenomenon and its disastrous effects on aquatic life. It is through the woes of Inka that Balakrishnan is able to present a modern society that ignores and is indifferent towards environmental conservation and sustainability. The following extract is a case in point:

> …Child, a lot of things cause El Nino. The main culprit is man's own greed. Thousands of trees are felled. Forests are destroyed. Poisonous gasses fill our air. The Earth is in critical condition. El Nino is a disease that is ravaging our world. (Balakrishnan, 2003a, p. 86).

This extract points to the manner in which nature has become victim to the ignorance and heedlessness of man. The story brings home the pressing need to be more vigilant of natural surroundings and to treat the issue of environmental sustainability as a matter of prime concern, to the reader.

Similar information about nature can be seen in Philippine literature too. Yuson (1996) quoted that, "Cold comfort of the mountain changed…. now warm mountain …" (p. 129). The author compared cold and warm with the young couples. Hence, the threats for nature in works of literature are universal.

Symbiosis and Nature

Symbiosis is a mutually beneficial interaction between two different biological organisms. But it is parasitism – the kind of relationship destructive to one of the organisms the competition between humans and other living beings that has earned Balakrishnan's attention. The crow is a bird often associated with urban living and commonly found in settings wherever huge amounts of rubbish or waste are dumped. According to Alias and Hashim (2016), the crow is a pest, a destructive organism due to its unclean nature; the birds usually congregate near bustling and not too clean market places or landfills that are not properly managed. The presence of these birds is indicative of the lack of hygiene in that particular locality. There is a compelling need for an effective solution to this issue and crow control necessary to avoid health problems or the likelihood of epidemics occurring in view of the rapid rise of urban population. One popular crow- control mechanism practised in Malaysia is the use of guns to shoot the birds; however better management of preventive measures against this pest is imperative, with law enforcement by the relevant authorities in a move to ensure good health of the population and minimise the negative effects on the environment. There is however another side to this concern.

The issue of crows in the country is interwoven in Balakrishnan's 'Pengantin Hitam'; the story traces the fate of a crow as she waits for her lover. The bird becomes victim to the local authorities' cruel attempts at sprucing up the image of a town tarnished by the presence of these dark creatures. The writer gently leads the reader to evaluate man's actions against the birds which in the first place had been brought into the country to help rid coffee plantations of crop bugs. The story highlights the acts of the modern man who himself is the main perpetrator of the problem, a producer of rubbish and non-biodegradable waste, thus contributing to the pollution of the environment and overflow in landfills. Balakrishnan views the crow as a helper in eliminating waste generated by the urban population. The story as told from the perspective of a female crow which loses its partner, allows the reader to reflect on how urban living is mismanaged. Alias and Hashim (2016) suggested that although crows negatively impacted the population by being carriers of diseases for both man and livestock, the act of shooting them without any apparent system could very likely give rise to more problems at a later stage by bringing an imbalance in the system.

Like the fate of the crow in 'Pengantin Hitam', the Indian short story, written by Manu (2018) also narrates the fate of the birds which live in the big trees. Under the big trees, there are statues erected for the great leaders of India. The birds which sit on the trees with nests ruin the statues with their droppings. The short story narrates as, "Either the birds and the nests must be killed or the trees must be cut…" (Manu, 2018, p. 31). The fate of nature like birds and trees are well said in this short story.

Further, Zi et al. (2015) narrated the fate of animals in the poem. The poet explained

how and why squirrel was smashed on the road. "Before me jumps a squirrel……. can only let it pass between the front wheels…." (Zi et al., 2015, p. 83). One can understand from that, throughout the globe the enmity against nature are discoursed in the literature.

Environment and Urban Economy

Economic activity has a major impact on our environment. The passion to pursue progress has put the environment in danger. These issues are also highlighted by the author. The main thrust in the story 'Bermain Dengan Pelangi', while addressing the issue of foreign labour, is the negative consequences of urbanisation experienced by a village girl. She loses her virginity, becomes pregnant and gives birth to an illegitimate child. Such is the pressure and desperation that befalls her that she is forced to dump her baby. The characters in this story paint the fate of a segment of urban society confronted with numerous challenges as they try to adapt to life and living in a big town. 'Bermain Dengan Pelangi' compels us to ponder on the fate of man as he tries to make sense of urban life and the social by- effects of urbanisation on his life:

> "…They came from the same estates in Kuala Kangsar although they didn't know each other as children. They only became close when they moved to the city five years ago. Since then, they have been working in the factory, and they have shared so much of the sweet and bitter aspects of city life together." (Balakrishnan, 2003a, p. 6).

The story attempts to provide some insight into the imperfection of an urban life often exposed to numerous challenges that stem from a kind of culture shock.

The presence of group rural migrants gives rise to various issues in Malaysia and poses a threat to the civility of Malaysia. This 'threat' stems not only from the criminal aspect but also from the impact of their presence on the quality of life, social, culture, health awareness, political relations, and economy (Ahmad et al., 2014). Rural migrants to big cities are more likely to be confronted with the problems of public health, civility, social mingling, cultural shock, political relations and unemployment, and this is a situation that needs to be duly acknowledged in urban planning and development. Migrant worker issues are brought to the forefront in 'Perempuan dari Jawa' with a specific focus on the workers' tenacity and willingness to put their lives at risk to seize economic opportunities found abundantly in the towns and cities of Malaysia. The story explores the society's quality of life with loneliness and gullibility rendering people vulnerable to mischief and roguery of miscreants. The issue of migrant workers is the focal point of both this story and 'Bermain Dengan Pelangi'.

Economic development in the industrial, commercial and public service sectors have in turn resulted in rapid urbanisation in Malaysia. An effect of this is the increased migration from rural areas to towns and cities by those in search of better work opportunities and pay. Asan Golam Hassan

(2004) argued that this population shift actually lowered the rate of poverty in rural places; however, in many instances, the migration of the rural poor into urban settings did not alleviate their problems and instead only created new predicaments that perpetuated this poverty cycle. The issue of the urban poor is creatively explored in 'Mendamba Puyuh di Air Jernih' where the sufferings of the rural-to-urban migrant society is acutely portrayed through the lives of estate workers able to partake only in low level (hence low pay) work in the city.

The findings by Narayanan and Rostam (2012) are interwoven into the story 'Mendamba Puyuh di Air Jernih'. The issue of progress and its effects on estate dwellers is presented through the protagonist Munusamy, a nostalgic man reflecting on the miseries and sorrows brought about by the need to concur with the pressures of progress and development. People are driven to seek jobs in the city in order to feed their families – in doing so they become subject to life very far removed from what they had been accustomed to. Through sheer hard work, they try to continue living in a new environment that requires them to constantly adapt and accommodate. This enforced urbanisation or realignment creates its own set of problems for the environment; in the story, this difficulty is presented in the dearth and difficulty of finding *cendawan busut*, a type of wild mushroom. In essence, 'Mendamba Puyuh di Air Jernih' is a story of the worries and uncertainties of a farm dweller losing his strength and determination to continue

staying on the land that had once been the economic pulse of the country.

Problems in Urban Life

Life in the city is also characterized by various problems. These problems are also seen in Balakrishnan's short stories. Here are some of the problems that get the attention of authors in this short story. Urbanisation in developing countries usually makes itself evident through an extreme concentration of population in urban areas. In Malaysia, this process of transformation from rural to urban areas took place especially during the post- Independence era. According to Mapjabil et al. (2014), an estimated 65% of Malaysia has since become urban zone. This transformation has been accompanied by changes in socio-economic attitudes, standard of living as well as in value systems, and a consequence of urban life is in how the urban lifestyle has assumed importance in the values and manners of society in this country. The rural-to-urban transformation inevitably produces various effects - among these are a surge in population, an increase in economic functions, and a rise in the overall standard of living of the local populace. But if this development is unsustainable, then the community is confronted with difficulties and extreme pressure to find a balance between the pace of urbanisation, their standard of living, and their own value systems.

A house in this context becomes a basic necessity in the same way that food and drink are to life, with the type of accommodation an indication of the status

of the resident. Squatter structures are commonly found dotting urban areas as people without means seek shelter from the extremities of nature and harshness of life. A squatter housing is essentially an illegal construction built without permit from the relevant authorities for preservation and upkeep of our natural surroundings, be it government agencies or landowners or, the structure not fulfilling approved building requirements and material specifications (Ismail, 2005). "*Germis Dalam Kemarau*" highlights the issue of urban squatters by putting forward a stark portrayal of life in such a set-up and the wretchedness that inevitably prevails. Examples of these descriptions are, "…she sweeps the rubbish off her hole-riddled floor…" (Balakrishnan, 2003a, p. 72), and as below:

> …In the twelve years they have lived in this wooden house on this illegal land, he and his family had never faced a water problem quite as bad as this… but it is now the fourth month that this problem has afflicted their lives, a life that is already shackled to poverty. (Balakrishnan, 2003a, p. 72).

Urban living is often associated with lack of space, a feature incorporated in several of the stories in Balakrishnan's anthology. Even burials necessitate the spending of huge amounts of money with cemetery plots costing several thousands of ringgit each, as can be seen in 'Sewangi Bunga Tanjung'. This story compels us to rethink on our urban lifestyle and its impact.

Unsystematic management of waste also results in the degradation of clean air. Toxic elements from untreated rubbish in landfills, for instance, seep into the ground and eventually contaminate rivers and water catchment areas. This degrades the quality of our water, even the underground water never escapes.

It cannot be denied that the creation of new urban areas has indeed contributed to the social and economic development of our country. However, a by-product of this progress has been the marginalisation of the original inhabitants of the land. A study by Narayanan and Rostam (2012) on the acquisition of land towards the construction of Putrajaya proves that this process in actuality had created complex economic and social problems associated with the forced re-location of those who were previously living on those lands. Relocation has its own problems such as employment in the new location, schools for kids, and public transportation. A major impact, however, was psychological, losing a peaceful farm life that belonged to the families for generations. An urban environment and lifestyle was an acute challenge, especially for the poor and the aged who lived a harmonious lifestyle with nature.

A rise in global temperature that causes a faster rate of evaporation is yet another factor in the incidence of inadequate water supply. Balakrishnan's "Germis Dalam Kemarau" similarly draws on this issue of lack of water from the viewpoint of a woman struggling through difficulties and hardship

in managing her household. The problem of the urban populace is presented in a riveting manner in the story, like a thorn in the flesh.

Urban life is hectic and full of haste, a feature explored in 'Senjakala' and 'Mengejar Impian' in Balakrishnan's anthology. In the former, the reader witnesses the city dweller's obsession with work and the pursuit of material wealth, and how these very things become meaningless in the face of death. The character Rita pines for her husband and three children who were victims of a road accident; she is filled with a deep regret that her work had made her neglect her family, and now it is too late to undo this wrong. In 'Mengejar Impian', the maddening pace of everyday life becomes an important image of the city dweller with each one in a seeming race to improve their lives, thereby having to unwittingly sacrifice that which is most precious to them.

Such issue can be seen not only in Malaysia but also throughout the globe. Urban life becomes harder due to environmental issues such as pollution, climate change, more population, industrialisation and so on. Tiang (2001) stated about Singapore urban lives through his book to the global readers that people were living in urban with more stress.

> Living people betraying the deleterious effects of living in a time of rapid change, in a society that was becoming more highly competitive and achievement-oriented, and when the interests of the state seemed to prevail over those of the individual… (Tiang, 2001, p. 70).

Similarly, She (2001) narrated about urban as, "Don't you worry about it, I'll find it! This sort of thing happens all the time…. here in this place…" (p. 385). In an urban context, anything can happen at any time and when time passes on, its become a common or a usual thing. No doubt, the works of literature across the world focus on the effects in urban too.

Technology, Sustainability and Environment

In modern life, we cannot avoid technology. However, the advancement of this technology also affects the sustainability of human life in this era. Some short stories emphasize this fact. In 'Kilau-Kemilau Kandil Hijau', Balakrishnan puts forth the theme of environmental sustainability with the storyline anchored on the awareness of nature. The writer through the story's central character Dr. Adnan, proposes the development of environmentally friendly technology in the pursuit of progress. The corporate sector that generates knowledge should re-evaluate work procedures to ensure sustainability of the environment. As concerned citizens, preservation and upkeep of our natural surroundings should be our top priority. Simply by sponsoring research to help in conservation of nature or by donating to such funds cannot absolve us of our responsibility. The story urges us to cultivate an eco-friendly outlook as a mainstream in our life. The writer cleverly selects the backdrop of the story, and utilises flashback technique, plot, imagery, dialogue, and monologue in an interesting manner appropriate to the tale. 'Kilau-Kemilau

Kandil Hijau' instils awareness in the reader and invites him to re-evaluate his views and attitude towards the environment.

'Lambaian Malar Hijau', anchored on the theme of love and concern for nature and environment, stresses the fact that these feelings are reinforced by sound knowledge and understanding, without which our stand and ideas would either be ignored or considered irrelevant. The story is set against the background of lush jungles and the intense love of Daneng for nature, provides a very touching scenario. Balakrishnan makes us aware of the unsung heroes among the current generation, boldly leading the fight against the destruction of our forests and nature. 'Lambaian Malar Hijau' strongly suggests that one must not only be smart and judicious, but support this with knowledge and determination to save forests and make them sustainable. From the story, we are made aware of the consequences of an earth made precarious by the greed of man driven by modernisation and forgetful of the contribution of nature. It is a rousing call to us to wake up from our slumber and be of spirit like Daneng to fight for the sustainability of our environment.

The forests of the 'Orang Asli' is presented by Balakrishnan as a place of lush beauty with the sounds of insects and chirping of birds permeating the loveliness and serenity of the setting. The writer touches on mankind's greed and disregard of nature when she talks about the widespread illegal logging activities in the vicinity of Orang Asli settlements, an easy- going people attuned to their environment, wholly dependent on the fruits of the forest for their livelihood, and practising an unhurried and peaceful day-to-day living. 'Lambaian Malar Hijau' is told from the perspective of Cikgu Jo, a teacher from town.

'Kuak-kuak Di Batin' is a tale of the adverse effects of genetic engineering on humans. We become forgetful and overlook many things when we become too dependent on science and technology, and forcibly push ahead against the order of nature. Although the actions of the Brazilian government may seem acceptable to the rational mind, and their acts are seen as beneficial to mankind, these in fact eventually lead to adverse human consequences. Progress in cloning brings forward various polemics on this issue. The character Babalus in the story is endowed with two sets of feelings or emotions that constantly compete against the other to control his egoistic soul. Babalus often becomes confused between his feelings as a human and his tendencies as a cow. Through the story, the writer beseeches us to evaluate and assess the actions of men who seek to justify their doings in the name of sustainable living.

Mamat (2009) pointed to the constant interaction between development and the environment; in this era of rapid and volatile progress, advancement in science and technology is inevitable and these drastic changes will often expose the environment to various problems. The need to protect nature against this onslaught of change cannot be ignored; we must find solutions or learn to live as an integral part of our ecology. Man, therefore, has to become

a harmonious species, not the destructive variety (Balakrishnan, 2003a). From this statement, it becomes clear that the writer's prime concern is nature, a philosophy very much reflected in the stories in *Keinginan Kecil di Celah Daun* with various issues related to nature and the environment both directly and indirectly featured in the story plots.

CONCLUSION

The anthology highlights several findings on the manner of interaction between literature and the environment. This makes it amply clear that literary works cannot be viewed in isolation as output that simply entertains but does not benefit readers. Knowledge and understanding of other disciplines is necessary to strengthen the value of such writing. Studies on the environment in literature are admittedly not a novel endeavour in Malaysia; however, explorations on works of literature have focused primarily on the perspective of beauty and aesthetics without any deep insight into ecology or the environment. Numerous issues related to nature can be observed in literary works such as competition between species, technological effects, man's attitude towards nature, effects of land use on the environment, and the degradation of environmental value due to pollution.

The reading of Balakrishnan's stories in this anthology provides the reader with a new perception and understanding related to environmental awareness. It can be concluded that Balakrishnan short stories

show the presence of urban landscape or towns in literature as a means to show an urban environment. An analysis of Balakrishnan short stories shows that the interplay of urban life is influenced by the characters created or vice versa. This study shows that Balakrishnan consistently created an image reflecting the psychological and sociological burden of modern society and post-modernity in Malaysia through her short stories.

While in the context of the characters portrayed in the stories as an instrument of presenting the essence of urban life and sustainability, this study found that Balakrishnan has successfully explained to us the relationship between the characters she created in her short stories with urban images. The various problems and nuances of the city's features that are now a reality in the lives of Malaysians are clearly illustrated in the stories. In this context, Balakrishnan has successfully injected some understanding of urban life through literature. The themes and issues relating to city life are intriguing. The issue is more focused on the social changes made possible by the urbanization process reflected through activities dominated by modern and post-modern living by using characters occupying urban areas in the short story. Moreover, illustrations from other pieces of literature in the globe are labelled in brief.

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Gender Differences in Body Image, Body Mass Index and Dietary Intake among University Students

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ABSTRACT

Body image dissatisfaction has shown to play a role in weight control and leads to an imbalance of energy and nutrient intakes. This study aims to determine gender differences in body image and its association with Body Mass Index (BMI) and dietary intakes among university students. A total of 100 university students were recruited. Body image was assessed by Body Shape Questionnaire and Figure Rating Scale. Dietary intake was assessed by meal practices and 3 days of dietary recall. All statistical data were analysed by SPSS. About 80% of females wished to be thinner and 28% of males wished to be fatter. The prevalence of body image dissatisfaction in this study was 89%. Participants who were dissatisfied with their body image had a significantly higher body image concern (mean score 82.24 ± 27.17) than body image satisfied group (59.64 ± 13.28). There was a significant positive correlation between BMI and body shape questionnaire score ($r = 0.306$; $p = 0.002$). The mean BMI in the body image dissatisfied group (22.07 ± 3.53 kg/m^2) was significantly higher than the satisfied group (20.97 ± 1.27 kg/m^2). Females who had body image dissatisfaction seldom snack whereas females who had satisfied body image always snack in between meals. There were gender differences in energy and nutrient intakes. Majority of the students did not meet the Malaysian Recommended Nutrient Intakes (RNI). The findings highlight the need for nutrition interventions with a focus on weight management and healthy eating

patterns to promote positive body image among university students.

INTRODUCTION

Body image is defined as the perception of a person on his/her own physical appearance (Grogan, 2006). The components of body image can be divided into body shape concern, body weight perception, and body shape perception. Body image satisfaction is distinguished by undistorted body image with realistic perception and acceptance towards an individual's body shape and size (Wong & Say, 2013). On the contrary, body image dissatisfaction is having a distorted body image with shame, concern or disappointment about a person's look and normally have an unrealistic perception of their body shape and size (Wong & Say, 2013).

Obesity has become a major nutritional problem in Malaysia (Mohamud et al., 2011). Economic and technological advancements in the past decades have led to changes in the lifestyle including eating habits. The nutrition transition has shifted from the traditional diet to Western-style diets such as high amounts of fat and calorie intake. This phenomenon has led to an obesity epidemic in Malaysia (Kuan et al., 2011). The prevalence of overweight and obesity among adult were 33.6% and 19.5% respectively and the prevalence of obesity was higher in females than males (Mohamud et al., 2011). Being overweight or obese is accountable for the increased risk of adult morbidity and mortality.

In a society where a significant proportion of adults are overweight or obese, it is not surprising that body image dissatisfaction and body weight concerns are common. The previous study indicated that the prevalence of body image dissatisfaction in developed countries ranges from 35% to 81% among females and from 16% to 55% among males (Lawler & Nixon, 2011). Previous studies revealed that males and females differed in their perception of body image (Brennan et al., 2010; Shaheen et al., 2016). In addition, females are often reported to be more concerned and dissatisfied with their body image as compared to males (Kuan et al., 2011). Females wish to be thin and slender while males are keen to achieve an ideal body figure of masculinity (Kuan et al., 2011).

Body image plays an important role in the management of body weight. The body mass index (BMI) is the most common method of describing body weight in relation to height and is often used to derive a healthy weight. Body image satisfaction decreases with increasing BMI (Zaccagni et al., 2014). The study reported that an overweight person was less satisfied with their body as compared to a normal weight person of both genders (Zaccagni et al., 2014). Adults who considered themselves fat tended to engage in practices for weight loss. However, being overweight or obese could be misperceived as normal weight

(Kuan et al., 2011). Since real body shape is sometimes misperceived, a correct self-perception of body image in relation to body weight status is important in order to understand its relationship and in planning for the weight control program.

The body image concern has become a major issue among young adults due to the adverse effects which can lead to depression, poor nutritional status and the development of eating disorders (Ackard et al., 2002). Individuals who have body image dissatisfaction are more likely to adopt behaviours that may place them in overall poor health. The adoption of the dieting method rather than eating healthier food is common among those with body image dissatisfaction (Pang & Razalee, 2012). Some common eating habits of university students include dieting, meal skipping, unhealthy snacking, and frequent fast-food consumption (Gan et al., 2011). Such eating habits in the long term is associated with an eating disorder.

Eating disorders generally relate to abnormal or disturbed eating patterns and poor eating habits such as binge-eating, restricted calorie intake, and skipping meals or snacking (Manaf et al., 2016). Past studies had shown that body image dissatisfaction increased the risk of an eating disorder (Boutelle et al., 2002; Soo et al., 2008). Gan et al. (2011) found that Malaysian female students (21.3%) had a significantly higher risk of developing an eating disorder than male students (13.5%). Those who wish to be thinner avoid the consumption of several foods to prevent being overweight, and

they are less likely to consume breakfast cereals, pasta and rice dishes, high-fat foods, soft drinks, and chocolates (Bibiloni et al., 2013). It was also reported that those who had body image dissatisfaction was likely to have a decreased consumption of high-fat food, but they also did not increase the consumption of fruits and vegetables, which reflected a diet restriction rather than eating healthier food as a method to lose weight (Alipour et al., 2015). Therefore, it is necessary to assess the relationship between body image dissatisfaction and the dietary intake among university students.

Currently, body image has been the focus of many studies in overseas countries such as Japan and Korea by Han (2003), Sakamaki et al. (2005a), and Woo (2014). However, there is a lack of data in Malaysia focuses on the association between body image perceptions and dietary patterns among university students. Therefore, these data are needed in order to design a nutrition and weight interventions to improve body weight status and the dietary intake among university students. Given the critical role of body image in shaping the students' body weight and dietary intake, hence, this study aims to determine the gender differences in body image perception and its association with body mass index and dietary intake among university students.

METHOD

Design and Sampling

A cross-sectional study was carried out by using a convenience sampling method. Inclusion criteria include Malaysians

undergraduate students' age between 18-24 in the University of Nottingham Malaysia (UNM) while the exclusion criteria were students known to be suffering from chronic diseases and who were pregnant. The sample size was determined from a population size which approximately 140 students by using Cochran's formula (Singh & Masuku, 2014). To determine proportions in the population, Z value for a 95% confidence level is 1.96 with a p-value of 0.5; an acceptable sampling error was assumed as 0.05 (Singh & Masuku, 2014). Hard copies of the questionnaires were printed out and distributed to the students. Among the 140 questionnaires which were given out, only 100 participants completed this study and the overall response rate was 71.4%. All the respondents signed the informed consent forms before participating in this study. Ethics approval was obtained by the Science and Engineering Research Ethics Committee of the University.

Data Collection

The height (m) of participants was measured with SECA 217 stadiometer while weight (kg) were obtained from Bioelectrical Impedance Analysis (Tanita DC-430 MA) with shoes removed and adjusted to the nearest of 0.5kg clothes weight. Body Mass Index (BMI), kg/m^2 was derived from height and weight. The body weight classification of participants was categorised into underweight ($< 18.5 \ kg/m^2$), normal weight (18.5-$22.9 \ kg/m^2$), overweight (23.0-$24.9 \ kg/m^2$), pre-obese (25-$29.9 \ kg/m^2$) and obese ($\geq 30.0 \ kg/m^2$) by using Asian criteria

cut-offs from World Health Organization (2004).

The questionnaires comprised Section A, B, C, and D. Section A was sociodemographic information of participants included name, age, gender, ethnicity, physical activity levels, and living arrangements. On the other hand, the nutritional assessment of participants was obtained from anthropometric measurements.

Section B assessed the body image perceptions through Body Shape Questionnaire (BSQ) which was developed by Cooper et al. (1987). It was well-validated with a high internal consistency of $\alpha = 0.93$-0.97 (Cooper et al., 1987). BSQ was a self-reported questionnaire consists of 34-items with six-point Likert scales varying from 1 to 6 (always = 6; very often = 5; often = 4; sometimes = 3; rarely = 2 and never = 1). It was an instrument to measure body image concern, self-discrepancy because of physical appearance, and the fear of being fat. The result was the summation of 34-items points whereby the total scores <80 was considered as normal, 80-110 was considered as the mild level of body concern, range from 111-140 was categorised as moderate and >140 was classified as severe body image distortion.

Section C was the Figure Rating Scale developed by Stunkard et al. (1983) to assess the body image perception through self-rating body silhouette. However, the Asian version of the silhouette revised by Nagasaka et al. (2008) was used in this study. The scale from very underweight

(left) to very overweight (right) (score 1-9) as shown in Figures 1 and 2. Participants were being asked to choose their perception of current body size and their ideal body size perception according to the silhouette with scale rated. Then, the discrepancy of scores was calculated by the difference between ideal body size and perceived current body size. A positive score indicated the desire to be fatter; zero scores reflected body satisfaction while a negative score indicated a desire to be thinner.

Section D was the assessment of dietary intake through meal practices such as meal skipping and snacking habits adopted by Bibiloni et al. (2013). In addition, three-day 24-hours dietary recalls (2 weekdays and 1 weekend day) to examine the participants' energy and nutrients intake. The mean of daily intakes included energy, the percentage of energy intakes, macronutrients, and micronutrients were derived from dietary data analysis computing software named Nutritics.

The nutrient intakes were compared to Malaysian RNI (National Coordinating Committee on Food and Nutrition [NCCFN], 2017). Semi-Quantitative Food Frequency Questionnaire (SFFQ) which was adapted from El Ansari et al. (2010) was used to measure the consumption of cereal products, sweets (sugar-sweetened beverages), cakes/cookies, junk food, meat, fish, eggs, dairy products, fruits, and vegetables. It was a five-point scale rated from several times a day (1 point), daily (2 points), several times a week (3 points), 1-4 times a month (4 points), and never (5 points). Then, the points for sweets, cakes/cookies, and junk food were sum up as "Unhealthy diet score". The other food groups were sum up as "Healthy diet score" in a reversed point scale such as several times a day (5 points) and followed the sequence. The sum of nutrition scores was categorised into three tertiles as low (1st tertile), medium (2nd tertile = median), and high (3rd tertile) (El Ansari et al., 2010).
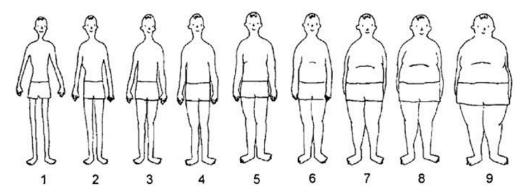

Figure 1. Body image figures of males from underweight to obese size (scale 1-9) which have been modified by Nagasaka et al. (2008)
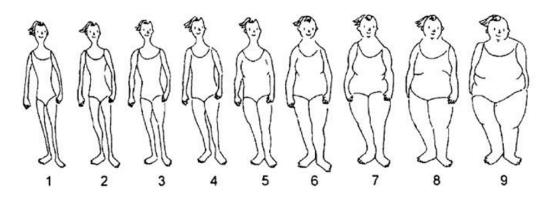
Figure 2. Body image figures of female from underweight to obese size (scale 1-9) which have been modified by Nagasaka et al. (2008).

Statistical Analysis

The data were analysed using IBM Statistical Program Package for Social Sciences (SPSS) software version 24.0. The categorical data were summarized using descriptive statistics as number and percentage while continuous data were presented as mean and standard deviations. The associations between categorical variables were carried out by Chi-Square tests and independent sample t-test to observe the statistical differences. Pearson correlation test was used to determine the association between body image and BMI. The statistical significance was set at p<0.05; CI 95%.

RESULTS

Demographic Data

Table 1 shows the characteristics of the participants by gender. A total of 100 participants were recruited in this study which comprised 50% males and 50% females. The mean age of the participants was 20.9±1.1 years old. Majority of the participants were Chinese (83%) followed by Malay (12%), Indian (3%), and other ethnicities such as Indian Malay (2%). Majority of the participants (61%) were lived outside of campus. Most of the students (47%) engaged with light physical activity levels. However, there was no significant difference in age group, ethnicity, living arrangements, and physical activity level between males and females ($p > 0.05$).

On the other hand, male was statistically taller and heavier than female. The mean height of male was 1.71±0.05 m while female was 1.57±0.06 m. The mean weight of male was 64.64±8.35 kg while female was 53.87±10.99 kg. However, there was no significant difference in BMI between male (22.16 ± 2.69 kg/m^2) and female (21.73 ± 3.95 kg/m^2). Majority of male (64%) and female (64%) were in the normal weight category. Pre-obesity or overweight is higher in male students than females. Meanwhile, more females were underweight (14%) than males (6%). No significant

difference was found between genders in body weight status (p>0.05).

Table 1 also shows the gender differences between body shape concerns based on the BSQ score. There was a significant difference in BSQ scores in females (94.20±24.81) than males (65.30±20.56). Majority of the females (44%) had a mild concern on their body image whereas majority of males (78%) had normal body shape concerns. Meanwhile, 54% of males perceived themselves in the normal category whereas 48% of females perceived themselves as fat. There was no significant difference in body image perception between males and females (p>0.05). There was a marginally significant difference in body shape dissatisfaction among gender (p>0.05). About 80% of female participants wished to be thinner as compared to 58% of male participants. Conversely, about 28% of males wished to be fatter as compared to 12% of female students.

Table 1

Characteristics of the study participants according to gender (n=100)

Variables	Total N = 100 N (%)	Male N = 50 N (%)	Female N = 50 N (%)	P-value
Age group (years)	20.86 ± 1.08	20.72 ± 1.11	21.00 ± 1.05	0.197[a]
18-19 years	16 (16)	9 (18)	7 (14)	
20-21 years	60 (60)	30 (60)	30 (60)	0.812[b]
22-23 years	24 (24)	11 (22)	13 (26)	
Ethnicity				
Malay	12 (12)	5 (10)	7 (14)	
Chinese	83 (83)	42 (84)	41 (82)	0.148[b]
Indian	3 (3)	3 (6)	0	
Others	2 (2)	0	2 (4)	
Living arrangements				
On campus	39 (39)	17 (34)	22 (44)	0.305[b]
Off campus	61 (61)	33 (66)	28 (56)	
Physical activity level	4 (4)	3 (6)	1 (2)	
Very active	43 (43)	24 (48)	19 (38)	
Moderate	47 (47)	20 (40)	27 (54)	0.453[b]
Light	6 (6)	3 (6)	3 (6)	
None				
Height (m)	1.64 ± 0.09	1.71 ± 0.05	1.57 ± 0.06	<0.001[a]**
Weight (kg)	59.26 ± 11.12	64.64 ± 8.35	53.87 ± 10.99	<0.001[a]**

Table 1 *(Continued)*

Variables	Total N = 100 N (%)	Male N = 50 N (%)	Female N = 50 N (%)	P-value
BMI (kg/m²)	21.95 ± 3.37	22.16 ± 2.69	21.73 ± 3.95	0.522[a]
Underweight (< 18.5 kg/m²)	10 (10)	3 (6)	7 (14)	
Normal weight (18.5-22.9 kg/m²)	64 (64)	32 (64)	32 (64)	
Overweight (23.0-24.9 kg/m²)	7 (7)	4 (8)	3 (6)	0.529[b]
Pre-obese (25-29.9 kg/m²)	19 (19)	11 (22)	8 (16)	
BSQ score	79.75 ± 26.92	65.30 ± 20.56	94.20 ± 24.81	<0.001[a]**
Normal (< 80)	54 (54)	39 (78)	15 (30)	
Mild concern (80-110)	31 (31)	9 (18)	22 (44)	<0.001[b]**
Moderate concern (111-140)	15 (15)	2 (4)	13 (26)	
Body Image Perception				
Thin	6 (6)	3 (6)	3 (6)	
Normal	50 (50)	27 (54)	23 (46)	0.710[b]
Fat	44 (44)	20 (10)	24 (48)	
Body Image Dissatisfaction				
Desired to be thinner	69 (69)	29 (58)	40 (80)	
Satisfied with current body size	11 (11)	7 (14)	4 (16)	0.056[c]
Desired to be fatter	20 (20)	14 (28)	6 (12)	

Note:
BMI = Body Mass Index; BSQ = Body Shape Questionnaire
[a] Independent t-test shows no significant difference p>0.05; a significant difference ** p<0.01, data is presented as mean and standard deviation (SD).
[b] Chi-Square test shows no significant difference p>0.05; a significant difference ** p<0.01.
[c] Chi-Square test was used, data shows marginally significant p>0.05.

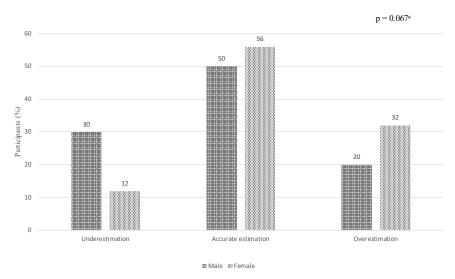## Associations between Body Image and Body Mass Index

Table 2 shows the perceived body image based on Figure Rating Scale and BMI according to gender. Majority of males (44%) in normal weight perceived themselves accurately in the Figure Rating Scale. Besides, 20% of males in pre-obese underestimated their body shape followed by 14% of males overestimated their body shape as overweight. Meanwhile, majority of females (40%) in normal weight also perceived themselves correctly whereas 24% misperceived themselves as overweight although they have normal body weight. Around 12% of females who were pre-obese underestimated their body weight as overweight.

Figure 3 shows the proportions of males and females in body image perception estimation. More females (56%) made an accurate estimation of their body shape than males (50%). About 32% of females overestimated their body weight than 20% of males. On the other hand, 30% of males underestimated their body shape as compared to 12% of females. However, there was no significant difference in the estimation of body image perception among gender (p>0.05).

Table 2

The perceived body image and body weight status by gender

Body Weight Status	Body Image Perception			
	Underweight (Fig. 1, 2) N (%)	Normal (Fig. 3, 4) N (%)	Overweight (Fig. 5, 6, 7) N (%)	Obese (Fig. 8, 9) N (%)
Male (N = 50)				
Under	0	3 (6)	0	0
Normal	3 (6)	22 (44)	7 (14)	0
Over	0	1 (2)	3 (6)	0
Pre-obese	0	1 (2)	10 (20)	0
Female (N = 50)				
Under	3 (6)	3 (6)	1 (2)	0
Normal	0	20 (40)	12 (24)	0
Over	0	0	3 (6)	0
Pre-obese	0	0	6 (12)	2 (4)
Total (N = 100)				
Under	3 (3)	6 (6)	1 (1)	0
Normal	3 (3)	42 (42)	19 (19)	0
Over	0	1 (1)	6 (6)	0
Pre-obese	0	1 (1)	16 (16)	2 (2)

Note: [a] Chi-Square test was used, data shows no significant difference (p>0.05)

Figure 3. The comparison of estimation body image perception between male and female students

The dissatisfaction group (desired to be thinner or fatter) and satisfaction group (satisfied with current body size) were categorised based on the discrepancy of scores from the Figure Rating Scale. There was a significant difference in body shape concern between body image satisfied group and dissatisfied group (Table 3). Participants who were dissatisfied with their body image had a higher body shape concern (mean score of 82.24 ± 27.17) than the body image satisfied group (mean score of 59.64 ± 13.28). Ninety-one percent (91%) of the participants in the body image satisfied group had normal concern on their body shape, whereas 51% of participants in the dissatisfied group had mild to moderate concern on the body image.

Table 3 also shows the BMI between perceived body image satisfied and dissatisfied group. There was a significant difference in the mean BMI between body image dissatisfied and satisfied group. The mean body mass index in the body image dissatisfied group (22.07 ± 3.53 kg/m^2) was significantly higher than the satisfied group (20.97 ± 1.27 kg/m^2). This showed that participants with high mean body mass index were dissatisfied with their body image. However, there was no significant difference in the body weight category between both groups. In the body image dissatisfied group, most participants were in the normal weight category (60%) followed by the pre-obese category (21%).

Figure 4 shows the correlation between body shape concern score and BMI. There was a weak positive correlation (p<0.01) between BSQ scores and BMI, which was statistically significant (r=0.306, p=0.002). This signified an increase in body mass index increased the body shape concern scores. In other words, participants with a high body mass index had higher body shape concerns towards themselves.
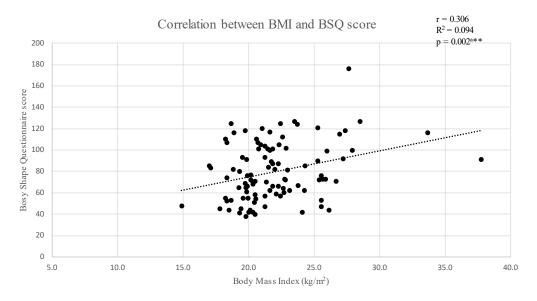
Table 3

Body shape concern and body mass index between body image satisfied and dissatisfied group

Perceived Body Image Satisfaction	Satisfied N = 11 N (%)	Dissatisfied N = 89 N (%)	P-value
Body Shape Concern	59.64 ± 13.28	82.24 ± 27.17	0.008[a]**
Normal concern	10 (91)	44 (49)	0.009[b]**
Mild to Moderate concern	1 (9)	45 (51)	
Body Mass Index kg/m^2	20.97 ± 1.27	22.07 ± 3.53	0.049[a]*
Body Weight Status			
Underweight (< 18.5 kg/m^2)	0	10 (11)	
Normal weight (18.5-22.9 kg/m^2)	11 (100)	53 (60)	0.073[b]
Overweight (23.0-24.9 kg/m^2)	0	7 (8)	
Pre-obese (25-29.9 kg/m^2)	0	19 (21)	

Note:
[a] Independent t-test was used, data shows significant difference * $p<0.05$; ** $p<0.01$, data is presented as mean and standard deviation.
[b] Chi-Square test was used, data shows no significant difference $p>0.05$; a significant difference ** $p<0.01$.

Note: [a] Pearson Correlation test was used with significance difference ** $p<0.01$
Figure 4. Scatter diagram showing a positive relationship between BSQ and BMI

Associations between Body Image and Dietary Intake

Table 4 shows the meal practices between body image satisfied and dissatisfied group according to gender. There was no significant difference between the satisfied group and the dissatisfied group in males for meal practices. On the other hand, there was a significant difference in snacking between satisfied and dissatisfied groups among females (p<0.05). Sixty-five percent (65%) of females who had body image

dissatisfaction seldom snack whereas 75% of females who had satisfied body image always snack in between meals.

Table 5 describes the differences between body image satisfied and dissatisfied group in nutrition score according to gender. The nutrition score in this study was obtained based on the assessment of the Semi-Quantitative Food Frequency Questionnaire (SFFQ) (El Ansari et al., 2010). There was no significant difference between satisfied and dissatisfied with body image

Table 4

Meal practices by perceived body image satisfaction among male and female undergraduate students

Meal Practices	Male (N = 50)			Female (N = 50)		
	Satisfied N = 7 N (%)	**Dissatisfied** N = 43 N (%)	**P-value**[a]	**Satisfied** N = 4 N (%)	**Dissatisfied** N = 46 N (%)	**P-value**[a]
Regular mealtime Always Seldom Never	4 (57) 3 (43) 0	22 (51) 20 (47) 1 (2)	0.895	2 (50) 2 (50) 0	17 (37) 25 (54) 4 (9)	0.769
Skipping meals Always Seldom Never	2 (29) 3 (42) 2 (29)	6 (14) 23 (53) 14 (33)	0.617	0 3 (75) 1 (25)	8 (17) 30 (66) 8 (17)	0.648
Snacking between meals Always Seldom Never	2 (29) 4 (57) 1 (14)	12 (28) 26 (60) 5 (12)	0.977	3 (75) 0 1 (25)	16 (35) 30 (65) 0	<0.001*
Supper Always Seldom Never	2 (29) 3 (42) 2 (29)	9 (21) 25 (58) 9 (21)	0.752	0 2 (50) 2 (50)	11 (24) 29 (63) 6 (13)	0.123

Note: [a] Chi-Square test was used and showed significance difference * p<0.05

Table 5

Nutrition score based on food group consumption by perceived body image satisfaction among male and female undergraduate students

Nutrition score	Male (N = 50)			Female (N = 50)		
	Satisfied N = 7 N (%)	Dissatisfied N = 43 N (%)	P-value[a]	Satisfied N = 4 N (%)	Dissatisfied N = 46 N (%)	P-value[a]
Unhealthy diet score*						
Low (1st tertile)	2 (29)	9 (21)		0	7 (15)	
Medium (2nd tertile)	3 (42)	29 (67)	0.375	3 (75)	29 (63)	0.702
High (3rd tertile)	2 (29)	5 (12)		1 (25)	10 (22)	
Healthy diet score*						
Low (1st tertile)	1 (14)	11 (26)		0	7 (15)	
Medium (2nd tertile)	5 (72)	21 (48)	0.540	3 (75)	28 (61)	0.695
High (3rd tertile)	1 (14)	11 (26)		1 (25)	11 (24)	

Note: [a] Chi-Square test showed no significant difference (p>0.05)
*Unhealthy diet was comprised of sweets/sugar beverages, cakes, and snacks while a healthy diet was comprised of carbohydrate (cereals), protein (meat, fish, dairy, eggs) and fibres (fruits and vegetables) food groups.

for both genders (p>0.05). Majority of the participants from both satisfied and dissatisfied groups fall in the medium score for health and unhealthy diet score.

Table 6 summarises the energy and macronutrient intakes between male and female students. There was a significant difference between male and female students in the mean intake of energy and macronutrients such as protein and fat (p<0.05). Male students had higher mean intakes of energy and macronutrients than female students. However, majority of the participants failed to meet the RNI for all nutrients. Table 7 summarises the micronutrient intakes between male and female students. Male students had significantly higher mean intakes of sodium, potassium, and magnesium than female students (p<0.05). Majority of them failed to meet the RNI recommendation for micronutrients.

Table 6

Energy and macronutrient intakes between male and female undergraduate students

Macronutrients			Male N = 50 Mean ± SD	RNI[a]
Energy intake	(kcal/day)		1839 ± 615	2240
		<RNI	41 (82)[c]	
		>RNI	9 (18)	
Protein	(g/day)		94.7 ± 38.4	62
	(% energy)		20.6 ± 4.1	
		<RNI	8 (16)	
		Meet RNI	1 (2)	
		>RNI	41 (82)	
Fat	(g/day)		68.8 ± 25.9	62-75
	(% energy)		33.5 ± 5.5	
		<RNI	25 (50)	
		Meet RNI	8 (16)	
		>RNI	17 (34)	
Fibre	(g/day)		12.0 ± 5.3	20-30
		<RNI	45 (90)	
		>RNI	5 (10)	
Saturated fat	(g/day)		18.7 ± 8.5	
Monounsatura-ted fat	(g/day)		18.7 ± 8.8	
Polyunsaturat-ed fat	(g/day)		9.1 ± 3.8	
Cholesterol	(mg/day)		312 ± 156	<300
		Meet RNI	24 (48)	
		>RNI	26 (52)	

Table 6 *(Continued)*

Macronutrients		Female N = 50 Mean ± SD	RNI[a]	P-value[b]
Energy intake	(kcal/day)	1436 ± 384 45 (90) 5 (10)	1840	<0.001*
Protein	(g/day) (% energy)	64.6 ± 26.1 17.8 ± 4.0 18 (36) 0 32 (64)	53	<0.001* 0.001*
Fat	(g/day) (% energy)	56.5 ± 18.9 35.0 ± 4.8 20 (40) 11 (22) 19 (38)	51-61	0.008* 0.174
Fibre	(g/day)	10.1 ± 4.8 46 (92) 4 (8)	20-30	0.068
Saturated fat	(g/day)	16.3 ± 7.6		0.128
Monounsaturated fat	(g/day)	15.6 ± 6.9		0.048*
Polyunsaturated fat	(g/day)	7.2 ± 3.2		0.007*
Cholesterol	(mg/day)	230 ± 152 35 (70) 15 (30)	<300	0.010*

Note:
[a] RNI = Recommended Nutrient Intake based on NCCFN (2017)
[b] Independent t-test was used which presented as mean and standard deviation
[c] Values in brackets presented as percentage
*Significance difference (p<0.05)

Table 7

Micronutrient intakes between male and female undergraduate students

Micronutrients			Male N = 50 Mean ± SD	RNI[a]
Sodium	(mg/day)		3123 ± 1154	1500
		<RNI	2 (4)[c]	
		>RNI	48 (96)	
Potassium	(mg/day)		1547 ± 540	4.7
		<RNI	50 (100)	
Calcium	(mg/day)		464 ± 223	1000
		<RNI	47 (94)	
		>RNI	3 (6)	
Magnesium	(mg/day)		156 ± 67	400
		<RNI	50 (100)	
		>RNI	0	
Iron	(mg/day)		11.2 ± 4.7	9
		<RNI	17 (34)	
		Meet RNI	2 (4)	
		>RNI	31 (62)	
Vitamin D	(μg/day)		2.20 ± 2.07	15
		<RNI	50 (100)	
		>RNI	0	
Vitamin C	(mg/day)		49.7 ± 40.5	70
		<RNI	39 (38)	
		Meet RNI	1 (2)	
		>RNI	10 (20)	

Micronutrients		Female N = 50 Mean ± SD	RNI[a]	P-value[b]
Sodium	(mg/day)	2446 ± 880 9 (18) 41 (82)	1500	0.001*
Potassium	(mg/day)	1196 ± 491 50 (100)	4.7	0.001*
Calcium	(mg/day)	400 ± 165 50 (100) 0	1000	0.106

Table 7 *(Continued)*

Micronutrients		Female N = 50 Mean ± SD	RNI[a]	P-value[b]
Magnesium	(mg/day)	113 ± 62 49 (98) 1 (2)	310	0.001*
Iron	(mg/day)	10.4 ± 5.4 47 (94) 0 3 (6)	20	0.401
Vitamin D	(μg/day)	1.98 ± 2.61 49 (98) 1 (2)	15	0.651
Vitamin C	(mg/day)	39.0 ± 46.4 46 (92) 0 4 (8)	70	0.222

Table 8 summarises the energy and nutrient intakes of participants according to perceived body image satisfaction. The mean energy intake of the dissatisfied group (1628±533 kcal/day) was lower than the satisfied group (1708±690 kcal/day). However, there was no significant difference in energy and nutrient intakes between satisfied and dissatisfied groups (p>0.05). Majority of them had failed to meet the RNI for all nutrients irrespective of body image dissatisfaction. There was a significant difference (p<0.05) in the dissatisfied group where their % energy derived from fat (34.5±5.4%) had a higher mean percentage than the satisfied group (32.1±2.6%). Table 9 summarises the micronutrient intakes of participants according to perceived body

image satisfaction. There was no significant difference in micronutrient intakes between satisfied and dissatisfied groups (p>0.05). Majority of them failed to meet the RNI irrespective of body image dissatisfaction.

DISCUSSIONS

This study aims to determine the gender differences in body image perception and its association with body mass index and dietary intake among university students.

Body Weight Status

In this study, the prevalence of overweight and pre-obese were higher in male students than females while females had a higher prevalence of being underweight. These findings were consistent with two Malaysian

Table 8

Energy and macronutrient intakes by perceived body image satisfaction among undergraduate students

Macronutrients			Satisfied N = 11 Mean ± SD	Dissatisfied N = 89 Mean ± SD	P-value[b]
Energy intake	(kcal/day)		1708 ± 690	1628 ± 533	0.651
		<RNI[a]	10 (91)[c]	76 (85)	
		>RNI	1 (9)	13 (15)	
Protein	(g/day)		84.9 ± 47.4	79.0 ± 34.6	0.611
	(% energy)		18.9 ± 4.2	19.2 ± 4.3	0.826
		<RNI	3 (27)	23 (26)	
		Meet RNI	0	1 (11)	
		>RNI	8 (73)	65 (73)	
Fat	(g/day)		61.1 ± 25.3	62.8 ± 23.2	0.821
	(% energy)		32.1 ± 2.6	34.5 ± 5.4	0.018*
		<RNI	6 (55)	39 (44)	
		Meet RNI	3 (27)	16 (18)	
		>RNI	2 (18)	34 (38)	
Fibre	(g/day)		11.9 ± 5.0	10.9 ± 5.2	0.572
		<RNI	10 (91)	81 (91)	
		>RNI	1 (9)	8 (9)	
Saturated fat	(g/day)		15.9 ± 8.1	17.7 ± 8.2	0.480
Monounsaturated fat	(g/day)		15.5 ± 9.0	17.3 ± 7.9	0.485
Polyunsaturated fat	(g/day)		7.3 ± 3.6	8.3 ± 3.6	0.413
Cholesterol	(mg/day)		285 ± 200	269 ± 154	0.760
		<RNI	5 (45)	54 (61)	
		>RNI	6 (55)	35 (39)	

Note:

[a] RNI = Recommended Nutrient Intake based on NCCFN (2017)

[b] Independent t-test was used which presented as mean and standard deviation

[c] Values in brackets presented as percentage

*Significance difference (p<0.05)

Table 9

Micronutrient intakes by perceived body image satisfaction among undergraduate students

Micronutrients			Satisfied (N = 11) Mean ± SD	Dissatisfied (N = 89) Mean ± SD	P-value[b]
Sodium	(mg/day)		3128 ± 1555	2742 ± 1006	0.439
		<RNI[a]	2 (18)[c]	9 (10)	
		>RNI	9 (82)	80 (90)	
Potassium	(mg/day)		1357 ± 494	1373 ± 551	0.926
		<RNI	11 (100)	89 (100)	
Calcium	(mg/day)		486 ± 236	425 ± 193	0.336
		<RNI	10 (91)	87 (98)	
		>RNI	1 (9)	2 (2)	
Magnesium	(mg/day)		140 ± 52	134 ± 69	0.756
		<RNI	11 (100)	88 (99)	
		>RNI	0	1 (1)	
Iron	(mg/day)		10.8 ± 5.2	10.8 ± 5.0	0.975
		<RNI	6 (55)	58 (65)	
		Meet RNI	0	2 (2)	
		>RNI	5 (45)	29 (33)	
Vitamin D	(μg/day)		1.79 ± 1.13	2.13 ± 2.46	0.650
		<RNI	11 (100)	88 (99)	
		>RNI	0	1 (1)	
Vitamin C	(mg/day)		45.4 ± 37.3	44.3 ± 44.5	0.935
		<RNI	9 (92)	76 (85)	
		Meet RNI	0	1 (1)	
		>RNI	2 (18)	12 (14)	

Note:
[a] RNI = Recommended Nutrient Intake based on NCCFN Malaysia (2017).
[b] Independent t-test was used which presented as mean and standard deviation
[c] Values in brackets presented as percentage

studies by Kuan et al. (2011) and Pang and Razalee (2012) who reported that male university students had a higher prevalence of overweight and pre-obese than females whereas the prevalence of underweight was higher among female students as compared to males. A higher prevalence of underweight among female students might be due to the desire for skinny body shape (Sakamaki et al., 2005b). On the contrary, lifestyle habits such as physical inactivity can be a contributor to raising the risks of being obesity among students (Mahgoub et al., 2016). Our findings showed that majority of the students were less physically active, and males were more active than females. These findings were similar to the study by Rajappan et al. (2015) who reported that high prevalence of physical inactivity found among females and those who were obese.

Body Image and Its Association with Body Mass Index

Comparison between genders in terms of body image dissatisfaction revealed that majority of females desired to be thinner whereas males desired to have a larger body size. Our findings are in line with the findings reported by Wong and Say (2013). The possible explanation could be deduced from men and women defined body image differently. When compared at gender level, attractiveness is associated with being thin for women, whereas a more muscular appearance is considered attractive for men (Moustafa et al., 2017). This was proven through various studies looking at the gender differences in body image (Kamaria et al.,

2016; Moustafa et al., 2017; Shaheen et al., 2016; Yin & Seng, 2010). Previous studies reported that female students were less satisfied with their body shape than males (Kamaria et al., 2016; Yin & Seng, 2010). Shaheen et al. (2016) reported that males desired the area-specific body parts such as chest and shoulders to be larger. Moustafa et al. (2017) revealed that body dissatisfaction among males was usually related to a lack of muscle mass and not the fat mass. In our study, females expressed a higher level of body image dissatisfaction than males. Body image dissatisfaction among females may be due to the influence of social media which portrayed the ideal image for females as thinner and skinny (Moustafa et al., 2017). Prolonged exposure to the desirable ideal body image subsequently results in body shape dissatisfaction among young adults, especially females (Cheung et al., 2011).

Our findings showed that there was a significant positive correlation between BMI and body shape concern. This indicated students with higher BMI expressed higher body shape concerns. Similar findings were reported by Gillen and Lefkowitz (2012). They found that BMI was associated with body dissatisfaction whereby the increase of BMI led to greater dissatisfaction with body image in both genders (Gillen & Lefkowitz, 2012). This happens due to university students leaving home for university and having increased exposure to the different environment and surrounding people. In addition, university students are also more concerned about social figures, celebrities, and fashion models and may follow them to

achieve body perfectionism (Wong & Say, 2013). Overweight students are concerned with their body shape as they hope to have a nice appearance (Wong & Say, 2013). Peer pressures drive the university students to become highly concerned to maintain an attractive unrealistic body image in order to gain popularity among peers (Tsang, 2017).

On the other hand, our study found out that more females overestimated their body weight although they had normal body weight. This finding was similar to the study reported that females were more likely to perceive themselves as fat than males (Zaccagni et al., 2014). Conversely, more males in this study underestimated their body weight than females. This observable trend was similar in the study reported that females tend to overestimate their body weight while males tend to underestimate their body weight (Kuan et al., 2011). In fact, body image dissatisfaction leads to a misperception of their own body weight (Shagar et al., 2014). This could be due to the influence of mesomorphic body shape causing males to admire a V-shaped figure, with a more muscular upper body, and the desire to be heavier in weight (Rathakrishnan & Chuen, 2011). On the other hand, females are often exposed to the belief that thin figures are ideal for females, therefore more females preferred thin as their ideal body image (Swami & Way, 2006).

Body Image and Its Relationship with Dietary Intake

An increasing trend of unhealthy dietary habits is predominantly found among university students (Gan et al., 2011). This could be related to the sociocultural pressure that leads the students to pursue an unattainable body shape which consequences in eating disturbances (Balluck et al., 2016). There was a significant difference in snacking between satisfied and dissatisfied groups among females. Our study found out that 65% of females who had body image dissatisfaction seldom snack whereas 75% of females who had satisfied body image always snack in between meals. However, there was no significant difference in meal practices and body image dissatisfaction among male students. This could be due to females with dissatisfied body image always think that they are not thin enough and therefore they try to lose weight by seldom snacking in-between meals. A study by Wong and Say (2013) stated that overweight students with body shape concerns were prone to have a healthy lifestyle while underweight students with body shape concerns were focused to achieve a good physical appearance. A study reported by Shagar et al. (2014) stated that misperception of own body weight was associated with unhealthy dietary eating patterns such as different kinds of dieting and meal skipping practices. Cheung et al. (2011) also observed that misperception of weight status and body image dissatisfaction especially the desire to achieve an ideal body shape may practice unhealthy weight gain or loss.

When comparing the body image satisfaction and nutrition score based on the food group, no significant difference

in the nutrition score were found. Majority of the participants from both satisfied and dissatisfied groups fall in the medium nutrition score. This could be due to there are other factors which influence the food selection of students (Kabir et al., 2018) including individual factors (food taste, past eating habits), societal factors (peer influence), psychosocial factors (stress), and environment factors (food prices, healthy food availability) and they were not assessed in this study. In addition, it should be noted that people with high relative weight usually underreported their food intake (Tur et al., 2005). Other studies also reported similar findings. Those who had a body image dissatisfaction try to avoid weight gain, but they also did not increase the consumption of fruits and vegetables, reflecting that they are not eating healthier food (Alipour et al., 2015). Moreover, El Ansari et al. (2010) showed that students who perceived themselves as too thin were associated with both healthy diet score and high-calorie diet score (unhealthy diet score) whereas none of the scores was associated with those students who perceived themselves as too fat. These reasons perhaps answer the insignificant difference in the nutrition score between body image satisfied and dissatisfied group for both genders.

There was a significant difference between gender and dietary intake. Males had a higher mean energy intake and mean nutrients intake than females. Gan et al. (2011) also found that mean energy intakes and other nutrients for males and females failed to meet the RNI as well as gender

differences in energy and nutrient intakes. Conversely, body image dissatisfaction had no association with dietary intake despite the unhealthy eating habit practices that may lead to inadequate energy and nutrient intake. Our findings revealed that there was a significant difference in energy derived from fat between the satisfied and dissatisfied group. The dissatisfied group had a higher mean fat energy intake (%) than the satisfied group. This could be due to most of the students who were dissatisfied with their body shape consumed more dietary fat. Our finding corroborated with another study reported that body image dissatisfaction was associated with total energy intake with an increase of macronutrient intake (Jodhun et al., 2016). Despite body image dissatisfaction in dietary intakes, a lack of nutritional knowledge among students may be one of the barriers to healthy food choices which affects the eating patterns and nutritional intakes (Ganasegeran et al., 2012).

LIMITATIONS

There are a few limitations to this study. First, due to the nature of the cross-sectional study, we could not determine the causal relationship between body image dissatisfaction, BMI, and dietary intake. Second, as the dietary recall was self-administered, the accuracy of the responses would rely solely on the memory and the honesty of the respondents. Moreover, the study did not take into account other possible factors that affect body images such as peer influence, family support,

and mass media. Several other factors that are known to affect dietary intakes such as socioeconomic status, stress, environmental factors, and individual factors were also not assessed in this study.

CONCLUSION

The current study showed that the prevalence of body image dissatisfaction in this study was 89%. University students especially females were more concerned about their body shape and had a higher prevalence of body image dissatisfaction. Overweight and pre-obese students tend to have a body image dissatisfaction towards themselves. Although there was no association of body image dissatisfaction on dietary patterns and nutrient intakes, females who had body image dissatisfaction seldom snack in between meals. Majority of university students did not meet the RNI recommendation. In conclusion, intervention programmes among university students should focus on weight management and body image awareness to achieve healthy body weight and a positive body image. Nutrition education must be advocating among university students in healthy food choices and proper eating habits because a balanced and adequate nutrient intake is important in maintaining health later in life. Further studies are needed to explore the association of body image dissatisfaction and nutrient intakes with an equally distributed range of body weight status, sociocultural factors, and involving a larger number of sample sizes.

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Factors Associated with Savings and Withdrawals among Employees Provident Fund Members

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ABSTRACT

Financial security in life after retirement is a serious concern among older people, particularly as Malaysia is becoming an ageing nation. This paper examined saving and dissaving behaviours among members of Employees Provident Fund (EPF) aged 55 years and older. It examined the association between EPF balance outcome with socio-demographic characteristics, income, and withdrawal. Using data collected through interview surveys at selected EPF counters throughout the country, it revealed that 75% of respondents had less than RM200,000 in their EPF accounts at age 55 and 84% of the respondents made some withdrawals before age 55 and 67% upon reaching age 55. Both withdrawals were largely made to purchase property, pay for children's education, and settle housing or car loans. Findings also showed that education and monthly income were positively associated with EPF savings of at least RM200,000 at age 55 while the opposite was true for small withdrawal amounts made before retirement. This suggests that EPF saving is very much dependent on income which in turn is determined by educational attainment and longer working years. While it can be said that in general members withdrew their EPF savings to either save elsewhere or invest towards the accumulation of their wealth, more opportunities should be made

available for people to work longer beyond mandatory retirement age.

INTRODUCTION

There is a growing concern on the issues of savings adequacy and financial sustainability for old age due mainly to an increase in life expectancy. An increase in life expectancy means people are living longer beyond their retirement age. To ensure a decent life in retirement, one must have income security or made some form of preparation to fund this period of one's life. With economic uncertainty and the ever-rising cost of living, it becomes more challenging for some to live comfortably later in life. Financial security is one of the main components of a comfortable retirement, besides good health, happy and meaningful life. After all, retirement is about spending the remaining years, hence the need for retirement planning to ensure sufficient funds and/or savings for old age security and well-being.

The financial security and well-being of older people vary greatly across continents, countries, and regions. According to Bloom et al. (2011), the variations are largely due to the differences in how the income of older people is derived, and the reliability of the flow of their income. Generally, older people are less likely to have paid employment, more vulnerable because they are more likely to have health issues and the need for long-term care than are younger adults. The income of older people is mostly generated from a combination of their own savings which are often small and with low-interest yield, formal pension schemes, and support from family members. Of course capacities and resources will be more limited and needs will be more complex as they get older and older.

While older people in many developed countries are protected by a comprehensive social protection system, the scenario in developing countries including Asia is worrying given its speed of population ageing and under-developed formal old-age protection programs (ARC Centre of Excellence in Population Ageing Research [CEPAR], 2013). The inadequacy of the retirement benefits of these countries including Malaysia to finance post-retirement expenses could aggravate poverty among the elderly (Asher, 2000, 2002, 2009; Asher & Nandy, 2006; Budina & Tuladhar, 2010; Economic and Social Commission for Asia and the Pacific [ESCAP], 2008; Ong & Hamid, 2010; Park & Estrada, 2012; Vaghefi et al., 2017).

Issues and Challenges among Retirees

The average life expectancy at birth in Malaysia was 74.5 years in 2019 with the average life expectancy at birth was 77.3 years and 72.2 years for females and males, respectively. Currently, mandatory retirement in Malaysia is set at age 60 with an option for early retirement. The Government implemented the change from age 58 to 60 years in 2012 while for private-sector employees, mandatory retirement

at age 60 was effective only from July 1, 2013. The move to increase the retirement age to 60 years put Malaysia on par with some neighbouring countries, however, it is still behind compared with many developed countries. Countries such as Australia, Belgium, Canada, Denmark, New Zealand, and the US have adopted age 65 or older or unfixed retirement age.

With longer life expectancy, retirement planning becomes a critical concern among the older population. In a study conducted by Randstad Workmonitor in 2015, 76% of employees in Malaysia believed they would have to work beyond their retirement age and that Malaysian employees plan far less for retirement. Only one in 10 employees were willing to save 40% of their income for old age while 90 % of the respondents were willing to set aside only 20% or less. A study by Awang et al. (2018) found that while the majority of respondents aged 40 years and older residing in Malaysia would like to live at least 80 years, many did not save for old age. This suggests that the majority of Malaysians are not sufficiently ready and are lacking in knowledge on retirement planning (Ridhwan et al., 2017; Shanmugan & Abidin, 2013). To ensure a decent life in retirement, Malaysians must plan and start saving early.

Employees Provident Fund (EPF) was established in Malaysia with the primary objective to provide financial security after retirement in the form of mandatory savings. The EPF plays an important role as the largest social security institution in the country for private and non-pensionable public sector employees. Under the EPF Act 1991, EPF provides retirement benefits for members through the management of their savings. Currently, total monthly contribution that goes into an individual employee's savings account comprises 11% of the employee's monthly salary and 13% of the employer's contribution.

There are several concerns when it comes to the effectiveness of EPF in providing income security to its members after retirement. One of the most frequently raised issues is the adequacy of the amount of savings among its members. Extant review of the literature indicates that majority of EPF members have insufficient savings to meet their retirement objectives (Alaudin et al., 2016; Asher, 2012; Holzmann, 2014; Samad & Kari, 2007; Vaghefi et al., 2017). Holzmann (2014) found that only one-third of active EPF members accumulated enough savings upon retirement. In another study by Asher (2012), 73.2% of EPF members had less than RM50,000 when they reached age 54. Findings from Vaghefi et al. (2017) also suggested that 43% of EPF retirees were not able to maintain their standard of living with their retirement savings.

Even though EPF's mandatory contribution rate is the world's fifth-highest at 24%, it does not translate into a high savings amount among its members. It has been argued that this is largely due to the low salary structure in the country, where 89% of the working population earn less than RM5,000 monthly (Jaafar, 2018; World Bank Group, 2018). The median salary in 2018 is RM2,038, which is about 2.1

times higher than the minimum wage of RM1,100. In its report, EPF stated that 1.64 million of active members contributed less than the minimum wage (EPF, 2018). Since the sufficiency of EPF savings depends on the contribution of employees and employers during their active working period, their income during this period would significantly determine the amount of their EPF savings.

Another contributing factor to low retirement savings is savings leakages. The EPF Act 1991 sets the age for withdrawals at 55, however, members are allowed to withdraw their savings for various reasons before reaching 55. This means that withdrawals can be made way in advance of the retirement age of 60. For example, 44% of EPF withdrawals made in 2018 was to finance housing loan. While this flexibility allows members to divest in asset ownership or invest in a more profitable investment, however, it could also lead to low final balance for retirement and adversely affect dividend yield.

More worrying is the concern with respect to old age savings among those working in the informal sector. Recently the EPF introduced a voluntary contribution scheme for owners of a sole proprietorship, self-employed persons, business partners, and retired workers, however, participation among these groups has been quite low and slow.

Given that the mandatory retirement age of 60 years remains, the average life span of Malaysians at retirement is at least 15 years, and the fact that withdrawals are allowed way before retirement age,

would members have sufficient savings to live a reasonably comfortable life in their retirement? EPF has recently revised its basic savings requirement from RM228,000 to RM240,000, based on its calculation of RM1,000 required monthly for a person retiring at 55 to survive for the next 20 years. Given that in 2018, 64% of EPF members who reached 54 have savings below RM50,000, it is indeed a disturbing fact particularly if the EPF savings is their main retirement savings. Hence, this study aimed to examine the savings and withdrawal patterns among EPF members aged 55 and older in order to have a better understanding of the saving and dissaving behaviour of EPF members. Particularly, it seeks to analyse the relationship between income, withdrawals, and other characteristics in determining EPF balance at retirement.

METHODOLOGY

Data were obtained from a face-to-face interview survey using a structured questionnaire. Respondents consisted of EPF members who visited EPF counters on the day of data collection. The survey was carried out from December 2015 to March 2016 with specific dates determined for the 14 states involving 19 EPF branches throughout the country. Members were approached by trained interviewers who briefly explained about the study and the interview would only be conducted upon receiving consent from members to participate as respondents in the survey. The questionnaire was designed to collect information on the respondents' socio-demographic background, employment,

withdrawal, and utilization of EPF savings, current savings and assets as well as income and expenditure. Data available for analysis consisted of 771 respondents aged 55 years and older who completed the survey questionnaire (Appendix 1).

RESULTS

Profile of Respondents

The profile of respondents shown in Table 1 indicates that 68 % were male while in terms of ethnicity, Malay comprised 47 % followed by Chinese (36.7%) and Indian (13.9%). About 61 % of the respondents

were aged 55-59 years, 27 % aged 60-64 years, and 12 % aged 65 years and older. Expectedly the number of respondents aged 65 years and older visiting the EPF office would be small as the majority of them were no longer working and their EPF membership was more likely to be inactive. While majority had at least secondary education, only 14% have tertiary education.

Employment. More than half of the respondents were working at the time of the study (58.5%). Among those who were working about 59% in the private sector followed by 22% self-employment and 19 % in

Table 1

Distribution of respondents by gender, ethnicity, age, and education

Variable	Categories	Frequency	Percentage
Gender	Male	527	68.4
	Female	244	31.6
Ethnicity	Malay	365	47.3
	Chinese	283	36.7
	Indian	107	13.9
	Others	16	2.1
Age group	55-59	473	61.4
	60-64	206	26.7
	65 and older	92	11.9
Education	Primary / No schooling	128	16.7
	Secondary	414	54.0
	Form 6 / Pre-U / Diploma	115	15.0
	Tertiary	109	14.3

Government/Statutory Body. Among the 320 respondents who were not working, their previous employment was mostly in the private sector (67.2%) followed by Government/Statutory Body (25.0%) and self-employed (7.8%) (Table 2). The mean and median income of respondents who were working is RM3,790 and RM3,000, respectively while among those who were not working the mean and median of their last drawn salary is RM3,684 and RM2,000, respectively. It can be observed that there is little difference between the mean of current income and of previous income, however, a large variation is observed between the two median incomes.

Comparing working status by sex, the data shows that 62 % of the male respondents reported they were still working compared with only 50 % of the female respondents (Figure 1).

As expected the proportion of respondents who were working is highest among those aged 55-59 years (67.4%) and decreases with increasing age. The data indicates that a large proportion of the respondents continued to work beyond their retirement age of 60 with 38 % of those aged 65 years and older were still working (Figure 2).

Among respondents who were currently working, more than half were earning RM3,000 or less per month (53.9%) while those earning more than RM5,000 per month comprised about 22 %.
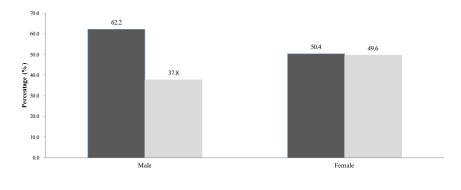
Withdrawal of EPF Savings

Although the EPF Act sets age 55 for members to withdraw their EPF savings, earlier withdrawals are allowed for various reasons. A very high proportion of the respondents (80.2%) withdrew their EPF savings before age 55. Interestingly those who withdrew at age 55 decreased to about 73 % (Table 3).

Table 2

Distribution of respondents by employment

Employment Status	Currently working		Currently not working	
	Frequency	Percentage	Frequency	Percentage
Total	451	58.5	320	41.5

Sector	Current employment		Previous employment	
Government/Statutory Body	86	19.1	80	25.0
Private Sector	267	59.2	215	67.2
Self Employed	98	21.7	25	7.8
Total	451	100.0	320	100.0

Working Status by Gender

Figure 1. Working status of respondents across gender

Working Status by Age Group

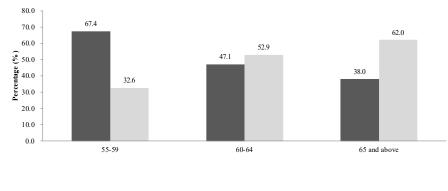*Figure 2.* Working status of respondents by age

Table 3

Withdrawal status before age 55 and at age 55

Withdrawal	Yes		No		Total
	Frequency	Percentage	Frequency	Percentage	Frequency (Percentage)
Before age 55	618	80.2	153	19.8	771 (100.0)
At age 55	559	72.5	212	27.5	771 (100.0)

Table 4 indicates that 83.7 % of withdrawals made before age 55 were less than RM100,000 compared with 66.6 % of withdrawals made at age 55 for the same amount. Expectedly the proportion of respondents who withdrew at least RM200,000 at age 55 was greater than those who withdrew the same amount before age 55 (13.4% and 6.4%, respectively).

With regard to the use of withdrawals, the results revealed that the top three uses of withdrawals made before age 55 are similar to those withdrawals made at age 55 namely to buy property, pay for children's education and settle housing or car loan. The proportion of respondents

who used their withdrawals at age 55 to buy property was much smaller than those who used their withdrawals before age 55 (36.9% and 54.0%, respectively). However, the proportion of respondents using their withdrawals at age 55 to pay for children's education was higher than those who withdrew before age 55 (24.7% and 20.1%, respectively). Respondents who used their withdrawals from EPF savings to perform hajj/*umrah* increased from 1.5% of withdrawals made before age 55 to 10.7 % of withdrawals made at age 55. It should be noted that visiting Mecca for hajj/*umrah* is only applicable to Muslims (Table 5).

Table 4

Amount of EPF savings withdrawal

| Withdrawal made | | | | |
| Withdrawal amount (RM) | Before Age 55 | | At Age 55 | |
	Frequency	Percentage	Frequency	Percentage
>0 – 24,999	263	44.3	202	36.1
25,000 – 49,999	127	21.4	84	15.1
50,000 – 99,999	107	18.0	86	15.4
100,000 – 199,999	59	9.9	93	16.6
200,000 – 399,999	30	5.1	52	9.3
400,000 – 599,999.	5	0.8	15	2.7
600,000 or more	3	0.5	8	1.4
Total	594	100.0	539	100.0

Table 5

Use of withdrawals made before age 55 and at age 55

| Use of withdrawals* | Withdrawals before age 55 (n=618) | | Withdrawals at age 55 (n=559) | |
	Frequency	Percentage	Frequency	Percentage
Buy Property	335	54.0	206	36.9

Table 5 *(Continued)*

Use of withdrawals*	Withdrawals before age 55 (n=618)		Withdrawals at age 55 (n=559)	
	Frequency	Percentage	Frequency	Percentage
Pay for children's education	124	20.1	138	24.7
Settle housing/car loan	111	18.0	105	18.8
Invest in unit trust/Saving	66	10.7	89	15.9
Daily expenses	43	7.0	69	12.3
Perform hajj or umrah	9	1.5	60	10.7
Pay for Medical Expenses	21	3.4	25	4.5
Business	12	1.9	14	2.5
Others (e.g. children's wedding and travel)	15	2.4	46	8.2

*Multiple answers

EPF Savings

EPF savings at age 55. Of the total respondents who answered the question on their EPF savings upon reaching age 55, about 75 % of them reported having less than RM200,000 with about 56 % having less than RM100,000 (Table 6). Among the 147 respondents who did not make any withdrawals before age 55, 78 % reported that their savings at age 55 were less than RM200,000 with about 65 % reported having less than RM100,000 (Table 6).

Table 6

EPF savings at age 55

EPF savings at age 55	Total respondents		Respondents with no withdrawals made before age 55	
Amount (RM)	Frequency	Percentage	Frequency	Percentage
>0 - <25,000	213	28.8	57	38.8
25,000 – <50,000	85	11.5	18	12.3
50,000 – <100,000	113	15.3	21	14.3
100,000 – <200,000	141	19.1	19	12.9
200,000 – <400,000	107	14.4	19	12.9
400,000 – <600,000.	45	6.1	3	2.0
≥600,000	36	4.8	10	6.8
Total	740	100.0	147	100.0

EPF savings at age 55 were further examined across gender, age, ethnicity, education, and current work status using chi-square statistics. The results in Table 7 clearly show that the proportion of female respondents who had savings at least RM100,000 is significantly lower than male respondents. The proportion of males is doubled that of the female for savings of RM200,000 or more. Expectedly, respondents with no education or primary registered the highest proportion with EPF savings of less than RM25,000 while of those with at least a post-secondary education having the highest proportion of EPF savings of at least RM200,000. While there was no significant difference across age and ethnicity, respondents who were still working at the time of the survey reported a significantly higher proportion than respondents who were not working as the savings amount increases from RM50,000 to more than RM200,000.

EPF members, upon reaching age 55, have the option to withdraw all of their savings, partly withdraw or not withdrawing any. The data indicate that overall 33% of the respondents withdrew all of their savings, 42% made partial withdrawals while 26% did not withdraw any. It is interesting to note that the proportion of respondents who withdrew all and who did not withdraw any decrease with an increasing amount of their EPF savings (Table 8).

Subsequently, EPF savings at age 55 were regrouped into two categories; savings of less than RM200,000 and savings of at least RM200,000. This cut-off point was used to examine the factors associated with having a sufficient amount of savings for retirement which is slightly lower than the figure estimated by the EPF. Logistic regression was performed using these two categories of EPF savings as the dependent variable. The independent variables include sex, age, education, and withdrawal amount and the result is shown in Table 9. Three significant factors are observed, namely, income, education, and withdrawal amount made before age 55. Respondents with a current income of RM3,000 and more are about 4 times more likely to have EPF savings at least RM200,000 compared to respondents with income lower than RM3,000 monthly income. Higher educational attainment is also significantly associated with a higher likelihood of EPF savings while the withdrawal of less than RM25,000 made before age 55 is less likely to be associated with high savings.

Current EPF Savings and Assets. When asked whether they still have savings in the EPF account at the time of the survey, 75.4% of the total respondents admitted so. Among respondents who still have savings in their EPF account, about 18% of the respondents reported having at least RM200,000 (Table 10).

In terms of other savings and assets owned, more than 90% of the respondents owned a house and other properties while 41% reported having other savings and 30 % shares or insurance (Table 11).

Table 7

EPF Savings at age 55 by gender, age and ethnicity

Variable	<RM 25,000	RM 25,000 – RM 49,999	RM 50,000 – RM 99,999	≥RM 200,000	Chi-square test
Gender					
Male	117 (23.2)	57 (11.3)	71 (14.1)	152 (30.2)	35.119**
Female	96 (40.7)	26 (11.0)	42 (17.8)	37 (15.7)	
Age Group					
55 – 59 years	124 (27.7)	50 (11.2)	68 (15.2)	120 (63.5)	1.18
60 and above	89 (30.5)	33 (11.3)	45 (15.4)	69 (23.6)	
Ethnicity					
Malay	110 (31.7)	34 (9.8)	55 (15.9)	93 (26.3)	9.999
Chinese	69 (25.1)	32 (11.6)	39 (14.2)	72 (26.2)	
Indian & others	34 (28.8)	17 (14.4)	19 (16.1)	24 (20.3)	
Education level					
Primary/No schooling	80 (64.0)	14 (11.2)	15 (12.0)	6 (4.8)	193.515**
Secondary	106 (26.6)	48 (12.1)	74 (18.6)	72 (18.1)	
Form 6/Pre-U/Diploma	17 (15.7)	11 (10.2)	14 (13.0)	48 (44.4)	
Tertiary	8 (7.5)	10 (9.4)	9 (8.5)	63 (59.4)	
Working Status					
Yes	105 (24.5)	43 (10.0)	75 (17.6)	112 (26.2)	14.555**
No	108 (34.6)	40 (12.8)	38 (12.2)	77 (24.7)	

Table 8

EPF savings at age 55 by withdrawal status at age 55

Savings at age 55	Withdraw all	Partly withdraw	No withdrawal	Total (%)
<RM 25,000	86 (40.4)	55 (25.8)	72 (33.8)	213 (100.0)
RM 25,000 – RM 49,999	30 (35.3)	31 (36.5)	24 (28.2)	85 (100.0)
RM 50,000 – RM 99,999	34 (30.1)	53 (46.9)	26 (23.0)	113 (100.0)
RM 100,000 – RM 199,999	41 (29.1)	68 (48.2)	32 (22.7)	141 (100.0)
≧RM 200,000	50 (26.6)	102 (54.3)	36 (19.1)	188 (100.0)

Table 9

Logistic regression of EPF Savings at age 55 (Less than RM200,000 vs. at least RM200,000)

Variable	Adjusted Odd Ratio	95% CI	p-value
Male	1.460	0.784 – 2.720	0.233
Income RM3,000 and more	3.768	1.985 -7.152	0.000
50 – 59 years	0.858	0.475 – 1.547	0.610
Education attainment			
Primary or No schooling (Reference)	-		
Secondary	4.480	1.277 – 15.718	0.019
Form 6 / Diploma / Pre-University	20.884	5.413 – 80.576	0.000
Tertiary	8.943	2.375 – 33.676	0.001
Withdrawal before age 55			
No withdrawal (Reference)	-		
Withdrawn less than RM25,000	0.289	0.125 – 0.670	0.004
Withdrawn RM25,000 – RM100,000	0.757	0.364 – 1.571	0.454
Withdrawn RM100,000 and above	1.916	0.831 – 4.417	0.127

Table 10

Respondents' current savings in EPF

Current savings	Frequency	Percentage
Yes	581	75.4
No	190	24.6
Total	771	100.0
Amount of savings		
<0 - RM 24,999	207	37.8
RM 25,000 – RM 49,999	73	13.3
RM 50,000 – RM 99,999	80	14.6
RM 100,000 – RM 199,999	88	16.1
RM 200,000 – RM 399,999	60	11.0
RM 400,000 – RM 599,999	20	3.7
RM 600,000 or more	19	3.5
Total	547	100.0

Note: 34 respondents did not respond to savings amount

Table 11

Other savings and assets owned by respondents

Asset*	Frequency	Percentage
House and other properties	716	92.9
Savings other than EPF	327	41.2
Land and inheritance	177	22.9
Shares	144	18.7
Insurance	86	11.2

Note: *Multiple answers

Subsequently, total asset values were calculated for each respondent and its distribution by the amount of EPF savings is shown in Table 12. There is a huge variation in the number of assets owned within each category of EPF savings. While the minimum values did not differ by much, the maximum values vary from RM3.6 million to RM18.7 million with the medians ranging from RM240,500 for respondents having less than RM25,000 savings in EPF to RM780,000 for those having at least RM200,000 EPF savings. 50% of the respondents who did not disclose their current EPF balance and those with zero balance had at least RM300,000 in total assets. However, among the respondents with zero EPF balance, about 7% of them

reported not having any other savings or assets. The skewness of the distribution of total assets by EPF current balance can be observed in the boxplot as shown in Figure 3.

Table 12

Distribution of total assets by current EPF savings

Variable	>RM0 - <RM25K	RM25K – <RM50K	RM50K - <RM100K
Frequency	172	67	74
Minimum	5,000	5,000	3,000
Q1	110,200	190,000	153,750
Median	240,500	300,000	305,000
Q3	515,625	600,000	552,500
Maximum	18,700,000	9,102,000	3,600,000

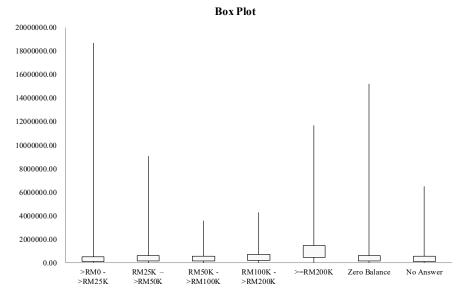| Variable	RM100K - <RM200K	>=RM200K	Zero Balance	No Answer
Frequency	85	93	175	30
Minimum	20,000	2,000	1,000	20,000
Q1	232,500	490,000	152,000	118,650
Median	450,000	780,000	300,000	367,500
Q3	700,000	1,475,000	618,000	585,000
Maximum	4,300,000	11,700,000	15,200,000	6,510,000

Figure 3. Distribution of total assets by current EPF savings

DISCUSSION AND CONCLUSIONS

This study examined savings and withdrawals among Employees Provident Fund (EPF) members aged 55 years and older. Data were collected using a structured questionnaire face-to-face interview survey at selected EPF counters throughout Malaysia. Close to 60% of the respondents were working at the time of the survey with about 85% of them continued to work beyond the retirement age of 60. While this does not necessarily indicate that majority of respondents feel that they have insufficient savings for retirement, it does however suggest that many of them were not against working productively even after retirement.

The data showed that 80% of the respondents made some withdrawal before age 55 with about 84% withdrew less than RM100,000. The proportion of withdrawals made at age 55 decreased to about 73% with 67% withdrew less than RM100,000. The lower proportion of respondents that made a withdrawal at age 55 compared to before age 55 suggests that the balance remaining in their EPF savings may be too small or negligible after the initial withdrawal, therefore discouraging them to make further withdrawal.

It is encouraging to note that 27% did not make any withdrawal and that only one-third of the respondents withdrew all of their EPF savings upon reaching age 55. It is also encouraging to know that withdrawals were put to good use namely to buy property, pay for children's education, and pay off housing and car loans.

About 75 % of the total respondents and 78 % among those who did not make any prior withdrawal had less than RM200,000 in their EPF accounts at age 55. Expectedly male respondents and those who were still working had a significantly larger amount of savings than female respondents and those who were not currently working, respectively. This suggests that only a quarter will have the minimum amount to survive another 15 to 20 years after retirement which explains the high proportion of respondents who continue to work beyond the retirement age of 60. While current EPF balance indicates that only 18% of the respondents reported having savings of at least RM200,000, majority of them owned houses and other properties as well as had savings elsewhere. It can be said in general that many respondents seemed to be cash poor and asset rich although there was a huge variation with respect to the value of their total assets.

High income, high educational attainment, and the amount of withdrawal made before 55 were found to be a high predictor for having higher EPF savings at 55. Respondents who earned RM3,000 and more were about 4 times more likely to have EPF savings of at least RM200,000 or more. Since better education can also be associated with higher income earned, it is not surprising to find that education plays an important role in determining the level of income and in turn, EPF savings. However, the data indicates that respondents who made a withdrawal of less than RM25,000

before age 55 were less likely to have higher EPF savings compared to no withdrawal suggesting that their accumulated savings have been low over the years.

Although the EPF Act allows full withdrawals at age 55, the data showed that majority of the respondents either withdrew partially or did not withdraw at all upon reaching age 55 which suggests that withdrawals would only be made when there is a need. Assuming that members retire at 60, those aged 55 will have another five years of contribution to their EPF savings and that any withdrawals made are spent towards accumulating assets for the future. Undoubtedly, some form of intervention from the state is needed to assist the small proportion of those who are left with nothing in their EPF accounts and do not have any disposable assets or other savings.

There have been several suggestions made to completely disallow withdrawals before 55 or to increase the age of withdrawal from 55 to 60 to ensure members have higher final balance savings at their retirement. While both suggestions would definitely help members to have a longer time to contribute and therefore accumulate more savings, the introduction of either policy with EPF might be too controversial or unpopular among the public for EPF to consider to be implemented. More opportunities should be made available to older persons to work long beyond the mandatory retirement age should they wish to continue working.

These discussions also bring forward another important predicament faced by Malaysians, which relates to the income structure. Experts claimed that majority of Malaysian earn insufficient salaries in comparison to their cost of living (The Star Online, 3 Nov 2019). With a high proportion of the salaries earned being spent on living expenses, many cannot afford to save more. Malaysian government recently announced an increase in the minimum wage from RM1,100 to RM1,200. Even though the increment is small and unlikely to have a major impact on retirement savings, it made a long way to improve the overall financial security of Malaysians and help alleviate the rising cost of living.

More worrying is the concern with respect to old age savings among private-sector employees and those working in the informal sector. Recently the EPF introduced a voluntary contribution scheme for owners of a sole proprietorship, self-employed persons, business partners, and retired workers, however, participation among these groups has been quite low and slow. Greater participation in voluntary saving schemes such as the Private Retirement Scheme (PRS), a voluntary long-term savings and investment scheme can help individuals save more for retirement. The government also recently introduced an incentive of RM1,000 to eligible members to encourage people to save more for retirement purposes. More efforts are also needed to improve financial literacy among citizens, particularly on awareness to start savings early.

LIMITATION OF STUDY

Given that the data collection for this study was obtained from members conducting transactions at EPF counters, it only captured information from members who visited the EPF during the data collection period. There was also the difficulty in obtaining the actual amount of EPF balances and withdrawal made since the majority of respondents were reluctant to divulge the information and some respondents had difficulty in recalling the exact amount.

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APPENDIX 1

SURVEY ON THE SAVINGS ADEQUACY AMONG RETIREES IN MALAYSIA: ISSUES AND OPTIONS 2015

Sila tanda atau isikan jawapan di tempat kosong yang disediakan.
Please tick or fill in the blanks in the space provided.

BAHAGIAN A: Maklumat Latar belakang
SECTION A: Background Information

1. Kad Pengenalan/IC No: _____

2. Emel/*Email*: _____

3. Negeri kediaman /*State of residence*: _____

4. Umur /*Age*: _____

5. Jantina/*Gende*r: Lelaki/*Male* [   ]   Perempuan/*Female* [   ]

6. Kumpulan etnik/*Ethnicity*: Melayu/*Malay* [   ]   Cina/*Chinese* [   ]

                            India/*Indian*   [   ]   Lain-lain/Others [   ]

7. Tahap pendidikan/*Education level*:

   Rendah/Tiada pendidikan formal   [   ]   *Primary/None*

   Menengah   [   ]   *Secondary*

   Tingkatan 6/ Pra-Universiti/ Diploma   [   ]   *Form 6/Pre-University/Diploma*

   Ijazah ke atas   [   ]   *Degree and above*

8. Status Perkahwinan/*Marital status*:

   Tidak pernah berkahwin [   ] *Never married*

   Sudah Berkahwin   [   ] *Married*

   Duda/Janda   [   ] *Widowed*

   Bercerai/Berpisah   [   ] *Divorced* / *Separated*

Jika tidak pernah berkahwin, terus ke BAHAGIAN B
If never married, proceed to SECTION B

9. Bilangan anak /*Number of children*:   _____ (Bil./Number)

  a) Berapa ramaikah yang masih bersekolah? _____ (Bil./*No*)
    Of these, how many are still in school?

  b) Berapa ramaikah yang sudah bekerja?   _____ (Bil/No).
    How many are working?

BAHAGIAN B: Maklumat Pekerjaan
SECTION B: Employment

1. Adakah anda bekerja sekarang/*Are you working now*?

Ya /*Yes* [   ]   Tidak / No [   ]

JIKA MASIH BEKERJA

2a. Di sektor manakah **anda bekerja ketika ini**?
    Are you working for?

Kerajaan /badan berkanun	[ ]	*Government/statutory body*
Sektor Swasta	[ ]	*Private sector*
Bekerja sendiri	[ ]	*Self-employed*

3a. Sekiranya anda bekerja dalam sektor swasta/bekerja sendiri, dalam industri apakah anda bekerja?
If you are working in private sector/self-employed, in what industry are you working?

Pembuatan dan pembinaan	[ ]	*Manufacturing and construction*
Runcit dan borong	[ ]	*Retail and wholesale*
Perkhidmatan	[ ]	*Services*
Restoren dan catering	[ ]	*Restaurant and catering*
Pengangkutan dan Lojistik	[ ]	*Transportation and logistics*
Perkhidmatan Kewangan	[ ]	*Financial services*
Teknologi Maklumat	[ ]	*Information technology*
Hiburan/seni	[ ]	*Entertainment/arts*
Lain-lain	[ ]	*Others*

4a. Berapakah gaji bulanan/pendapatan anda termasuk elaun?
    What is your monthly salary, including allowances?   RM_____

5a. Pada umur berapakah anda berhasrat untuk bersara?
At what age do you intend to retire?

Umur/*Age*: _____ tahun/*years*
atau / or
Saya akan bekerja selagi saya mampu [   ] *I will work as long as I can*

6a. Adakah anda fikir anda masih perlu bekerja kerana…
Do you think you still need to work after retirement because…

Untuk menampung kehidupan selepas bersara   [   ] *To sustain your living after retirement*
Ingin terus menyumbang tenaga kerja   [   ] *To continue contributing to the workforce*
Memang suka bekerja   [   ] *I enjoy working*
Lain-lain   [   ] *Others*
Jika lain-lain, sila nyatakan /*If others, please state*:_____

JIKA TIDAK BEKERJA

2b. Di sektor manakah anda bekerja sebelum ini?
   Were you *working for?*
Kerajaan /badan berkanun [   ]   *Government/statutory body*
Sektor Swasta   [   ]   *Private sector*
Bekerja sendiri   [   ]   *Self-employed*
3b. Sekiranya anda bekerja dalam sektor swasta/bekerja sendiri, dalam industri apakah anda bekerja?
   If you were working in private sector /self-employed, in what industry were you working?

Pembuatan dan pembinaan [   ]   *Manufacturing and construction*
Runcit dan borong   [   ]   *Retail and wholesale*
Perkhidmatan   [   ]   *Services*
Restoren dan catering   [   ]   *Restaurant and catering*
Pengangkutan dan Lojistik [   ]   *Transportation and logistics*
Perkhidmatan Kewangan   [   ]   *Financial services*
Teknologi Maklumat   [   ]   *Information technology*
Hiburan/seni   [   ]   *Entertainment/arts*
Lain-lain   [   ]   *Others*

4b. Berapakah gaji bulanan terakhir anda, termasuk elaun?
What was your last drawn monthly salary, including allowances?
         RM _____

5b. Pada umur berapakah anda berhenti bekerja?
At what age did you stop working?
   Umur/ *Age:* _____ tahun/*years*

6b. Adakah anda sedang mencari pekerjaan?

Are you looking for a job?

  Ya / *Yes* [   ]   Tidak / *No* [   ]

BAHAGIAN C: Pengeluaran dan Pengunaan Simpanan KWSP
SECTION C: Withdrawal and Utilization of EPF Savings

JIKA ANDA BERUMUR 55 TAHUN KE ATAS, JAWAB SOALAN 1 – 10
JIKA TIDAK, TERUS KE SOALAN 11

IF YOU ARE AGED 55 AND OVER, ANSWER QUESTION 1 TO 10
IF NOT, PROCEED TO QUESTION 11

1a. Pernahkan anda mengeluarkan simpanan KWSP anda **sebelum** berumur 55 tahun?

 *Have you ever withdrawn your savings from EPF **before** age 55?*

        Ya/ *Yes* [   ]   Tidak/ *No* [   ]

Jika tidak, terus ke Q3
If no proceed to Q3

 b. Jika Ya, berapakah jumlah pengeluaran anda ketika itu?

   If Yes, how much did you withdrew at the time?

   Kurang dari / *Less than* RM 25,000   [   ]
   RM 25,000 – RM 49,999   [   ]
   RM 50,000 – RM 99,999   [   ]
   RM 100,000 – RM 199,999   [   ]
   RM 200,000 – RM 399,999   [   ]
   RM 400,000 – RM 599,999   [   ]
   RM 600,000 atau lebih */or more*   [   ]

2. Apakah tujuan pengeluaran anda? (Pelbagai jawapan)

What were the reasons for the withdrawal? (Multiple Responses)

   Untuk membeli hartanah/mengubah suai rumah [   ] *To buy property/renovate house*
   Untuk melangsaikan pinjaman rumah/kereta   [   ] *To settle housing/car loan*
   Untuk membiayai pendidikan anak   [   ] *To pay for children's education*
   Untuk membiayai perbelanjaan perubatan   [   ] *To pay for medical expenses*
   Untuk melabur dalam unit amanah   [   ] *To invest in unit trust*
   Lain/lain   [   ] *Others*

Jika lain-lain sila nyatakan/ *If others please specify*: _____

3. Apabila **anda mencapai umur 55 tahun**, berapakah jumlah simpanan KWSP anda ketika itu?

   *When you **reached age 55**, how much did you have in EPF?*

   Kurang dari / *Less than* RM25,000   [   ]
   RM 25,000 – RM 49,999   [   ]
   RM 50,000 – RM 99,999   [   ]
   RM 100,000 – RM 199,999   [   ]
   RM 200,000 – RM 399,999   [   ]
   RM 400,000 – RM 599,999   [   ]
   RM 600,000 atau lebih /*or more*   [   ]

4a. Ketika itu, adakah anda:
    At that time, did you:

   Mengeluarkan keseluruhan simpanan   [   ]   *Withdraw all your saving*
   Mengeluarkan sebahagian simpanan   [   ]   *Withdraw part of your saving*
   Tiada pengeluaran   [   ]   *No withdrawal*

Jika tiada pengeluaran, terus ke Q10 di ms. 7 / *If no withdrawal, proceed to Q10 at pg. 7*

 b. Berapakah jumlah pengeluaran anda ketika itu?
    How much did you withdrew at that time?

   Kurang dari / *Less than* RM 25,000   [   ]
   RM 25,000 – RM 49,999   [   ]
   RM 50,000 – RM 99,999   [   ]
   RM 100,000 – RM 199,999   [   ]
   RM 200,000 – RM 399,999   [   ]
   RM 400,000 – RM 599,999   [   ]
   RM 600,000 atau lebih /*or more*   [   ]

5. Apakah tujuan pengeluaran anda? (Pelbagai jawapan)
What did you use the money for? (Multiple responses)

   Untuk membeli hartanah/mengubah suai rumah [   ] *To buy property/renovate house*
   Untuk melangsaikan pinjaman rumah/kereta   [   ] *To settle housing/car loan*
   Untuk membiayai pendidikan anak   [   ] *To pay for children's education*

Untuk membiayai perbelanjaan perubatan	[ ]	*To pay for medical expenses*
Untuk melabur ke unit amanah	[ ]	*To invest in unit trust*
Untuk menunaikan ibadah haji/umrah	[ ]	*To perform hajj or umrah*
Lain/lain	[ ]	*Others*

Jika lain-lain sila nyatakan/ *If others please specify*: _____

6. Berapakah **baki yang masih tinggal** daripada pengeluaran KWSP tersebut?
*How much **do you still have** from the money that you withdrew from EPF?*

Tiada baki / *Nothing left*	[ ]
Kurang dari / *less than* RM 25,000	[ ]
RM 25,000 – RM 49,999	[ ]
RM 50,000 – RM 99,999	[ ]
RM 100,000 – RM 199,999	[ ]
RM 200,000 – RM 399,999	[ ]
RM 400,000 – RM 599,999	[ ]
RM 600,000 atau lebih / *or more*	[ ]

7. Sekiranya <u>tiada baki</u> yang tinggal di Q6, berapa lamakah masa yang diambil untuk anda menggunakan keseluruhan simpanan EPF?
    If <u>nothing left</u> in Q6, how long did it take you to use up all the EPF savings?

Kurang dari 3 tahun	[ ]	*Less than 3 years*
3 hingga ke 5 tahun	[ ]	*3 to less than 5 years*
5 hingga 10 tahun	[ ]	*5 years to 10 years*
Lebih dari 10 tahun	[ ]	*More than 10 years*

8. Adakah anda masih mempunyai simpanan dalam KWSP?
Do you still have saving in EPF?   Jika tidak, terus ke **Bahagian D**
Ya / *Yes* [   ]   Tidak / *No* [   ]   *If no, proceed to **Section D***

9. Berapakah jumlah simpanan yang anda masih ada dalam KWSP?
    How much saving do you still have with EPF?

Kurang dari / *Less than* RM 25,000	[ ]
RM 25,000 – RM 49,999	[ ]
RM 50,000 – RM 99,999	[ ]
RM 100,000 – RM 199,999	[ ]
RM 200,000 – RM 399,999	[ ]
RM 400,000 – RM 599,999	[ ]
RM 600,000 atau lebih / *or more*	[ ]

10. Untuk baki yang masih tinggal dalam KWSP, bagaimanakah anda merancang untuk mengeluarkannya?

For the balance that you have in EPF, how do you plan to withdraw it?

Sekaligus   [   ] *Lump sum*
Pengeluaran bulanan   [   ] *Monthly*
Pengeluaran bila perlu   [   ] *As and when needed*

Value for Money of Retirement Insurance Plans in Malaysia with Consideration of Longevity Factor

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ABSTRACT

The rising cost of pensions as a result of longevity risk is an emerging global issue. In Malaysia, the mortality rate has gradually improved over time and consequently, the old-age dependency ratio has also increased. Thus, there is a need to further develop voluntary retirement schemes, such as annuities, in Malaysia to help retirees sustain their retirement income. However, the Malaysian private pension market is very small and there is a lack of understanding of the products among retirees. This study aims to calculate the value for money of retirement insurance products in Malaysia based on age and gender. The value for money calculation provides financial information to assist customers in selecting their optimal plan upon retirement. The value for money calculation was performed using the money's worth ratio (MWR) approach. Mortality rates are projected using the Lee-Carter model to account for longevity risk. The findings comprise the MWR values calculated for two private retirement products available in the Malaysian market, where one features an investment-linked component and the other is a deferred annuity. Our findings show that the plain deferred annuity gives a significantly higher

value for money than the investment-linked product for all ages and both genders.

INTRODUCTION

Population ageing is a demographic change phenomenon that affects future retirement costs as retirees are expected to spend increasing amounts of time in retirement. The longevity risk associated with the improvement of mortality rates everywhere in the world is a global issue causing uncertainty in future retirement costs. Asher and Bali (2015) summarised the multi-pillar retirement system in Malaysia as follows: i) defined benefit plans – the government pension scheme, ii) defined contribution plans – the Employees' Provident Fund (EPF), and iii) voluntary schemes – annuities, private pension, and retirement insurance plans. They underscored the role of the financing mix in managing retirement spending. Owing to the huge increase in the projected old-age dependency ratio from 6% in 1990 to 13% in 2021, pension costs have continued to increase in recent years, creating a financial burden for public pension fund providers (Park & Shin, 2011). Policymakers are looking for better ways to sustain pension funds and a financing mix comprising defined benefit and defined contribution plans appear promising for the future. On top of that, retirees' awareness of private retirement insurance plans is also

crucial in providing sufficient retirement income to avoid retirees outliving their assets.

Currently, in the decumulation phase, the EPF allows retirees to choose how to manage their retirement savings without any restriction on how they convert the fund to a stream of income during retirement. The EPF allows lump-sum withdrawal upon retirement as well as offering several withdrawal schemes for health and education purposes before retirement. Therefore, it is important for EPF members to effectively manage their retirement savings by considering all available retirement-linked instruments in the market. For instance, the purchase of annuities or any retirement-linked insurance product is currently completely voluntary and based on the retiree's decision. Low financial literacy among retirees makes the development of voluntary retirement schemes challenging. Alexandrova and Gatzert (2019) highlighted this low financial literacy as one of the reasons for the low annuity demand in the market. Thus, understanding the value for money of such products is critical in educating future retirees for optimally managing their retirement funds.

Analysis of the value for money of retirement insurance products such as annuities has long been discussed in the literature, mainly within the context of developed countries. The concept of the money's worth ratio (MWR) was first introduced by Mitchell et al. (1999) for

evaluating the value for money of life annuities available in the US private market in 1995. According to Milevsky (2013), at least three dozen research articles published in the past two decades have examined the MWR of annuities in countries ranging from Singapore to Chile. A recent study by Aquilina et al. (2017) analysed the MWR of life annuities in the UK following the ban on gender-based price discrimination in the UK.

In the Asian region, our literature search found only two countries for which MWR results have been published namely, Singapore and Malaysia (Asmuni & Purcal, 2018; Fong et al., 2014). This is because the retirement insurance plan market is immature in this region, where most countries are categorized as developing. For developing economies in the region such as Malaysia, the market for innovative retirement products to help mitigate longevity risks, such as annuities and longevity bonds, is very small. Asmuni and Purcal (2018) reported on the history of the annuity market in Malaysia, which was suspended in 2001 because of mis-selling issues and a lack of understanding of the product. Subsequently, annuities only returned to the market a decade after their suspension.

Nevertheless, the demand for annuities has traditionally been very low in Malaysia. The penetration rate for annuities in Malaysia was close to zero over the past decade. Annuities represent only 0.75% of the total number of policies in force for direct insurers in 2018 (Central Bank of Malaysia,

2019). In contrast, the take-up rates in Chile and Switzerland are high with a significantly growing number of policies sold over time. In Chile, almost two-thirds of all retirees do annuities whilst in Switzerland, only around 10 to 30 percent of all individuals cash out their pension (Bütler & Staubli, 2010; Rocha & Thorburn, 2007). Thus, further research is urgently needed to support the development of voluntary retirement schemes in this country.

The aim of this work is to build on prior research by calculating the value for money of the retirement insurance products that were available on the private Malaysian market in 2018 based on age and gender. The longevity factor is incorporated in the analysis by taking into account the improvement in the mortality rate over time using the Lee-Carter model. This is the first study to evaluate the value for money of retirement insurance products where one features an investment-linked component (Product A) and the other is a deferred annuity plan (Product B). We consider these two products owing to their distinct features, where Product A provides a yearly retirement income based on the retiree's investment allocation decision. In particular, a retiree may choose to invest some proportion of their pension fund into a high-risk investment fund over the insurance term. Thus, the expected return of Product A depends on this investment decision. On the other hand, Product B provides a fixed yearly retirement income determined at the time of purchase with no option for retirees

to choose their investment allocation. This value for money calculation and comparison will contribute to improving the financial literacy of retirees, thus helping them in selecting the optimal plan upon retirement.

METHOD

The MWR approach was applied to evaluate the worthiness of a retirement insurance purchase. This concept has been used widely in economics to evaluate the value for money of annuity products (Brown, 2003; Fong, 2011; Ganegoda & Bateman, 2008). Intuitively, the MWR formula calculates the value of a benefit received as a ratio of a dollar premium paid for the insurance product. The MWR formula used in the analysis is outlined below:

$$MWR = \frac{EPDV}{P} \qquad [1]$$

where $EPDV$ is the expected present discounted value of all benefits covered by the product and P is the premium paid for the product. $EPDV$ is calculated as follows:

$$
\begin{aligned}
EPDV &= \sum_{t=0}^{y-x} v^t \ _tp_x^{\overline{11}} A_t \\
&+ v^t \ _{t-1}p_x^{\overline{11}} \ _1p_{x+t-1}^{12} B_t \\
&+ v^t \ _{t-1}p_x^{\overline{11}} \ _1p_{x+t-1}^{13} B_t.
\end{aligned} \qquad [2]
$$

The $_1p_x^{12}$ value is the transition rate from State 1 (healthy) to State 2 (total permanent disabled, TPD), whereas the $_1p_x^{\overline{11}}$ is the probability of retirees staying in State 1 (healthy) in a year. In the event of survival, the annuity stream of income A_t will be paid. On the other hand, if TPD (State 2) or death (State 3) occurs, the insured will receive a lump-sum benefit payment of B_t. The age at purchase is represented by x whilst y represents the age at which the last payment is made. Equation [2] is applied separately for males and females for ages at purchase of 30, 40, and 50 years.

The mortality rate is estimated based on population mortality data from 2000 to 2016 obtained from the World Health Organization (WHO) and the total permanent disability rate is estimated from data in the World Report on Disability (WHO, 2011). Owing to the limited amount of publicly available data, we assume a stationary rate for the TPD transition rate. A time-inhomogeneous multiple states Markov model is applied to estimate these rates (Haberman et al., 1997; Rickayzen & Walsh, 2002). We follow the conversion method reported by Gatenby (1991) to estimate the TPD state transition rate from prevalence data. Figure 1 illustrates the Markov model developed in our analysis.
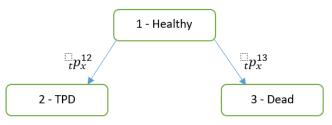

Figure 1. Markov model for retirement insurance products

Retirement Insurance Products

A distinct element that differentiates Product A from Product B is that Product A comprises an investment-linked component where some proportion of the premium paid will be invested in a high-risk investment fund. Though such products offer the opportunity for higher returns, the variability is also high owing to exposure to investment risk. Thus, the income payment stream depends on the performance of the investment fund. Furthermore, the product also offers a lump-sum payment for TPD or a death benefit. On the contrary, Product B is a deferred annuity product that pays a stream of annuity income without investment options. TPD or death benefits are also offered. The premium and benefit payment illustrations for both products are presented in Appendix 1 and 2. For Product A, the projected investment returns of X% and Y% are provided by the insurance company together with the projected benefit associated with each investment return. In this sales quotation, the company assumes that 25% of the premium paid is allocated to an equity fund (high risk) whilst the remaining 75% is allocated to a bond fund (low risk). For Product B, the benefit illustration is fixed with no choice of investment offered to the customer.

Mortality Factors

The mortality rates are projected using the well-known Lee-Carter mortality projection model, as shown in equation [3] (Lee & Carter, 1992). Since the data obtained from the WHO is in age group categories, the Heligman-Pollard formula is applied to convert the age group mortality to a single age mortality rate (Heligman & Pollard, 1980; Ibrahim & Siri, 2011; Kostaki, 1991).

$$\ln(m_{x,t}) = a_x + b_x k_t + \varepsilon_{x,t} \qquad [3]$$

where $m_{x,t}$ is the central death rate of age x in year t, and the vectors a, b, k are estimated by finding the least square solution using the singular value decomposition (SVD) method. The R statistical software codes used to solve the vectors can be found in Appendix 3. A forecast package is applied in our coding to project the mortality rates (Hyndman et al., 2019).

RESULTS

The fitted mortality rates for the Malaysian male and female populations are shown in Figure 2 and Figure 3, respectively. The sum of squared error obtained from the fitting procedure using the Lee-Carter model is close to zero for all ages and both gender categories, which indicates that the model fits well with the Malaysian mortality rate data.

These rates are then projected to the year 2088 to match our assumption of the maximum life span of 100 years old. If a customer purchases a retirement insurance plan at the age of 30 in 2018, the consumer will reach the age of 100 in 2088.

The MWR values are calculated for Products A and B for purchase ages of 30, 40, and 50 years for each gender category. For Product A, the investment-linked part of the product allows the customer to choose the proportion of the premium to be

allocated to high-risk investments, such as equity. Thus, the investment returns vary depending on the investment performance of the selected portfolio. In this paper, the calculations are performed based on the projected returns provided by the company arising from favourable (X% annually) and less favourable market conditions (Y% annually). On the other hand, the assumption of interest rates used for the valuation of Product B valuation is based on the risk-free rate of return obtained from the Malaysia Government Securities' return. The MWR values for Products A and B are shown in Table 1 and Table 2, respectively.
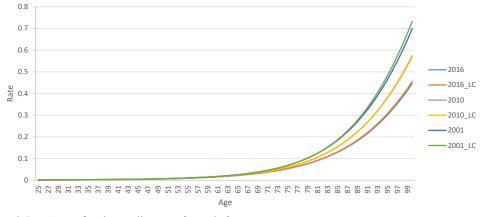
Figure 2. Lee-Carter fitted mortality rates for males[1]

1   The empirical mortality rate data is labelled using the base year of the observed mortality rate whereas the fitted mortality rate obtained from the Lee-Carter model is labelled as 'year_LC'.
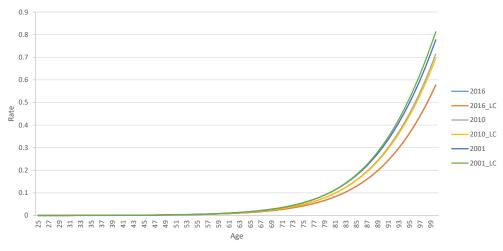
Figure 3. Lee-Carter fitted mortality rates for females[1]

Table 1

The money's worth ratio (MWR) values of Product A

Age	Male		Female	
	X%	Y%	X%	Y%
30	0.4671	0.7212	0.4561	0.7157
40	0.4878	0.7313	0.4670	0.7210
50	0.5138	0.7429	0.4772	0.7231

Table 2

The money's worth ratio (MWR) values of Product B

Age	Male	Female
30	1.0123	1.0383
40	1.0192	1.0365
50	0.9628	0.9708

DISCUSSION

The MWR value represents the expected benefit received per dollar of premium paid for the insurance product. A value of greater than 1 means that the expected benefit is higher than the premium, indicating that the product offers very good value for the money. However, in the insurance market, most private or profit-based companies offer products with premium charges called loading fee to cover administrative costs, commission, and profit allocation. Milevsky (2013) summarised the MWR values of annuities calculated in developed countries including the US, the UK, Canada, and Australia. All of these countries have MWR values below 1, ranging from 0.814 to 0.965 and 0.852 to 0.937 for males and females, respectively. In addition, a study by Fong et al. (2014) showed that the MWR value for a life annuity purchased from a commercial insurer in Singapore was on average 0.948 and 0.957 for male and female categories respectively in 2007. Thus, it is not unusual to have an MWR value of less than 1. A lower MWR value indicates that a higher loading fee needs to be paid to receive the expected benefit from the product.

Based on Table 1, given an expected return of X% where the annual return is on average 7.4%, assuming favourable market conditions, the value for money of Product A is very low for all ages for both male and female categories. Thus, consumers would be better off investing their premium in the market without purchasing the product. On the other hand, the value for money is about 30% higher if the expected return of Y% is applied. The rate of return Y% is expected to be 3.5% on average, close to Malaysia's average annual risk-free rate of return. The MWR value increases with age, showing no

incentive for purchasing the product at an early age. Since Product A is an investment-linked retirement product, the MWR value ranges from 0.46 to 0.74 depending on the expected return.

In contrast, the value for money of Product B is about 5% and 7% higher for males and females, respectively, for the purchase age 30 in comparison to purchase age 50, showing an incentive for purchasing at an earlier age. MWR values higher than one for ages 30 and 40 for both genders indicates that the product offers very good value for money to consumers. The MWR value for the age 50 category is also good since it is only slightly less than 1 and comparable to other countries' results. Overall, Product B has a higher value for money for all categories compared to Product A based on the MWR approach.

Let us now focus on the MWR results for both products according to gender. For Product A, the MWR value is slightly lower for females. Conversely, for Product B, the MWR value is slightly higher for females. This finding is supported by the projected benefits of both products. For the same premium, product B offers slightly different TPD and death benefits for females as compared to males. In our calculation, this resulted in a higher EPDV of benefit value (as calculated using equation [2]) for the female category, whilst Product A offers exactly the same benefit regardless of gender. Our results indicate that the equalised benefit provision favours insured

males owing to the higher mortality rates for males as compared to females. The projected mortality rates for males are higher in comparison to females, especially with increasing age, as shown in Figure 2 and Figure 3. Thus, males are more likely to receive the TPD, or death benefit is higher. If equalised benefit and premium charges are imposed for both genders, this will become favourable for prospective male buyers.

Overall, our findings provide two important lessons for potential insurance buyers. First, the investment-linked product considered in this paper, which we called Product A, offers benefits that are heavily weighted on the TPD and death benefit. The projected yearly income of RM3,500 is rather small in comparison to the yearly income offered under Product B (refer to Appendix 1 and 2). It is well explained in the literature that the purpose of purchasing a retirement insurance product is to counteract improving mortality rates or the so-called longevity risk for retirees (Alexandrova & Gatzert, 2019; Asmuni & Purcal, 2018; Fong et al., 2014; Milevsky, 2013). Thus, such retirement products should offer benefits that are heavily weighted towards yearly income since the likelihood of receiving this income increases with increasing longevity. This is also an important input for actuaries working on retirement product design for insurance companies.

Second, the low value for money of Product A can also be explained by the high loading fees associated with the product

(which include the yearly fund management charges[2]). These kinds of expenses are not payable under the deferred annuity product. Thus, even though some consumers prefer to have flexibility in choosing their investment funds, they have to be aware of the charges associated with this option.

CONCLUSION

Population ageing has become an indisputable issue over the past decade since mortality rates have improved quite substantially almost everywhere. The expected increase in years spent in retirement requires proper financial knowledge to optimally plan for a sustainable retirement income. To date, the market for innovative products offering retirement benefits to mitigate the longevity risk is still small in Malaysia. As the population ageing issue becomes more prevalent, the demand for innovative retirement products is also expected to increase. Future retirees should be equipped with appropriate financial knowledge on such products to make good decisions for their retirement planning.

In developed countries, the study of the value for money of retirement insurance plans such as annuities has been a central focus in the literature. However, owing to the limited market for such products in Malaysia, few studies have been carried out in this country. Thus, this study aimed to analyse the value for money of the

retirement insurance products available on the private market in Malaysia in 2018 using the MWR approach. Mortality rates were projected using the Lee-Carter model to incorporate longevity risk in the analysis.

Based on the products currently available in the Malaysian market, we found a significant difference in the MWR values of the two retirement insurance products, one featuring an investment-linked component and the other being a deferred annuity. In conclusion, the deferred annuity offers higher value for money for retirees of all ages in both male and female categories. Hence, it provides a reliable and good-value retirement income for retirees. The retirement insurance plan with an investment-linked component has low value for money owing to two factors, the heavily weighted TPD and death benefit as compared to the yearly retirement income and the higher loading fees, which include the fund management charges.

Our results offer some important insights for potential insurance buyers and providers. A retirement insurance plan should concentrate on providing the highest possible yearly retirement income (based on the premium paid) in order to cope with improving mortality rates. This will offer a retirement plan with good value for money that is worth purchasing. In addition, potential buyers should be aware of the additional charges that come in exchange for the flexible choice of investments offered under a retirement product with an investment-linked component. Even though there is the potential for higher

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2 According to the sales illustration provided by the insurance company, the fund management charge is 1.5% (as a percentage of invested funds) for the equity fund and 1.0% for the bond fund.

returns associated with risky investments, these returns are not guaranteed and the benefits received will depend entirely on the investment fund's performance. Our results are limited to the analysis performed using the projected returns and benefits provided by the insurance company in the sales illustration. The company assumes that 25% of the premium paid is allocated to high-risk investments (equity funds) whilst the remaining 75% is allocated to low-risk investments (bond funds).

The analysis in this paper only considered retirement insurance plans that are currently available on the private market in Malaysia. There is a huge gap in the voluntary retirement schemes market in Malaysia in comparison to other developed countries. In particular, the products currently offered by insurers only provide a yearly retirement income for a limited-term, such as 10 years. Although such products offer additional income protection upon retirement; it does not solve the major issue of longevity risk for retirees. The uncertainty regarding the amount of time spent in retirement may leave retirees with no income at all if they live longer than expected. Clearly, there is room for further development of voluntary retirement schemes, such as nominal life annuities or inflation-indexed life annuities that pay a yearly retirement income for the duration of the retiree's life.

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APPENDICES

Appendix 1

Illustration of benefit payment for males[3]

Age	Product A			Product B	
	Annuity Income	TPD/Death (X%)	TPD/Death (Y%)	Annuity Income	TPD/Death
30	3500	61091	41500	14762	53709
40	3500	61091	41500	10412	42241
50	3500	60704	41500	6887	27572

Appendix 2

Illustration of benefit payment for females[3]

Age	Product A			Product B	
	Annuity Income	TPD/Death (X%)	TPD/Death (Y%)	Annuity Income	TPD/Death
30	3500	61091	41500	14762	53918
40	3500	61091	41500	10412	42265
50	3500	60704	41500	6887	27523

3   A premium charge of RM50,000 was used in the analysis are for both products, where Product A requires payment on a single premium basis and Product B requires an annual premium of RM5,000 for 10 years. The TPD or death benefit shown is an average annual payment. Data extracted from Sales Illustration obtained from both companies.

Appendix 3

R Code for Lee–Carter Mortality Projection

```
# extract mortality data from Excel file Msia_Deathrate_Male.csv
x <- scan(file="Msia_Deathrate_Male.csv", what = "character", skip = 1, sep = ',')
x.mat <- matrix(x, ncol = 18, byrow = TRUE)
mx <- x.mat[1:76, 2:18]
mx <- matrix(as.numeric(mx), nrow = 76, ncol = 17)
Age <- c(seq(length=76, from=25, to=100))
Year <- 2000:2016
dimnames(mx) = list(Age, Year)
n <- nrow(mx) # number of ages
m <- ncol(mx) # number of years
# Transpose data and get deaths and logrates
mx <- t(mx)
lograte <- log(mx)
# Do SVD
ax <- apply(lograte,2,mean) # ax is mean of lograte by column
clograte <- sweep(lograte,2,ax) # central log rates (with ax subtracted) (dimensions
m*n)
svd.mx <- svd(clograte)
# Extract first principal component
sumv <- sum(svd.mx$v[,1])
bx <- svd.mx$v[,1]/sumv
kt <- svd.mx$d[1] * svd.mx$u[,1] * sumv
# Forecasting kt - Fit kt using ARIMA model (0,1,0)
library(forecast)
fitkt <- Arima(kt,order=c(0,1,0),include.drift=TRUE)
kt.drift <- fitkt$coef
fitmx <- function (kt,ax,bx)
# Derives mortality rates from kt mortality index, following the Lee-Carter method
{clogratesfit <- outer(kt, bx) logratesfit <- sweep(clogratesfit,2,ax,"+") logratesfit}
logfit <- fitmx(kt,ax,bx)
dimnames(logfit)=list(Year, Age)
exp(logfit)
# Calculate the fitted value squared error
mxfiterror <- (exp(logfit)-mx)^2
# Project kt year 2017:2088
```

Appendix 3 *(Continued)*

```
y <- 1:72
kt.forecast <- kt[17] + (y*kt.drift)
Year.forecast <- 2017:2088
logfit.forecast <- fitmx(kt.forecast,ax,bx)
dimnames(logfit.forecast)=list(Year.forecast, Age)
logfit.forecast
# Combine actual and forecast logfit
all.logfit <- rbind(logfit,logfit.forecast)
fitrate <- exp(all.logfit)
write.csv(data.frame(fitrate),file="output_fitrate_mortmale.csv")
```

Legal analysis on the Right to Livelihood for Stateless Persons in Malaysia

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ABSTRACT

In Malaysia, there are various communities that have stateless persons in their midst. As the Malaysian government is not a party to the Convention Relating to the Status of Stateless Persons 1954, these individuals have limited rights or no rights within the State. Of all rights that individuals are entitled to, the right to livelihood would be one of the more important rights. Unfortunately, the Federal Constitution of Malaysia does not expressly provide for this right to livelihood for all persons living in the State. However, a liberal interpretation of existing law is possible. There have been instances where judges employed a liberal approach to the interpretation of provisions of the Federal Constitution of Malaysia. This study attempted to analyse the current position of stateless persons in relation to the right to livelihood in Malaysia by applying the concept of livelihood through a liberal interpretation of the right to life under art 5 of the Federal Constitution of Malaysia. The research encompassed a content analysis of international law, domestic law (including the Federal Constitution), and theories of incorporation of international law into the domestic sphere. The research further delved into the possible inclusion of the right to livelihood for stateless persons through the liberal construct of law in Malaysia.

Keywords: Conventions, livelihood, refugees, stateless

INTRODUCTION

The Federation of Malaysia is one of the States that has taken strides in attempting to reduce statelessness within its jurisdiction. Although the term 'statelessness' or 'stateless person' is used within the international

sphere, this term does not feature within the Federal Constitution of Malaysia. A stateless person is one 'who is not considered a national of any state under the operation of its law'. This is according to the Convention Relating to the Status of Stateless Persons 1954 (Stateless Persons Convention). Whilst the international system of law uses the term 'nationality', the domestic system through the Federal Constitution proffers the term 'citizenship'. The refugee on the other hand would be one who is persecuted in his / her home state for reasons of race, religion, nationality, has a membership of a particular social group or political opinion, and thus unable to receive protection from his / her home state. This is provided for in art 1A (2) of the Convention Relating to the Status of Refugees 1951 (Refugees Convention). Due to the finer points of international and domestic definitions, communities in Malaysia who are dealing with statelessness are distinctively categorized, as evident in the discussion below.

Communities such as the Rohingya, Non-citizen Indians, Sabah stateless have in this decade been successfully identified and recognized as either being stateless or at risk of statelessness. Rohingya, have been considered both refugee and stateless due to citizenship laws effected by the military junta in the 1970s and 80s in Myanmar. The non-citizen Indians have had problems in relation to their documentation in Malaysia from the time of Malaysian Independence but have been recently clearly categorised as stateless by virtue of the Malaysian Indian Blueprint 2017. The Sabah situation,

on the other hand, is complex as there are varied circumstances of statelessness within the communities in Sabah: there are for example refugees from the Philippines who received IMM13 immigration status in Sabah; children of migrants born in Sabah with births unregistered; illegal immigrants with undocumented families and the Bajau Laut who live in territorial waters.

Although the Indian community has been quite clearly categorised as stateless through domestic policy, the same is not true for all stateless persons in Malaysia. As such, each stateless community should be addressed distinctively. Whilst groups of stateless persons continue to be identified; and effort is being taken to register these groups and provide them with some legal recourse, the fact remains that until they are capable of acquiring citizenship as provided for in the Federal Constitution of Malaysia, they are eschewed from enjoying all the rights available to the Malaysian citizen. For purpose of this paper, the focus will be on the right to livelihood, which remains one of the most important second-generation rights. This study attempts to analyse the law in relation to livelihood for stateless persons in Malaysia. International and domestic law on livelihood is analysed. The analysis is supported by further evaluation of theories in relation to the incorporation of international law within the domestic sphere. The thesis of the paper suggests that stateless persons residing in Malaysia could be entitled to the right to livelihood through the liberal interpretation of domestic law and the incorporation of international law

rules. The terms right to work, employment, and livelihood are used interchangeably. Within the Federal Constitution of Malaysia, the term livelihood is used since the term employment is not present as an individual right in the constitution. International law uses the terms of employment or work in international conventions.

LITERATURE REVIEW - THE RIGHT TO LIVELIHOOD IN INDIA, MALAYSIA AND THE INTERNATIONAL SYSTEM

Articles 5 – 13 of the Federal Constitution of Malaysia provide for nine pertinent fundamental liberties encompassing both civil and political rights as well as economic, social, and cultural rights. The Malaysian constitution does not specifically use the term human rights, but rather uses the term 'fundamental liberties'. Thio (2009) contrasted this with the later Westminster based constitutions influenced by the European Convention on Human Rights (ECHR) and subsequent European Court of Human Rights jurisprudence. In the case concerning the Bermuda Constitution i.e. Minister of Home Affairs v. Fisher (1980) the court highlighted that emphasis on the ECHR only took place after 1960 with the independence of Nigeria. Art. 5 of the Federal Constitution of Malaysia provides for the right to life. It stipulates that "no person shall be deprived of his life or personal liberty save in accordance with the law". There have been cases that have stretched the meaning of the right to life to include the right to livelihood. Malaysian courts refer to Indian jurisprudence as art.

21 of the Indian Constitution 1949 is *in pari materia* (similar) to art. 5 of the Federal Constitution of Malaysia. Referring to Indian cases, the case of Francis Corlie v. Union Territory of Delhi (1981) held that the right to life included the right to live with human dignity and all that goes along with it. This would include the bare necessities of life such as adequate nutrition, clothing, and shelter over the head and facilities for reading, writing and expressing oneself in diverse forms, freely moving about, mixing and commingling with fellow human beings. It further stated that the right to life includes basic needs and the right to carry on such functions and activities as constituting the bare minimum expression of the human-self. In the case of Olga Tellis v. Bombay Municipal Corporation (1986), pavement dwellers contended that they had a right to live. Furthermore, one cannot exercise this right without the means of livelihood. The right to life is illusory without a right to the protection of the means by which life can be lived. Life and livelihood go hand in hand in India. Later cases, such as State Of U.P v. Charan Singh (2015) still refer to the case of Olga Tellis v. Bombay Municipal Corporation (1986).

In Malaysia, the seminal case on point would be the case of Tan Tek Seng v. Suruhanjaya Perkhidmatan Pendidikan (1996) where Gopal Sri Ram, JCA stated:

> They (Judges) should, when discharging their duties as interpreters of the supreme law, adopt a liberal approach in order to implement the true

intention of the framers of the Federal Constitution. Such an objective may only be achieved if the expression "life" in art. 5(1) is given a broad and liberal meaning. Adopting the approach that commends itself to me, I have reached the conclusion that the expression "life" appearing in art. 5(1) does not refer to mere existence. It incorporates all those facets that are an integral part of life itself and those matters which go to form the quality of life. Of these are the right to seek and be engaged in lawful and gainful employment and to receive those benefits that our society has to offer to its members.

In the case of Ketua Pengarah Jabatan Alam Sekitar & Anor v. Kajing Tubek & Ors (1997), the term "deprivation of life" under art. 5(1) of the Federal Constitution of Malaysia included the right to livelihood. Deprivation of a clean environment results in deprivation of livelihood, which in turn results in deprivation of life. The term is twice removed.

Clean environment = livelihood
= life.

The case of Pihak Berkuasa Negeri Sabah v. Sugumar Balakrishnan (1998) revolved around the cancellation of a re-entry permit into Sabah. This affected the right to livelihood of the respondent. Gopal Sri Ram JCA in the Court of Appeal cited his own judgment of the case of Tan Tek Seng v. Suruhanjaya Perkhidmatan Pendidikan

(1996) and was of the view that "'life' and 'personal liberty' are both equally dynamic concepts and should be treated in like fashion".

Other cases include Lembaga Tatatertib Perkhidmatan Awam v. Utra Badi (2000). In this case, tarnishing the reputation of the appellant affected the right to life according to Gopal Sri Ram JCA. In Nor Anak Nyawai v. Borneo Pulp Plantation Sdn. Bhd. (2001) according to Ian HC Chin J, customary land rights fell under the right to livelihood. The interpretation of the right to life here is again twice removed from the core right. While in Lembaga Tatatertib Perkhidmatan Awam v. Utra Badi (2000) case, right to life encompassed the right to live with common human dignity, in Nor Anak Nyawai v. Borneo Pulp Plantation Sdn. Bhd. (2001), the right to life encompassed the right to livelihood which in turn encompassed the right to customary land rights.

In the Federal Court decision of Pihak Berkuasa Negeri Sabah v. Sugumar Balakrishnan (2002), Mohd Dzaiddin FCJ was of the view that art. 5 should be read as a whole and disagreed with the Court of Appeal interpretation of the right to life. Nevertheless, cases post Pihak Berkuasa Negeri Sabah v. Sugumar Balakrishnan (2002) paint a different picture. In Sivarasa Rasiah v. Badan Peguam Malaysia & Anor (2010) it was decided that "other freedoms may be found embedded in the 'life' and 'personal liberty' limbs of art. 5". Gopal Sri Ram FCJ gave Tan Tek Seng v. Suruhanjaya Perkhidmatan Pendidikan (1996) case a breath of fresh air in the case Lee Kwan

Woh v. Public Prosecutor (2009) where it was held that art. 5 (1) is meant to be prismatically read together with art.8.

Relying on *dictum* from the cases of Tan Tek Seng v. Suruhanjaya Perkhidmatan Pendidikan (1996), Sivarasa Rasiah v. Badan Peguam Malaysia & Anor (2010), and Lee Kwan Woh v. Public Prosecutor (2009), in the case of Muhamad Juzaili bin Mohd Khamis and Ors v. State Government of Negeri Sembilan and Ors. (2015), Mohd Hishamudin CJA provided a stretched interpretation of the right to life when three transgender individuals were detained for crossdressing. It was asserted that the law, in that case, s.66 of the Syariah Criminal Enactment 1992 (NS) prevented the appellants from moving in public to reach their places of work and as such rendered the right to livelihood illusory.

Looking at international law, the conventions on human rights are both general conventions that cover the international community at large and specific conventions that cater to groups such as stateless persons, women, and children. General conventions such as the International Covenant on Civil and Political Rights 1966 (ICCPR 1966) and the International Covenant of Economic, Social and Cultural Rights 1966 (ICESCR 1966) cover first and second generational rights respectively. Art. 6 of the ICESR 1966 provides for the right to work. This right is for all human beings and not limited to citizens alone. Art. 7 stipulates that the State should recognise the right of everyone to just and favourable conditions of work. However, a study conducted by Refugee International on stateless persons of Bangladesh, Estonia, and United Arab Emirates (UAE) showed that lack of citizenship and identification cards led to unemployment, underemployment, and lower salaries (Lynch, 2005).

The Stateless Persons Convention, bespoke to persons who are stateless as of the law, offer rights of employment. The articles referring to the right to employment are the right to wage-earning employment (art. 17 of the Stateless Persons Convention 1954), self-employment (art. 18 of the Stateless Persons Convention 1954), and liberal profession (art. 19 of the Stateless Persons Convention 1954).

The Convention on the Reduction of Statelessness 1961 is another convention aimed at ensuring the reduction of future statelessness in a State party to the convention. It ensures that all children born in a State acquire nationality either based on the *jus sanguinis* (decent of parents) or *jus soli* (by birth) rule.

In spite of its lack of accession to the general human rights conventions and the conventions on stateless persons, Malaysia is party to a number of Human Rights Conventions that cover specific groups of persons. According to Tikamdas (2006), accession to international conventions, such as the Convention on the Elimination of Discrimination against Women 1979 (CEDAW 1979) and the Convention on the Rights of the Child 1989 (CRC 1989) show proof of Malaysia's commitment towards protecting all persons whether documented or not.

Malaysia became a party to CEDAW 1979 on 5 July 1995. Art. 11 of the CEDAW 1979 provides that "States Parties shall take all appropriate measures to eliminate discrimination against women in the field of employment in order to ensure, on a basis of equality of men and women, the same rights". Particular rights include the right to work as an inalienable right, the same employment opportunities, free choice of profession and employment, equal remuneration, social security, and protection of health.

The spirit of the Convention is rooted in the goals of the United Nations: to reaffirm faith in fundamental human rights, in the dignity, and worth of the human person, in the equal rights of men and women. The operational words of art. 1 being "on a basis of equality of men and women".

The Malaysian government acceded the CRC 1989 on 17 Feb 1995. The CRC in its art. 32 protects children from work that threatens the health of the child. The State has the responsibility of protecting the child and ensuring that there is a minimum age requirement. As such, the State regulates the work conditions for children.

METHOD

This conceptual paper focusses on the plight of the stateless person in Malaysia and the possible right to livelihood based on the provision of the law. The study is via library research and cumulative synthesis. Extant literature on the right to livelihood is uncovered through the systematic study of case law. The study employed content analysis of current laws and methods of interpretation of constitutional law. There is a comparative analysis of Indian cases. The Indian Constitution provides fundamental liberties similar to what exists in Malaysia. The paper focusses on the right to life and the stretching of the interpretation of this right to include the right to livelihood. The study examined both international and domestic laws. The research juxtaposed the right to employment within international law with the right to livelihood as provided for within the domestic constitutional setting.

In terms of reception of international law into the domestic system, the transformation and incorporation doctrines apply. These doctrines form the theoretical basis of the analysis. Conventions would need to be acceded to and incorporated as part of the domestic law. Customary international law on the other hand does not necessarily apply automatically. As there is a conservative reception of international laws within Malaysia, these theories are juxtaposed with the more liberal construct of the federal constitution through case law. As such, judicial interpretation techniques were examined.

The interchangeable use of the terms 'livelihood', 'work' and 'employment' is evident in this research. Domestic interpretation of the right to life includes livelihood thereby positioning it as the domestic term used. International law conventions on the other hand seem to use the terms 'work' or 'employment'. ICESCR

1966 uses the term 'work' whereas in the Stateless Persons Convention 1954 uses 'employment'.

In the course of conducting this research, certain limitations were identified. There is criticism as to the usage of the doctrinal research method for this type of study. Doctrinal research is viewed in a negative light. Most critics use the term 'arm chair research' to describe doctrinal research. This implies that the researchers are detached from the populations aggrieved. There is a realization that research studies in the field of law should not be confined to pure legal matters (Yaqin, 2007). The researchers are of the view that doctrinal research is more suitable in instances where the focus of the research lies in the constitutional concept of the right to livelihood and international law provisions rather than the stateless populations. The main purpose of the research was to focus on the rights that could be made available to the stateless person and to strengthen the right so that all persons regardless of their status as stateless were able to enjoy rights and privileges that were usually only made available to citizens. The predominant purpose of the study, therefore, was to come up with an effective and inclusive interpretation of the right to livelihood as encompassed in domestic constitutional law.

The second limitation is the lukewarm reception of international law within the domestic sphere. Although there are many articles internationally that provide for the right to livelihood, the reality paints a very different picture. Most Asian states are not party to all the conventions and even if they are, operationalising the provisions in their ideal form may not be feasible. International law articles in turn are very general and do not provide clear guidelines as to how a State is going to realise a particular right. Hence the theory and the practice may not be all that aligned when it comes to international law incorporation into the domestic sphere.

The decision to conduct a doctrinal study leads to a separate issue whereby the right to livelihood is generalised for all stateless groups. Therefore, it may not address the intricacies of each stateless group effectively. Whilst one group of stateless individuals may need to depend heavily on the broad /liberal interpretation of the right to life, other groups may not require this as there may already be integrated network systems within the community that provide for livelihood in an informal manner. Identifying individual groups' needs demands individual socio-legal studies for each group and may be research better suited for collaboration with social scientists. Foster and Lambert (2016) acknowledged that the lack of empirical data did challenge the global protection of stateless persons. In spite of its small geographical size, lack of empirical data appears to be a problem in Malaysia as well.

RESULTS

The Federal Constitution of Malaysia, as young as it is, has not incorporated the right to livelihood as a clear standalone right. Furtherance of social human rights was not part of the important scheme of things

back when the Reid Commission drafted the Federal Constitution. Countries such as Malaysia and Singapore that acquired independence before the 1960s do not use the term human rights, but can still benefit from the liberal interpretation of their respective constitutions using judicial interpretative techniques.

In terms of case law in Malaysia, the court utilised judicial interpretative techniques and employed a liberal interpretation of the right to life. This is seen in the case of Tan Tek Seng v. Suruhanjaya Perkhidmatan Pendidikan (1996). Although the case specifically referred to a public service officer who is a citizen of the State, nevertheless the phrase 'members of a society' as used in the case would include stateless persons who live in society. This is buttressed by the fact that the word person incorporated in art. 5 is a clear indication that the article refers to citizens and non-citizens alike (Faruqi, 2008).

Although there are no cases on the right to life and the stateless person to-date, it can be deduced that such a stretched interpretation of the word 'life' covers what it means and who it benefits. As such all persons ought to enjoy the right to livelihood in the State as long as their existence in the State is not tainted with illegality.

Within its context, one notes that art. 5 of the Federal Constitution of Malaysia does contain a proviso that relates to immigration. Detention of a person is usually for no more than twenty-four hours. Within that timeframe, he/she will appear before a magistrate. However, it is possible for a non-citizen to face detention for up to 14 days (art. 5(3)).

Divergent viewpoints may crop up in relation to this provision. Firstly, is to interpret the proviso to mean that stateless persons would fall into the category of an illegal immigrant and therefore be eschewed from a liberal construct of art. 5 of the Federal Constitution of Malaysia. At the other end of the spectrum, the contention is that stateless persons form a specific category of persons who are not merely immigration offenders. *De jure* stateless persons (stateless persons as of law) such as Palestinians and the Rohingya have acquired a certain level of status in the country due to the backing of the UNHCR and other organisations. Other stateless persons that are *de facto* stateless (stateless as of fact) such as the undocumented Indians have been recognised as stateless via policy. Governmental/organisational efforts are already underway to ensure that these individuals acquire documentation. As such the stateless would be the 'non-citizens' other than those caught for immigration offences and therefore ought to benefit from the liberal interpretation of art. 5. As it stands, no cases form a clear principle of law that stateless persons are entitled to the right to livelihood in their State of residence via art. 5 of the Federal Constitution of Malaysia. This stretched interpretation of 'life' remains an idea rather than a tangible expression of rights.

The concept of rule of law within the international system of law on the other hand clearly envisages the thick conception,

which readily provides for rights to all human beings. International law provides various provisions safeguarding the right to livelihood through conventions. Unlike domestic law, international law provides a platform to protect non-citizens in ways that rarely differentiate them from citizens (Opeskin, 2016).

All human beings ought to enjoy fair remuneration, safe, and healthy working conditions, rest, and leisure. Currently, only citizens are able to exercise these rights. Since the provisions of the Stateless Persons Convention are not considered as customary international law, the convention is dependent on State accession. Malaysia has yet to accede to this convention. Even if provisions on the right to work were part of customary international law, it may not bind Malaysia as Malaysia generally subscribes to the pure dualist doctrine of incorporation of international law within the domestic sphere. For international customary law to apply, there must be a transformation of custom into domestic law (*PP v. Rajappan*, 1986).

Analysis of the Reduction of Statelessness Convention 1961 revealed that children of refugees and stateless parents would acquire nationality within Malaysia thereby slowly eliminating the issue of stateless persons in Malaysia. Based on art. 14 of the Federal Constitution of Malaysia, it is evident that Malaysia applies the *jus sanguinis* principle, which means that citizenship is acquired by the descent of parents. However art. 14(1) (b)

read together with Part II, s.1 para (e) of the 2nd Schedule of the Federal Constitution of Malaysia stipulates that every person born within the Federation who is not a citizen of any other country are citizens of Malaysia by operation of law. These safeguards would address statelessness.

Referring to CEDAW 1979 and CRC 1989, the focus of CEDAW 1979 is not the woman citizen but all women, which raises the presumption that the convention provides the platform to ensure all women in the State regardless of citizenry or non-citizenry as our case may be are entitled to work. Further analysis of the convention, in particular art. 1 of CEDAW 1979 however described otherwise.

The operational words of art. 1 of CEDAW 1979 being "on a basis of equality of men and women". The focus of CEDAW is not to provide rights as such but to provide equality of rights. This indicates that if the stateless man does not receive the right to employment, then the right is not available to the stateless woman as well. This statement is repeated in art. 11 of CEDAW, which refers to the employment rights of women. As such, although CEDAW does provide for the right to employment, it remains illusory to the stateless woman unless and until this right is available to men. Art 32 of the CRC 1989 on the other hand serves as a protective provision rather than a rights-based provision. From this analysis, one deduces that the only conventions that Malaysia has acceded to containing provisions on women and children's right

to employment are not coterminous with the right of employment for the stateless person.

DISCUSSIONS

Evaluating why stateless persons acquire minimal rights and protection within the State of residence, Weiner (1993, as cited in Lilienthal et al., 2015) surmised the perception as follows: stateless persons are threats to 1) the State that they have come from, 2) the State of residence and 3) the relationship between the two states. Firstly, they would be a threat if they have arrived whilst opposing the regime of the home State and the resident State may use them as a military threat. Secondly, the resident State may perceive them as a threat to security. Furthermore, they may be a cultural and socio-economic threat within the resident State. This sense of unease comes from the higher echelons of government right down to the citizens of the State (Lilienthal et al., 2015). Due to the perception of threat rather than an opportunity, States like Malaysia are reluctant to accede to conventions that provide rights to these stateless communities. The 'securitarianism' approach is employed (Dean et al., 2015). Migration in general (which includes movement of stateless persons) can be viewed as a threat to national security (Metelev, 2016). Regional bodies such as ASEAN consider emigration as a right but immigration as a matter of national sovereignty and security (Petcharamesree, 2016). Both Feller (2006) and Nathwani (2000) had criticized the approach whereby securitarianism trumps humanitarianism.

Popular misconceptions that take place within strict immigration control include the mischaracterization of those in need of asylum. Stateless communities are not given rights as statelessness is sometimes seen as a consequence of illegal migration especially in relation to the Sabah stateless in Malaysia.

It is only very recently that the government has chosen to classify certain communities as having stateless persons in their midst, the first being the Indians who are earmarked as stateless in the Malaysian Indian Blueprint (Prime Minister's Office, 2017) of the former government. There are as of yet no governmental policies clearly categorizing other groups (like the Rohingya community and the Sabah stateless) as stateless and providing the communities rights based on this categorization.

There is a general reluctance to see statelessness as a Malaysian problem (Allerton, 2017). For example, rather than focus on the statelessness of Sabah children, the media tends to focus on the fact that they are street children (Allerton, 2017). Further, Chai (2019) stated that public discourse revealed that there was a guarded approach to the stateless issue. This is due to a misunderstanding that if citizenship is resolved for any stateless person in Malaysia, then all stateless persons will have access to citizenship regardless of their link to the State.

Internationally, statelessness has failed to emerge as an issue that attracts the attention of the general parlance. Kingston (2009) was of the view that the story of

statelessness failed to emerge due to three factors. Firstly, the story of statelessness is difficult to construct. A clear image of a stateless person does not develop in the mind of society and the narrative on statelessness is not easy to understand. Stories on refugees and street children are more graphic and well received by the media. Secondly, the issue lacks credible solutions at a global level. Various causes of statelessness exist and each cause may require a separate solution. The Rohingya, stateless Indians and Sabah stateless could be classified as stateless due to different factors and would require different methods of resolving the issue of statelessness. There is difficulty in creating awareness about the message. Thirdly, there is a lack of political will because there is a close link between statelessness and the concept of sovereignty thereby causing the home ministry to focus on security rather than rights. The politics of invisibility exist for certain persons in Malaysia who lack legal status (De Vries, 2016). Lack of visibility coupled with a reluctance to classify persons as stateless makes it difficult to earmark persons entitled to the right to livelihood.

As such, two propositions emerge:

1. It is when the government recognizes statelessness through policies, that the individual enjoys citizenship rights encompassing the right to livelihood.

2. The conduit to livelihood would be through citizenship and not statelessness since the government of Malaysia recognizes very few communities as stateless (clearly only the Indians at present) and Malaysia has not acceded to the relevant conventions providing for rights and reduction of statelessness. Therefore, these conventions do not apply.

The term 'livelihood' is used in the propositions as a reference is specifically made to the Federal Constitution in analyzing applicable domestic law. The question arises as to who determines which rights are to be safeguarded and why is it some rights may be eschewed? There has been a longstanding debate within human rights scholarship about a hierarchy of human rights (De Wet & Vidmar 2012). It is indeed a step in the right direction that contemporary conventions contain the right to livelihood, although the term used is either the right to work or employment depending on which convention is being referred to. The breadth and width of application however remain as vague as in the case of interpretation of the Federal Constitution of Malaysia. In relation to the provisions of rights within the Stateless Persons Convention, there is no indication as to a hierarchy of rights. A stateless person may have priorities in terms of rights received. Priorities include the right to livelihood and housing in the State of residence. Extant literature does not reflect rights that are of a priority compared

to others. However, referring to the right to livelihood per se, in relation to minority conventions, more elementary rights, such as the right to residence and to work, were never touched (Arendt, 1976).

Malaysia does not provide for most of the rights to the stateless person. The only 1st generation rights provided include the right to religion under art. 12 and nationality for the newborn when art. 14(1)(b) is read together with Part II 1(e) of the Second Schedule of the Federal Constitution of Malaysia. Second-generation rights included, albeit on a piecemeal basis, is the right of administrative assistance through the UNHCR and rights to property theoretically as per art. 13 of the Federal Constitution of Malaysia. Although it is theoretically possible to protect stateless persons through domestic law, such laws have been of minimal effect in practical terms. Through the General Assembly Resolution 3274 (XXIX) of 1974 read together with art. 11 of the Reduction of Statelessness Convention 1961, the UNHCR has been given the mandate to deal with both refugees and stateless persons in the examination of their claims and presenting their claims to the appropriate authorities. It is recommended that an appropriate agency should be entrusted with the effective protection of stateless persons beyond reactive and non-functional tasks so far conferred upon the UNHCR (Goodwin-Gill, 1994). Malaysia is yet to be well equipped for accession to the Stateless Persons Convention as even States that have acceded to it for years do not necessarily comply with all

international treaty obligations (Bianchini, 2017). The UNHCR's focus and rightly so is on refugees residing in Malaysia. UNHCR does not have the mandate to negotiate on stateless persons' right to livelihood. Its mandate only covers the scope of art. 11 of the Reduction of Statelessness Convention 1961.

CONCLUSION

Based on the aforesaid analysis, there are ways in which stateless persons may enjoy the right to livelihood without having to be a citizen in the State. Theoretically, the law seems liberal enough for this safeguard to exist. Practical application of the law however confines the right of livelihood to the citizen of the State. The former Malaysian government tended to shy away from the issue of statelessness. In fact, the Former Home Minister did comment that Malaysia did not have stateless persons ("No Stateless People", 2015). However, statelessness is a gaping wound that will fester and one day explode if no entity addresses the matter as soon as possible. The current government has yet to look at opportunities for the stateless. Relevant conventions such as the ICESCR 1966, the Stateless Persons Convention 1954, and the Reduction of Statelessness Convention 1961 exist that allow stateless persons to enjoy rights within a State. The stateless residing in Malaysia may not benefit from international law since primary conventions on stateless persons do not apply in Malaysia. It would not be feasible to accede to these conventions as they provide a host of rights

for the stateless that the State may not be able to accommodate. Even if accession of the three conventions above takes place, the right to livelihood may not feature as a pertinent right within the hierarchy of rights. Although the UNHCR at present has the mandate to present a claim on statelessness to the appropriate authorities, the mandate does not reach as far as for the UNHCR to assist in facilitating the right to livelihood for the stateless person. The recommendation based on this analysis is for the executive to be cautious in terms of accession to conventions but the judiciary to be liberal in the interpretation of art 5 of the Federal Constitution of Malaysia. Until the government provides for some allowances for stateless individuals to work in this country or the judiciary stretches the liberal interpretation of the right to livelihood to include stateless persons, this group of individuals would have to rely on the mission of NGOs and the goodwill of civil society.

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Personal Data Protection in P2P Lending: What Indonesia Should Learn from Malaysia?

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ABSTRACT

The question raised in this study is how personal data should be protected and can solely be used for the commercial interests of one party, which is closely related to consumer protection. Specifically, it focuses on how Indonesian laws protect the abuse of personal data exchange, especially in peer-to-peer (P2P) lending platforms and how these laws compare with Malaysia's. The results show that in Indonesia, there are no clear regulations on personal data protection in P2P lending; it is regulated by unclear protective treatments and no strict sanction regarding personal data protection. EIT Law, GR 82, MOCI Regulation 20, and FSA 77/2016 cannot guarantee the validity and reliability of personal data protection. Indonesia should learn from Malaysia, mainly from its Personal Data Protection Act (PDPA) which not only protects personal data but also imposes sanctions and has been implemented since 2013. Therefore, P2P lending platforms operating in Indonesia must be required to comply with Indonesian laws and regulations that are relevant to their activities, location, and legal structure.

Keywords: Indonesia, Malaysia, personal data protection, peer-to-peer lending

INTRODUCTION

Legal violations of personal data are carried out by accessing, storing, and manipulating personal computers connected to the internet (Kantaatmadja et al, 2002). As a type of alternative finance, peer-to-peer (P2P) lending requires access to personal data (Mokhtarrudin et al., 2017). Loans offered through online platforms are cheaper than

traditional financial institutions (Ghazali, 2018).

The question raised in this study is how personal data should be protected and can only be used for the commercial interests of one party, which is closely related to consumer protection (Mateescu, 2015). The public should be made aware of the importance of the regulation of personal rights protection (privacy rights). The increasing growth of P2P lending platforms in Indonesia has given importance to conduct a study regarding personal data protection.

Conceptual Approach

The Definition of Peer-to-peer Lending. P2P lending platforms provide convenience in speed, data processing, accessibility, and other appliances compared to traditional financing (Pokorná & Sponer, 2016). However, this also implies that debtors in several segments can increase their dependency on this funding source (Carney, 2017). Investors in P2P lending are faced with a big risk as they are not professionals (Lee & Lee, 2012).

Data Protection in Peer-to-peer Lending. In P2P lending, the need for data protection must be doing to reduce the risk of other people's actions accessing and sharing personal data without consent (Zarza, 2015). An example of this is the case of Facebook facing charges regarding the use of unauthorized data (Editorial Board, 2019). In contrast, social media companies regularly collect and occasionally share user data (with consent) (Carney, 2017). To create an acceptable data protection strategy, a business needs to focus holistically on proactive and reactive activities that synergize with storage strategy developments, while having an effective backup or recovery strategy (De Guise, 2017).

The Comparison Between Indonesia and Malaysia in Data Protection on Peer-to-Peer Lending. In Indonesia, P2P lending is regulated through:

1. Law Number 11 of 2008 regarding Electronic Information and Transactions, as amended by Law Number 19 of 2016 (EIT Law).
2. Government Regulation Number 82 of 2012 regarding the Implementation of Electronic Systems and Transactions (GR 82).
3. Ministry of Communication and Information Technology Regulation No. 20 of 2016 regarding Personal Data Protection in Electronic Systems (MOCI Regulation 20).
4. Financial Services Authority (FSA) Regulation Number 77/POJK.01/2016 regarding Lending Services and Information Technology-Based Loans or Peer-to-Peer Lending Financial Technology (FSA 77/2016).
5. Bank Indonesia Regulation Number 19/12/PBI/2017 regarding Financial Technology Implementation (PBI 19/12/2017).

FSA 77/2016 regulates P2P loans made in Indonesian Rupiah (ABNR Counsellors at Law, 2017). The main parties involved in P2P lending are providers, debtors, and lenders, which are manifested in two types of electronically-conducted agreements, namely agreements between providers and lenders and agreements between lenders and debtors (ABNR Counsellors at Law, 2017).

Under Article 28 paragraph (3) FSA 77/2016, to ensure complete security of electronic document storage, Providers (Other Financial Services Institution) must participate in managing data security (Investasi Online, 2019).

However, to improve the quality of P2P Lending services, Providers can cooperate and exchange personal data with technology-based support service providers. The latter tends not to seek approval from data owners, which increases the risk of misuse of personal data exchange (Article 23 FSA 77/2016).

In contrast, Malaysia has established the protection of personal data through the 2010 Personal Data Protection Act (PDPA) which is successfully implemented in 2013 under the supervision of the Personal Data Protection Commission (PDPC) (Shahwahid & Miskam, 2015). To become P2P operators, companies must procure a license from the Malaysia Securities Commission (SC). SC licensed platforms are required to verify business propositions and creditworthiness to all potential publishers (iMoney.my, 2019). In May 2016, SC has regulated publisher and investment services that can participate in P2P through new guidelines in Chapter 13 (Securities Commission Malaysia, 2016b). Through this regulation, Malaysia becomes the first country in the ASEAN that regulate P2P lending (The International Comparative Legal Guides [ICLG], 2019b). In Malaysia, a fintech company must be: (1) an official or registered business as defined in the 2013 Financial Services Act and (2) an official business as defined in the 2013 Islamic Financial Services Act; or (3) a money services business as defined in the 2011 Money Services Business Act (Bank Negara Malaysia, 2016).

In Malaysia, The Central Bank of Malaysia (BNM) and SC are the main regulatory bodies that govern licensing and marketing requirements for fintech companies (Kandiah, 2019). There are two reforms to the regulation of fintech businesses in Malaysia. First, through the Financial Technology Enabler Group, BNM launched a Regulatory Sandbox in 2016. Second, it is based on the 2007 Capital Market and Services Law (Section 377 CMSA 2007) regarding digital asset guidelines. Therefore, digital currencies and tokens will be regulated by the SC so that they can eventually be used (Kandiah, 2019). The SC can conduct periodic assessments on the compliance of the IEO operator on any of its regulatory obligations and request documents and assistance (Securities Commission Malaysia, 2020). In 2016, the SC had established management responsibilities in dealing with cyber risks, including (1) maintaining the confidentiality and sensitivity of entity data; (2) protecting

information vulnerabilities and operating systems of the entity; (3) preventing existing and future cyber threats (Securities Commission Malaysia, 2016a).

Methods

This is normative legal research, a research methodology used to find legal rules, principles, or doctrines (Marzuki, 2005). This is also doctrinal research (Yaqin, 2008) with a comparative (Cruz, 1999; Soekanto, 1986), and statute approach (Marzuki, 2005) that reviews the laws and regulations related to personal data protection in both Indonesia and Malaysia in connection with P2P lending. Secondary legal resources are books or articles on P2P, data protection, and consumer protection studies written by scholars. The data gathered were then analyzed using the qualitative data analysis method.

RESULTS

Peer-to-Peer Lending Platforms

P2P lending has and will continue to exist and develop (Zhang et al., 2016), For example, Prosper.com facilitated $ 1 billion in funding and served more than 200,000 customers. The online P2P lending market can offset the risk of asymmetric information that often occurs in traditional financial institutions because it is highly decentralized without direct contact between debtors and lenders (Lin et al., 2009).

Likewise, P2P lending in Indonesia is developing at a rapid rate. There are several P2P lending platforms, including Klik ACC, Investree, Modalku, Money Friends, KoinWorks, Akselerasi, Danamas, Amartha, and DanaKita. These sites can help young entrepreneurs to obtain capital. In transactions, investors can choose prospective debtors according to their financial history and profile (Investasi Online, 2019).

In 2018, Lembaga Pendanaan, B2B Finpal, and Fundaztic hold the largest market shares in Malaysia. To date, Lembaga Pendanaan leads with more than RM 2.06 billion in funds raised. There are also several sharia P2P lending platforms including Nusa Kapital and microLEAP Islamic (Lim, 2019).

How Information Can be Freely Accessed by Everyone. Advances in information technology have made it possible for personal data to be accessed internationally by anyone. However, the principle of privacy must take precedence over the principles of freedom of information. In connection with the international aspect of transborder data flow (TDF (Munir, 1999), countries need international regulations on TDF (Kantaatmadja, 2002).

There are two types of privacy, namely informational privacy, and autonomous privacy. Informational privacy includes the right of individuals to determine which personal information will be conveyed to others, whether confidential or sensitive. Meanwhile, autonomy privacy guarantees individuals' rights and freedom to carry out activities without interference from other parties (Garner, 2004).

Privacy is a state or condition free from public outreach, including interference with one's decisions or actions. It is essential to protect individuals from external threats, such as harassment, ridicule, theft, manipulation, extortion, exclusion, and subordination (Petkovic & Jonker, 2007). Privacy and data protection are related articulations resulting from complex interplays of decisions, location choices, difficult to identify, and associated moments (Gutwirth et al., 2011).

In practice, privacy is a soft concept based on the public perception of risks and benefits. For example, public trust rises when using a credit card in online purchases; it provides a greater convenience compared to the potential risk of transaction data that may be misused (Schilit et al., 2003).

In the United States, personal rights can be referred to as the supervision of information dissemination on personal data, specifically the right to determine the use of personal data by the government. In Europe, personal rights is a matter of protecting personal data (Kantaatmadja, 2002).

How Personal Data Should be Protected.
Article 1 GR 82 regulates the protection, storage, maintenance of personal data. Furthermore, Article 2 paragraph (1) GR 82 regulates the protection of electronic personal data consisting of the collection, acquisition, transmission, processing, and destruction of personal data.

Article 2 paragraph (2) GR 82 regulates electronic system standards, and obtaining consent for confidential personal data, treatment of personal data as personal data, relevance to the purpose of obtaining, responsibility for collecting, processing, announcing, sending and disseminating personal data, including reporting to the data owner in the event of a data protection failure.

Personal Data Protection in Peer-to-Peer Lending in Indonesia

According to Article 29 of FSA 77/2016, providers must be transparent, fair, reliable, and trustworthy in protecting users and prioritize dispute resolution methods that are cheap, fast, and affordable. Likewise, Article 26 of FSA 77/2016 states that in addition to maintaining the confidentiality, integrity, and availability of personal, transaction, and financial data, providers must also notify users in the event of a failure to protect user data and confidentiality.

Articles 27 and 28 of FSA 77/2016 require operators to protect all components of information technology, secure P2P loans, provide monthly and annual reports, and carry out audits of all their activities.

Article 43 of FSA 77/2016 regulates restrictions on providers regarding the publication of fictitious and/or misleading information, offering something to users, and asking for payment when a user issues a complaint.

Article 47 FSA 77/2016 gives FSA the right to impose administrative sanctions in the form of written warnings and license revocation to providers who violate the rules.

MOCI Regulation 20 has not been able to protect personal data, especially on social media, online market places, and financial platforms (Editorial Board, 2019). Whereas in the European Union (EU), the European Commission since 1990 has proposed a Privacy Directive to regulate the use of personal data, as well as provisions concerning the right of subjects to request the deletion of data or the "right to be forgotten" which is regulated in the EU General Data Protection Regulation (Editorial Board, 2019) and were initially supported by 12 member countries (Madsen, 1992).

Article 30 of EIT Law only regulates the criminal act of illegally accessing someone else's electronic system (Chazawi & Ferdian, 2015). The unlawful nature of the actual action lies in the lack of permission from the owner of the electronic system, rather than the owner of personal data. Furthermore, "accessing" is defined as the activity of interacting with an established electronic system.

Therefore, Indonesian law does not regulate the protection and misuse of personal data (Suwana, 2018). Many P2P lending platform behaviors have contacted, threatened, and humiliated debtors (Editorial Board, 2019).

Personal Data Protection in Peer-to-Peer Lending in Malaysia

Fintech, such as equity crowdfunding (ECF) and P2P lending, provides technology convenience and benefits to the business world and provides cost-effective and efficient solutions to debtors (Kunhibava & Muneeza, 2020). In Malaysia, the SC functions to regulate fintech as an intermediary between business investors to provide investment and financing alternatives.

Meanwhile, personal data protection is regulated by the PDPA, passed by the Malaysian Parliament in 2010 (Hassan, 2012). According to section 5, PDPA regulates the principles of personal data protection in data processing, including general, notification and choice, disclosure, security, retention, data integrity, and access principles. Furthermore, data processing by third parties including data users, data processors, or people who are authorized in writing to process personal data under the direct supervision of data users is regulated in section 47.

In Malaysia, 97% of the total businesses consist of small and medium enterprises (SMEs) (ICLG, 2019c). SMEs in Malaysia, apart from getting financing from getting support from conventional and sharia banks. They are also supported by the Malaysian Security Berhad; and the Malaysian Government with the Malaysian SME Corporation through the 2012-2020 SME Master Plan (ICLG, 2019c).

All data users in Malaysia must comply with PDPA, including data users not established in Malaysia who process personal data using Malaysian equipment except for those that transit through Malaysia. Data users who transfer personal data outside Malaysia must understand and comply with the terms of data transfer

between the subject and the user for contract implementation, transfers for the summary performance of contracts between users and third parties, and data transfer agreements based on subjects (ICLG, 2019c). Section 4 of the PDPA regulates credit reporting based on the 2010 Credit Reporting Agent Act regarding commercial, investment, banking, financing, insurance, service, and agency transactions.

DISCUSSIONS

The protection of personal data in Indonesia is regulated separately in different laws and regulations, making it difficult to understand the scope of legal protections for personal data. Currently, data protection regulations overlap with one another. Providers can exchange data and cooperate with information technology-based support service providers to improve the quality of P2P lending, without any restrictions regarding the parties involved and the types of data being exchanged. Meanwhile, Article 47, FSA 77/2016 only applies to violations of obligations and restrictions but not to the protection of personal data as regulated in Article 23. Therefore, operators must take responsibility when P2P lending platforms want to announce and disseminate failed customer data through the use of certain applications to access and retrieve contact numbers, which is a legal violation of personal data protection.

Although the FSA is authorized to impose administrative sanctions on the operator, it may be imposed with or without prior administrative sanctions in the form of a written warning. Article 84 GR 82 does not apply sanctions for moral or civil violations, but only provides sanctions to those who commit administrative violations.

Criminal sanctions in Article 30 of the EIT Law are limited to the actions of anyone intentionally and without rights or unlawfully accessing computers and/or electronic systems in any way by violating, breaking through, surpassing, or breaking into security systems, being convicted with a maximum of 8 (eight) years of imprisonment and/or a maximum fine of IDR 800,000,000.00 (eight hundred million rupiahs).

To date, Indonesia does not have a legal rule concerning personal data protection. There are many cases of customer data misuse that occur in P2P lending. To conduct an assessment of prospective debtors, companies require thorough access to consumer phones, including telephone contacts. However, in some cases, contact access is used for billing (CNBC Indonesia, 2019). P2P lending providers collect crucial customer data, including sensitive personal information and financial records. They track online shopping and social media patterns for digital trace tracking. The data is then analyzed for marketing, sales, and data retrieval purposes such as creating a scoring system to determine customer profiles (Ng, 2018).

In contrast, the personal data protection laws in Malaysia are comprehensive and orderly that sanctions are quickly determined for violators through PDPA, including those that violate sensitive personal data

(Cieh, 2013) and cases related to fintech (Bromberg et al., 2017). PDPA adheres to the principles of the e-government security legal framework which includes general principles, disclosure, notification and choice, data integrity, security, retention, and data access (Sonny, 2012).

In a P2P application, the data distribution system is designed to provide control over data access and is shared with the participating community. Participants can share data bilaterally or multilaterally, using sophisticated platforms governed by the system. The decentralized data sharing model will create a new mechanism for exchanging trusted data among participants without requiring a single third party to handle the data. The main obstacle faced in this system is ensuring that participants actually share data (PDPC Singapore, 2019). In P2P lending, the operator is held responsible for the collection, assignment, and use of debtor data (Crowdfund talks, 2019).

To protect personal data, PDPA regulates the collection, use, and disclosure of personal data to recognize and balance the protection of individual rights with the need to collect, use or disclose personal data for purposes deemed appropriate by authorized individuals. This obligation is addressed to everyone who processes personal data and anyone who has control over or authorizes the processing of any personal data relating to commercial transactions conducted by Malaysian citizens using equipment in Malaysia, except for those that transit through Malaysia (Leong & Bakar, 2010).

Section 9 of the PDPA (Security Principles) states that data users must consciously protect their data, including taking practical steps. If processing is carried out by a data processor, the user is required to ensure the data processor must (1) provide adequate guarantees regarding technical security measures and the organization that govern the process, and (2) take reasonable action to ensure compliance with these steps (ICLG, 2019a).

The Personal Data Protection Commissioner ('Commissioner') is the main regulator that oversees data protection issues, appointed by the minister to carry out the functions and authorities granted under the PDPA on terms and conditions deemed appropriate. Commissioners are appointed by the Personal Data Protection Advisory Committee (Chambers & Partners, 2019).

P2P lending in Malaysia must comply with Malaysian laws and regulations that are relevant to its activities, location, and legal structure. The provisions of the Electronic Commerce Act 2006 govern the validity of electronic communications and transactions (ICLG, 2019b). Likewise, the 1998 Malaysian Communications and Multimedia Law must also be complied with by financial institutions, insurance companies, aviation service providers, and licensees (Chambers & Partners, 2019). On December 23, 2016, the commissioners completed and registered the Personal Data Protection Practice Code for the Insurance/Takaful Industry. Then, on January 19, 2017, the commissioners completed the Personal Data Protection for the Banking

and Financial Sector. Furthermore, on November 21, 2017, the Commissioners completed the Code of Practice for the Transportation (Aviation) Sector (Chambers & Partners, 2019).

There are many decisions issued by commissioners regarding violations of personal data protection (Chambers & Partners, 2019):

- In November 2016, the PDPC requested the Malaysian Communications and Multimedia Commission (MCMC) to block websites under Section 130 of PDPA for the collection of unlawful personal data.
- In May 2017, the commissioners reported that they had sued and fined private tertiary institutions, hotels, and employment agencies. The fines imposed reached MYR 20,000 (around USD 5,000).
- In November 2017, the MCMC also blocked the microsite sayakenahack. com due to data privacy issues following an application from PDPC.
- In 2018, the PDPC imposed a fine of MYR 10,000 on employment agencies for processing personal data without obtaining a registration certificate from the Commissioner.
- Since January 25, 2019, the PDPC has investigated massive data breaches resulting in the leakage of 1,164,540 students' data and alumni records from leading Malaysian universities. This includes MyKad numbers, student names, email addresses, home addresses, campus codes, campus names, program codes, course levels, student IDs, and mobile numbers (Chambers & Partners, 2019).

Under Section 104 of the PDPA, after the commissioner receives a complaint, they will conduct an investigation related to the relevant data used to determine whether the actions specified in the complaint are contrary to the PDPA. If the complainant is not satisfied (disadvantaged), he can submit an appeal. Furthermore, if data users are not satisfied with the decision of the Personal Data Protection Advisory Committee, they can submit a review of the decision in the Malaysian High Court (Chambers & Partners, 2019).

Financial institutions (P2P lending platforms) are bound by their license terms and conditions, which will usually involve strict requirements relating to customer data processing, which often require customer data to be stored in Malaysia. This will depend on the category of approval obtained by the relevant financial institution (Chambers & Partners, 2019). Of course, any electronic processing of personal data in Malaysia will be subject to PDPA, and the commissioner can issue further guidance on this issue in the future (DLA PIPER, 2020).

If there is a failure in compliance, depending on which part/regulation is violated, a fine of RM 10,000-500,000 and/or imprisonment for up to three years is imposed. Then, if a legal entity commits

a crime, anyone who at the time of the violation was a director, chief executive, manager, secretary, similar official, and acted in the capacity as a legal entity, or the person responsible for all company affairs may be held liable under Article 133 of the PDPA (ICLG, 2019b).

Therefore, personal data protection systems that adhere to the principles of privacy, autonomy, transparency, and non-discrimination must be regulated in the personal data protection law in Indonesia (McDermott, 2017). This is particularly important in P2P lending which involves sensitive personal data (Liu & Kuhn, 2010) which is limited in commercial affairs (Cohen, 2018). To protect personal data in P2P lending, Indonesia should adopt Malaysian laws related to PDPA data protection and form a PDPC.

CONCLUSION

In Indonesia, there are no clear regulations on personal data protection in P2P lending; it is regulated by unclear protective treatments and strict sanctions regarding personal data protection. Moreover, the complexity of the P2P lending system makes it difficult to protect such data, to determine who is most responsible for personal data leaks, and to pinpoint users of illegal personal data. EIT Law, GR 82 regarding The Implementation of Electronic Systems and Transactions, MOCI Regulation 20, and FSA 77/2016 cannot guarantee the validity and reliability of personal data protection. Indonesia should learn from Malaysia, a neighboring country with a PDPA that has been protecting

personal data, including the compliance system since 2013. Furthermore, in case of a failure in compliance, depending on which parts/regulations are violated, a fine of RM 10,000-500,000 and/or imprisonment of up to three years will be imposed. P2P lending in Malaysia must also comply with Malaysian laws and regulations that are relevant to its activities, location, and legal structure.

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Mediation as a Suitable Dispute Resolution Method in Medical Negligence Cases: Special Reference to the Malaysian Position

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ABSTRACT

Medical negligence is an act or omission by a medical professional that departs from the accepted medical standard of care. Currently, medical negligence claims fall under the law of tort adversarial system. The objective of this paper is to study the practice of mediation as a dispute resolution for medical negligence cases in Singapore and the United Kingdom and thereafter, make a recommendation of the application of mediation as an alternative to litigation in resolving medical negligence cases in Malaysia. Mediation offers positive benefits, amicable dispute settlements, and speedy process to affected parties. Further, it may overcome the challenges faced by the parties in litigation, such as a lengthy period in pursuing claims. This paper adopted both quantitative and qualitative research methods. The former involves library research and interviews, and the latter is in the form of survey questionnaires using a structured questionnaire. The results showed that >80% of the respondents agreed that mediation was a suitable dispute resolution method and should be applied in medical negligence. Mediation resolves the dispute and preserves the trust in the doctor-patient relationship. It is hoped that Malaysia will offer mediation as either a separate dispute resolution method for medical negligence cases or mediation to be offered under the current court-annexed system with a

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modification whereby the parties may opt for mediation at any time upon registration of the case without the need to wait for pretrial case management stage.

Keywords: Dispute resolution, litigation, mediation, medical negligence, Malaysia

INTRODUCTION

In the law of tort, negligence is one of the most important areas which covers and protects various interests of human life. Medical negligence is one of them which is focused specifically on medical healthcare provision. The case of Berger v. Becker (2000) defines medical negligence as an omission or an act done by doctors negligently during the meeting with a patient where they fail to observe the procedures in medical practice and cause injuries or death to the patient. There can be many ways where a doctor may be said to have omitted certain act such as not following the procedures, giving patients wrong advice, prescribing the wrong medication, deterioration of patient's condition right after surgery, and others as in the case of Bolam v. Friern Hospital Management Committee (1957). Over the years, medical negligence cases have increased tremendously in Malaysia, and they keep increasing whether it is reported or non-reported cases. Chin (2013) in her article discussing a quick solution to medical disputes shared that the claims for various cases related to medical negligence and medical ethics were increasing each year despite campaigns and talks organised by the Medical Healthcare of Malaysia (KKM). She further shared in her article that the Medical Defence Malaysia (MDM) reported the claims could be up to RM5.4 million per case excluding interest which was awarded up by a local court in the year 2011. In the year 2014-2015, about 3,526 medical negligence cases occurred and reported to the Patient Safety Unit of the Health Ministry (Lum, 2017).

As for the years post-2015, there is no comprehensive and systematic collection of data and statistic on medical negligence cases in Malaysia but other sources such as the news media, academic researchers, and government annual reports prompt the government policymakers and relevant agencies to take appropriate action on the escalation of medical negligence cases in Malaysia. It is found that the top five (5) incidents that resulted in damage to the patient's health are: medication error, the adverse outcome of clinical procedure, dislodgement of the catheter, and injury to the neonate (Patient Safety Council of Malaysia, 2018).

The law of tort offers an adversarial system which refers to litigation in making claims for medical negligence. However, there are many challenges faced by the affected parties and the lawyers while undergoing litigation procedure, such as; length of time to come into the final judgement, the abstraction of medical reports from the hospital or medical authorities, getting a suitable expert witness, the relationship doctor-patient will be affected, the cost of the litigation fee is

expensive (Kassim & Najid, 2013). Another challenge faced by the affected parties in almost all countries is to get cooperation from the health institution. In many cases, doctors do not want to participate either because they are busy or they do not want to face the patient or have the insurers settle the issue (Amirthalingam, 2017).

Further, under the tort system, the compensation and damages in medical negligence cases itself is a challenge to the affected person. The victim must prove to the court that the medical practitioner is negligent. Later the court will pass judgment on the compensation available for the victim. If the victim cannot get a witness because there is no cooperation from the doctor or healthcare, he will not get anything. It either he gets everything or gets nothing under the adversarial system (Kassim & Nijad, 2013).

In Malaysia, the civil cases registered with the court must go for a compulsory mediation session that is handled by the court as provided by the Rules of Court 2012. However, the parties need to first initiate a case. Hence, it is time for Malaysia to think of offering an alternative dispute resolution method to litigation. Mediation would be one of the best alternatives. Khan and Hak (2015) defined mediation as a process where an impartial and neutral third party assisted the disputant by facilitating them to discuss and negotiate their own settlement terms. There are a few approaches in mediation that may be adopted such as facilitative, directive, and evaluative. The suitable approach for medical negligence would be facilitative where the parties

may negotiate without the interference or direction from the mediator. Khan and Hak (2014) further explained that mediation might be applicable in many disciplines and areas such as the community to resolve a complex issue involving different races, cultures, and religions like in Malaysia.

Singapore has been practising mediation over the centuries. Mediation is also made applicable in medical negligence cases and has been a successful way of resolving disputes. The Ministry of Health of Singapore has been working together with the Medical Mediation Scheme (MMS) since the year 2008. There were 79 medical negligence disputes being referred to Medical Mediation Scheme, only two of the disputes went further for litigation suits and others were resolved by the mediation process. These 79 medical negligence cases were initially filed in the Subordinate Court of Singapore. As for the year 2016, about 465 out of 538 cases have been mediated (Lum, 2009).

Whereby, in the United Kingdom, mediation is not a new method of resolving disputes since it has been in practised for many years and there are mediation centres in every state that include medical negligence cases as part of the areas covered. Mediation in medical negligence in the United Kingdom was introduced in the year 2016 which was launched by the National Health Service ('NHS') after receiving a positive result from the pilot programme launched in the year 2014 (Gray, 2017). Almost 67.8% of claims on medical negligence disputes have been resolved

instead of attending court trials due to the establishment of the mediation process in medical negligence disputes (Alkhenizen & Shafiq, 2018).

The objective of this paper is to study the practice of mediation as a dispute resolution for medical negligence cases in Singapore and the United Kingdom and thereafter, make a recommendation of the application of mediation as another method or the alternative to litigation in resolving medical negligence cases in Malaysia. This paper discusses the challenges faced in litigation in Malaysia which also discusses the current practice in Malaysia; the practice in Singapore and the United Kingdom; and the reason to choose mediation. This paper also discusses the outcome or findings of the research conducted that support the idea of using mediation as the dispute resolution method for medical negligence cases. Thereafter, this paper suggests Malaysia offers mediation as either a separate method dispute resolution for medical negligence cases with the legal rights of parties remain in-tact or to offer court annexed-mediation as per current practice with a modification.

METHOD

This study involved library-based research as well as field research, that focused on medical negligence in Malaysia, Singapore, and the United Kingdom. Literature related to mediation and medical law that was referred from the articles in Malaysia, Singapore, and the United Kingdom was being looked upon since the concept of mediation in medical negligence was well developed and well-applied over the past years. The data and materials were compiled on the development of mediation and how mediation had been applied in medical negligence in Singapore and the United Kingdom.

Besides that, the qualitative research method had been adopted by interviewing doctors, patients, lawyers, academicians, or medical negligence experts and mediators as the respondents in order to obtain opinions on the alternative resolution to resolve medical negligence disputes and views on mediation and medical negligence. The interview was limited to six respondents only. These respondents were experienced people in mediation and handled medical negligence based on their professional qualifications. They had at least more than ten (10) years of experience. Meanwhile, a quantitative research method was adopted by using survey questionnaires via the online Google Form. Upon completion of the survey, the data collected and analysed was to arrive at the conclusion of this paper.

RESEARCH FINDINGS

The research findings are divided into two parts i.e., the quantitative and qualitative findings. The quantitative findings are derived from the questionnaire distributed, whilst the qualitative findings are data collected from interviews that were conducted. The followings are the results of the findings.

Quantitative Findings

The questionnaire involved 109 respondents. More than half of the total respondents were female i.e., 50.5%. The respondents' academic qualifications were divided into few categories which were medical specialist, Doctor of Philosophy, master, bachelor, diploma, and others. For clarification purposes, 'others' refers to the Malaysian Higher Certificate of Education (Sijil Tinggi Pelajaran Malaysia) and the Malaysian Certificate of Education (Sijil Pelajaran Malaysia). The respondents comprised patients, legal practitioner i.e., lawyers; medical practitioners such as doctors, medical assistants, neurosurgeons; administrative staff of health institutions, persons who were working with the insurance company; and persons who were working in the financial fields such as accountant and bankers.

The respondents were posted a few questions related to this research in order to appreciate their understanding of dispute resolution in medical negligence cases. First, the researchers posted a question related to medical negligence. There were 85.3% (93 respondents) respondents who confirmed that they understood the term 'medical negligence', whilst 16 (14.7%) respondents answered in negative. This is shown in Figure 1.

Second, the researchers would like to check whether the public in Malaysia has information on medical negligence cases. Hence, the next question that was posed to the respondents related to the rising trend of medical negligence. There were 87 (77.1%) respondents affirmed that it was a rising trend and 25 (22.9%) of the respondents think it was not. The following figure illustrates the opinion of the respondent i.e., Figure 2.

No ■ Yes
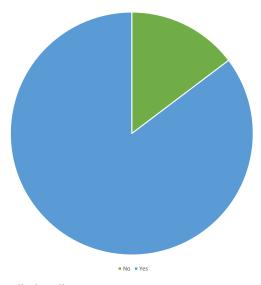
Figure 1. The meaning of medical negligence
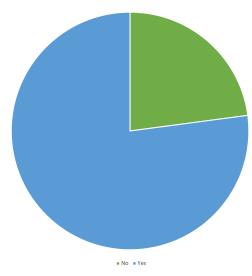
Figure 2. The rising trend of medical negligence

Next, the respondents were posted with a question related to mediation as dispute resolution. There were 86 respondents who understood the nature of the mediation process and believed it could save time and cost in resolving a dispute. Fourthly, the respondents were asked what they thought about mediation. 98 respondents believed that mediation was a win-win situation (89.9%). Whilst the rest of the respondents did not think so (10.1%). This is shown in Figure 3.
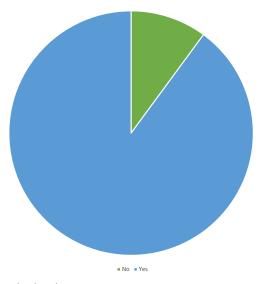
Figure 3. Mediation is a win-win situation

Lastly, the respondents were asked about their opinion on the usage of mediation in resolving medical negligence cases. There were 74 (67.9%) of the respondents who agreed that mediation could be applied in resolving medical negligence cases. Hence, more than half of the respondents support the idea to adopt mediation in resolving medical negligence cases. This is illustrated in Figure 4.
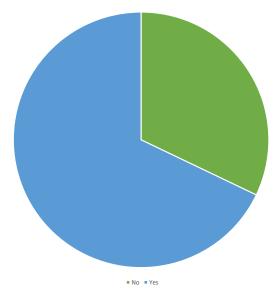
Figure 4. The usage of mediation in resolving medical negligence cases

From the results of the questionnaire, it is concluded that basically, the respondents understood the meaning of mediation and believed medical negligence cases were a rising trend. Further, it was a win-win situation. From the questionnaire and the answers given, it is suggested that the respondents who understand the meaning of mediation and its process, support the idea of having mediation or the usage of mediation in resolving medical negligence cases in Malaysia.

Qualitative Findings

The findings from the interview sessions support the idea of adopting mediation as the method of resolving medical negligence cases. In describing the importance of mediation, the respondents made the following comments:

"It helps the doctor and the patient relationship to be intact"
"It is a better choice, saves cost for litigation fees, and saves court time and could achieve a fair settlement."
"Less of winning/losing party situation"
"Both parties are able to bring their issues to the table and find a possible amicable solution"
"With the assistance of a mediator, the

parties can deeply discuss their interests and concerns"

One of the respondents agreed that mediation was a better choice with an exception that "a mediator is a person well versed in medical negligence and medical ethics". Another respondent explained that mediation was advantageous to both parties as the institution's reputation would be protected and the affected party would be able to have a speedy way of resolving disputes and moved forward in life. He said;

> "Mediation is, in fact, advantageous in resolving medical negligence disputes as it is confidential. It protects the hospital and the doctor's reputation. It also allows the patient and or their families to obtain a quick resolution and move on with their lives instead of having to deal with protracted litigation."

The other respondent believed that if the parties were given chances to explain to each other and the respondent also shared that the hospital had a mediation group. He said;

> "it is a better choice, as we understand hospital have their very own Mediation group but let's make it known to the public so that they can understand better what they are facing rather than getting angry and wanting to sue the doctor because of the death, sometimes, the patient died due to secondary diseases not because of doctors' negligence"

The followings are some of the comments made by the respondents with regards to mediation;

"It takes a shorter time"

"It saves time because of no need to go through lengthy procedures"

"I have a neighbour that got involved with medical negligence and they opted for Mediation after consulting a few of their friends and they managed to understand the issue with an open heart"

"(there is) no need to appoint lawyer, just to the mediation centre"

"It just occurs on the fixed day and the decision will be made instead of filing the case to the Court"

"We don't need to go through the lengthy court process"

"Speedy process"

"obtain an early settlement without the lengthy process of a civil trial"

"compared to court litigation, yes."

"do not (have to) go through several stages like litigation suit"

"Less legal procedure"

The respondents' point of views in supporting the idea of having mediation as the dispute resolution method for medical negligence cases can be summarised as follows:

1. Mediation preserves the relationship between doctors and patients.
2. Mediation saves time and cost.
3. Mediation allows the parties to come with a possible amicable solution where they can discuss their interest and concerns deeply.
4. Mediation is a confidential process where the parties' reputation is protected.

5. Mediation process is less procedural.

Therefore, it can be concluded that the advantages of mediation as mentioned by the respondents may overcome the challenges that occurred in the tort adversarial system or litigation.

DISCUSSION

In Malaysia, the adversarial system offered under the tort law has been criticized as to improve the system due to the challenges faced by the parties and lawyers in pursuing medical negligence through litigation and its effect on the parties. According to Kassim and Najid (2013), the challenges and the effects of litigation are first, the process is costly, second; the litigation process takes a long time to get a judgment; third, there is a possibility that the victim may not obtain any compensation due to inability to prove the causal connection in the case; fourth, the litigation process destroys the relationship between the doctor and the patient because of the confrontational elements during the trial; and fifth, the process attacks the credibility of the doctors which causes them to aggressively deny and refuse to admit their mistake. According to Hambali and Kodhapanahandeh (2014), the challenges in pursuing claims under the litigation are a lengthy period of the process, the high cost, obstacle faced by the victim in obtaining medical records to initiate the court action and to obtain the expert medical witness because doctors refuse to testify against another.

Further, under the tort system, the victim has no choice but to pin the responsibility on a certain person and prove the person's fault to ensure that he gets the compensation. There are situations where doctors have been declared bankrupt and some decided to cease practice due to stress during the trial of the case (Kassim & Najid, 2013). This kind of battle will destroy the chances to have a good relationship between the victim and the doctor or the healthcare in the future. Islam (2013) in discussing medical negligence in Malaysia explains that the adversarial system under tort law provides compensation to the victim after the court makes the decision upon hearing the available evidence and the law. He comments that in certain situations litigation fails to achieve real justice.

Another issue that is worth to be discussed is the issue of compensation. According to Kassim and Najid (2013), compensation is given to the victim to put him in the position as if the negligence never took place. However, the compensation is unpredictable and might not be given according to the merit of the claim per se; due to certain reasons such as the availability of witnesses. They further explained that under the tort system the victim or injured party needs to attribute the act of negligence or attribute fault to a particular individual to be compensated. Due to this, many victims fail to get compensation. Hence, the outcome is uncertain. The victim might get compensation after many years of legal battle and suffer financial issues as well. They further discuss in a certain situation that the victim is over-compensated or under-compensated due to the nature of the

tort system. In concluding their discussion, it was suggested for Malaysia to have a satisfactory compensation system.

Hambali and Khodapanahandeh (2014) discussed the matters from the perspective of the plaintiff or the patient where the compensation received was not similar as per the amount mentioned in the judgment since the total amount needed to deduct the cost and the lengthy period of time involved in getting the judgment. They also discussed the matters from the perspective of defendants or the doctor and the healthcare. The claims made due to medical negligence caused them to pay a higher insurance premium to protect them from malpractice in the future. Due to this reason many physicians are driven away from certain specialties to avoid malpractice. Hence, they believe the awards have no deterrent effect on them whilst the purpose of the court to grant award is not only to compensate the victim but to discourage similar mistakes committed by others in the future. Both of them concluded that the victims of medical negligence were not compensated fairly. The tort system needs to be revised to avoid harm towards the parties, the healthcare system, and the government. They suggested that the court system be revised by providing options or alternatives through alternative dispute resolution.

Hence, the practice of Singapore and the United Kingdom in resolving medical negligence cases is studied to see how to resolve matters amicably and without having to face challenges in litigation. It is found that the Singapore judiciary system

has been going towards a less adversarial approach in resolving medical disputes over the years. There is a protocol called "pre-action protocol" in the Singapore judiciary system which promotes early communication between the affected parties and to resolve the disputes earlier without going any further for a legal proceeding. The affected parties can request a medical report from the relevant doctor without prejudice and discuss the matter, prior to filing any legal proceeding. The relevant doctor and his healthcare institution will be obliged to disclose the medical report listing out all the findings, including the affected party condition before and after the treatment or cause of death. If the pre-action protocol fails, the case will be referred to Court Dispute Resolution in the State Court and mediation will be conducted by a judge or a mediator of the Centre to facilitate (Anderson, 2018).

In fact, there are two bodies that govern healthcare in Singapore which are the Ministry of Health and the Singapore Medical Council which promotes mediation (Khoo & Choo, 2018). Practice Direction 35 which was gazetted on 1 September 2017 provides that in order for the affected parties to proceed with civil litigation suit, the affected parties must undergo a mediation process before they could proceed to litigation to resolve the disputes. A similar procedure is applicable for medical negligence disputes since it falls under civil litigation. Hence, the affected parties must apply mediation then proceed with litigation suit. The results in settlement of

medical negligence disputes in applying mediation have been positive ever since the establishment of mediation in medical negligence which was set up by the Ministry of Health of Singapore together with the Medical Mediation Scheme (MMS). MMS consists of a well-trained mediator who has knowledge of medical ethics and law and is accredited by MMS. Section 43 of the *Medical Registration Act 1997* (Sg.) must be read together with the Medical Scheme Act which states that not all mediators can conduct mediation for medical negligence disputes. Hence only knowledgeable mediators in medical negligence can conduct mediation (Lum, 2009). Even though Malaysia offers mediation to the parties under the court-annexed mediation system, the pre-action protocol in Singapore is not similar to the Malaysian court procedure. Order 34 Rule 2 of the Rules of Court 2012 provides that the parties are required to undergo a mediation process at the stage of pre-trial case management before proceeding with the trial.

Whilst, in the United Kingdom, mediation has been applied in health care over eighteen years whereby the government has been working closely with National Health Service (NHS) and other United Kingdom Health Authorities (Medical and Health Mediation, 2017). The aim of the cooperation is to promote mediation to resolve conflicts involving patients, families, and health practitioners and to come into a settlement without going to the court. In the United Kingdom, mediation maybe applies at any stage in the court proceeding. Mediation can be applied before or after the legal suit has been filed unlike in Singapore, whereby it is compulsory to go for a mediation session after a complaint has been filed with the Complaints Committee based on Section 42 of the *Medical Registration Act 1997* (Sg.).

Even if it is not a compulsory alternative dispute resolution in the United Kingdom, the judges and other Healthcare Authorities have been promoting mediation as to avoid legal suit. This is shown in the case of Burne v. A (2006), whereby mediation is applied to end the envious and distressing case. Besides that, the NHS Resolution (previously known as the NHS Litigation Authority) encourages mediation service to speed up the medical disputes as well as resolve claims. The NHS Litigation Authority collaborated with the Centre for Disputes Resolution to offer a face to face discussion between the affected parties with the support of an independent and accredited mediator. Legal rights are remaining intact during the mediation process and either party can proceed for legal suit if they are unhappy with the settlement or an outcome. The scheme is actually voluntary and an independent process to resolve claims against any healthcare authorities. The mediator who handles medical negligence disputes is well versed with medical law and ethics and also well-trained. The training provided to the mediator is held by NHS (Hyde, 2014).

The United Kingdom has been promoting mediation through its judiciary system even if it is not a compulsory procedure in

medical negligence cases, unlike Singapore but, at least the NHS Resolution encourages the affected parties to opt for mediation instead of litigation. Almost 67.8% of claims on medical negligence disputes have been resolved instead of attending court trials due to the establishment of the mediation process in medical negligence disputes (Alkhenizen & Shafiq, 2018).

In Malaysia, the Court has its mediation centre under court annexed-mediation practice, for example, Kuala Lumpur Court Mediation Centre. According to Practice Direction No 4 of 2016, the mediator for the court may be divided into three categories, first, the court staff or the judge (other than the one who presides the case); second, the mediator from Malaysian Mediation Centre; and third, mediators from Kuala Lumpur Regional Arbitration Centre (KLRCA) which currently is known as Asia International Arbitration Centre (AIAC). The practice in Malaysia is almost similar to the system adopted by the United Kingdom since both countries did not make mediation as a compulsory process prior to the registration of litigation cases and the court in both countries work together with an independent mediation or dispute resolution centre. However, in the United Kingdom the parties may opt for mediation at any stage, but, in Malaysia, as mentioned earlier the parties are directed to the mediation process before trial.

The reason to look for mediation as the alternative for litigation in medical negligence cases is that the affected party or patient or victim (all the terms are used interchangeably in this paper) is highly emotional and the mediation process is more relaxed, friendly, and allow the parties to ventilate emotions. According to Warshauer (2013), the emotion of the patients is the catalyst to the decision of proceeding with a filing of malpractice cases in the court. The relationship between the doctor and the patient, the expectation of the patients towards the doctor's perfect services, and the doctors' feelings by taking the complaint personally caused both parties to be in high levels of emotions in malpractice cases. Especially when the patients want the doctor to suffer as much as they have suffered. Hence, both parties will hold their grounds. This kind of case would not be a simple one. The best solution for this case is to negotiate a solution through a mediation process.

Further, mediation allows the parties to be in a session where both are given time to tell the stories from their perspectives so the other would understand their stories. Khan (2013) explained that mediation was meant to keep a good relationship between the parties as it was one of the best dispute resolutions in maintaining the relationship. The parties can resolve their dispute amicably, come into a solution that both of them agree upon, and maintain their relationship. Hence, the application of mediation may overcome the delay issues facing by parties in litigation. The application of mediation in Malaysia is supported by the respondents in this case as mentioned in the findings herein.

The respondents believe that mediation may overcome the challenges facing by the

parties in the tort adversarial system. Hence, Malaysia may learn from the practice of Singapore and the United Kingdoms' approach in offering mediation as long as the parties do not have to face the challenges occurred under the tort adversarial system, the relationship of the parties is preserved, the compensation is the outcome of the parties' amicable decision, they can hear each other, and their good names are preserved.

CONCLUSION

Malaysia needs to offer an alternative to the current tort system in overcoming the challenges in the litigation process. Evidence from this study suggests that the parties will opt for mediation in the future given that it saves the parties and court's time, is cost-effective, and allows the parties to come to a resolution of their own while maintaining their relationship. Further, due to the nature of the mediation process of confidentiality, the medical practitioner will not be exposed under the trial and this saves them from the stress. The findings of this paper support that mediation is a suitable dispute resolution method in resolving medical negligence cases.

Therefore, the Government of Malaysia may offer mediation as the dispute resolution method for medical negligence through either as a separate system from litigation (First suggestion) or under court-annexed as what has been offered currently but with certain modification (Second suggestion). The first suggestion offers mediation as the method of resolving disputes for medical negligence cases without involving litigation at all. The government may offer a compulsory mediation process before the parties register the case at the court where all the parties, the victim, the medical practitioner, the healthcare, the insurance agent or representative of the Ministry of Finance and an expert of medical negligence to assist in negotiating the quantum for the case with the legal rights of the parties intact. This mediation process may be handled by the centres mentioned in the Practice Direction as mentioned herein earlier i.e., AIAC or MMC. The parties have the right to initiate a legal proceeding under tort adversarial systems that are not waived by opting mediation as the first step. They have the right to proceed with litigation if there are still issues that need adjudication. From the experience of Singapore and the United Kingdom, mediation has managed to solve the party's cases, however, certain cases are still being directed to litigation.

The second suggestion offers mediation to the parties upon registration of the litigation case in court without the need to wait until pre-trial case management. It means that the parties may opt for mediation at any time. The categories of the mediator as provided under the practice direction mentioned earlier may be maintained. This is to ensure that the parties do not have to face the challenges that exist under the current system and may opt for mediation upon registration of the case. Both suggestions are made to avoid the parties from facing challenges that occurred in the tort adversarial system and to ensure

the victim gets the justice he deserves. Future research may concentrate on the details of the proposal in offering mediation as the dispute resolution method for medical negligence cases with the parties' legal rights remain in-tact.

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Effects of Ownership and Board Structures on Acquisitions Returns

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ABSTRACT

This study examined the announcement effects for acquirers from the years 2000 to 2013. Since acquisitions create agency problems and companies in Malaysia exhibit concentrated ownership structures, this study aimed to investigate three major objectives namely the effects of family control, blockholder activism, and board structures on the stock performance of acquirers. In addressing these objectives, the three-day abnormal returns one day before the announcements were adopted as the proxy for the announcement effects. Ordinary least squares regression methods were used to examine the effects of the 10 factors on abnormal returns. The results show that acquisitions in Malaysia were value-enhancing, which is consistent with the synergistic theory. Family ownership and active institutional blockholders were able to create value which implies that family-controlled firms do not engage in opportunistic behavior. Moreover, institutional blockholders should play an active role if they want to protect their investments. The study has implications on regulators such as the Securities Commission (SC) with regards to board composition in which independent directors should consist of at least one-third of it because such composition leads to more significant values.

Keywords: Announcement effects, blockholder, board structure, family, Malaysia

INTRODUCTION

A majority of Malaysian companies are controlled by families (Claessens et al., 1999; Mohd et al., 2015). Mohd et al. (2015) showed that at least 64.5% (55.3%) of companies listed on the Main Market of Bursa Malaysia were controlled by families if 20% (30%) ownership was used as the cut-off point. Family firms face a different type of agency problem as compared to non-family firms. In family firms, the agency problem between managers and large shareholders can be reduced or even eliminated because family members are often present on the board or serve as part of the management team (Bouzgarrou & Navatte, 2013). However, a different type of agency problem emerges when the families, who own a significant number of shares in the firm, use their controlling power to undertake actions that would benefit them but at expense of minority shareholders. Such actions include empire-building, managerial compensations, reducing risks, or increasing survival. By undertaking acquisitions, family-owned firms could pay a higher amount of remuneration to family members who usually serve as directors and managers. Anderson and Reed (2003) argued that family firms focused on survival rather than enhancing shareholder value.

Furthermore, family firms may choose to diversify their investments to lower the probability of financial distress or bankruptcy even though this action might lower firm value (Bouzgarrou & Navatte,

2013). Thus, acquisitions can be used as a way to reduce financial distress or increase the survival of the family firm. Most research support this argument as family firms are often found to outperform non-family firms in acquisitions (André et al., 2014; Ben-Amar & André, 2006; Bouzgarrou & Navatte, 2013; Craninckx & Huyghebaert, 2015; DeCesari et al., 2016).

Agency problems that emerge from merger and acquisition (M&A) activities can be alleviated by corporate governance (for example, Ahn et al., 2010; Ashraf & Jayaraman, 2014; Masulis et al., 2007; Park et al., 2008). Good corporate governance can ensure that firms do not get into default or bankruptcy (Zhou et al., 2011) and can increase the effectiveness in the monitoring and improvement of decision making as well as in reducing agency problems between minority and majority shareholders. This study examined two mechanisms of corporate governance namely the role of the board of directors and the participation of blockholder. A board of directors consists of individuals who are nominated by the company's shareholders thus serving as effective internal monitoring (Hilscher & Şişli-Ciamarra, 2013). Meanwhile, the participation of blockholders may contribute to the success or failure of M&As as they can monitor managerial actions. As such, seven important governance-related characteristics are examined namely the participation of active and passive individuals and institutions of blockholders, the board size,

independent directors, executive directors, and founder-director, with the stock price performance of M&As.

Several studies had analysed the effect of acquisitions on share prices of the acquiring firms (see Jarrell et al., 1988; Jensen & Ruback, 1983; Martynova & Reenboog, 2008; Renneboog & Vansteenkiste, 2019, for an extensive literature review). Most of the evidence of acquisitions examines the issues in the context of developed markets (Amewu & Alagidede, 2018; Field & Mkrtchyan, 2017; Gleason et al., 2014; Swidler et al., 2019). Meanwhile, amongst well-known studies in developing markets document show the effects of the acquisition on the share prices of the acquiring firms are mixed (Chen et al., 2020; Sha et al., 2020; Yang & Segara, 2019). Past Malaysian studies consistently documented that acquisitions created wealth for acquiring shareholders (Isa, 1994; Ma et al., 2009; Mat-Nor & Ismail, 2006; Mat-Rahim & Pok, 2013). However, they did not associate stock price performance with any governance and ownership patterns. Thus, this study intended to fill that gap. To the author's best knowledge, this is among the initial studies conducted to examine the effects of family firms and shareholders' return on acquisition performance in Malaysia.

This research investigated in-depth the effects of family ownership on the wealth of acquisition. The prevalence of family-controlled firms in Malaysia coupled with a lack of studies on the effects of these firms on acquisition performance further indicates that this area needs to be further explored. By observing the stock price performance of family firms in Malaysia, this study aims to present findings from the context of a developing country which in turn could be used as a comparing point to the performance of family-controlled firms in developed countries such as the US (Basu et al., 2009), European countries (DeCesari et al., 2016), France (Bouzgarrou & Navatte, 2013) and Canada (André et al., 2014). Using a sample of Malaysian acquisitions from the period of 2000 to 2013, this paper found that investors reacted positively in the short-term to the presence of active institutional blockholders in the acquiring firms as they could monitor managerial activities in those companies. On the other hand, the presence of either passive individual blockholders or active individual blockholders leads to a lower value, which could be due to a lack of monitoring in the case of passive blockholders or to diversifying concerns for active individual blockholders. Therefore, a good acquisition decision is in the hands of active institutions as they would ensure the effectiveness of the acquisition. The positive returns to shareholders show that acquisitions in Malaysia are value-enhancing and this could be attributed to the synergistic effects as asserted by Bradley et al. (1983) and Duggal and Miller (1999). Concerning the directorship, the overall results indicate that the presence of directors does not lead to any significant effect on value except for independent directors, whereby in additional analyses, the proportion of independent directors leads to significant value creation.

Thus, the recommendation by the Securities Commission (SC) that independent directors should constitute at least one-third of the board is good for the shareholders of the bidding firms.

The remainder of the paper is organized as follows. In Section 2, this study presents the related theory and literature. Section 3 describes the sample of the selection process, variables, and methodologies used to measure acquirer performance. The results are presented in Section 4 while Section 5 concludes the paper.

Literature Reviews and Hypotheses Development

The first explanation for M&As is based on agency theory. There are two types of agency problems: Type I involving owners and managers and Type II involving the majority and minority shareholders (Villalonga & Amit, 2006). Agency problems arise because of the differences that exist in goals and risk preferences (Eisenhardt, 1989). This problem can motivate the managers to pursue their objectives at the expense of shareholders' interests (Jensen & Meckling, 1976). Gompers et al. (2003) reported that firms with higher agency problems and stronger managerial rights were more likely to pursue M&As. Weston et al. (1990) argued that M&A might lead to three forms of agency problems namely managerial entrenchment[1], empire-building[2] , and risk reduction[3].

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1   occurs when managers make themselves a valuable asset to their firms and costly to be replaced (Shleifer & Vishny, 1986).
2   Managers often prefer to maximize their utility instead of shareholders' value (Trautwein, 1990).
3   Managers wanted to maximize their utilities and reduce risk-employment such as the risk of losing jobs and their professional reputation.

Firms with high family ownership show significant abnormal returns according to several studies. Significant positive returns to shareholders are found when families acquire other companies (André et al., 2014; Bouzgarrou & Navatte, 2013; Caprio et al., 2011; Craninckx & Huyghebaert, 2015). However, Basu et al. (2009) and Bauguess and Stegemoller (2008) found significant negative returns to shareholder wealth. These results indicate that family firms face an agency problem in M&As, which subsequently lowers the wealth of shareholders. Therefore, the following hypothesis is developed:

H[1]: There is an effect of family ownership on abnormal returns in the short-run following acquisition announcements.

Blockholder could monitor managerial actions in the acquisition by reducing agency problems between managers and outside shareholders (Bauguess et al., 2009; Bouzgarrou & Navatte, 2013; Harris et al., 2010). There are two types of blockholders examined in this study: passive and active. A passive blockholder is not represented on the board while an active blockholder has a representative on the board. Thus, it is expected that active shareholders will play a more vital role in monitoring managerial performance. Therefore, the following hypothesis is developed:

H[2]: There is an effect of either active or passive individual blockholding on abnormal returns in short-run performance following acquisition announcements.

Conflict of interest between the majority and minority shareholders may be alleviated with the existence of independent directors,

who could monitor managerial actions. Bursa Malaysia (2020) classified an independent director as a director with less than nine years of attachment to a firm. As documented by previous studies, high levels of outside director's acquisition expertise will have the greatest positive effects on acquisition performance (Alexandridis et al., 2010; McDonald et al., 2008). Therefore, the following hypothesis is developed:

H_3: There is an effect of director independence on abnormal returns in short-run performance following acquisition announcements.

Despite the importance of director independence in minimizing agency problems, the executive director and founder-director could also influence agency problems. They also have expertise and experience that could lead to better decision-making in investment strategy due to their private knowledge. A study by Field and Mkrtchyan (2017) found that executive directors played effective roles in improving acquisition performance. They argued that executives with prior acquisition experience generated positive returns. However, the result for executive directors without experience is either negative or insignificant (André et al., 2014). Therefore, the following hypothesis is developed:

H_4: There is an effect of executive director on abnormal returns in short-run performance following acquisition announcements.

Normally, founders of firms have specialized knowledge, significant ownership, and non-pecuniary factors that are linked to their firms. Xie (2015) stated that founders also could select more diligent directors for their companies in order to manage and sustain the firms' wealth. Besides, he argued that the founders' personal characteristics could affect firm value. This is supported by Bouzgarrou and Navatte (2013), Caprio et al. (2011), and Li and Srinivasan (2011) who found that founder directors generated positive returns for bidders. Thus, the role of founders is associated with value creation for acquirers. Therefore, the following hypothesis is developed:

H_5: There is an effect of founder-director on abnormal returns in short-run performance following acquisition announcements.

This paper aims to present a different perspective from a developing country that in turn could be used as a comparing point to the performance of blockholders and board structures from developed countries such as France, the US, Vietnam, and Canada (André et al., 2014; Bougarrou & Navatte, 2013; Li & Srinivasan, 2011; Pham et al., 2015). This study sheds light on the role of corporate governance mechanisms in affecting shareholders' wealth in M&As. Given that the majority of firms in Malaysia are controlled by families, the conflict of interest between the majority and minority shareholders might be even more severe. To solve this predicament, effective corporate governance mechanisms are required, which may be in the form of blockholder participation and director independence. Furthermore, conducting a study on this topic is also important because it examines

the effectiveness of the monitoring role of independent directors as suggested and revised in MCCG 2001, 2007, and 2012. The monitoring activity will subsequently enhance the quality of the firms' decisions that will affect directors.

METHOD

Sample Selection

The data was obtained from the general announcement section in Bursa Malaysia's website, circulars to shareholders, the company's annual report, Securities Commission's website, Thompson DataStream, and Bloomberg Merger and Acquisition (M&As) database. Data on ownership characteristics, governance characteristics, and deal characteristics were manually collected from the companies' proposals and annual reports from the year 2001 to 2014. The initial data comprised of 4702 announcements. Sample observations included all deals between the years 2000 and 2013. According to the Securities Commission (2007), M&A is defined when "the acquirer or proposes to acquire control in a company whether the acquisition is effected by the person or by any agent". Thus, out of the 278 acquisitions, "clean" samples made up 203 announcements and "unclean" samples made up 75 announcements. Clean data is classified as clean announcements of acquisitions with no other announcements made up by acquirers. Meanwhile, unclean announcements consist of other announcements made up by acquirers that affect share prices. The sample of this study focused only on the cleaned groups.

Two methodologies were applied in this study. First, to measure announcement performance, event study methodology was used to estimate the cumulative average abnormal return (CAAR). Second, to measure the effects of the independent variables on the cumulative abnormal return (CAR) regression models were used.

This study used event study methodologies as suggested by previous researches (Bradley et al., 1983; Brown & Warner, 1985; MacKinlay, 1997). The market model was used to measure abnormal market reactions on M&A announcements returns. To capture the impact of market reactions on M&A announcements, this study used a 121-day event window that comprised the 60 pre-event days, the event day, and 60 post-event days. The estimation period was from day 200 to 61 days before the announcement date.

To measure the CAR, the normal return was first calculated using the market model approach as suggested by MacKinlay (1997)[4]. Normal return refers to the expected return if the event did not happen. The FTSE Bursa Malaysia EMAS Index (FBMEMAS) was used as the market portfolio. FBMEMAS was chosen because it was a broader index as compared to the more popular FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBMKLCI).

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[4]   As suggested by MacKinlay (1997), a larger event window was used rather than a specific period of interest to enable the researcher to capture market reactions prior to the official date of the announcement.

RESULTS AND DISCUSSIONS

Share Price Reactions on Acquisition Announcements

Table 1 reports the CAAR for acquiring firms using MM. The CAAR for the acquiring firms for the two-day event window (0, 1) and 121-day event window (-60, 60) are 0.826% (p=0.014) and 6.102% (p=0.019) respectively. The findings of this study are consistent with that of other studies in Malaysia such as Ma et al. (2009), Mat-Nor and Ismail (2006), and Mat-Rahim and Pok (2013). Mat-Nor and Ismail (2006) who found that the return of 8.26% was significant over a longer 61-day window period (-30, 30).

Mat-Rahim and Pok (2013) recorded that acquirers earned significant positive returns of 0.24% for a two-day event window (-1, 0) and 0.34% for a five-day (-2, 2) event window, while Ma et al. (2009) found positive significant returns of 0.80% for a three-day event window (-1, 1). However,

the findings of this study contradict that of Isa (1994) which found acquirers recording insignificant returns of 1.162% for a two-day event window (-1, 0). Acquirer returns from developed markets are mixed. Andrade et al. (2001) and Duggal and Miller (1999) found that the returns from short-term event windows of (-1, 1) and (-20, 1) in the US are -0.7% and 1.20% respectively and that both values are significant at 5% and 10% levels. Meanwhile, Gleason et al. (2014) found that the returns in the US for the event window (-1, 1) was positively significant at 0.98% (p=0.10). Andriosopoulos and Yang (2015) and Bougarrou and Navatte (2013) found that returns for the short-term event window of (-1, 1) were positive at 0.75% and 1% and were significant to the bidders in the UK and France respectively. The returns of the post-announcement event window of (2, 60) for both samples were not statistically significant. This supports the efficient market hypothesis as forwarded by Fama (1970).

Table 1

Results of CAAR for sample groups using Market Model (MM)

Event window	Clean (n=203)	
	CAAR (%)	p-value
CAAR (-60,60)	6.102%	0.019**
CAAR -60,10)	4.540%	0.008***
CAAR (-20,1)	2.475%	0.002***
CAAR (-5,1)	2.104%	0.000***
CAAR (-3,1)	1.250%	0.007***
CAAR (-1,1)	0.939%	0.008***
CAAR (0,1)	0.826%	0.014***
CAAR (2,60)	1.281%	0.427

Note: denotes significance level at 1%, 5%and 10% level respectively

Descriptive Analyses

Table 2 presents a summary of descriptive statistics for all variables characteristics of the 203 sample firms. Majority of the companies that announce acquisitions can be classified as family companies (n = 158) as families own more than 10% in the company. The family ownership (FAMILYOWN[5]) on average is 32.11%. The highest family ownership is recorded by KrisAsset Holding Bhd with almost 76.41% of its share is held by IGB Corporation Bhd. The percentage of family ownership recorded in this study is also consistent with previous studies for example Song and Rath (2010) and Song et al. (2008) who found the average of concentrated ownerships was 32.7% and 32% respectively. Moreover, 54 firms (26.60%) had at least one active individual blockholder (BLIDACT[6]) blockholder and

55 firms (27.09%) had at least one passive individual blockholder (BLIDPSV[7]). The average for both blockholders was 3.65% and 3.31% respectively. Accordingly, on average of active institutional blockholder (BLISACT[8]) is 8.36%. The maximum ownership of active institutional blockholder (82.33%) was recorded by Cycle and Carriage Bintang Bhd with the majority of shares held by Cycle and Carriage Limited (48.070%), Employees Provident Fund Board (EPF) (21.590%) and J.I.Motor Holding B.V. (12.670%). Meanwhile, the average variance inflation factor (VIF) for the regression model is 1.42 while the score for each variable is less than 3 indicate that the multicollinearity problem does not exist in this model.

[5] FAMILYOWN relates to the percentage of voting rights an individual or a family holds, directly or indirectly (at least 10%), while the aggregate shareholdings of other major shareholders are not greater than 10%.
[6] BLIDACT is defined as a percentage (%) of the number of blockholders of an individual and non-family company holding at least 5% of voting rights, and represented on boards.

[7] BLIDPSV is the percentage (%) of the number of blockholders of an individual and non-family companies holding at least 5% of voting rights, and not represented on boards.
[8] BLISACT is the percentage (%) of institutions, corporations, and non-family companies holding at least 5% of voting rights and represented on boards.

Table 2

Independent variables descriptive statistics

VARIABLE	MEAN	MAXIMUM	MINIMUM	MEDIAN	STD DEVIATION	VIF*
FAMILYOWN	0.3211	0.7641	0	0.3257	0.2157	2.07
D4BLIDACT	0.2660	1	0	0	0.4430	1.23
BLIDACT	0.0365	0.2688	0	0	0.0672	1.65
D4BLIDPSV	0.2709	1	0	0	0.4455	1.11
BLIDPSV	0.0331	0.2603	0	0	0.0598	1.64
D4BLISACT	0.2118	1	0	0	0.4096	1.95
BLISACT	0.0836	0.8233	0	0	0.1937	1.65

Table 2 *(Continued)*

VARIABLE	MEAN	MAXIMUM	MINIMUM	MEDIAN	STD DEVIATION	VIF*
D4BLISPSV	0.2906	1	0	0	0.4552	1.15
BLISPSV	0.0316	0.4053	0	0	0.0599	1.64
BOARDOWN	0.3049	0.7493	0	0.3203	0.2211	1.16
INEDBRD	0.4548	1	0.14	0.43	0.1388	1.60
INEDOWN	0.0051	0.0799	0	0.000	0.0129	1.21
EXECDIRBRD	0.3602	0.83	0	0.38	0.1939	1.72
EXECDIROWN	0.2507	0.7492	0	0.2078	0.2224	1.13
D4FOUNDER	0.1034	1	0	0	0.3053	1.09
D4CASH	0.8818	1	0	1	0.3237	1.79

Note: *denotes the diagnostic tests in this study include tests of multicollinearity, heteroscedasticity, autocorrelation, normality, and outlier.

Multivariate Analysis

The study had conducted several diagnostic tests such as multicollinearity, heteroscedasticity, autocorrelation, and others. The results in multicollinearity (VIF=1.42), heteroscedasticity (the Breusch-Pagan/Cook-Weisberg [17.07 as it significant 1% level]), autocorrelation (Durbin-Watson [DW] test was 1.8848 which lies above the upper limit of DW table (dU=1.8477), the null hypothesis of no autocorrelation is not rejected. The results of normality and outlier will be given upon request.

Table 3 displays the regression results when different measures of directors or blockholders are appointed in Model 1[9] to Model 2[10]. Model 1 uses blockholder as measured by ownership and the proportion for director participation. The results show that BLISACT is significant at this stage and is statistically significant at a 5% level while BLIDACT is not significant at this stage. D4FOUNDER[11] illustrates significant outcomes in Model 2. The adjusted R-squares[12] are 1.13% and 9.24% and it is consistent with those in previous studies (Bauguess et al., 2009; Craninkx & Huyghebaert, 2015; Field & Mkrtchyan, 2017, for an extensive literature review) for Models 1 and Model 2 respectively. F-statistic indicates that jointly, the coefficients of the independent variables are not equal to zero for both models. Next, Model 2 uses a dummy for the presence of blockholders and the ownership of directors' participation. The adjusted R-squares are 0.0924% and the F-statistic

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9   Model 1 shows blockholder as measured by ownership and proportion of directors.

10   Model 2 shows blockholder as measured by dummy and director as measured by ownership.

11   D4FOUNDER = is defined as 1 if a firm has a founder on its board; 0 otherwise.

12   As the Breush-Pagan/Cook-Weisberg value is a statistically significant 17.07 while Durbin-Watson *d* value is not significant, the Robust Standard Error procedure for heteroscedasticity is used.

Table 3

Multiples regressions for variables on returns to acquirers (Model 1 to Model 2)

VARIABLE	Model 1	Model 2
FAMOWN	0.0933*** (0.0022)	0.0653* (0.0995)
D4BLIDACT		-0.0220** (0.0232)
BLIDACT	-0.1114 (0.1184)	
D4BLIDPSV		-0.0238*** (0.0082)
BLIDPSV	-0.1490** (0.0475)	
D4BLISACT		0.0217* (0.0956)
BLISACT	0.0526** (0.0175)	
D4BLISPSV		0.0030 (0.7884)
BLISPSV	0.0134 (0.8734)	
BOARDOWN	-0.0054 (0.7855)	-0.0152 (0.4445)
INEDBRD	0.0920** (0.0443)	
INEDOWN		0.2044 (0.4517)
EXECDIRBRD	0.0231 (0.4205)	
EXECDIROWN		0.0215 (0.5885)
D4FOUNDER	-0.0208* (0.0902)	-0.0112 (0.3733)
D4CASH	-0.0359** (0.0234)	-0.0305* (0.0666)
CONSTANT	-0.0191 0.7114	0.0491 0.2770
No. Observation	203	203
F-stat	3.71	3.29
Sign F-stat	0.0001	0.0006

R^2	0.1553	0.1373
Adj R^2	0.1113	0.0924

***, ***Note:* * denotes significance level at 1%, 5% and 10% level respectively

indicates that jointly, the coefficients of the independent variables are not equal to zero for both models. On top of that, the coefficients of BLIDACT, D4BLISPSV[13], BLISPSV, BOARDOWN[14], INEDOWN[15], EXECDIRBRD[16], and EXECDIROWN[17] are demonstrated to be insignificant for all Models. This study also included control variables such as cash (D4CASH)[18], this variable is negatively significant for all the models.

As the family's wealth is linked to the performance of the firm, family firms are more risk-averse; thus, they tend to be more cautious in making investment decisions. For example, they could be choosy in identifying a target firm and they would not overpay for it. Furthermore, they have more incentive to monitor target firms. The results for family ownership and

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13   D4BLISPSV is a dummy of institutions, corporations, and non-family companies holding at least 5% of voting rights and not represented on board.

14   BOARDOWN is defined as a percentage (%) of shareholding by all members of board of directors.

15   INEDOWN is the percentage (%) of independent directors to total directors.

16   EXECDIRBRD denotes the fraction of professional CEOs involve the board's day to day operations.

17   EXECDIROWN is the percentage (%) of professional CEOs involved in the board's day to day operations.

18   D4CASH = is defined as 1 if cash-acquisition; 0 otherwise. The number in the bracket is the p-value.

family directorship show the non-existence of managerial entrenchment or agency problems between the majority and minority shareholders. Thus, the higher the family ownership or directorship stake, the higher the abnormal returns. These findings support the hypothesis that there is a significant effect of family ownership and family directorship on acquisition announcements.

Next, it is anticipated that blockholders can monitor the performance of acquisitions (Shleifer & Vishny, 1986). If they are powerful, they could replace underperforming managers. Studies done by Bauguess et al. (2009) and Walters et al. (2007) showed that active blockholders could play their role in companies and generated significant positive returns for the (-3, 3) and (-1, 1) window periods. As for passive blockholders, Bauguess et al. (2009) found that they did not play a role in explaining returns to acquirers, as evident from the insignificant effect for a three-day event window (-1, 1). However, in this study, active individual blockholders (D4BLIDACT[19]) and passive individual blockholders (D4BLIDPSV[20] and BLIDPSV) bring value-decreasing returns to acquirers. The existence of either active or passive individual blockholders on the board leads to a 2.03%, 2.23%, or one-standard-deviation increase in family ownership which leads to an 8.40%

reduction in abnormal returns, respectively. These coefficients are statistically significant at least at the 10% level. There are two reasons for the significant negative returns. First, despite having 5% shareholding, active individual blockholders do not play an active role in monitoring, which subsequently reduces their involvement in decision-making. Second, the passive individual blockholder would only aim to diversify their investment in order to reduce the overall risk without any involvement in the firm's management.

This study finds that the active institutional blockholders (D4BLISACT[21] and BLISACT) who serve on the boards add more value to the acquirer. The empirical evidence reveals that active institutional blockholders in firms reduce the CEO's entrenchment and increase the benefit of monitoring (Bauguess & Stegemoller, 2008; Bauguess et al., 2009; Walters et al., 2007). They detected that active institutional blockholders bring significant positive returns for short window periods. A plausible explanation for such a condition is that the active institutional blockholders in Malaysia are able to provide a monitoring role and thus influence the board of directors to acquire targets that can lead to value creation.

Following that, this study finds that the fraction of independent directors (INEDBRD[22]) on the board does play a

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19   D4BLIDACT is defined as a dummy of individual block holder and non-family owned companies having at least 5% of voting rights, and represented on the board.
20   D4BLIDPSV reflects a dummy of individual block holder and non-family owned companies holding at least 5% of voting rights and not represented on the board.

21   D4BLISACT reflects a dummy of institutions, corporations, and non-family owned companies holding at least 5% of voting rights and represented on the board.
22   INEDBRD represents the fraction of independent directors to total directors.

rather significant role and eventually leads to positive and significant returns to the acquiring firms. In reviewing the relevant literature, INEDBRD is often found to be a good governance mechanism since it represents the shareholders' interest. The independent directors bring additional expertise and valuable business relationships that should benefit the firm and serve as the drivers for the growth performance of the M&As (Walters et al., 2007; Pham et al., 2015). It is believed that an independent board would then increase the directors' capacity in influencing the firm's strategic decisions in M&As (McDonald et al., 2008). This is in line with findings from previous studies by Ben-Amar and André (2006), Pham et al. (2015), and Walters et al. (2007) who supported the claim that independent directors had a statistically significant positive effect on acquirers for short window periods.

The dummy for the founder (D4FOUNDER) shows a negative significant coefficient of -0.0208 for a five-day (-3, 1) event window in Model 2. Thus, this study shows that founder-directors create negative returns for firms. This result is consistent with that of earlier studies by Bauguess and Stegemoller (2008) and Ning et al. (2014) who all agreed that the presence of the founder on the board resulted in negative and statistically significant returns for a three-day event window (-1, 1). They argued that founders had their own objectives which were not focused on maximizing shareholders' wealth but rather on entrenching their position in the firm.

Finally, family ownership and acquisition financed by cash are confirmed to always be significant in explaining returns regardless of the models used. Positive returns to bidders indicate that family-controlled firms in Malaysia engage in M&As in order to maximize shareholders' wealth and not to achieve private benefits for family members. Furthermore, the findings establish that families align their interests with those of minority shareholders. The results also show that if families want to diversify their risk through acquisitions, they would only do so by acquiring firms that could lead to value-creating synergies. Finally, the findings indicate that agency problems between the minority and majority shareholders in acquisitions are lessened. This finding is consistent with that of previous studies (see for example André et al., 2014; Ben-Amar & André, 2006; Bougarrou & Navatte, 2013; Caprio et al., 2011; Craninckx & Huyghebaert, 2015; DeCesari et al., 2016; Defrancq et al., 2016; Ruiz & Requejo, 2010).

As for acquisitions financed by cash, the results show that bidders in Malaysia are categorized as cash-rich bidders and experience value-decreasing acquisition. This outcome is also in line with the results of previous studies (see for example Banerjee et al., 2014; Bouzgarrou & Navatte; 2013; Harford, 1999; Mat-Nor & Ismail, 2006). Moreover, Jensen (1986) also stated in his study that since free cash flow functioned as the fund for all the firms' projects, the firms were usually reluctant or refuse to pay out to shareholders. Nevertheless, the

firms still manage to generate substantial free cash flows whilst the managers from the firms with unused borrowing power are prone to engage in low benefit, unprofitable projects, or even create value-destroying acquisitions. Consequently, firms with high free cash flows have a higher probability of facing conflicts of interest between the shareholders and managers.

Discussions

This study explored the announcement effects of the acquisition on the performance of bidding firms. Moreover, this study also explored whether governance mechanisms such as blockholder activism and board structures (board size, independent director, executive director, and founder-director) as well as control factors (cash) could explain short-term announcement effects in Malaysian acquirer firms. The positive announcement effect of acquisitions by acquirers had been well documented in various countries especially in the United States as well as European and Asian markets.

The evidence shows that family ownership leads to a positive relationship in explaining returns for short-term performance. This indicates that family-controlled firms do not engage in opportunistic behaviour by expropriating wealth from minority shareholders. Thus, the findings of this study contradict that of Lemmon and Lins (2003) who found that controlling shareholders in Asia including Malaysia engaged in expropriating behaviour. A possible explanation for the

positive relationship is that expropriation does not occur in acquisitions as it will reduce stock prices. The findings have implications on several parties such as managers of bidding firms, policymakers, and academicians. With respect to managers of family-controlled firms, as long as an acquisition is creating value, they do not have to worry about investors penalizing them. Policymakers do not have to worry about opportunistic behaviour because investors will penalize family-controlled firms who engage in such behaviour as investors are always monitoring their actions. This study also enriches the knowledge of academicians as it proves that investors make rational investment decisions. If they believe that acquisitions by family-controlled firms would create value, they would then invest in those companies. The findings are also relevant to the Securities Commission as one of the regulators for the Malaysian capital market. Furthermore, since Malaysia has a distinct characteristic by which institutions namely government-linked investment companies (GLICs) and non-GLICs play a major role in monitoring firms, the effect of their ownership may be even more consequential on the acquisition's value. The future research could be beneficial to the government as it shows whether acquisition undertaken by GLICs controlled companies create shareholders' value. Moreover, M&As in Malaysia are now moving to the transforming industry to the fourth industrial revolution (IR4.0) in which to drive the digital transformation of the manufacturing and related services sector in

Malaysia together with the implementation of financial services technology (Fin-tech). Thus, M&As could be used to tap into domestic and foreign markets, acquire cutting edge technology, improve products and services, and cut costs. This study intends to investigate this conjecture in the future.

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An Investigation of the Factors Influencing the Financial Performance of Agricultural Cooperatives in Thailand

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ABSTRACT

This study investigates the factors influencing the financial performance of 1,766 agricultural cooperatives in Thailand by applying the DuPont analysis framework. Financial performance, measured using ROE (return on equity), was decomposed to three contributing factors, *viz*., profitability, asset efficiency, and financial leverage. Linear regression and quantile regression analyses were employed to respectively estimate the conditional mean and conditional quantiles. Profitability was found to be the strongest driver of ROE. Asset efficiency and financial leverage were also positive contributors to ROE. An alternative regression model was carried out, where the financial performance construct ROE was replaced with ROA (return on assets). The findings suggest that increasing leverage leads to decreasing performance, contradicting the earlier results. This implies that whether leverage hurts or benefits performance can depend on the variable choice. Employed as control variables, location and age were found to be associated with performance. In particular, the cooperatives in the central region, in general, appeared to have the lowest financial performance. The study empirically pointed out that negative equity led to violations of the ordinal and interpretable properties of ROE. Thus, ROE components should be carefully examined. Regarding cooperative management policy, cooperatives should concentrate on both operating and financial performances with the priority given to profitability, which

involves the efficiencies of cost and sales management.

INTRODUCTION

It is widely acknowledged that cooperatives play a crucial role in improving the socio-economic conditions of their members and communities (United Nations [UN], 2009). Likewise, over the past century, since the first cooperative in Thailand, the Wat Chan Cooperative Unlimited Liability, was established in 1916, cooperatives have played a crucial role as economic contributors to the economy (Krasachat & Chimkul, 2009; Patrawart & Sriurai, 2016). In 2018, there were 6,626 cooperatives with more than 12 million members (about 17% of the country's population), and they contributed THB 2.188 trillion (13% of the GDP) to the nation's GDP (Cooperative Promotion Department of Thailand, 2019).

The cooperatives in Thailand can be classified according to seven types, namely, agricultural, fishery, land settlement, consumer, service, thrift and credit, and credit union. The largest type is the agricultural cooperative, which accounts for more than half of all cooperatives, totaling 3,367 cooperatives and 6.52 million members (Cooperative Auditing Department of Thailand, 2019b). However, in terms of profitability, it was found that 30.53% of agricultural cooperatives were unprofitable compared to 14.18% of the other six types of cooperatives. In addition, in terms of financial performance, the return on equity (ROE) of agricultural cooperatives was 4.85% compared to 6.82% of the other cooperatives' ROE (Cooperative Auditing Department of Thailand, 2019c). Therefore, agricultural cooperatives in Thailand suffer both low profitability and low financial performance. However, one may argue that cooperatives are not necessarily profiting maximizers, as cooperatives also have a duty to promote the welfare of their patrons. That is, cooperatives have been noted to have dual objectives (Draheim, 1952). Nonetheless, in order to serve the function of promoting the well-being of society, it is necessary for cooperatives to be successful in their business operations (Dogarawa, 2010). In other words, before becoming socially successful, cooperatives should be financially successful (Rochin, 1983). The financial performance of cooperatives determines the capability to support their members and the viability of the cooperatives *per se*. Every cent of the return from investment in cooperatives signifies not only support for each member's well-being but also a contribution to the growth of the economy as a whole.

The objectives of this study were twofold; namely, to explore the factors driving the performance of agricultural cooperatives in Thailand by employing the DuPont analysis, and to make recommendations for improvement. Not only will the management of cooperatives be able to adapt the findings of this study to improve cooperatives' strength, but also policymakers may be able to employ the

findings for policy development in order to promote the performance of cooperatives.

This paper is organized into four sections: first, the introduction is presented; second, the methodological framework and a review of the literature are discussed; third, the data, variables, and model estimation are described; and last, a conclusion and discussion are made, and recommendations are proposed.

METHOD

Applied research on cooperative performance can be grouped according to two general approaches, *viz.* financial measurements and non-financial measurements (Soboh et al., 2009). On the one hand, financial or economic measurements, in general, measure profitability or efficiencies by using accounting data. On the other hand, nonfinancial measurements involve, for instance, member satisfaction, member ownership and controls, and community development (Monaghan & Sadler, 2013). This study adopted a financial measurement method, namely, DuPont analysis, as discussed in the next section, along with a related literature review.

DuPont Analysis

The DuPont analysis is a framework for analyzing financial performance made known by the DuPont Corporation since 1912 (Flesher & Previts, 2013). The analysis involves decomposing ROE, defined as

net income divided by equity, into three different contributors, as shown in equation [1].

$$ROE = profitability \times asset\ efficiency \times financial\ leverage,$$ [1]

This allows tracking down the strength and weakness of a cooperative into three areas; namely, *profitability*, *asset efficiency*, and *financial leverage*, which are, respectively, proxied by the following constructs: profit margin = net income/sales, asset turnover = sales/assets, and equity multiplier = assets/equity.

In brief, the net profit margin variable is the result of the cooperatives' ability to control their expenses—mainly interest expenses and operating expenses. The asset turnover variable reflects the efficiency of the cooperatives' asset utilization. The higher the ratio, the higher is the efficiency. The equity multiplier variable shows the use of financial leverage. The higher the cooperative's debt financing, the larger is the equity multiplier.

The DuPont equation can further be expanded into five components, as shown in equation [2].

$$ROE = \frac{NI}{EBT} \times \frac{EBT}{EBIT} \times \frac{EBIT}{Sales} \times \frac{Sales}{Assets} \times \frac{Assets}{Equity},$$ [2]

where EBT is earnings before taxes, and EBIT is earnings before interest and taxes. Equation [2] further decomposes the profit margin ratio into measures on tax burden (NI/EBT), interest burden (EBT/EBIT), and operating profit margin (EBIT/sales). However, according to s. 39 and s. 69 (bis) of the Thai Revenue Code, the cooperatives in Thailand are not liable for corporate taxes. Therefore, this study concentrated on the DuPont framework of equation [1].

Literature Review

DuPont applications are widely carried out on corporate performance (de Wet & du Toit, 2007; Keown et al., 2008). However, only a small amount of research has applied the DuPont analysis to agricultural financial performance (Grashuis, 2018). Grashuis and Ye (2019) offered an excellent review of cooperative performance. This section offers a brief and selective literature review, concentrating on measuring cooperative financial performance *via* the DuPont expansion analysis. Mishra et al. (2009) used the DuPont expansion to examine agricultural profitability on the state-level data of ten U.S. Economic Research Service regions between 1960 and 2004. The study found that a perpetually low-profit margin and low asset efficiency were the causes of low profitability. Mishra et al. (2012) further employed the DuPont expansion method with a system of equations to analyze farm-level data from the U.S. Department of Agriculture's Agricultural Resource Management Survey in order to evaluate the factors driving profitability

between 1996 and 2009. The drivers of the DuPont's components were specialization, farm size and typology, contracting, and level of government payments. Additionally, Grashuis (2018) studied the financial performance of the largest 1,000 U.S. farmer cooperatives using the extended DuPont on efficiency, productivity, and leverage. The author employed the quantile regression method and found that financial performance was largely associated with the operating profit margin.

Data Analysis and Results

Data. The annual data for the year 2018 of all agricultural cooperatives in Thailand were retrieved from the Cooperative Auditing Department (Cooperative Auditing Department of Thailand, 2019a). Due to data availability, the initial sample set contained 2,663 agricultural cooperatives, which could be classified according to the attributes of their net income and equity, as shown in Table 1.

Table 1 reveals that, out of 2,663 cooperatives, 1,908 were profitable, whereas 755 suffered a financial loss. Furthermore, 272 cooperatives reported negative equity (liabilities exceeding assets), implying they were experiencing financial distress. The last column of Table 1 reports that 1,860 cooperatives had both positive net income and positive equity, and 224 were experiencing negative net income and negative equity. Since the DuPont analysis concentrates on the financial performance measure, ROE, the next section discusses the empirical problems concerning ROE.

Table 1

Agricultural cooperatives by the sign of ROE's components (net income and equity)

Sign	Net Income	Equity	Net income and Equity
Positive	1,908	2,391	1,860
Negative	755	272	224
Sum	2,663	2,663	2,084

ROE Issues. Financial ratios such as ROE and ROA are widely employed as financial performance measures (de Wet & du Toit, 2007; Mubashar & Tariq, 2017; Şamiloğlu et al., 2017). If the denominator of such index variables is negative, the construct validity is violated in two ways; namely, 1) these indices will lose their ordinal property; and 2) it is difficult or impossible to interpret the meaning of such indices (Thornblad et al., 2018). This is the case for ROE since the denominator shareholders' equity can become negative if the level of debt exceeds total assets. Each row *a* in Table 2 summarizes the plausible cases of ROE, while row *b* presents related numerical examples taken from the empirical data of this research with fictitiously renamed cooperatives A, B, C, D, and E.

Cooperatives A and B both reported positive ROEs of roughly 1%, implying a favorable return on equity. However, this

Table 2

ROE – ordinal and interpretational problems: empirical evidence

co-op		Equity	Net income	ROE	Interpretation
A	a	positive	positive	positive	normal operation
	b	40,615,783.67	429,543.28	0.0106	
B	*a*	negative	negative	positive (falsely)	financially distressed
	b	-1,282,953.48	-13,597.93	0.0106	
C	*a*	positive (low figure)	positive	positive	likely to be over-leveraged
	b	8,711.74	25,582.41	0.3405	
D	*a*	positive	negative	negative	losses (temporary or long-term)
	b	5,858,957.45	-1,362,066.58	-0.2325	
E	*a*	negative	positive	negative	not meaningful, debts exceed assets
	b	-1,286,718.65	457,345.77	-0.355	

Note: Each row *a* of the fictitiously renamed cooperatives A, B, C, D, and E summaries the plausible cases of ROE, where row *b* presents related selected numerical examples taken from the empirical data

was not the case for B, since the positivity was a result of negative earnings and negative equity, falsely interpreting B as generating a positive return on equity is misleading. The ROE of co-op C was 34% due to the low equity value. A closer look reveals that the debt-to-equity (D/E) and debt-to-asset (D/A) ratios were respectively 9.62× and 0.91×, implying high leveraging. The negative ROE of D correctly indicated that a loss incurs to the equity. However, the negative ROE of E was difficult to meaningfully interpret, since it came from negative equity. Cases B, C, and E represented problems of ordinality and interpretability. A problem arises when the denominator equity is in the range of low positive to negative values. If this problem is not addressed, the results and interpretations can be spurious. The following remedies are proposed; namely, 1) drop negative equity ROE out of the sample, which however may lead to sampling bias (Trimbath, 2006); 2) employ a transformation of the index that will preserve the ordinality and interpretability; and 3) use an alternative profitability measure that is not affected by a negative denominator. In this respect, ROA is a good alternative since the divisor's total assets cannot be negative.

In addition to ROE, this research thus employs ROA as an alternative performance measure. Furthermore, in order to ensure well-specified data, 224 positive ROE cooperatives that were generated from negative net income and negative equity were opted out from the sample set, whereas 5% of both tails of the data were excluded. The final sample set contains 1,766 cooperatives.

Variable Characteristics

The attributes of the variables are summarized in Table 3. The sample-set includes 1,766 agricultural cooperatives in Thailand for the year 2018. NI.Sales (profit margin) is the ratio of net income to sales; Sales.Assets (asset turnover ratio) is the ratio of sales to total assets; Debt.Equity is the ratio of debt to equity; Debt.Asset is the ratio of debt to total assets; and Age is the age (in years) of the cooperative as of 31 December 2018. Table 4 reports the correlation coefficients of the independent variables.

Table 3

Summary statistics

Statistics	ROE	ROA	NI.Sales	Sales. Assets	Debt. Equity	Debt. Asset	Age
Mean	0.0836	0.0461	0.1940	2.8112	1.905	0.4495	25.509
Median	0.0653	0.0293	0.0752	0.2833	1.008	0.5019	24.776
Std.Dev.	0.0724	0.0549	0.3719	11.4865	4.336	0.2885	14.084
Range	0.4110	0.4112	10.4532	201.411	105.382	0.9906	67.317

Table 3 *(Continued)*

Statistics	ROE	ROA	NI.Sales	Sales. Assets	Debt. Equity	Debt. Asset	Age
Minimum	0.0037	0.0007	0.0002	0.0037	0.000	0.000	0.5306
Maximum	0.4147	0.4119	10.4535	201.4147	105.382	0.9906	67.847
Observation	1766	1766	1766	1766	1766	1766	1766

Table 4

Correlation matrix

	NI.Sales	Sales.Assets	Debt.Equity	Debt.Asset	Age
NI.Sales	1				
Sales.Assets	-0.1170	1			
Debt.Equity	-0.0901	-0.0701	1		
Debt.Asset	-0.2025	-0.2285	0.4792	1	
Age	-0.1068	-0.2311	0.0135	0.3356	1

Model Estimation

Ordinary least squares (OLS) regression is the main workhorse in applied econometrics (Granger, 2010). However, OLS relies on a set of rigorous assumptions regarding the characteristics of the data. For example, if the assumptions on homoscedasticity and normality are not satisfied, the OLS may no longer be a good estimator (best linear unbiased estimator properties may not hold). Alternatively, quantile regression, introduced by Koenker and Bassett (1978), does not make an assumption on the distribution of the residuals and is more robust to outliers. It is known that mean is not always an accurate measure of the central tendency of the entire data, particularly in the presence of outliers and skewed distributions. Rather than focusing on a single estimation of a conditional mean, quantile regression offers a mechanism to estimate the conditional median function of the entire conditional distribution of the response (Rodriguez & Yao, 2017). Therefore, in addition to the OLS, this research also employed quantile regression estimation.

The estimations of all of the regression models were carried out in the R programming environment. In particular, the "robustbase" and "quantreg" libraries were employed for robust estimation and quantile regression. Under the framework of DuPont analysis equation [1], without loss of generality, in order to make the interpretation of the leverage effect on the profitability more straightforward, a proxy

of financial leverage, namely, debt-to-equity ratio, replaces the equity multiplier ratio in equation [1]. In addition, a set of control variables is included in equation [3], where the variable definitions are offered in Table 5.

$$
\begin{aligned}
ROE_i &= \beta_0 + \beta_1 \left(\frac{NI}{Sales}\right)_i \\
&+ \beta_2 \left(\frac{Sales}{Assets}\right)_i \\
&+ \beta_3 \left(\frac{Debt}{Equity}\right)_i \\
&+ \beta_4 Age_i + \beta_5 S1_i \\
&+ \beta_6 S2_i + \beta_7 S3_i \\
&+ \eta_i,
\end{aligned}
\tag{3}
$$

The subscript i refers to cooperative i. β_i, $i = 1 \dots 7$, are the corresponding parameters for the independent variables. η_i is the classical linear regression error term. The control variables are Age_i and regional dummies (S1, S2, S3, and S4$_i$), where S4$_i$ is opted out as the base case. The following briefly details the agricultural activities in each region. The central region includes: rice, fruits, vegetable crops, field crops, and livestock. The north-eastern region includes: rice, rubber, cassava, jute, mulberry, soybean, mungbean, peanut, sesame, and some vegetable crops. The northern region includes: rice, soybean, mungbean, corn, cotton, sorghum, and fruits. The southern region includes: rubber, rice, fruits, vegetables, oil palm, marine fisheries, and prawn farms (Chainuvati & Athipanan, 2001; Poapongsakorn, 2011).

Table 5

Variable working definition

Variable	Working Definition
DuPont Components	
return on assets =	*net income / assets*
return on equity =	*net income / equity*
profit margin =	*net income / sales*
asset turnover =	*sales / assets*
debt-to-equity =	*debt / equity*
debt-to-asset =	*debt / asset*
Control Variables	
Age_i = age (in years) of the cooperative as of 31 December 2018.	
Regional dummy variables	
S1$_i$=	1 if the cooperative is in the central region, 0 otherwise
S2$_i$=	1 if the cooperative is in the north-east region, 0 otherwise
S3$_i$=	1 if the cooperative is in the northern region, 0 otherwise
S4$_i$=	1 if the cooperative is in the south, 0 otherwise

The various estimation models employed are as follows: Model 1 is an OLS regression with MM-type robust estimators (Koller & Stahel, 2011; Yohai, 1987). Models 2, 3, and 4 are quantile regressions where the data are classified into 25th, 50th, and 75th quantiles. A set of models called 1a, 2a, 3a, and 4a were also employed, where two variables of Models 1 to 4 (equation [3])—namely, ROE and debt-to-equity ratio—were replaced with

ROA and debt-to-asset ratio, respectively. The reason was to investigate the variability of the results using the alternative financial performance and capital structure measures. The estimation results for Models 1 to 4 (for OLS and quantile regressions) are presented in Table 6.

OLS Regression Results. The MM-type regression Model 1 revealed that all of the DuPont components were positively and

Table 6

Regression results [a]

dependent variable: ROE	OLS Regression	Quantile Regression		
		25th	50th	75th
indep. variable	*Model 1*	*Model 2*	*Model 3*	*Model 4*
Intercept	0.0545***	0.0275***	0.0681***	0.1233***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
NI/Sales	0.0528***	0.0447***	0.0437***	0.0440***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Sales/Assets	0.0041***	0.0010**	0.0024***	0.0035***
	(0.0000)	(0.0143)	(0.0012)	(0.0000)
Debt/Equity	0.0039***	0.0012*	0.0041***	0.0071***
	(0.0000)	(0.0891)	(0.0000)	(0.0000)
Age	-0.0001	0.0002*	-0.0004***	-0.0013***
	(0.3978)	(0.0504)	(0.0016)	(0.0000)
S1	-0.0169***	-0.0167***	-0.0188***	-0.0154**
	(0.0000)	(0.0000)	(0.0001)	(0.0121)
S2	-0.0093***	-0.0075**	-0.0122***	-0.0156***
	(0.0058)	(0.0435)	(0.0022)	(0.0048)

Table 6 *(Continued)*

dependent variable: ROE	OLS Regression	Quantile Regression		
		25th	50th	75th
indep. variable	Model 1	Model 2	Model 3	Model 4
S3	-0.0083*	-0.0040	-0.0110***	-0.0098*
	(0.0169)	(0.3673)	(0.0098)	(0.0899)
Adjusted R^2, [b]	0.314	n.a.	n.a.	n.a.
Psudo-R^2, [b]	n.a.	0.0535	0.0694	0.0338
Sample size	1,766	1,766	1,766	1,766

Note: ***, **, * significant at 1%, 5%, and 10% levels, respectively

[a] The dependent variable of Models 1, 2, 3, and 4 is ROE: Model 1 is a linear regression model with MM-type estimators. Models 2, 3, and 4 are quantile regressions where the data are separated into 0.25, 0.50, and 0.75 quantiles

[b] *Psudo-R^2* is reported since R^2 is not an applicable goodness-of-fit metric for quantile regressions, as they are calculated by minimizing the absolute values of the weighted residuals, not the sum of the squared errors.

significantly associated with ROE at the 1% level, i.e. for profitability (*NI/Sales*): β_1 = 0.0528, implying that a one percentage point increase in profit margin is significantly related to a 0.0528 percentage point increase in ROE, asset efficiency (*Sales/Assets*) β_2 = 0.0041; and financial leverage (*Debt-to-equity*) β_3 = 0.0039. *NI/sales* were the factor with the strongest marginal effect on ROE. *Age* was not statistically significant. Regarding the regional dummy variables, the agricultural cooperatives in the south on average had the highest ROE, followed by the northern, the north-eastern, and the central regions, respectively.

Quantile Regression Results. This study employed quantile regression in order to investigate whether the factors affected the profitability differently for different quantiles for the entire distribution. The estimations were carried out on 0.25, 0.50, and 0.75 quantiles. All of the DuPont components were still found to be significantly and positively associated with ROE. For *NI/sales*, the positive effect on ROE was relatively constant across quantiles, at 0.0447, 0.0437, and 0.044 for the 25th, 50th, and 75th quantiles, respectively. This implies that the marginal effect of the profit margin on ROE is strong and relatively constant among cooperatives with different levels of performance. The positive effect of *sales / assets* on ROE was more profound on the higher quantiles. That is, a one percentage point increase in *sales / assets* led to a statistically significant increase of 0.0010, 0.0024, and 0.0035 percentage point increases in ROE for the 25th, 50th, and 75th quantiles, respectively. The positive effect of *debt-to-equity* was found to be stronger for the higher quantiles. That is,

a one percentage point increase in *debt-to-equity* led to increases in ROE at 0.0012, 0.0041, and 0.0071 percentage points for 25th, 50th, and 75th quantiles, respectively. Regarding Age, for low ROE cooperatives (at the 25th quantile), the older cooperatives were positively related to higher ROE, but for medium and high ROE cooperatives the relationship was reversed. That is, for medium and high ROE cooperatives, as cooperatives become older they will be less profitable. The cooperatives in different regions appeared to have different levels of ROE, although not all regional dummies were statistically significant.

Additional Analysis. An alternative regression model was carried out in order to investigate the variability of cooperative performance should different proxies of financial performance and leverage be employed. The performance measure ROE was replaced with ROA, and in order to be on the same scale as ROA, the financial leverage debt-to-equity ratio was replaced with the debt-to-asset ratio. The model is represented by equation [4]

$$
\begin{aligned}
ROA_i &= \beta_0 + \beta_1 \left(\frac{NI}{Sales}\right)_i \\
&+ \beta_2 \left(\frac{Sales}{Assets}\right)_i \\
&+ \beta_3 \left(\frac{Debt}{Assets}\right)_i \\
&+ \beta_4 Age_i + \beta_5 S1_i \\
&+ \beta_6 S2_i + \beta_7 S3_i \\
&+ \eta_i,
\end{aligned}
\tag{4}
$$

The same procedure was observed, and the estimated results are presented in Table 7 below.

Table 7

Regression results

dependent variable: ROA	OLS Regression	Quantile Regression		
		25th	50th	75th
indep. variable	Model 1a	Model 2a	Model 3a	Model 4a
Intercept	0.0331***	0.02487***	0.05195***	0.09162***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
NI/Sales	0.0432***	0.03284***	0.03151***	0.02724***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Sales/Assets	0.0045***	0.00069**	0.00246***	0.00373***
	(0.0000)	(0.0414)	(0.0000)	(0.0000)
Debt/Assets	-0.0277***	-0.02283***	-0.04328***	-0.07195***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Age	0.0004	0.00005*	-0.00007**	-0.00036***
	(0.22012)	(0.0960)	(0.0605)	(0.0000)

Table 7 *(Continued)*

dependent variable: ROA	OLS Regression	Quantile Regression		
		25th	50th	75th
indep. variable	Model 1a	Model 2a	Model 3a	Model 4a
S1	-0.0053***	-0.00627***	-0.00896***	-0.00839***
	(0.0025)	(0.0000)	(0.0000)	(0.0036)
S2	-0.0027*	-0.00287**	-0.00553	-0.00678***
	(0.0802)	(0.0114)	(0.0003)	(0.0182)
S3	-0.0011	-0.0020*	-0.00421***	-0.00616***
	(0.4912)	(0.0864)	(0.0074)	(0.0292)
Adjusted R^2	0.6886	n.a.	n.a.	n.a.
Psudo-R^2	n.a.	0.1727	0.2162	0.2155
Sample size	1,766	1,766	1,766	1,766

Note: ***, **, * significant at 1%, 5%, and 10% levels, respectively

It can be seen from the adjusted R^2 and *Psudo- R^2* that the explanatory powers significantly improved over the original model. Interestingly, almost all of the previous results were confirmed apart from the financial leverage proxy, debt-to-asset, which was now significantly but negatively associated with ROA, and appeared to be stronger for cooperatives with higher ROA. That is, a one percentage point increase in debt-to-asset led to a decrease of 0.02, 0.04, and a 0.07 percentage point decrease in ROA for the 25th, 50th, and 75th quantiles, respectively. This is discussed in the next section. The control variable Age was not significant in Model 1a, but the quantile regression Models 2a and 4a revealed that the cooperatives in the central region on average had the lowest ROA. Nevertheless, not all regional dummies were statistically significant in Model 3a.

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The robust estimator regression estimation results showed that all of the DuPont components—namely, profitability, asset efficiency, and financial leverage—were positively associated with the financial performance measure, ROE. The most salient factor in terms of boosting the ROE was the profit margin or the effectiveness of the manager to generate net profit from sales. This positive association is consistent with Grashuis (2018) and Mishra et al. (2009). The second most important factor was financial leverage. The age of the cooperatives was found to be irrelevant in terms of financial performance. Not all of the regional dummies were significant in every model estimated. It appeared that the cooperatives in different regions exhibited different financial performance. In particular,

most models suggested that the cooperatives in the central region appeared to have the lowest financial performance in terms of ROE and ROA. The quantile regression estimations confirmed the regression results and provided a more complete picture of the factors affecting the performance on different quantiles. All of the DuPont components were still found to be positively associated with the ROE. The marginal impact of profit margin was still consistently the strongest and was relatively constant across the quantile spectrum of ROE. In terms of asset efficiency and financial leverage, impacts were found to be greater for cooperatives with stronger performance. The regional dummy variables were found to be consistent with the OLS regression results. Age and ROE were positively correlated for low ROE cooperatives (25% quantile), but were negatively correlated for medium and high ROE cooperatives (50th and 75th quantiles), implying that medium and high-performance cooperatives are less profitable as they become older.

An additional analysis was carried out in order to investigate the response of cooperative performance on different proxies of financial performance and leverage, where ROE was replaced with ROA, and debt-to-equity with debt-to-asset. The findings confirmed almost all of the previous results. However, the leverage construct debt-to-asset was found to be negatively associated with the performance measure ROA, contradicting the earlier results when ROE was used as the performance measure. In the absence of debt, the cooperative's level of assets is the same as its shareholders' equity, rendering ROE equal to ROA. The introduction of debt comes with an attached interest expense, which in turn lowers net income and, hence, reduces ROA. In addition, increasing debt reduces the proportion of equity, which results in an increase in ROE. Therefore, different performance measures may lead to different conclusions. This study finds that, on the one hand, employing ROE leads to the conclusion that increasing leverage induces an increase in financial performance. On the other hand, when ROA is employed, an increase in leverage hurts the performance, particularly for cooperatives in higher profitability quantiles. Increasing leverage may initially induce higher ROE. However, if the return on assets is lower than the additional cost of debt, this will ultimately take a toll on the profit and the ROE. On the other hand, if the ROA is greater than the additional cost of debt, this implies that using leverage is favorable. This can be summarized in the following DuPont equation [5] proposed by Newman and Briggeman (2016).

$$ROE = ROA + \left[\left(ROA - \frac{Interest\ Expense}{Debt} \right) \times \left(\frac{Debt}{Equity} \right) \right] \quad [5]$$

This implies that leverage should be employed to boost the ROE as long as the rate of return on assets is greater than the cost of interest expense. In addition,

should ROE be employed as a financial performance measure, the researcher should be aware of the negative denominator problem, which can violate the ordinal property and confound the interpretation (discussed in section 3.1 above). Under the circumstance of a negative denominator, a construct that can hold the ordinal and interpretable properties is preferred.

Regarding management policy, cooperatives should pay close attention to managing both sides of performance, namely, operating and financial. Operating performance involves profitability and asset efficiency. Financial performance concerns financial leverage. The first priority should be given to profitability, which involves the efficiencies of cost and sales management. The second priority is leverage, which can either boost or hurt financial performance according to the variable choice. Thus, the leverage decision should depend on the net benefits to leverage. Lastly, the efficiency of asset management concerns the focus on increasing sales revenue over the assets of the cooperative.

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SOCIAL SCIENCES & HUMANITIES

Scrutinizing Social out- of- placers: Euripides, Madness and Jaspersian Psychopathology

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ABSTRACT

A great number of analyses have already been devoted to the study of the concept of madness but few have ever used Karl Jaspers' psychopathological notion of insanity as a touchstone to examine prominent literary works. The present investigation aims to portray the manifestation of madness in Euripides' *The Bacchae*. Applying the eclectic perspective of Karl Jaspers which bridges the gap between empirical and interpretive psychiatry, this research examines the justification of the divinely-induced madness in 407 BC Greece. Jaspers' book, *General Psychopathology* includes a tentative classification of mental disorders which will be used to look at this particular work of art from his perspective, offering a standpoint which is equally person-centered and science-based. Out of the eight provisional categories of psychic abnormalities suggested by Jaspers in his book, the women of Thebes seem to be having problems with a disturbance in three of them, namely the awareness of objects, awareness of the self and the phenomena of self-reflection.

Keywords: Euripides, *General Psychopathology,* Karl Jaspers, madness, psychopathology, *The Bacchae*

INTRODUCTION

Madness is too broad a term to be defined as its characterization is a matter of context in terms of place, time and many various factors but generally, humans have either consciously or unconsciously established certain codes of behavior that delineate 'normality'. Any deviation from them would lead to isolation from the better normal half, stigmatizing the out of placers. That is why

many of us equalize the distinction between reason and unreason with the socially constructed dichotomy of the normal and the abnormal. Inspired by Foucault's *Madness and Civilization*, Mills (2003) explained how "any instances of seemingly aberrant behavior can be labeled as an instance of mental illness" (p. 103).

Porter (2002), as well as Cooper and Sartorius (2013) asserted that while some renowned psychiatrists like Michel Foucault and Thomas Szasz took 'mental illness' to be only a fabrication of the mind to serve some other interests concerning power and control, there were still a great number of intellectuals who believed by heeding the relatively stable psychiatric symptoms over time, we were capable of even classifying the mental disorders into categories like ICD-10 and DSM-IV, disregarding the limitations they might entail.

Griesinger, Kraepelin and Freud each represented their own novel ideas at the end of the nineteenth century which paved the way for the emergence of a figure who was going to lay the foundation of psychopathology at the dawn of the twentieth century. Karl Jaspers, a German-Swiss psychiatrist and philosopher was born in 1883 in Germany. He is mostly remembered as a major proponent of existentialism since the theme of individual freedom pervades many of his works. He became one of the few people who tried to bridge the gap between empirical and interpretive psychiatry known today as "the biologic" and "the dynamic" (Jaspers, 1959/1997, p. 45).

Opposing the advancement of biological reductionism in the realm of mental illness led by Wilhelm Griesinger, Jaspers (1959/1997) emphasized the timeless, inseparable unity of soma and psyche in favor of eclecticism in the choice of research methods. There were two standpoints that social scientists were adhering to at the time and Jaspers decided to make them available to psychiatry.

Taking the terminology from Wilhelm Dilthey, Jaspers (1959/1997) distinguished between the two methods of "explanation" and "understanding". Explanation is to act impersonally to discern nature's laws through drawing causal connections. Understanding, on the other hand, aims for finding meaningful connections when discussing mental disorders by analyzing the individual's experiences and unfulfilled desires. This process has to be done empathically. Kraeplin's method which is called Explanation by Jaspers, represents the first group and Freud's interpretive method called Understanding represents the latter.

As mentioned earlier, Jaspers' research methodology is eclectic, meaning he benefits from multiple theories and ideas to gain complementary insights into psychology. The transformation of eclecticism as a conceptual approach will not be discussed here separately. The focus of this research is to show how Jasper's eclectic perspective distinguishes him from other psychiatrists and how it might help us gain a better understanding of mental disorders.

Psychopathology or the study of mental disorders dates back to 1913 when this

scientific discipline was first introduced in Jaspers' book, *General Psychopathology*. Written in 1913, this book highlights the fact that neither Explanation nor Understanding gives us an all-inclusive perspective of mental life and limitations of both views must at all times be taken into account. Jaspers realized that psychiatry should be equally person-centered and science-based and this is where philosophy offered its assistance. The goal of the present study is to glance at the intriguing manifestation of the concept of madness reflected in the masterfully-written work of art, *The Bacchae,* with a Jaspersian view.

The Bacchae, written by the Athenian playwright Euripides in 407 BC, is the story of Dionysus, the god of wine and fertility going back to his birthplace, Thebes, to punish those who would not worship him. Pentheus, the king of Thebes, refuses to honor the god despite his grandfather Cadmus's efforts and is doomed to die in the hands of his own mother, Agave, and other Theban women. They were participating in Bacchic rites in a state of divine frenzy in Cithaeron Mountains. The play culminates with Cadmus and all the Theban women being banished from their homeland as further punishment for their insolence.

Dionysus is generally known as the god of wine and fertility but he's also called, the Mainomenos, Zagreus and Lysios which are closely related to our discussion of insanity in 407 BCE Greece. Astrachan (2009) explains that Mainomenos comes from the Greek word mania which means madness and Dionysus was actually 'the mad god'

or 'the raving one'. He was the Zagreus or 'great hunter' who was the reason for a person's intoxication after setting his soul free. That is why he was also named Lysios, the 'loosener' or 'liberator'. Many believe his home was located somewhere in Asia in ancient Lydia or Phrygia, in western Turkey where he was raised, loved and followed by a female group of nymphs called the Maenads or 'the mad women' followers of Dionysus. Bacchantes or the Bacchae which means 'the initiated ones' was another name attributed to these worshippers which explains why the mad god was also known as Bacchus.

Astrachan (2009) pointed out that states of ecstasy and enthusiasm were believed to be two spiritual Dionysiac gifts to all. The former is from the Greek word ek-stasis which means 'standing outside' one's self and one's ordinary life. We celebrate our physicality and experience a unison with the rest of the world and eventually the god through liberating activities which mostly involve music, drinking wine and dancing. Enthusiasm or en-theos in Greek means being 'filled by the god' in which our subjectivity is disrupted as we are called out of ourselves. It is believed that analysis, art, tragedy and dreams are some of the means associated with appearances of Dionysos. They both present and produce mania or madness.

Madness is used frequently by Greek tragedians as a major theme and Euripides is no exception. In addition to *The Bacchae*, he depicts insanity as an external factor induced by the gods in both *Herakles* and

Orestes. A study done by Hartigan (1987) explicates how in Herakles, the main character does not seem to even possess a tragic flaw and yet he is doomed to kill his own wife and children in a fit of madness. *Orestes*, on the other hand is an example of deus ex machina. The main character is suffering from madness as the consequence of a matricide that was committed at a divine command. Orestes and his sister were on the verge of being executed when the god Apollo appeared and brought back the peace by putting everything in order. Although Euripides was illustrating madness to be divinely generated in his dramas, he seemed skeptical about this long-held belief and represented vengeance or patriarchal beliefs as the hidden motivations of crimes.

MATERIALS AND METHODS

Before examining Karl Jaspers' Psychopathological standpoint and discussing the methodology used in this paper, we should take a look at the investigations that had already been done regarding the issue of mental illness in Ancient Greece and the nature of insanity in Euripides' work. By having a more comprehensive knowledge about the researches that had been conducted on these subjects, we would be able to see clearly what more a Jaspersian reading of *The Bacchae* can offer. The first issue is the stark contrast between the literary and philosophical texts and the medical ones regarding their attitude towards the definition of mental illness in Ancient Greece.

In an article entitled *Mental Illness in the Greco-Roman era*, the authors demonstrate how from the 5th century BC, physicians firmly believed psychoses to have biological causes while literary texts abound with cases of frenzy contrived by divine entities. In Plato's philosophical writings, four different types of divine madness are illustrated: "those of the poet, the prophet, the Bacchanalian rites, and love" (Cilliers & Retief, 2009, p. 132).

However, this traditional view of the supernatural origin of madness was beginning to fade away when the humoral theory started to be used as a criterion to form the very first divisions of mental illness. The overall wellbeing and mental balance of a person were believed to be based on the harmony among the four humors of black bile, the yellow bile, blood and phlegm. While the accumulation of black bile caused melancholia accompanied by depression, insomnia and suicidal thoughts, having more than enough amount of yellow bile led to phrenitis which was characterized by fever and delirium (confusion). Either of these two groups of mental illnesses could also involve delusions and hallucinations but there was still no word of schizophrenia or bipolar (manic- depressive) psychosis. Mania which may still be used as a general term for insanity was another kind of mental illness caused by excessive drinking and sexual activity, emotional crisis and many other factors (Cilliers & Retief, 2009).

These contrasting views towards the definition and the origin of mental illness were also applied to women of Ancient

Greece. Tradition and medicine used to offer various complicated points of view in terms of female madness. In a paper called *Female Madness in Greek Tradition and Medicine*, Connelly (2017) explained while the former deemed it as an external threat, the latter viewed it as an attack from the inside. Dionysian (associated with maenads) and desire-induced madness (associated with Aphrodite or Eros) belong in the first category. Whereas the Dionysian madness provokes women to abandon the male society, the desire-induced madness as well as the medical perception (associated with Hippocratic Corpus and Plato) were believed to be caused because of avoiding men (Connelly, 2017).

A Jaspersian study of *The Bacchae* according to his psychopathological standpoint encourages one to probe the probable causes of insanity in Agave and the other women in Cithaeron Mountains. In an article named *Women in classical Greece*, the writeremphasizes the menial condition of women in the Classical period of Greek history compared to their male counterparts. With the exception of Sparta, Women lived in seclusion most of their lives where they had no freedom in terms of education, the right to vote or choice of marriage. Some dramatists played along and reinforced the stereotypes by representing women as both weak and dangerous who should be taken under control. Others including Euripides sympathized with the opposite sex by acknowledging the difficulties they face both in personal and public life (Steele, 1975).

Continuing with the discussion on mental illness and its various depictions in different texts in Ancient Greece, it is time to see how it is manifested in Euripides's drama. Two types of divinely-induced insanity can be observed in *The Bacchae*. Examining the madness of women in Euripides's play, Michael Lambert (2009) described when the frenzy bestowed by the gods was received with acceptance, the initiates only experience joy and ecstasy as a result of being united with divinity as well as nature. The bacchantes who have followed Dionysus from Asia and the members of the chorus belong to this category. However, those who boldly deny the authority of the gods and refuse to worship them are doomed to suffer in pain and panic while everything seems to happen against their will. The Theban women including the daughters of Cadmus as well as Pentheus are the victims of this punishment. Lambert also briefly points out to the limited view of Greeks towards women which can be evidently perceived in Pentheus's division of them into two groups of working wives or whores (Lambert, 2009).

Reading Euripides's play, *The Bacchae,* one cannot help but notice the author's challenging and philosophic perspective regarding human action and the conflicting spheres of gods and men. Although the Heraclitean themes of fate and necessity are present in his drama, the writer's skeptical attitude leads him to show Pentheus as both a fool and a madman for believing confidently that he knows the true nature of insanity. Euripides represents this level of

certainty as madness. It seems like Euripides is actually pointing to a need for a harmony between the opposite forces (Lioyd, 2008).

Coleridge's concept of the balance of opposites is applicable to Euripides' *Bacchae*. Arthur D. Epstein (1971) in his article explained how Coleridge made a sharp contrast between Athenian dramatists and Shakespeare in terms of handling the diversities, the former emphasizing the gap and the latter delighting in it. In his play, Euripides is apparently stressing the fact that neither side of these opposites is complete without the other and this deficiency is particularly evident in the Pentheus-Dionysus conflict. "Human-Superhuman, Old-New, Rational-Irrational, Force-Persuasion, Nature-Civilization, Conformity-Nonconformity, Sterility-Fertility, Acceptance-Rejection, Chaos-Order, Life-Death, Ecstasy-Horror, Reason-Madness, Physical-Metaphysical" are some of the dichotomies present in the play, showing the richness and inclusiveness of the writer"s scope as he skillfully manifests the imperfection of each side of the dualities and the necessity of balance or harmony between them (Epstein, 1971).

The dichotomy of Apollonian restraint and Dionysian excess is best represented in the characters of Pentheus and Dionysus, the former as a prototype of law, order and rationality and the latter being the representative of ecstasy and madness. Euripides attempts to show the devastating consequences of repressing either of the two inseparable aspects of our being, the body and the soul. Duality can be even observed in the character of Dionysus himself. He can appear as a symbol of fertility and sexual excitement in the form of a goat, a bull, and an ass in some stories. On the other hand, the same god is seen as savage and bloodthirsty as a lion, a panther, and a lynx in some other tales (Higgs, 2003). In an article entitled *The Primal Spirit: Sacred Frenzy in Euripides' Bacchae*, Lima (2005) claimed that the drama seemed to be a critique of both forces who favored extremism and the writer handled the task in the cleverest fashion.

After examining some of the studies already done on the subject of mental illness in Ancient Greece and the nature of insanity in Euripides' work, we can move to Jasper's psychopathological point of view which will be used in this paper as the methodology, guiding the research. Jaspers' agenda was to put psychiatry on secure philosophical foundations like what Bertrand Russell and Rene Descartes did before him in their own field of study but ironically, anti-foundationalists such as Kurt Gödel and Ludwig Wittgenstein proved them wrong by pointing to both practical and theoretical reasons why the idea of finding a starting point or an anchor was mostly an illusion (Stanghellini & Fuchs, 2013).

Nevertheless, Jaspers' psychopathological attempt to discover exact albeit provisional description and classification of mental disorders brought about its own merits and he owes it all to Edmund Husserl's philosophy. Husserl talked about the possibility of reaching the contents of the conscious mind for the very first time, calling it "descriptive psychology"

at the beginning and "phenomenology" later on (Stanghellini & Fuchs, 2013, p. xv-xxxix).

In Jaspers' point of view, phenomenology forms the cornerstone of psychopathology. It describes psychic states as represented by the patients and then examines the relations between them as distinctly as possible. After building a rich collection of individual cases of phenomena while keeping an open mind, we can perhaps build up a tentative classification as a source of future reference. The eight categories of mental disorders suggested by Jaspers in *General Psychopathology* are as follows: Awareness of objects, Experience of space and time, Awareness of the body, Delusion and awareness of reality, Feelings and affective states, Urge drive and will, Awareness of the self, Phenomenon of self-reflection (Jaspers, 1959/1997).

In the awareness of objects, many abnormalities may appear that distort our usual way of perceiving the world. "Illusion is the term for perceptions which in fact are transpositions (or distortions) of real perceptions" (Jaspers, 1959/1997, pp. 64-65). Pareidolia is a type of illusion in which the imagination plays a huge part in creating false perceptions.

Following the discussion of false perceptions, Jaspers briefly points to another abnormality regarding the awareness of objects called abnormal imagery or false memory. A sudden realization of a supposed past experience that was forgotten comes to the patient's mind but in actuality, nothing is really remembered. It is either a figment of his or her imagination or a distortion of real events.

Patients who experience space in an abnormal manner see objects smaller, larger or crooked. They may claim how space seems infinite in their eyes, how they feel lost and abandoned in this limitlessness. Some schizophrenics have also reported of a second space in which everything looks engulfing, at a very great distance with dimmer colors (Jaspers, 1959/1997).

Jaspers stated that the experience of time was even more complicated than space. In order to delineate various abnormalities regarding the experience of time, Jaspers placed them in these four categories: momentary awareness of time, the awareness of the time-span of the immediate past, awareness of time-present in relation to time-past and future and the awareness of future.

The disturbances related to the awareness of the body are very complex and difficult to categorize. Patients have a problem locating an irritable place or any other part on their bodies or they may even fail to find the position of the left side of the body and distinguish it from the right. Patients might feel very heavy or light as a feather ready to fly. Some patients had reported that at some point, all their senses became one and they were able to see with their legs and hands (Jaspers, 1959/1997).

In the discussion of the awareness of reality, Jaspers maintained that delusion was a pathologically mistaken judgment made by the patient that was almost always accompanied by a change in the personality.

Their belief possesses a highly strict level of incorrigibility that is by no means altered no matter how much evidence is offered to the contrary. People with delusional awareness or perception sense that the world around them is undergoing a drastic transformation which generates the feelings of suspicion and bizarreness.

While feelings are different conditions of the self, sensations are components of bodily perception and environmental ones. It is worth mentioning that in cases like hunger or sexual excitation, the two concepts overlap and we can describe them as feeling-sensations. Jaspers (1959/1997) explained how sometimes, patients felt incompetent and insufficient without an actual reason. Apathy is another severe state in which the person experiences an absence of feeling.

It is necessary to distinguish the non-directional biological necessity called urge from drive which is an instinctual activity aiming at some target. We also need to differentiate them both from the volitional act that has a specific goal and includes the discussion on choice and making decisions. Impulsive acts, the loss of will or surprisingly an access of power are a few disorders in this category (Jaspers, 1959/1997).

Jaspers named four main characteristics of self-awareness and delineated how the lack of any one of them was a sign of a certain abnormality. These four features are: "(1) the feeling of activity- an awareness of being active; (2) an awareness of unity- I am aware at any given moment that I am a unity; (3) awareness of identity- I am aware

I have been the same person all the time; (4) awareness of the self as distinct from an outer world and all that is not the self " (Jaspers, 1959/1997, p. 121).

Development in an individual happens gradually in terms of biological-physical transformations in a passive manner. This also includes mental alterations which are the result of self-reflection as soon as the immediacy of the phenomena is gone. Compulsive phenomenon is a disturbance related to the experience of self-reflection. Psychic compulsions are inexplicable irremovable and unjustified desires where volitional control is present to some extent yet not powerful enough to prevent the individual from doing an action that is evidently incomprehensible (Jaspers, 1959/1997).

RESULTS AND DISCUSSION

Examining the play according to Karl Jaspers' notion of madness using the eight tentative categorizations, it is evident that the women of Thebes were having problems with disturbances in three of them, namely the awareness of objects, awareness of the self and the phenomena of self-reflection. In the prologue, the god of wine explained why he was in Thebes to reclaim his authority and took full responsibility for driving women insane as a means of punishment. This section of the play was pointing to Dionysus being the Mainomenos and Lysios, the reason for a person's madness and liberation of the deepest parts of the psyche during Bacchic ecstasy.

As the tragedy goes on, we saw how Cadmus, Tiresias and also members of the chorus pointed their fingers at Pentheus, calling him insane for fighting against the gods' will. They warned him of the catastrophic consequences of challenging the divine. Pentheus mocked them as well, believing the whole idea of these ceremonies to be nothing but sheer perversion, endangering the order of the society and the health of people, especially women. Thus, he had Dionysus who was disguised as a mortal captured and brought to his palace where they had a lengthy discussion and no one was able to convince the other. Pentheus was left desperate when this stranger magically freed himself from the chains while an earthquake shook the ground and a fire appeared for a few minutes. As they were still arguing, a messenger arrived at the scene and gave a vivid report of the Theban women's preoccupation in Cithaeron Mountains. This was only a section of his description of the Bacchae in their divine frenzy:

> . . . At the appointed time, the women started their Bacchic ritual. The entire mountain and its wild animals were, like them, in one Bacchic ecstasy. Agave, by chance, was dancing close to me. I jumped out, hoping to grab hold of her. But she screamed out, "Oh, men are hunting us. Come on, Armed with that thyrsus in your hand." We ran off, and so escaped being torn apart. But then those Bacchic women, all unarmed, went at the heifers, using their bare hands. You should have seen one ripping a fat, young calf apart— others tearing cows in pieces with their hands. You could've seen ribs and cloven hooves tossed everywhere—some hung up in branches dripping blood and gore. And bulls, proud beasts till then, dragged down by the hands of a thousand girls. Hides covering their bodies were stripped off faster than you could wink your royal eye. Then, they went back to where they'd started from, those fountains which the god had made for them. They washed off the blood. Snakes licked their cheeks, cleansing their skin of every drop . . . (Euripides, 2003, pp. 14-15).

Awareness of the Self

Euripides pointed to a few supernatural actions carried out by the Bacchic participants in the aforementioned part of the play, namely the killing of animals as big as a cow and tearing them apart with bare hands or making milk and wine streams flowed by the touch of their fingertips and thyrsus. While their super strength was difficult to explain in psychological terms, their intimate relation and unification with natural surroundings and animals reminded us of a disturbance in self-awareness investigated by Jaspers (1959/1997). He introduced the distinction one normally made between herself and the outside world as the fourth feature of the awareness of the self. It seemed that this characteristic as well as the awareness of identity was disrupted as a result of Bacchic intoxication. Theban

mothers were seen feeding gazelles and wolf cubs with their breast milk while their children were left hungry at home.

The rest of the tale takes on a shocking turn as we observe that Pentheus's curiosity to see the Dionysiac rituals led him into the stranger's trap who in reality was the god of wine himself. Pentheus was apparently mesmerized by the god of madness, listening to his every word, dressing in women's costume specially designed to be worn in Bacchic ceremony. This change happened when not long ago, the stranger was his arch enemy and he viewed anything remotely related to worshipping the gods with the utmost contempt. Afterwards, this much-changed version of Pentheus who was now even able to see Dionysus in his true form as a bull left for Cithaeron Mountains. He was led by the stranger through deserted streets to go and spy on the Bacchic initiates. Then, the songs of the chorus foreshadowed the gruesome event ahead while a soldier suddenly entered the palace and started giving a detailed report of what he was unfortunate to witness.

Phenomena of Self-reflection

The researchers who had already examined the madness of the Bacchae emphasized the fact that they were suffering from hysteria since they experienced partial amnesia and were eager to be the center of attention due to being repressed by the patriarchal society. Hysteria is an instance of mental illness almost primarily associated with women

beginning in 1900 B.C. It was recognized as the result of the movement or wandering of the womb (Cilliers & Retief, 2009).

If we run the risk of explaining mental derangements depicted in literary works according to the current categorizations of mental problems, it is fair to assume that the Theban women and the maenads in Euripides's Bacchae were suffering from mass hysteria, known today as Mass psychogenic illness (MPI). It later on, adopted lycanthropy as its variation in which the participants acted like wild animals (Cilliers & Retief, 2009).

Pistone (2012) in her article also traced the medical and psychological manifestation of madness in Euripides. She argued that while epileptic symptoms were most common among his characters, the seemingly divinely-induced insanity could be interpreted "in terms of unmet or unbalanced psychological elements" (Pistone, 2012, p. 1).

However, Jaspers (1959/1997) viewed hysteria in a different light, quite distinct from previous investigations. In his *General Psychopathology*, he claimed that hysteria was an unconscious imitation of illness as a result of ungratified wishes and cravings. Therefore, the person displayed signs of a real illness while there seemed to be no physiological disturbance in either the body or the brain, causing the suffering. Jaspers believed that the conversion of repression into symptoms was necessarily accompanied by dissociation and it could

never be compared to normal repressions we might experience every day.

Thus, the Maenads in Euripides' *Bacchae* were most probably undergoing a disturbance related to the experience of self-reflection. Jaspers called it compulsive phenomena in which the patient had some inexplicable unjustified desire and though the power of will was present to some extent, it was not enough to prevent the person from doing an incomprehensible action. He believed that these baffling acts could range from moving the objects around or saying curse words to extremely severe cases in which the person committed suicide or killed his own children.

In Euripides' *Bacchae,* while there are certain epileptic signs such as foaming at the mouth or eyes rolling in their sockets, the climax of the tragedy is Pentheus being killed by the hands of his own mother due to some unexplainable reason. Patriarchal pressure on Theban women might be a possible motivation.

After the slaughter was over, Agave returned to the palace, still intoxicated by the Bacchic frenzy to show off to his father the head of the beast she had hunted. In reality, it was her beloved son's head she was still mistaking for a lion's. Here, we observe a most meticulously conducted scene of psychotherapy performed by Cadmus in order to help his daughter return to the world of reality. He started from drawing her attention to the objective world and then moving on to subjective realities including identity.

Awareness of Objects

Imagining Pentheus's head as a lion reminds us of Jaspers' notion of illusion. A type of disturbance related to the awareness of objects, illusions are distortions of our perceptions and this case is a good example of pareidolia. In pareidolia, imagination plays a major role and the illusion lasts as long as the person feeds it with her power of fantasy. The following lines are the manifestation of the illusory nature of Agave's perceptions:

> AGAVE: Bacchae… [displaying the head] From the mountains I've brought home this ivy tendril freshly cut. We've had a blessed hunt. I caught this young lion without a trap, as you can see. The honor of the first blow goes to me. In the dancing I'm called blessed Agave. His other children laid hands on the beast, but after me—only after I did first. We've had good hunting. So come, share our feast. (Euripides, 2003, p. 22)

Abnormal imagery or false memory is another psychic abnormality Jaspers (1959/1997) had clarified which could be observed in Euripides' drama. Agave felt extremely proud to have killed a wild beast and presented its head to Cadmus triumphantly. Slaughtering his son, Pentheus, suddenly came to her mind where her imagination helped to distort the real events. Agave firmly believed she was passively used by someone else in a hypnotic state and the gods were to be blamed for the act of murder. Moreover, seeing the

sky "brighter…more translucent than it was before" by Agave manifested another disruption in her ability to experience the objects around as she had her perception intensified.

The play ended by Dionysus's reappearance and reiteration of the fact that worshipping and obeying god's will was the best action while Cadmus and all the Theban women were banished from their homeland as a further punishment for their insolence. Attributing the temporary frenzy and the dreadful murder to the gods helped Agave to cope with the devastating reality that was killing her own child and the chorus defended the divinely-induced madness as a form of retribution.

CONCLUSION

The aforementioned investigation of Euripides' tragedy has demonstrated how the people of ancient Greece (around 407 BC) were obsessed with the idea of divinely-induced madness, overlooking all the other factors that work hand in hand affecting an individual's mental condition. While the ancient Greeks ascribed all kinds of mental disorders to the wrath of the gods, applying Karl Jaspers' psychopathological notions to *Bacchae* uniquely helps us gain a more accurate understanding of the nature of insanity reflected in Euripides' drama. A disturbance in the awareness of the self, phenomena of self-reflection as well as the awareness of objects can be observed in Bacchic women especially Agave. Although the Dionysian myth dominates the whole tale, the playwright's detailed description

of the characters' seemingly divine frenzy cannot help but sound questionable to the contemporary reader.

ACKNOWLEDGMENT

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Catch-and-release Behavior of Anglers in Tasik Muda, Kedah

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ABSTRACT

This study aimed to identify the basic sociodemographic background, catch-and-release behavior, and preferred fish species of anglers in Tasik Muda, Kedah, Malaysia. During the study period, anglers who fished in Tasik Muda were requested to answer a survey questionnaire through a face-to-face on-site sampling technique. Based on the theory of planned behavior (TPB), the questionnaire measured four variables, namely, attitude, subjective norm, perceived behavioral control, and intention. Eight types of fish species were included as choices. The results show that most of the respondents were male (90.5%) with a mean age of 36.59 ± 8.80 years old. Furthermore, most of the respondents were married (77.1%), self-employed (45.8%), and obtained an education of up to Sijil Pelajaran Malaysia level (40.3%). Scores for perceived behavioral control were above average (3.94 ± 0.78), thereby indicating that this variable may have a bigger impact in performing catch-and-release fishing. The anglers also demonstrated their subjective norm (3.58 ± 0.75), intention (3.56 ± 0.89), and attitude (3.39 ± 1.07) toward catch-and-release fishing. In terms of fish species, most of the anglers preferred Malaysian mahseer (*Tor tambroides*) (4.65 ± 0.66), snakehead (*Channa striata*) (4.54 ± 0.82), copper mahseer (*Neolissochilus soroides*) (4.51 ± 0.83), and hampala barb (*Hampala macrolepidota*) (4.47 ± 0.80). However, the TPB variables and fish preferences differed when analyzed against the basic sociodemographic background of the anglers. This study provides the basic

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data and information on anglers engaged in recreational fishing in Tasik Muda, Kedah.

INTRODUCTION

Tasik Muda, also known as Muda Dam, can be categorized as a remote fishing site due to its location away from cities in Malaysia. Tasik Muda is approximately 40 km from Sik town, the nearest urban center. To reach the best fishing spots in the lake, anglers travel by boat for approximately 3-4 hours from the main jetty. The anglers target several fish species, such as *Hampala macrolepidota* (hampala barb) and *Tor tambroides* (Malaysian mahseer).

However, a few fish species in Tasik Muda are protected in accordance with the Kaedah-Kaedah Perikanan Sungai 1991 legislation by the State Government of Kedah. Thus, anglers are prohibited to catch the listed species and must release such captured fish back into the water.

Groups of inland fishermen depend on dams for subsistence or commercial purposes. These fishermen supply fish as a protein source of food to the nearby community. Records from the Department of Fisheries (DOF) of Malaysia show approximately 50 registered and licensed commercial fishermen in the country. However, only 16 fishermen actively conduct fishing activities. In addition, approximately six unregistered fishermen fish solely for subsistence purposes. The DOF records also indicate an annual catch of over 50 tons of freshwater fish species. The major fish species include *Hemibagrus bleekeri* (river catfish), *Oreochromis sp.* (tilapia), *Osteochilus hasseltii* (silver sharkminnow), *Barbonymus schwanenfeldii* (tinfoil barb), and *Cyclocheilichthys apogon* (red-eyed barb).

Fish consumption among recreational anglers is high in Malaysia, especially in Tasik Muda, Kedah. Apart from this fact, the basic sociodemographic backgrounds of anglers are mostly unknown. Most anglers focus on their "satisfaction" and "fun" motives while fishing, and are less concerned about fish stock and conservation status.

Based on the theory of planned behavior (TPB), the catch-and-release concept can be divided into elements of attitude, subjective norm, perceived behavioral control, and intention of the anglers. These four variables can lead to corresponding catch-and-release behavior, which is important in preserving the ecosystem by returning protected fish to their habitat (Arlinghaus et al., 2007). In certain occasions, anglers wish to take home some of these fish, which reflects their "consumptive orientation" (Sutton & Ditton, 2001).

However, few studies have sought to understand how anglers view catch-and-release fishing and support relevant regulations (Arlinghaus et al., 2007). To communicate and promote catch-and-release fishing to anglers, fisheries and local agency managers would need to understand

the perspectives and behaviors of these anglers (Arlinghaus et al., 2007).

Other issues are observed in Tasik Muda. First and foremost is the noted that there is a decline in the population of several fish species. Coincidentally, for unknown reasons, few people have visited Tasik Muda in recent years. Therefore, this study can help fisheries managers and management agencies in Tasik Muda to improve their understanding of the situation by providing basic information about the anglers who fish in the lake. Understanding the anglers engaged in catch-and-release fishing is crucial to implement appropriate management (Arlinghaus et al., 2007). In addition, this study could highlight the importance of educating anglers to appreciate the natural environment, maintain its aesthetic qualities and attractiveness through catch-and-release fishing, and ensure their continued visits to Tasik Muda in the future.

Therefore, the objectives of this study were to determine the basic socio-demographic backgrounds, catch-and-release behavior, and preferred fish species of anglers in Tasik Muda, Kedah. The null hypotheses of the research are as follows:

H_1: Groups of anglers with different basic socio-demographic backgrounds have similar behaviors toward catch-and-release fishing.

H_2: Groups of anglers with different basic socio-demographic backgrounds have similar preferences of fish species.

Catch-and-Release Behavior of Anglers

Sutton (2003) defined catch-and-release fishing as returning the captured fish alive and without injury back to the water to conserve resources and increase future fishing opportunities. Anglers who disagree with elements of "catching fish," that is, their satisfaction is not entirely focused on catching fish, probably practice catch-and-release fishing (Sutton, 2003).

According to Arlinghaus et al. (2007), from the angler's perspective, catch-and-release behavior should be applied for conservation and other non-consumptive reasons, such as maintaining opportunities to recapture the fish later on. On the other hand, Sutton and Ditton (2001) stated that catch-and-release was an investment in conserving fisheries resources by controlling the amount of harvested prohibited species or stopping when the bag limits for the day had been reached. Catch-and-release behavior could control excess harvest from fishing activity and simultaneously increase fishing opportunities for other groups of anglers (Sutton, 2003).

Theory of Planned Behavior

The TPB consists of three main ideas used to predict the intention and behavior of an angler (Ajzen, 1991). First, attitude refers to the level of preference or non-preference of an angler toward catch-and-release behavior. Second, subjective norm (or social subjective norm) refers to the social pressure to conduct or not conduct catch-and-release fishing. Third, perceived behavioral control refers to the level of ease in conducting

catch-and-release behavior, which may be influenced by the angler's previous experiences (Figure 1).

Greater preferences placed by anglers on the attitude, subjective norm, and perceived behavioral control toward catch-and-release increases their intention to perform such behavior. Significant results obtained for attitude, subjective norm, and perceived behavioral control toward intention

depend on different behaviors in various situations. Therefore, in certain cases, the results show that attitude significantly influences intention, while a combination of attitude and perceived behavioral control sufficiently explains the intention to perform the behavior. In other cases, all the three predictors contribute independently toward the intention to behave (Ajzen, 1991).
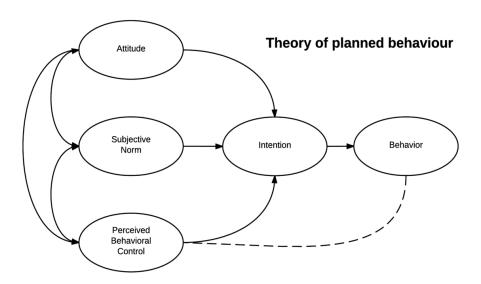
Figure 1. Theory of planned behavior (Ajzen 1991)

MATERIALS AND METHODS

Study Location

This study was conducted in Tasik Muda, located approximately 40 km from Sik town in Sik District, Kedah. Figure 2 shows the map where the sample and data were collected. The dam was built in 1969 by the Muda Agriculture Development Authority (MADA) to provide higher paddy cultivation (twice a year) along the Muda

areas. The MADA administration manages the dam, and the Sik District Council manages the tourism and fishing amenities and facilities on the jetties. Apart from catchment areas and precipitation, two main streams (Sungai Besar and Sungai Kecil) serve as water sources for Tasik Muda. The dam has a large catchment area of 984 km^2 but a low storage capacity of only 160 million m^3 of water.

Figure 2. Map of Tasik Muda in Kedah (Source: Google Maps)

Study Duration and Sample Collection

Sampling was conducted over 16 days, during the weekends of March and April 2018. Face-to-face technique was used to approach the anglers between 6:00 p.m. and 9:00 p.m. at the jetties after they had returned from fishing. The time range was selected based on earlier observations on the availability of the anglers at the jetties.

All anglers encountered at the fishing sites were approached and those who agreed to answer the survey questionnaire were included in the sample. A total of 201 anglers completed the survey questionnaire.

Sampling Tools and Techniques

This study used a face-to-face on-site survey technique as the sampling method and a survey questionnaire as the sampling tool. The survey included categorical questions about the anglers' basic socio-demographic backgrounds. Variables for catch-and-

release behavior and anglers' preference of fish species were measured using a 5-point Likert scale ranging from 1 (extremely dislike) to 3 (neutral) to 5 (extremely like).

Variable Measurement

Three variables were measured in this study. First, the basic socio-demographic backgrounds of the anglers were determined in terms of gender, marital status, state of origin, age, income, employment status, and education level. Second, TPB variables of attitude, subjective norm, perceived behavioral control, and intention measured the catch-and-release behavior. Finally, fish preferences among anglers were identified by listing various types of fish species commonly caught in Malaysia.

Statistical Data Analysis

All data obtained from the anglers were analyzed using SPSS software version 20.

The sociodemographic data were examined using descriptive statistics (frequency, percentage, mean, and standard deviation). Responses to the Likert scale were analyzed using one-way ANOVA. In addition, Tukey test was used as post-hoc test, with a p-value of 0.05, to detect any significant difference between the means.

RESULTS AND DISCUSSIONS

Basic Sociodemographic Backgrounds of Anglers

A total of 201 anglers completed the survey questionnaire during the study period. Among the anglers, 90.5% were male and 77.1% were married (Table 1).

Most of the anglers reside in the state of Kedah (53.7%), followed by those from neighboring states Perak (14.4%) and Pulau Pinang (11.4%). The findings show that most of the anglers were locals who spent their time fishing in Tasik Muda. These local anglers could provide greater economic benefits to the fishing sites if they know the best fishing spots, while continuing to protect the wildlife and other aquatic organisms (Cooke et al., 2006). Interestingly, foreign anglers (2.5%) came to fish in Tasik Muda during the study period. These anglers originated from the United States (1.5%), Switzerland (0.5%), and Japan (0.5%).

Table 1

Basic sociodemographic backgrounds of anglers who fished in Tasik Muda, Kedah during the study period

Angler's group	Frequency	Percentage (%)
Gender		
Male	181	90.5
Female	19	9.5
Marital status		
Single	41	20.4
Married	155	77.1
Others	5	2.5
State of origin		
Kedah	108	53.7
Kelantan	6	3.0
Kuala Lumpur	4	2.0
Melaka	3	1.5
Pahang	6	3.0
Pulau Pinang	23	11.4
Perak	29	14.4

Table 1 *(Continued)*

Angler's group	Frequency	Percentage (%)
State of origin		
Perlis	13	6.5
Sarawak	1	0.5
Selangor	1	0.5
Terengganu	2	1.0
Foreign country	5	2.5
Age group		
17 to 29	42	20.9
30 to 39	91	45.3
40 to 49	47	23.4
50 and above	21	10.4
Income group		
below RM1,000	33	16.4
RM1,000 to RM1,999	72	35.8
RM2,000 to RM2,999	59	29.4
RM3,000 to RM3,999	17	8.5
RM4,000 and above	20	10.0
Employment		
Government	34	16.9
Private sector	68	33.8
Self-employed	92	45.8
Others	7	3.5
Level of education		
Up to SPM	81	40.3
Diploma	54	26.9
Bachelor's degree	50	24.9
Master's or Ph.D.	3	1.5
Others	12	6.0

The age range of the anglers was 17-62 years. Most of them were in the 30-39 age group (45.3%), and a few were aged 50 years and above (10.4%). In terms of income, the range was from RM0 (no income) to RM12,000; 81.6% of the anglers earned less than RM2,999. In general, anglers in low-income groups were mainly locals

who depend solely on the lake resources, whereas anglers in the high-income groups were mainly tourists who visit the lake for recreational fishing. Crouch (1992) found that high income levels enabled tourists to travel to other countries, and generally, international tourism was considered as a luxury rather than a necessity.

Results also revealed that most of the anglers were self-employed (45.8%), followed by those who work in the private sector (33.8%), government sector (16.9%), and other groups (3.5%). In terms of education, most anglers obtained education up to the Sijil Pelajaran Malaysia (SPM) level (40.3%) or a national certificate of education obtained prior to graduation from secondary school. The rest of the anglers obtained a diploma (26.9%), bachelor's degree (24.9%), graduate degree (1.5%), and other forms of education (6.0%). The findings on the sociodemographic backgrounds of the anglers in Tasik Muda could help fisheries and local agency managers to identify different angler groups and their purposes. Some of the anglers engage in recreational fishing, whereas others may fish for consumption, particularly those with a lower income and a lower level of education compared with the overall population of anglers (Burger, 2002; Burger et al., 1999).

Analysis of Items and Variables in Theory of Planned Behavior

The behavior of anglers towards catch-and-release fishing was determined by using four TPB variables, namely, attitude, subjective norm, perceived behavioral control, and intention. Each variable consists of at least three items following the study of Ajzen (1991). Table 2 shows the mean values of the items under each variable.

The item analysis indicated that the response "catch-and-release practice is up to me" showed the highest mean value of 4.52 ± 0.70. This was the only item that recorded a value above 4.00, indicating that the anglers in Tasik Muda believed that they could control or conduct the catch-and-release behavior themselves. Most of the anglers claimed that they released the fish back to the water alive, and the fish usually survived (Arlinghaus et al., 2007). The rest of the items ranged from 3.00 to 4.00. Meanwhile, the least mean value was recorded for "most anglers practice catch-and-release every time they go fishing" (3.13 ± 0.99). This result indicates the uncertainty of anglers if others practice catch-and-release fishing in Tasik Muda. Anglers who fish in a group (social norm) may feel the need to keep or release the fish caught, depending on the behavior of other group members (Wallmo & Gentner, 2008).

Meanwhile, the variable analysis indicates that perceived behavioral control had the highest mean value (3.94 ± 0.78) (Table 2). It was followed by subjective norm and intention, with mean values of 3.58 ± 0.75 and 3.56 ± 0.89, respectively. The lowest mean value was 3.39 ± 1.07 for attitude. Situational factors may play a significant role in the practice of catch-and-release behavior (Sutton, 2001). These results could highlight some important

Table 2

Mean values for items under TPB variables of catch-and-release fishing among anglers in Tasik Muda, Kedah

Items	Mean ± SD
Attitude	**3.39 ± 1.07**
My catch-and-release behavior is good so far.	3.43 ± 1.12
My catch-and-release behavior will increase my fishing satisfaction.	3.38 ± 1.17
My catch-and-release behaviour makes me happy.	3.35 ± 1.25
Subjective norm	**3.58 ± 0.75**
Most of my angler friends support the catch-and-release behaviour.	3.72 ± 0.94
Most anglers practice catch-and-release every time they go fishing.	3.13 ± 0.99
My friends think that I should practice catch-and-release fishing.	3.91 ± 0.79
Perceived behavioral control	**3.94 ± 0.78**
I am confident that I can practice catch-and-release every time I go fishing.	3.58 ± 1.06
Catch-and-release practice is up to me.	4.52 ± 0.70
I expect that I will practice catch-and-release in my next fishing trip.	3.72 ± 1.03
Intention	**3.56 ± 0.89**
I intend to practice catch-and-release each time I go fishing.	3.69 ± 0.97
I intend to release the fish after catching them.	3.65 ± 0.99
I intend to ask my friends to practice catch-and-release behavior.	3.86 ± 0.87
In the past 6 months, I practiced catch-and-release every time I went fishing.	3.18 ± 1.14
In the past 6 months, I asked my friends to practice catch-and-release fishing.	3.44 ± 1.09

factors that reflect the catch-and-release behavior among anglers in Tasik Muda, Kedah.

From the management perspective, fisheries managers should exert further effort in increasing the anglers' attitude toward the behavior of catch-and-release fishing. With attitude having the lowest mean value, educational efforts and promotions should include extensive messages and attractive slogans to encourage anglers to perform catch-and-release fishing (Arlinghaus et al., 2007).

Basic sociodemographic backgrounds in determining anglers' behavior of catch-and-release fishing

Detailed analysis of the TPB variables revealed various results, especially when

compared with the sociodemographic data of the anglers (Table 3). This analysis includes comparisons of age, income, employment, and education level.

No significant difference was found between the anglers' age groups (p>0.05). This result indicates that the variables of attitude, subjective norm, perceived behavioral control, and intention toward catch-and-release behavior did not differ based on the anglers' age.

However, the results based on income levels were significantly different among the anglers. The variables of attitude, perceived behavioral control, and intention of catch-and-release fishing varied for the anglers in the income group below RM1,000 compared with those in the RM3,000 to RM3,999 and RM4,000 and above income groups. This finding supports previous studies stating that the catch-and-release behavior among anglers could differ based on different income groups (Graefe & Ditton, 1997; Grambsch & Fisher, 1991). Among black bass and trout anglers in the United States, the lower income group showed a higher level of catch-and-release behavior compared with that of the higher income group (Grambsch & Fisher, 1991). By contrast, other lower income groups of anglers tend to keep the fish they caught, either for their own consumption or for subsistence fishing purposes (Burger, 2002). This could probably relate to the anglers' strong reliance on fish for food compared with the attitude of catch-and-release fishing (Wallmo & Gentner, 2008).

Table 3

Comparisons between angler's groups based on basic sociodemographic background toward the TPB variables

Angler's group	Attitude	Subjective norm	Perceived behavioral control	Intention
Age group				
17 to 29	3.58	3.49	4.02	3.69
30 to 39	3.36	3.56	3.86	3.47
40 to 49	3.35	3.64	3.94	3.62
50 and above	3.21	3.75	4.10	3.61
Income group				
below RM1,000	2.96[b]	3.65[ab]	3.85[b]	3.30[b]
RM1,000 to RM1,999	3.11[b]	3.41[b]	3.62[b]	3.26[b]
RM2,000 to RM2,999	3.57[ab]	3.51[b]	4.07[ab]	3.68[ab]

Table 3 *(Continued)*

Angler's group	Attitude	Subjective norm	Perceived behavioral control	Intention
RM3,000 to RM3,999	3.90[a]	4.10[a]	4.45[a]	4.21[a]
RM4,000 and above	4.12[a]	3.85[ab]	4.43[a]	4.22[a]
Employment				
Self-employed	3.13[b]	3.50[ab]	3.81	3.38
Private sector	3.58[ab]	3.77[a]	4.08	3.75
Government	3.72[a]	3.39[b]	4.03	3.67
Level of education				
Up to SPM	2.94[c]	3.46[c]	3.71[b]	3.19[c]
Diploma	3.47[b]	3.56[ab]	3.91[b]	3.61[b]
Bachelor's degree	3.97[a]	3.83[a]	4.31[a]	4.04[a]

*Various superscripts in a column indicate a significant difference between groups at alpha level of $p < 0.05$.

Analysis of the anglers' employment status showed mixed results. Those who worked in the government sector indicate a high attitude ($p < 0.05$) of catch-and-release fishing but low subjective norm ($p < 0.05$). However, the other variables showed no significant results ($p > 0.05$). Thus, these results indicate that the employment status may affect only a few aspects of catch-and-release fishing among anglers.
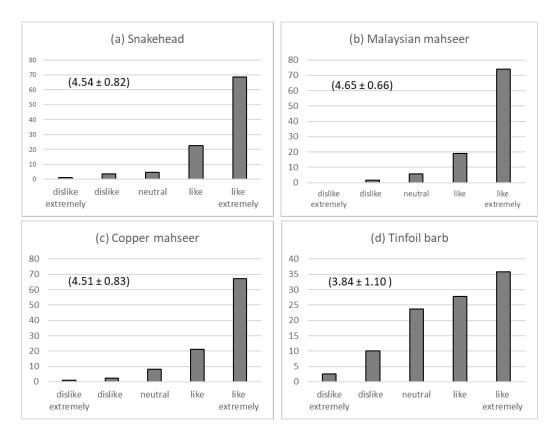
Significant differences were observed in the results for the education level of anglers. Those who obtained a bachelor's degree rated significantly higher ($p < 0.05$) on all four variables, compared with the "up to SPM" group. This result indicates that a higher level of education could have an effect on higher level of attitude, subjective norm, perceived behavioral control, and intention toward catch-and-release fishing. Previous studies obtained similar results. For instance, Grambsch and Fisher (1991) reported a positive correlation between educational levels and catch-and-release behavior among black bass and trout anglers. Thus, fisheries managers should categorize promotions based on different educational levels among anglers in Tasik Muda, especially for the larger "up to SPM" group.

Fish Preferences and Differences in Sociodemographic Backgrounds among Anglers

Eight commonly caught species of fish were listed in the survey questionnaire. The anglers rated the Malaysian mahseer with the highest preference, with a mean

value of 4.65 ± 0.66. This preference was followed by snakehead (4.54 ± 0.82), copper mahseer (4.51 ± 0.83), and hampala barb (4.47 ± 0.80) (Figure 3). These latter species are known as "sport" fish due to their power (Ibrahim et al., 2015). A large snakehead tends to resist being captured. The Malaysian mahseer is difficult to catch because it is available only in habitats that require pristine, serene, and clean running waters, which are generally located in the wilderness (Ingram et al., 2007; Kiat, 2004).

Then, fish preferences were compared among different angler groups. Clear differences were observed based on income level, employment status, and education level (Table 4).

Compared with the anglers in the RM4,000 and above income group, those in the below RM1,000 income group tend to place significantly higher preferences ($p<0.05$) on most of the listed fish species. This finding indicates that anglers in the lower income group prefer to catch most of the fish species. Based on employment status, compared with anglers from the government sector, those who were self-employed placed significantly higher preference ($p<0.05$)
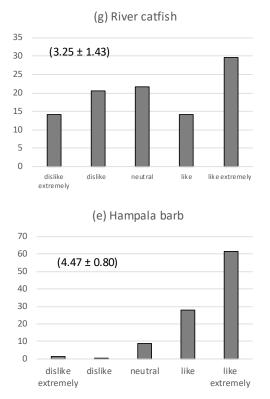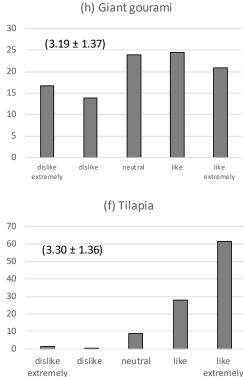
Figures 3(a) to (h). Anglers' preferences for different fish species in Tasik Muda, Kedah, from a scale of 1 (dislike extremely) to 5 (like extremely). Values in the middle of each graph indicate the mean ± S.D. of preferences

Figures 3 (Continued)

for snakehead, Malaysian mahseer, copper mahseer, and tinfoil barb. Finally, significant trends were observed among anglers based on their education level. Compared with those who obtained a bachelor's degree, anglers in the "up to SPM" group tend to place higher ($p<0.05$) preferences for cooper mahseer, tinfoil barb, hampala barb, tilapia, and river catfish (Table 4).

The results indicate that different angler groups in terms of sociodemographic backgrounds have different fish preferences. The differences were significant among higher-end and lower-end groups. This finding could indicate the importance of fish species to the anglers, such as the lower income group utilizing almost all fish species listed for their own consumption or subsistence purposes. Similarly, as locals that primarily depend on lake resources, self-employed anglers prefer different types of fish species when compared with tourists who fish in Tasik Muda.

In general, the results of this study could provide insights into the importance of various fish species to different angler groups in the lake. The analysis could also provide inputs for management decision processes and approaches, such as fish stocking programs (Lorenzen, 2008). Furthermore, implementation of rules and regulations on catch-and-release fishing requires managers

Table 4

Comparisons between angler's groups based on basic sociodemographic background toward their preferences for different fish species in Tasik Muda, Kedah

Mean / Angler's group	Snakehead	Malaysian mahseer	Copper mahseer	Tinfoil barb	Hampala barb	Tilapia	River catfish	Giant gourami
Age group								
17 to 29	4.83	4.88	4.88[a]	3.74	4.52	3.71	3.71	3.67
30 to 39	4.45	4.57	4.39[b]	3.71	4.44	3.10	2.91	2.98
40 to 49	4.41	4.57	4.39[b]	4.13	4.43	3.36	3.46	3.23
50 and above	4.62	4.76	4.57[ab]	4.00	4.60	3.24	3.29	3.05
Income group (RM)								
Below 1,000	4.85[a]	4.77	4.77[a]	4.43[a]	4.84	4.48[a]	4.45[a]	3.65
1,000 to 1,999	4.58[ab]	4.63	4.46[ab]	3.92[abc]	4.33	3.25[b]	3.09[b]	3.23
2,000 to 2,999	4.58[ab]	4.66	4.54[a]	3.63[bc]	4.31	3.09[b]	3.19[b]	3.05
3,000 to 3,999	4.25[b]	4.82	4.82[a]	4.00[ab]	4.76	2.65[b]	2.53[b]	2.75
4,000 and above	4.15[b]	4.40	3.95[b]	3.20[c]	4.65	2.85[b]	2.60[b]	3.10
Employment								
Self-employed	4.59[a]	4.70[a]	4.59[a]	4.01[a]	4.47	3.40	3.28	3.15
Private sector	4.66[a]	4.72[a]	4.65[a]	3.51[b]	4.43	3.03	2.94	3.07
Government	4.09[b]	4.38[b]	4.06[b]	3.88[ab]	4.44	3.30	3.47	3.44
Level of education								
Up to SPM	4.60	4.66	4.59[a]	4.22[a]	4.65[a]	3.56[a]	3.69[a]	3.36
Diploma	4.41	4.56	4.24[b]	3.67[b]	4.17[b]	3.09[ab]	2.85[b]	2.87
Bachelor's degree	4.52	4.82	4.70[a]	3.38[b]	4.54[a]	2.84[b]	2.76[b]	3.22

*Various superscripts in a column indicate a significant difference between groups at alpha level of $p < 0.05$

to understand the diversity of angler groups in the population (Johnston et al., 2011). All of these efforts are geared toward the sustainable management of the fisheries resources in Tasik Muda, Kedah.

CONCLUSION

This study aimed to improve the current understanding of the basic sociodemographic background, catch-and-release behavior, and fish preferences of anglers in Tasik Muda, Kedah. The results showed that the anglers could be categorized into various groups based on their age, income, employment status, and educational level. Meanwhile, the anglers' catch-and-release behavior was determined by measuring four TPB variables, namely, attitude, subjective norm, perceived behavioral control, and intention.

Analysis of the TPB variables showed that the anglers' perceived behavioral control was the highest (3.94 ± 0.78) contributing factor in catch-and-release fishing behavior. However, the TPB variables exhibited differences when anglers were compared on the basis of their basic sociodemographic backgrounds. Overall, anglers who fish in Tasik Muda have a moderate to high probability of practicing catch-and-release fishing behavior.

Fisheries managers need to bridge the gap in management programs to encourage more anglers to support catch-and-release fishing behavior. Catch-and-release guidelines and strategies (such as catch limit, bag limit, or fishing licenses) from other developed countries could be adopted and modified to suit the fisheries management system in Malaysia. In the near future, fisheries and agency managers should encourage and educate anglers regarding catch-and-release fishing. Emphasis on the importance of preserving the fisheries resources in Tasik Muda should lead to ideas that contribute toward sustainable recreational fishing practices for the benefit of future generations.

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Characterisation of Workers with Full-Time and Part-Time Work Schedules: The Labour Market in Penang, Malaysia

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ABSTRACT

An individual's decision regarding labour supply entails the choice to work or not to work, followed by the choice of employment status or work schedule, i.e., full-time versus part-time. This study aims to (i) compare the socio-demographic, household and work-related characteristics of full-time and part-time workers, (ii) determine if employment status is related to these characteristics and (iii) compare the incidence of full-time employment (i.e., the proportion of workers who work full-time) among sub-groups of workers. The study is based on a survey involving 527 workers. The convenience sampling method was used and the sample was stratified to reflect the ethnic and gender composition of Penang's population. The results show that the characteristics of full-time and part-time workers differ and that employment status is related to age, gender, marital status, education level, schooling status, household income, number of children, presence of adult dependents, occupation and the employment sector. The proportion of full-time workers is lower among individuals with the following characteristics: non-prime age, women, singles, less educated, still schooling, low household income, more children, no adult dependents, engaged in sales/service or elementary occupations and the private sector. Policy implications are discussed in terms of encouraging full-time employment in these groups.

Keywords: Employment status, full-time employment, hours of work, part-time employment; work schedule

INTRODUCTION

Individuals in the working age group have to make decisions pertaining to work. The

first decision that a person has to make is whether to participate or not to participate in the labour market. Upon making the decision to participate in the labour market, the individual then has to determine the hours of work he/she wants to supply. The crucial question that workers face regarding their work schedule is whether to work full-time or part-time. The choice of full-time versus part-time work may be based on individual preference and needs. There is no universally accepted definition of full-time work and part-time work. According to the International Labour Organization (1994), as stated in *C175-Part-Time Work Convention 1994 (No. 175)*, a part-time worker is an 'employed person whose normal hours of work are less than those of comparable full-time workers'. For practical purposes, part-time work is usually defined in terms of hours of work. The threshold which distinguishes full-time and part-time workers varies from one country to another. It is based on a threshold of 30 hours per week in Finland, Canada and New Zealand, 35 hours in Australia, Austria, Iceland, Japan, Sweden and the United States, 36 hours in Hungary and Turkey and 37 hours in Norway (International Labour Office, 2004).

In the case of Malaysia, s. 60A of the *Employment Act 1955* (Msia) specifies standard working time as 48 hours per week (i.e. a maximum of 8 hours of work per day and 6 working days per week) and no. 4(1) of the *Employment (Part-Time Employees) Regulations 2010* (Msia) states that a part-time employee is one whose average hours of work as agreed with the employer do not exceed 70% of the normal hours of work of a full-time employee employed in a similar capacity in the same enterprise. Hence, if a full-time employee works 48 hours per week, a part-time employee would be an employee whose average hours of work do not exceed 33.6 hours per week.

Part-time work serves as an entry point into the labour market for some workers (e.g., women and young people). It is also argued that one of the factors that underpins the choice of full-time versus part-time employment in recent times is the issue of work-life balance (Prithi & Vasumathi, 2018). This is because part-time work provides workers with an avenue to work shorter hours. It is also considered a more flexible working arrangement and gives workers more scope to combine labour market work with other activities.

However, part-time work has its drawbacks given that it usually entails the following problems: lower hourly wages than comparable full-time work, lower total earnings due to fewer hours of work (which may be compounded by lower hourly wages), fewer employee benefits (including social security benefits), limited opportunities for career advancement and training, work intensification (i.e. working part-time hours but carrying a full-time workload), irregular working hours and potential for reinforcing gender discrimination to the extent that part-time work mainly involves women who have

less favourable terms and conditions in the workplace (International Labour Office, 2004).

In this study, the research area is one of Malaysia's most developed states, i.e. Penang, which has a robust labour market especially in the manufacturing and service sectors with many full-time and part-time job opportunities. A better understanding of the characteristics of Penang's workforce that comprises part-time and full-time workers is necessary as Penang strives to transform itself into an International City and State that will pave the way for transforming Malaysia into a high-income nation. It is acknowledged that Penang is the heart of Malaysia's Northern Corridor and for this region to succeed, Penang must succeed. If the Northern Corridor can break through the middle-income trap, then Malaysia is a step closer to becoming a high-income nation (Kharas et al., 2010).

Based on the above discussion, this study seeks to address the following questions: (i) What are the differences in the socio-demographic, household and work-related characteristics of full-time and part-time workers in Penang? (ii) Is employment status related to these characteristics and (iii) What is the incidence of full-time employment for different sub-groups of workers? The results of this study will be used to compare the characteristics of workers with full-time and part-time work schedules and identify the factors that are associated with Penang workers' employment status. In addition, the incidence or rate of full-time employment (i.e., the percentage of individuals working

full-time) is computed for workers according to their attributes. The findings of this study provide a basis for recommending policies to facilitate full-time work (particularly for workers with a relatively low incidence of full-time employment) since full-time jobs offer advantages that are often lacking in part-time jobs.

LITERATURE REVIEW

The choice of employment status is often related to the following factors: socio-demographic factors which include age, gender, marital status, education level and schooling status; household characteristics which encompass household income, number of children, presence of adult dependents in the household; and lastly work-related factors which comprise variables such as occupation and sector of employment.

Most studies take into account the relationship between employment status and key demographic variables like age, gender and marital status. Age is found to be a significant factor in the decision about employment status. Matysiak's (2005) study in Poland showed that part-time employment was mostly chosen by the young who were combining work with education and older persons in pre-retirement and retirement age groups. In a Malaysian study by Amin and Alam (2008), age was found to be positively related to the likelihood of choosing part-time employment. Another demographic variable is gender. Women have been found to have a greater tendency to work part-time. In Britain, Gregory and Connolly (2008)

indicated that although the number of men in part-time employment was increasing, 81% of part-time workers were women; it was also noted that 43% of women and only 9% of men in the workforce were part-time workers. Kitterod et al.'s (2013) study in Norway highlighted that about four out of ten employed women in the country worked reduced hours and the proportion is even higher among women with children. The third demographic factor that is related to the choice of employment status is marital status. Nomura and Gohchi's (2012) study in Japan found that individuals in full-time jobs were more likely to be single and childless. Dunn's (2018) study in the United States found that among women workers, the percentage of part-time workers was higher in the 'married' group (16.7%) than in the 'never married' group (11.4%); in other words, part-time employment is more prevalent among married women.

Employment status is also related to education, i.e. the likelihood of choosing full-time employment is positively related to education. Matysiak (2005) also showed that there was a strong effect of education on hours of work; i.e. persons with tertiary education were more likely to be full-time workers as compared to less-educated workers, especially those with primary education. This pattern was also noted by Manning and Petrongolo (2008) in the case of women workers in Britain, where it was found that full-time women workers were on average better educated than part-time women workers. Amin and Alam (2008) found that in Malaysia, years of education and full-time employment were positively related. A recent study by Marotzke (2019) in two European countries, Germany and France, showed that the preference for part-time employment was lowest for women with high education. This implies that individuals with high education attainment tend to choose full-time work. Another education-related variable is one's schooling status. Due to the increasing cost of higher education, college students tend to work in order to pay for their education and living costs. Studies (e.g., Riggert et al., 2006; Yanbarisova, 2015) show that unlike part-time employment, full-time employment adversely affects the academic performance of students. Hence, there is a tendency to choose part-time work rather than full-time work among individuals who are still studying.

Household variables are also associated with an individual's employment status. One relevant variable is household income. The theory of labour supply suggests that household income and labour supply are negatively related due to the income effect; hence, individuals with high household income are more likely to work part-time, all else being equal. This relationship between household income and the choice of part-time versus full-time employment is supported by the findings of empirical studies. For instance, Buddelmeyer et al.'s (2005) study in eleven European countries as well as Amin and Alam's (2008) study in Malaysia showed that part-time workers were more likely to have higher household income, particularly in the case of women.

Another household variable that is related to the choice of employment status is the number of children in the household. Child care and domestic chores tend to increase with the number of children, thereby decreasing the hours allocated to market work. As compared to full-time work, part-time work enables individuals to achieve a better balance between domestic duties and labour market work. The relationship between the presence of children and the probability to work part-time is evident in Popova et al.'s (2003) study in the Latvian labour market as well as Gregory and Connolly's (2008) study in the UK.

A third household variable is the presence of adult dependents in the household which include a dependent spouse, adult children, parents and other adult household members who are unemployed or out of the labour force for various reasons. According to Bardasi and Gornick (2000), adult dependents may exert downward pressure on full-time employment (particularly among female workers) if adult dependents require care. In addition, the presence of adult dependents may cause work disincentives among workers if adult dependents in the household are awarded social benefit packages as in the case of welfare states.

Finally, work-related factors that pertain to employment status are occupation and economic sector. Part-time work usually involves workers who are engaged in occupations and sectors which require lower-level skills or qualifications. For instance, the study by Connolly and Gregory (2008) showed that those who worked part-time are mostly women in smaller scale managerial positions (i.e. in service-oriented businesses such as restaurants, salons and shops). Manning and Petrongolo's (2008) study in the UK indicated that part-time women workers were more likely to work in personal service, sales or elementary occupations. The probability of working part-time also depends on the economic sector where a worker is employed. The findings of Popova et al. (2003) revealed that workers in sectors such as utilities, transport and logistics had the least probability of working part-time. On the other hand, part-time work was more prominent in the agricultural sector. In addition, the study also showed that public sector workers were less likely to work part-time than those in the private sector.

Many of the past studies on workers' choice of full-time versus part-time work schedules focus mainly on women and were conducted in developed nations. The focus on women is also true in the case of the only known Malaysian study by Amin and Alam (2008). The study was based on the data collected in the Second Malaysian Family Life Survey, carried out in Peninsular Malaysia in 1988-1989. The present study seeks to broaden the scope of investigation by extending the analysis to include men as well. Hence, this study seeks to profile full-time and part-time workers in the workforce which comprises both gender groups. Since this issue has been previously studied in Malaysia using a much older data set, this study will provide a more recent snapshot of the attributes of full-time and part-time

workers in Malaysia, specifically in the state of Penang. Finally, given the lack of studies in developing countries, this study will also provide insights on the issue of full-time versus part-time work schedules in the context of a developing country like Malaysia.

METHOD

Primary data is used in this study. The survey data was collected using a structured self-administered questionnaire that was distributed to workers in Penang. The convenience sampling method was used and the sample was stratified to reflect the ethnic and gender composition of Penang's population in 2016 based on statistics reported by the Penang Institute (2018). A total of 527 respondents were surveyed comprising 207 (39.3%) Malays, 240 (45.5%) Chinese and 80 (15.2%) Indians/others. The ethnic distribution of respondents in the sample parallels the ethnic composition of Penang's population, which is made up of 40.9% Malays, 41.5% Chinese and 17.6% Indians and others. The sample consisted of 254 (48.2%) men and 273 (51.8%) women, which reflected the state's gender profile of 50.01% males and 49.99% females.

For the purpose of data analysis, the sample is divided into two main groups: (i) part-time workers, i.e., workers who do not work more than 70% of the standard workweek of 48 hours or in other words, do not work more than 33.6 hours per week and (ii) full-time workers, i.e., those who work more than 33.6 hours per week. This

is a descriptive study and the following is a discussion of the methods used to analyse the survey data. The characteristics of workers in this study are presented using cross-tabulations (also known as a bivariate table). Cross-tabulations show the distributions of two categorical variables simultaneously. In this study, the cross-tabulations show the distribution of workers by employment status or work schedule (that is, part-time or full-time work) versus various socio-demographic, household and work-related factors. The bivariate analysis used in this study adopts the Chi-square test of independence to ascertain whether there is an association between two categorical variables by comparing the observed pattern of responses in the cells to the patterns that would be expected if the variables were truly unrelated or independent of each other. By calculating the Chi-square statistic and comparing it against a critical value from the Chi-square distribution, it is possible to determine whether the observed cell counts are significantly different from the expected cell counts (Norusis, 1997).

Another statistic that is computed is the incidence of full-time work or also known as the full-time employment rate. In this study the threshold that separates part-time and full-time employment is 33.6 hours per week; hence, workers who work more than 33.6 hours per week are classified as full-time workers. The incidence of full-time employment shows the proportion or percentage of persons working full-time among all employed persons. The incidence of full-time employment is calculated for

workers in the different groups (based on the socio-demographic, household and work-related groupings that are used in this study).

RESULTS

The sample consisted of 527 workers, of which 400 (76%) were working full-time while the remaining 127 (24%) workers were part-time workers. Table 1 provides a snapshot of the socio-demographic, household and work-related characteristics of workers with full-time and part-time work schedules and the incidence of full-time employment for each sub-group of workers.

The age of respondents ranged from 15 to 70 and the mean age was 32 years. The Chi-square test showed that age was significantly related to employment status. Table 1 shows that the majority of full-time workers were above the age of 24 while the majority of part-time workers were below the age of 24. The incidence of full-time work was lowest (44.9%) in the youngest group (15-24 years), where many of these workers might be still pursuing their education and hence opted for part-time work. The incidence of full-time work was also relatively low in the oldest group (55 and above), i.e. the pre-retirement age group, where older workers tended to choose part-time work as they prepared for retirement. In contrast, the prevalence of full-time work was high for prime-age workers (25-34 and 35-44 age bracket) who were at the crucial phase of building their careers; the incidence of full-time work in these age groups are 91.8% and 88.4%, respectively.

Another demographic variable is gender. The sample comprised 254 men (48.2%) and 273 (51.8%) women. Among the full-time workers, 221 (55.2%) were males and 179 (44.8%) were females. Conversely, the majority of part-time workers were females (74%) and only 26% were males. The data shows that the incidence of full-time work was higher for men, i.e. 87% of men versus 65.6% of women were full-time workers and the Chi-square test showed that gender is significantly related to employment status. This can be attributed to gender divisions in household work; women traditionally played a more dominant role in carrying out household duties and thus chose part-time work in many cases.

The respondents were divided into three marital status groups; i.e. 54.8% were single, 43.3% were married and 1.9% were divorced/widowed. About half the number of full-time workers were single and the other half belonged to the ever-married group (i.e., married or divorced/widowed). In the case of part-time workers, the large majority were singles (68.5%). The incidence of full-time work was lower for singles (69.9%) in comparison to married workers (83.8%). The low incidence of full-time work among singles can be due to the fact that some of them (30%) are still schooling. In addition, singles generally have lower financial responsibility in comparison to those who are married and the income from part-time work may suffice for their financial needs.

Table 1

Distribution of workers by employment status and incidence of full-time work

Variables	Categories	Chi-square statistics	Full-time work (%)	Part-time work (%)	Incidence of full-time work
Age	15-24	115.47***	15.5	59.8	44.9
	25-34		50.2	14.2	91.8
	35-44		21.0	8.7	88.4
	45-54		10.0	9.4	76.9
	55 and above		3.2	7.9	56.5
Gender	Male	33.07***	55.2	26.0	87.0
	Female		44.8	74.0	65.6
Marital status	Single	13.61***	50.5	68.5	69.9
	Married		47.8	29.1	83.8
	Divorced/ Widowed		1.8	2.4	70.0
Education	PMR or below	63.63***	8.3	22.8	53.2
	SPM		20.0	41.7	60.2
	STPM		20.0	11.0	85.1
	Bachelor Degree		43.0	22.8	85.6
	Master/PhD		8.7	1.6	94.6
Schooling status	Not studying	95.77***	90.8	52.0	84.6
	Studying		9.2	48.0	37.8
Household income	RM3000 and below	56.66***	40.5	78.7	61.8
	RM3001-5000		27.3	11.0	88.6
	RM5001-7000		14.5	3.9	92.1
	More than RM7000		17.8	6.3	89.9
No.children	0	12.82***	56.8	70.9	71.6
	1		12.0	3.1	92.3
	2		16.0	11.0	82.1
	3		10.8	9.4	78.2
	4 or more		4.5	5.5	72.0

Table 1 *(Continued)*

Variables	Categories	Chi-square statistics	Full-time work (%)	Part-time work (%)	Incidence of full-time work
Adult dependents	0	23.34***	62.0	85.0	69.7
	1 or more		38.0	15.0	88.9
Occupation	Manager	144.45***	8.5	0.8	97.1
	Professional		39.7	16.5	88.3
	Technician		11.0	0.8	97.8
	Administration		18.2	5.5	91.3
	Sales & Service		14.0	61.4	41.8
	Crafts		2.3	0.8	90.0
	Elementary		2.0	8.7	42.1
	Others		4.3	5.5	70.8
Sector	Public	6.82***	13.8	5.5	88.7
	Private		86.3	94.5	74.2

Source: Authors' own computation based on survey data.
Note: *** indicate the Chi-square statistic is significant at 1 percent for all the variables.

Table 1 includes two factors related to education, i.e. education level and current schooling status. Both factors are significantly related to the employment status of workers. The proportion of workers with a low education level (PMR, i.e. lower secondary education, or below) was greater among part-time workers than full-time workers (i.e., 22.8% and 8.3%, respectively). In contrast, the proportion of workers with a high level of education (Bachelor, Master or PhD degree) was higher among full-time workers than part-time workers (i.e. 51.7% and 24.4%, respectively). The incidence of full-time work was relatively low (53.2%) for workers with a low education level (PMR or below). This is possibly because most jobs for less educated workers are low-paid, contingent jobs which are typically part-time. In contrast, full-time jobs generally require higher levels of education. The incidence of full-time work was higher (exceeds 85%) for workers with STPM (A-level) education and above. Lucrative jobs abound in Penang's rapidly developed economy and the better educated groups prefer to work more hours (i.e. full-time) to get the highest possible remuneration in these jobs.

The second education variable is current schooling status. Less than 10% of full-time workers were pursuing their education while nearly half the number of part-time workers were studying. It is noted that the incidence of full-time work is far lower (37.8%) for workers who were currently studying vis-à-vis those who were not studying (84.6%), given that educational pursuit

was time-intensive and in many cases, students preferred part-time work in order to complete their education successfully.

The next group of variables is household variables which include household income, number of children and presence of adult dependents. Household income levels range from below RM3000 to above RM7000. The proportion of workers with a relatively low monthly household income (RM3000 and below) was 40.5% among full-time workers and nearly two times higher (78.7%) for part-time workers. The prevalence of full-time work is notably the lowest (61.8%) among workers with the lowest level of household income (below RM3000). The prevalence of full-time work was greater (close to 90%) among workers with household income levels exceeding RM3000. This finding is counter intuitive. It is contrary to the expectation of an inverse relationship between household income and the prevalence of full-time work, especially in the case of secondary earners (e.g. women) who tend to have a preference for part-time work due to other commitments. However, it is plausible that the relationship between household income and employment status shown in Table 1 is an indication that the scenario in Penang's rapidly developing economy may be similar to the situation in developed countries such as the UK, at least as far as female workers are concerned, where full-time employment is likely to be adopted by women with higher household income due to their status as equal earners/main earners in the family

and the availability of resources to support a full-time working lifestyle (Kanji, 2010).

Another household variable is number of children. Nearly 57% of full-time workers and 71% of part-time workers did not have children in the household. These figures correspond to the proportion of singles among workers in each employment status group. Among workers with children, the incidence of full-time employment was inversely related with the number of children. This is because an increase in the number of children increases child care responsibilities, which reduces the time available for full-time employment, especially in the case of women who are usually the main caregivers. Aside from the number of children, another household factor is the presence of adult dependents in the family, which includes those who are either unemployed or outside the labour market for various reasons. The majority of both full-time and part-time workers do not have adult dependents and the incidence of full-time employment is about 70% for workers without adult dependents. In contrast, the incidence of full-time work is higher (nearly 89%) for workers with adult dependents in the household. Unlike the situation in developed countries, the social benefits for adult dependents in Malaysia are limited and hence it does not result in work disincentives (via a negative income effect) for household members who are working full-time. Furthermore, it is argued that the presence of adult dependents do not necessarily impinge on full-time

employment, given that adult dependents (especially grandparents) may assist in child care duties that enable workers to work full-time.

The last category of factors is work-related factors, which includes occupation and sector of employment. The highest percentage of full-time workers are in professional jobs (39.7%) whilst the highest percentage of part-time workers are engaged occupations related to sales and service. The incidence of full-time work is the lowest (approximately 40%) among sales and service workers as well as elementary workers. In contrast, the incidence of full-time employment is more than two times higher in other occupations. Finally, the majority of both full-time and part-time workers are employed by the private sector. The incidence of full-time work is lower among private sector workers; the figure is 74% for private sector workers and 89% for public sector workers. This is because most public sector jobs are full-time jobs and part-time options are limited in this sector.

To conclude, the results of the data analysis are broadly consistent with the findings of previous studies in the literature. However, it is noted that the findings of this study differ from earlier studies with respect to the relationship between employment status and household income. Earlier studies (e.g., Amin & Alam, 2008; Buddelmeyer et al., 2005) show that part-time workers are more likely to have higher household income. However, this study shows that full-time employment is positively related to household income. This may be because full-time employment is chosen by Penang workers (including female workers) with higher household income due to the access to resources to support a full-time working lifestyle for both gender groups. Another finding in this study that differs from earlier studies is with regard to the relationship between employment status and the presence of adult dependents. Bardasi and Gornick (2000) suggested that adult dependents had a negative influence on full-time employment since they might require care and because the social benefit packages that were given to them reduced the work incentives of other family members. However, the present study shows that the incidence of full-time employment is higher for workers with adult dependents. This may be because the presence of adult dependents in the households allows others in the family to work full-time since non-working adult dependents can play the role of caregiver.

DISCUSSION

Based on the results presented in Table 1, it is noted that the incidence of full-time employment tends to be lower for workers with the following characteristics: non-prime-age workers, women, singles, workers with lower education, currently studying, household income below RM3000, having more children, no adult dependents in the household, engaged in sales/service or elementary occupations and in the private sector. The findings are used to discuss policy implications. Since full-time work may be regarded as being better than part-time work (given the disadvantages of part-

time work noted earlier), the following is a discussion of viable policies or strategies to promote full-time employment for groups with a relatively low incidence of full-time employment.

The results show that the incidence of full-time work is lower among workers at the two ends of the age spectrum. In the case of workers in the oldest age group (55 years and above), the relatively low incidence of full-time work may be partly attributed to age discrimination where older workers may be sidelined by employers and given part-time positions whilst younger workers are preferred for full-time jobs because they are considered to be more productive, trainable and adaptable. Unlike developed countries such as the United States, there are no laws as yet in Malaysia that prohibit age discrimination *per se* in the work place. The time has come to introduce legislation that prohibits age discrimination in Malaysia to prevent the underutilisation of talents as we move in the direction of becoming an ageing population. In addition, older workers themselves may prefer part-time work due to health problems and/or lack of financial motivation to work full-time if they have accumulated sufficient savings and assets over the years. However, since older workers have a wealth of work experience and knowledge, it would be beneficial to offer senior workers full-time positions that suit their needs in order to encourage them to work full-time, thus enabling them to maximise their contribution to the organisation. Older workers should also be given the opportunity to participate

in training programmes to upgrade their skills and keep abreast of changes in the workplace.

The data shows a gender gap in the incidence of full-time employment, i.e. women have a lower incidence of full-time employment than men. The Malaysian government has hitherto outlined policies to encourage women to work. This includes strategies to attract women who had stopped working to return to the labour force via the Career Comeback programme that provides employment re-entry opportunities and also giving a one-year tax break for eligible women returning to work (Khazanah Research Institute, 2019). Policies to encourage women to work full-time include the provision of child care and flexible work arrangements (including work-from-home option) as outlined in the current Eleventh Malaysia Plan, 2016-2020 (Economic Planning Unit, 2015). In addition to the above, other gender-friendly labour policies should be implemented to ensure that the labour market conditions are more conducive for women to work full-time. Among the measures that are proposed to attract women to work full-time include implementing the principle of pay equity which ensures that men and women receive equal pay when they perform work that involves comparable skills or that is of comparable worth to the employer as well as dismantling barriers that prevent the career advancement of women. Encouraging women to work full-time allows employers to tap the potential of women to the fullest.

The results also show that the incidence of full-time work is inversely related to the number of children in the household. The availability of nurseries and day care centres would enable workers (especially women) to work full-time. Ideally, organisations should provide child care facilities in the work place or in a neighbouring area so that parents can easily drop off and pick up their children at these centres. Employers who are unable to provide this service should be encouraged to include child care allowances as part of their employee benefits package so that workers with more children can also afford private child care services, thus enabling them to work full-time. The Malaysian government supports these initiatives by implementing fiscal measures in terms of giving tax incentives to employers who provide child care centres or pay child care allowances for the benefit of employees (Inland Revenue Board of Malaysia, 2016). Other policies that have been put in place in Malaysia to facilitate child care include the following: providing formal care services by the public sector, encouraging the private sector to conduct corporate social responsibility programmes which include sponsoring the establishment of care centers in partnership with NGOs and conducting training or developing modules for training care providers and assessing the quality of care centres (Khazanah Research Institute, 2019). Flexi hours would be another solution whereby full-time workers are given some flexibility in choosing the time they start and finish work. Such a scheme would allow one or both parents to choose their work time schedules and thereby optimise the time they allocate for child care.

Finally, the results indicate that employment status is related to education variables, i.e. level of education and current schooling status. With regard to the first education variable, i.e. education level, it is noted that the incidence of full-time employment is lower among workers with low education levels. However, the rising cost of living and higher education makes it increasingly difficult for lower income families to finance the higher education of their children. The failure to pave the way for poorer students to attain higher education suggests that the relatively low levels of education that these less fortunate students achieve (due to financial reasons) may restrict their job prospects to lower paid jobs (such as elementary jobs as well as sales/service jobs) that are often part-time jobs. Hence, the incidence of full-time employment can be enhanced for workers with lower education levels by giving them the opportunity to pursue their higher education (e.g., by providing loans or scholarships) or undergo skills training that will improve their employability in better paid full-time jobs.

Employment status is also significantly related to schooling status, i.e. the incidence of working full-time is lower among workers who are still schooling. An individual who is still schooling generally anticipates schedule conflicts at the workplace and the educational institution and hence opt for part-time work to avoid or minimise

this problem. To enable more students to work full-time (particularly in the case of workers who need a full-time job to support their financially strapped family), the flexibility provided by the employer and the educational institution is vital. For instance, employers can allow shifts in work schedule or days/time off from work to accommodate the educational needs of workers who are pursuing their education.

CONCLUSION

This study contrasts full-time and part-time workers in Penang. The discussion in this article revolves around the issue of (i) differences in the characteristics of full-time and part-time workers, (ii) the relationship between workers' employment status (full-time versus part-time) and their socio-demographic, household as well as work-related characteristics and (iii) the incidence of full-time employment for different sub-groups of workers.

The results of the bivariate analysis are based on cross tabulations. The majority of full-time workers were above 24 years old and conversely the majority of part-time workers were below 24 years old. The large majority of part-time workers were females and single. Nearly half the number of full-time workers had higher education while about half the number of part-time workers are pursuing their education. The majority of part-time workers belonged to low-income households (below RM3000 per month) while the majority of full-time workers belonged to relatively higher income households. About 57% of full-time workers

had no children; the corresponding figure was 71% for part-time workers. Most full-time and part-time workers did not have adult dependents in the household. The majority of full-time workers were employed in either managerial, professionals, technicians or administrative occupations. On the other hand, the majority of part-time works were in sales/service and elementary occupations. Most workers in both employment status groups were in the private sector.

The Chi-square test results show that employment status (full-time or part-time) is related to factors such as age, gender, marital status, education level, schooling status, household income, number of children, presence of adult dependents, occupation and employment sector. A comparison of the incidence of full-time work shows that the proportion of full-time workers is lower among individuals with the following characteristics: non-prime age, women, single, less educated, still schooling, low household income, more children, no adult dependents, engaged in sales/service or elementary occupations and in the private sector.

The discussion on policy implications is based on the premise that full-time employment generally offers more advantages to workers and hence the need to find ways to facilitate full-employment for workers. Malaysia has addressed this problem to some extent, particularly in the case of female workers. However, there is still room for enhancing full-time employment among female workers, those with child care responsibilities, older

workers, individuals with low education level and those who are pursuing their education. The underutilisation of workers that arises from part-time employment translates into lost opportunity to boost the national economy and mitigate the impact of an impending ageing population. To conclude, it is in the interest of individual workers and the nation as a whole to promote full-time employment.

Finally, it is noted that some workers still prefer part-time work even when steps are taken to reduce the barriers of engaging in full-time employment. For such workers, it is necessary to ensure that they are treated fairly by employers. Further research is needed in this area to establish whether part-time workers are treated fairly or less favourably than full-time workers in the Malaysian labour market.

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Thematic-Based Text Structure Analysis as a Function of Text Memorization: Surah Yasin

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ABSTRACT

Within the context of text memorization, one of the techniques that may assist memorization is by breaking the text into thematic-based categories, which technique is known as text structure analysis. The purpose of the present study was to analyze the text structure of Surah Yasin, the 36th chapter in the Holy Quran with the objective to use the processed text structure as a scaffold for memorization for the *surah* (chapter). Surah Yasin was selected using purposive sampling as the text to be analyzed in this study. The data for this study were collected in two categories, namely macro proposition and micro proposition. Latent content analysis was used to analyze the selected text employing a three-dimension thematic-based text structure analysis approach. The themes yielded from the analysis were validated by two Quran exegesis experts. As many as 25 themes emerged from the content analysis of the selected text with a total of 227 micro propositions. Each theme comprises an arbitrary number of verses ranging from 1 to 9 verses. The findings are discussed within the perspective of how Surah Yasin can be effectively memorized together with understanding its meaning, using the three-dimension thematic-based text structure analysis approach. The implications of the findings of the current study are also extended to non-religious scripts.

Keywords: Content analysis, memorization, Quran, scaffold, thematic-based analysis

INTRODUCTION

It is the faith of the Muslims that the Quran is a reserve of guidance comprising history and reminders that assist their livelihood in this world as well as in the Hereafter (e.g., Nawaz & Jahangir, 2015). Hence, the Quran becomes an important book of knowledge and education for the Muslims. As such, the Quran should be preserved. One way of preserving the Quran is by memorizing its content. Ancient Islamic scholars used memorizing of Quranic scriptures as a method to preserve knowledge (Ariffin et al., 2013). This shows that memorizing the Quran has been used as a prevalent method for knowledge preservation so that the preserved content of the Quran can be passed on to future generations without any alteration (e.g., Ismail, 1990). If no one memorizes the Quran, in the case of the extinction of the printed Quran, which may be due to endless possible reasons, the Quran will not be able to be passed on to future generations or it may be altered. Therefore, Quranic memorization provides a secure storage for the preservation of the Quran. Although continuing the same practice and purpose for Quranic memorization since ancient time, numerous techniques since then have been developed to expedite the success of the memorization process including enhancing its efficiency and retention.

The emergence of various techniques is also due to the challenging process of Quranic memorization that involves the requirement of having certain skills such as the knowledge of the Arabic language,

which includes phonological processing or the *tajweed*, Arabic grammar as well as semantic knowledge, of which knowledge is believed to assist the memorization process (Yahya, 1994). Due the complexity of the Quranic language and the amount of content to be memorized, in general, the techniques of Quranic memorization, including the popular Turkey Method, can be summarized as being very behavioristic rather than cognitive in nature since the existing Quran memorization techniques are primarily based on the structural linguistic approach, which involves drilling and reinforcement of the repeated Quranic verses over time (e.g., Ahmad, 2006; Ariffin et al., 2015; Muhammad, 2005), of which technique is also influenced highly by one's ability to memorize (Ariffin, 2012). Moving away from the structural linguistic approach for Quranic memorization, the current study attempted to develop another technique of Quranic memorization using thematic-based text structure analysis as a function for Quranic text memorization. Rationally, the provision of a scaffold in terms of text structure analysis reduces the dependency on one's ability in memorization because the scaffolding compensates the deficiency in memorization ability.

Many studies have examined text structure for various purposes (e.g., Dempster & Reddy, 2007; Hebert et al., 2016; Pyle et al., 2017; Sáenz & Fuchs, 2002; William, 2018). However, regardless of the specific purpose, the general purpose of text structure analysis is often geared towards ease of reading, better understanding and

information retaining of texts (e.g., Burke et al., 2015; Gajria et al., 2007; Jones et al., 2016). Hence, analyzing the text structure of expository texts has received a great deal of attention of many reading researchers (e.g., Hall et al., 2005; Meyer et al., 2010, 2011; Wijekumar et al., 2012, 2014; Williams et al., 2007, 2009, 2014) in comparison to narrative texts especially religious scriptures. Therefore, the current study attempted to analyze the text structure of a religious scripture in terms of the organization of propositions in the text with the purpose of using the outcome of the analysis as a scaffold for the memorization of the selected text.

In analyzing text structure, many text analysis strategies have been used. Among the strategies of text analysis is text mapping, which involves the mapping of text propositions in the form of graphic organizers of which readers display and organize important textual features (e.g., Garwood et al., 2017; Stagliano & Boon, 2009). However, text mapping assumes that readers have the required skill in information literacy since they have to discriminate between text propositions that are considered important and of secondary importance. In addition, text mapping may be a compatible tool to analyze or recognize the structure of expository texts but not for narrative texts. Nonetheless, within the context of narrative texts such as religious scriptures, text structure analysis strategy such as text mapping that eliminates propositions perceived to be of less importance, is considered to be unsuitable to be utilized since every proposition in a religious scripture such as the Holy Quran is deemed as equally important.

Therefore, a more suitable text structure analysis approach that takes the whole text into account should be employed. One text structure analysis that allows the inclusion of the whole text in the form of themes is thematic analysis. According to Braun and Clarke (2006), thematic analysis enables the identification of rich, detailed and complex description of patterns within the data. Therefore, the present study analyzed the selected religious scripture using thematic-based analysis approach.

METHODOLOGY

The present study is a pioneering study of a larger research. The purpose of the study was to develop the scaffold for the memorization of Surah Yasin, the 36th chapter in the Holy Quran by analyzing the text structure of the selected chapter. For the purpose of this study, the thematic-based analysis of the text structure was based on three text structure dimensions (3D), namely the text propositional structures, the themes and the pattern of verse distribution for each theme. In order to develop the scaffold for Surah Yasin, the study was guided by the following research questions, which were formulated based on the three text structure dimensions:

Research Question 1: What is the propositional structure of Surah Yasin?

Research Question 2: What are the themes that emerge from Surah Yasin?

Research Question 3: What is the theme-based pattern of verse distribution in Surah Yasin?

Instrument and Sampling

The Holy Quran was the instrument used in the present study since the selected *surah* or chapter examined in this study is contained in the Holy Quran. Surah Yasin is the 36th chapter out of 114 chapters in the Quran. This surah was revealed in Mecca after the revelation of Surah al-Jinn The surah is named Yasin because it starts with the Arabic letters *ya* (ي) and *sin* (س) (Al-Sabuni, 1989). This surah comprises 83 verses.

Surah Yasin was selected using purposive sampling as a text to be analyzed in this study. There are, among others, several rationales why Surah Yasin was purposely selected for this study. First, the content of this surah is significantly concerning the matters related to *akidah* or belief, which is one of the *Taqwa* traits that is most frequently emphasized in the Quran for Muslims to ensure its sustenance in order for one to remain a Muslim (e.g., Sidek, 2017, 2018). It is acknowledged that other surahs apart from Surah Yasin also mentions *akidah*, one element of *Taqwa*. However, Surah Yasin has a significant importance over other surahs because it contains all pillars of Islam (*tawheed*, prophethood, justice and resurrection) that it is hailed as the Heart of the Quran as stated in the hadith by Al-Tirmidhi (1963), "Everything has a heart and the heart of the Quran is Yasin. Allah SWT will record anyone who recites Yasin as having recited the Holy Quran ten times." Hence, this pioneering study purposely selected Surah Yasin as the sample of the study.

Second, there are so many hadiths of the Prophet Muhammad P.B.U.H concerning the significant of reciting this surah in various occasions (e.g., al-Darimi, n.d.; al-Nasa'i, 1991; al-Suyuti, 2002). Therefore, within the context of frequency of recitation, comparatively, this surah is most frequently recited other than the first surah of the Quran, which is the Fatihah of which the frequent recitation is especially due to its mandatory status in the daily five compulsory prayers.

Third, based on a preliminary survey conducted on this surah, despite Surah Yasin being frequently recited, it is a phenomenon that many Muslims do not memorize this surah as a whole although some are able to recall parts of the surah. In addition, the finding of the preliminary survey also indicates that those who memorize this surah, do not understand the meaning of the verses in this surah. Since Quran is revealed for mankind to use as guidance, the situation Surah Yasin being frequently recited, but not memorized and understood, is a loss for the Muslims because without understanding, the guidance revealed in the surah cannot be grasped and utilized to benefit the reciter. To reiterate, as mentioned earlier, *akidah* is an element of Taqwa. Since Surah Yasin is heavily loaded with verses related to *akidah*, hence, missing the required understanding of verses in Surah Yasin might affect a Muslim's sustenance of *akidah*, which is the foundation of Islam. Without maintaining such foundation, the entire faith could collapse.

Data Collection

Since this study examined the classification of propositions in the selected text to unravel the propositional structure, inclusive document review method was employed without any content elimination. Hence, all 83 verses in Surah Yasin were utilized as the data of the study. Nonetheless, the *basmallah* verse (*bismillahirrahmanirrahim*) was not included since this verse generally serves as the opening recitation for all surahs in the Quran with the exception for Surah at-Tawba.

To answer the research questions in this study, content analysis was conducted by reviewing the selected document. Considering that the current study involved script examination, content analysis was the most suitable to be utilized as in past studies of similar nature (e.g., Al-Hammadi & Sidek, 2015; Bengtsson, 2016; Erlingsson & Brysiewicz, 2017; Hussain, 2010; Karcic, 2006; Mahir & Sidek, 2011; Mohammed & Sidek, 2015, 2016; Sidek, 2011a, 2011b, 2012b, 2013; Sidek & Abdullah, 2013). The data for this study were collected in two categories, namely macro proposition and micro proposition because the propositional structure of a text comprises of these two categories. The macro propositions were formed by grouping verses that were inferred to suggest similar or connected propositions. The micro proposition(s) at each individual verse level in each macro proposition group were formed by dissecting individual proposition in each verse.

Dissection of one group of verses from another was determined by marking the last verse in that group that was inferred to suggest a similar or connected proposition as the previous verse(s). The next group of verses was considered to emerge when the subsequent verse was inferred to suggest a different macro proposition than the previous verse. As to provide a clearer understanding of the data collection procedure, a few data collection samples are provided. For example, the first verse of Surah Yasin as shown below comprises alphabets with the meaning established as unknown within the context of Quranic exegesis:

> Verse 1: Yasin
> Meaning: Yasin

Hence, verse 1 in Surah Yasin was categorized as a group by itself. Another example is verse 11 of which the meaning of the verse is,

> You can only warn him who follows the reminder and fears the Beneficent Allah in secret; so, announce to him forgiveness and an honorable reward

Similar to verse 1, verse 11 was also categorized as a group by itself since its micro propositions are disconnected from the macro proposition of the previous and subsequent verses. Another example, verse 49 to verse 50 as shown below were inferred to suggest that their micro propositions are interconnected:

> Verse 49: I swear by the Quran full of wisdom

Verse 50: Most surely you are one of the messengers

Hence, verses 49 and 50 were categorized as in the same macro proposition group. Since the micro proposition of verse 50 is disconnected from the micro proposition of verse 51, verse 50 was assigned as the dissecting marker that denotes the emergence of a new group of macro proposition data. In grouping the verses, selected sources of *tafseer* or exegesis by Ibn Kathir (2000) and Al-Jalalyn (2013) were used in confirming the alignment between the interpreted micro propositions for each individual verse by the *mufassirin* or exegesis experts and the micro propositions of the verse inferred by the researcher. As such, a more accurate inference could be made.

The reviewing, dissecting and proposition marking procedures of the verses were repeated several times to ascertain the reliability of data inference, categorization as well as the dissection procedure, since reliability measure is necessary to ensure

consistency in construct measurement (e.g., Long & Johnson, 2000; Noble & Smith, 2015). The data collection was completed within the period of approximately four weeks. At the end of the data collection period, a list of macro propositions and micro propositions were acquired. Table 1 exhibits the examples of the organization of the data, which yielded a list of organized data to be analyzed in this study.

Data Analysis

Manifest content analysis was conducted in analyzing the frequency of the macro propositions in the selected text to answer research questions 1. Past studies used manifest content analysis to examine patterns in documents in numerical representations (e.g., Hsieh & Shahnon, 2005; Sidek, 2010). The macro propositions elicited in the selected text were organized in individual tables according to their respective themes using the deductive category application approach as suggested by Mayring (2000).

Table 1

Samples of data organization

Verse number	Verse Group	
	1	2
1	Ya Seen (*dm*)	
2		I swear by the Quran full of wisdom
3		Most surely you are one of the messengers
4		On a right way
5		A revelation of the Mighty, the Merciful (*dm*)

Key: *dm* = Macro proposition dissecting marker

Each theme was numbered sequentially in order to know the propositional structure of the selected text and the themes that would emerge from the text as well as the nature of verse distribution for each theme.

A coding method was devised in analyzing the macro and micro propositions as shown in Table 2 and Table 3.

The chunking method was used to dissect the micro propositions and a slash sign (/) was used to denote the separation from one micro proposition and another as shown in Table 3.

To answer research question 2, latent content analysis in the form of thematic analysis was selected as the tool to analyze the propositions in the selected text. Thematic analysis is commonly used for qualitative study (e.g., Castleberry & Nolen, 2018) to examine a deep structure (e.g., Bengtsson, 2016). Thematic analysis used in analyzing the data in this study is in the context of categorization of elements as used in past studies of similar nature (e.g., Ibrahim, 2009; Mihut, 2014; Perry, 2014; Raslie & Keong, 2017; Sidek, 2011b, 2012a, 2014) of which elements in the current study

Table 2

Samples of macro proposition data coding

Verse number	Verse	Coding Scheme
1	Ya Seen	G_1X_1
2	I swear by the Quran full of wisdom	G_2X_2
3	Most surely you are one of the messengers	G_2X_2
4	On a right way	G_2X_2
5	A revelation of the Mighty, the Merciful	G_2X_2
6	That you may warn a people whose fathers were not warned, so they are heedless	G_3X_3
7	Certainly, the word has proved true of most of them, so they do not believe	G_3X_3
8	Surely, We have placed chains on their necks, and these reach up to their chins, so they have their heads raised aloft	G_3X_3
9	And We have made before them a barrier and a barrier behind them, then We have covered them over so that they do not see	G_3X_3
10	And it is alike to them whether you warn them or warn them not: they do not believe	G_3X_3

Key: G = Verse group; X = Macro proposition; G_1 = Verse group 1; X_1 = Macro proposition for verse group 1; G_2 = Verse group 2; X_2 = Macro proposition for verse group 2; G_3 = Verse group 3; X_3 = Macro proposition for verse group 3

Table 3

Samples of micro proposition data coding

Verse Group (G_n)	Verse number	Verse	Number of Micro Proposition(s) (Verse Level)	Number of Micro Proposition(s), Y_y (Group Level, G_n)
G_1	1	Ya Seen	1	G_1Y_1
G_2	2	I swear by the Quran/ full of wisdom/	2	G_2Y_5
	3	Most surely you are one of the messengers/	1	
	4	On a right way/	1	
	5	A revelation of the Mighty, the Merciful/	1	
G_3	6	That you may warn a people/ whose fathers were not warned/ so they are heedless/	3	G_3Y_{15}
	7	Certainly, the word has proved true of most of them/ so they do not believe/	2	
	8	Surely, We have placed chains on their necks/ and these reach up to their chins/ so they have their heads raised aloft/	3	
	9	And We have made before them a barrier/ and a barrier behind them/ then We have covered them over/ so that they do not see/	4	
	10	And it is alike to them/ whether you warn them or warn them not/ they do not believe/	3	

Key: G = Verse group; n = Group number; Y = Micro proposition; y = Total of micro propositions for the respective verse group (G_n)

are in the form of text propositions. The micro propositions of each verse in each data group were analyzed to determine the macro proposition or theme for each verse group. A theme was inferred for each verse group based on the general proposition that was considered to encapsulate the micro propositions of the verses in each verse group as a whole.

To answer research question 3, directed content analysis was conducted because the purpose of unraveling the frequency of the macro propositions in the selected text was to analyze the design of the distribution of the proposition in the selected text. Past studies that examined the design of the structure of a certain content used directed content analysis (e.g., Curtis et al., 2001; Hickey & Kipping, 1996; Potter & Levine-Donnerstein, 1999). The analysis for research question 3 involved the frequency count of the number of verses under each theme

Validity Procedure

The list of data group was rated by two Quran exegesis experts using a two-point Likert scale indicating agreement or disagreement of the verses groupings as well as the themes assigned to each data group. The two experts were also requested to use the selected sources of *tafseer* or exegesis by Ibn Kathir (2000) and al-Jalalyn (2013) as their references in the validation procedure. Discrepancies that emerged in the validation procedure were solved via discussions and consensus. The validity index for the verses groupings and the assigned themes are 0.93 and 0.91 respectively.

RESULTS

The results of the study are presented in three parts based on the research questions pursued in this study; Macro proposition frequency, themes and the nature of distribution of verses in each data group.

Text Propositional Structure

RQ1: How many propositional structures are there in Surah Yasin?

The analysis for the frequency of the macro propositions was tabulated in order to exhibit the frequency of the macro propositions in the text examined in this study as shown in Table 4.

Table 4 shows that the verses in Surah Yasin can be dissected into 25 groups of verses of which each group was consolidated into one macro proposition amounting to 25 macro propositional structures formed from a total of 227 micro propositions. In order to demonstrate the structure of micro propositions in Surah Yasin, Figure 1 was generated.

Table 4

Text propositional structure

Verse Group (G_n)	Verse number	Number of Micro Proposition
G_1	1	1
G_2	2 - 5	5
G_3	6 - 10	15
G_4	11	4
G_5	12	3

Table 4 *(Continued)*

Verse Group (G_n)	Verse number	Number of Micro Proposition
G_6	13 -19	21
G_7	20 - 28	21
G_8	29 - 32	10
G_9	33 - 36	14
G_{10}	37 - 40	12
G_{11}	41 - 44	11
G_{12}	45 - 48	17
G_{13}	49 - 50	6
G_{14}	51 - 54	12
G_{15}	55 - 58	8
G_{16}	59 - 62	8
G_{17}	63 - 64	4
G_{18}	65 - 67	5
G_{19}	68 - 68	3
G_{20}	69 - 70	8
G_{21}	71 - 73	9
G_{22}	74 - 75	4
G_{23}	76	3
G_{24}	77 - 79	10
G_{25}	80 - 83	13

Total number of verse group = frequency of macro propositions =25
Total number of micro propositions = 227

Key: G_n: G = Verse group; n = Verse group number
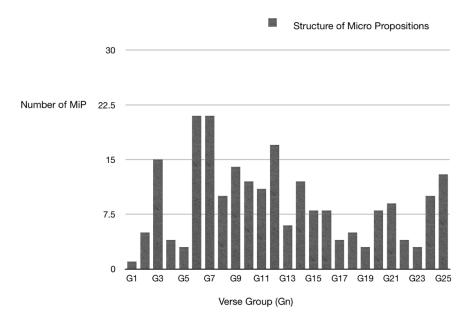
Figure 1 shows that verse groups G_6 and G_7 are most highly loaded with micro propositions that is 21 micro propositions in each group in comparison to other verse groups. Several verse groups have micro propositions between 10-19 (G_3, G_8-G_{12}, G_{14} and G_{24}-G_{25}) while the micro propositions for the rest of the verse groups are between 1-9.

Themes

Research Question 2: What are the themes that emerge from Surah Yasin?

Thematic analysis was conducted in grouping the verses in the selected text. Gist-based approach was used in determining the theme for each verse group. The themes were inferred based on the micro propositions in the verse group as well as the interpretation

of the verses in the two selected sources of *tafseer*, namely al-Jalalyn and Ibn Kathir. There are 25 themes that emerged from the analysis as presented in Table 5.

Key: MiP = Micro Proposition

Figure 1. Structure of Micro Propositions

Table 5

Themes in Surah Yasin

Verse Group (G_n)	Verse number	Theme
G_1	1	Unknown Meaning
G_2	2 - 5	Allah Confirming the Truth of the Quran and the Prophet
G_3	6 - 10	The Condition of Disbelievers
G_4	11	The Condition of Believers
G_5	12	Allah SWT Records Everything Man Do
G_6	13 -19	The Dialogue between Allah's Messengers and the Disbelievers
G_7	20 - 28	The Story of Habib An-Najjar
G_8	29 - 32	The Fate of Disbelievers
G_9	33 - 36	Earth as a Sign of Allah SWT as The Creator
G_{10}	37 - 40	Universe as a Sign of Allah SWT as The Creator

Table 5 *(Continued)*

Verse Group (G_n)	Verse number	Theme
G_{11}	41 - 44	Allah's Mercy on the Continued Existence of Mankind by Saving Those Sailing on Prophet Nuh's Ark
G_{12}	45 - 48	Mankind are Arrogant
G_{13}	49 - 50	Recompense for Those who are Arrogant
G_{14}	51 - 54	Resurrection Day
G_{15}	55 - 58	Dwellers of Heaven
G_{16}	59 - 62	Reminder not to Follow Satan
G_{17}	63 - 64	Dwellers of Hell
G_{18}	65 - 67	Condition of Disbelievers on the Day of Judgment
G_{19}	68	Age as a Sign of Allah's Creation
G_{20}	69 - 70	Quran as a Reminder
G_{21}	71 - 73	Cattle as a Sign of Allah's Creation
G_{22}	74 - 75	Idols Cannot Assist Disbelievers
G_{23}	76	Allah SWT Consoling the Prophet
G_{24}	77 - 79	Disbelievers in the Truth of the Hereafter World
G_{25}	80 - 83	Allah's Response to Disbelievers on Resurrection Day
	Total number of verse group = Total number of themes = 25	

Pattern of Verses Distribution

Research Question 3: What is the nature of verse distribution for each theme in Surah Yasin?

In analyzing the pattern of verses distribution, the total number of verses for each verse group is listed as presented in Table 6.

Table 6

Frequency of verses in each group verse

Verse Group (G_n)	Verse number	Number of Verses
G_1	1	1
G_2	2 - 5	4
G_3	6 - 10	5
G_4	11	1
G_5	12	1

Table 6 *(Continued)*

Verse Group (G_n)	Verse number	Number of Verses
G_6	13 -19	7
G_7	20 - 28	9
G_8	29 - 32	4
G_9	33 - 36	4
G_{10}	37 - 40	4
G_{11}	41 - 44	4
G_{12}	45 - 48	4
G_{13}	49 - 50	2
G_{14}	51 - 54	4
G_{15}	55 - 58	4
G_{16}	59 - 62	4
G_{17}	63 - 64	2
G_{18}	65 - 67	3
G_{19}	68	1
G_{20}	69 - 70	2
G_{21}	71 - 73	3
G_{22}	74 - 75	2
G_{23}	76	1
G_{24}	77 - 79	3
G_{25}	80 - 83	4

Table 6 demonstrates that the number of verses for the 25 verse groups ranges from 1 to 9 in an arbitrary pattern from G_1 to G_{25}. In order to see the pattern more clearly, Figure 2 was generated.

Figure 2 shows that 40% of the verse groups comprises 4 verses (G_2, G_4-G_8, G_{14}-G_{16}, G_{25}). Verse groups G_6 and G_7 are outliers with 7 and 9 verses respectively. Five groups comprise 1 verse only (G_1, G_4-G_5, G_{19}, G_{23}) while 4 verse groups G_{13}, G_{17}, G_{20}, and G_{22} are with 2 verses. Verse groups G_{18}, G_{21}, and G_{24} carry 3 verses in each group.

DISCUSSION

The investigation in this study was guided by the three dimension-framework, namely the text propositional structure, the themes and the pattern of the distribution of verses for each theme. For the analysis of macro and micro propositions, the findings show that Surah Yasin comprises 227 micro propositions that were grouped into 25 macro propositions. This analysis that
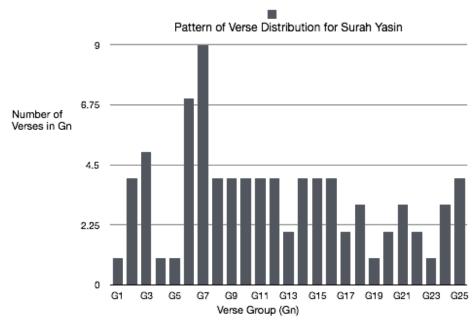
Figure 2. Pattern of verse distribution

breaks down the entire Surah makes the Surah more manageable for the purpose of memorization. The analysis of the structure of micro propositions may assist in memorization because it provides the picture of the number of small ideas in each verse. By knowing the number of micro propositions in each verse, a memorization system can be planned for each verse mathematically using the counting approach. Each micro proposition can be treated as one part or small idea of the verse. For example, in verse 2, G_2, Surah Yasin, there are 2 micro propositions. Anyone who wishes to memorize verse 2 will know that there are two parts or small ideas contained in verse 2. Verse 2 is an example at a more simplistic level involving only 2 micro propositions. Taking a more complex structure of micro propositions such as the ones in verse

18, G_6, Surah Yasin, in which there are 5 micro propositions, which means 5 parts or small ideas. With this information, one can evaluate the best approach to memorize the verses that is whether to memorize all micro propositions in the verse at once or only memorize one micro proposition at a time. Such decision can be made by one designing his or her memorization approach system taking into account one's ability, resources and constraints.

Besides using the micro proposition structure as a scaffold for memorization, the macro propositions provide a divisive structure that sets the boundary for each big idea for each verse group in the Surah. A marker dissecting approach can be employed using the macro proposition structure of the Surah. For instance, verse 2 is the marker of the beginning of verse

group, G_2 and verse 5 is the marker of the ending of verse group, G_2, of which verse 5 also plays a role as a dissecting marker that flags the emergence of the next verse group, G_3 with verse 6 serving as the marker of the beginning of verse group, G_3. This way, the memorization becomes more focused as the big or macro ideas are compartmentalized to reduce cognitive overload. This condition is in line with the cognitive load theory (e.g., Atkinson & Shiffrin, 1968; Sweller, 1988, 2006), which theory is in alignment with the Islamic Asha'irah theory of learning (e.g., Makdisi, 1962; 1963) that uses the rationale of sciences. Besides overcoming cognitive overload, using compartmentalized structure also enables the allocation of cognitive resources to a specific targeted input. The more cognitive resources allocated in memorizing a particular input, the higher the chances for the input to be efficiently memorized. Past studies have shown the effects of directed cognitive resources allocation (e.g., Kuldas et al., 2014; Tamarit et al., 2018).

Each macro proposition was labeled as a verse group with an assigned theme yielding 25 themes. At the skin-deep level, the themes may seem to be disintegrated although if closely pondered upon, the themes are actually interconnected. In order to clarify this claim, examples are imperative as they provide an evidential argument. As an example, the interconnection between the theme for verse group G_1 and the theme for verse group G_2 is discussed. The first theme (G_1), which comprises the first verse that is 'Ya seen', was given the theme 'Unknown Meaning' because the meaning of 'Ya seen' has been established since its revelation as forever unknown to other than Allah Subhanahu Wa Ta'ala (SWT). The theme for the second verse group (G_2), was inferred as 'Allah SWT Confirming the Truth of the Quran and the Prophet'. At the surface level, the relationship between these two themes seems to be non-existent. However, when pondered upon, the relationship between the theme for G_1 and the theme for G_2 becomes apparent. To clarify, it is a general knowledge that the nonbelievers do not believe that the Quran was revealed to the Prophet s.a.w. As stated in the Quran in Surah al-Furqan (The Criterion), in verse 4 and 5, the nonbelievers claim that the Quran was written by the Prophet s.a.w. himself despite the fact that the history of Islam has clearly established that the Prophet s.a.w. was an illiterate (e.g., Gunther, 2002). If such a claim of the nonbelievers is true, then the Prophet s.a.w. would have known the meaning of the verse in G_1. On the contrary, the fact is that even the Prophet s.a.w. himself who conveyed this verse to mankind, did not know the meaning of the verse 'Ya seen' in G_1. Therefore, the verses in G_2 are, by the analysis of logic, cannot be falsified with the revelation of the verse in G_1 composed at the forefront of Surah Yasin as the preamble to scientifically support the truthfulness of the subsequent verses 2-5 in G_2. Outside Surah Yasin, such relationship can also be seen between verses that are alphabetic in nature and the subsequent verses. For instance, between the first verse of Surah al-Baqarah and the subsequent

verse (verse 2). Another similar relationship is between verse 1 Surah Ali-'Imran and the subsequent verses, verses 2-3.

To further demonstrate the coherence framework among the themes in Surah Yasin, providing adequate examples is considered necessary. Hence, the interconnection between the theme for G_2 and the theme for G_3 as well as the interconnection between the theme for G_3 and the theme for G_4 are discussed. Upon the confirmation of the truth of the Quran and the Prophet as presented by the verses in G_2, Allah SWT describes the conditions of disbelievers in G_3 as the result of their refusal to believe despite the irrefutable logic of the truth as presented in the previous discussion of the interconnection between the themes for G_1 and G_2. Upon the description of the conditions of the disbelievers, Allah SWT describes the conditions of the believers who accept Allah's confirmation of the truth of the Quran and the Prophet. From these examples, it can be concluded that as varied as the themes may seem to be, they are coherently related in one intact thematic structure within the Surah.

Besides using the micro and macro propositions as well as the themes as memorizations scaffolds, the pattern of verses distribution was also analyzed as it is also a part of the three-dimension framework or 3D for Surah Yasin. In this study, the pattern of distribution of verses in Surah Yasin as unraveled in each verse group emerges as arbitrary ranging from 1-9. The number of verse(s) in each verse group serves as a scaffold in the form of numerical memorization tool of which tool enables one to self-regulate the awareness for any verse that is skipped upon recall. Studies have shown that the use of mnemonic device positively affects memorization (e.g., Fritz et al., 2007; Putnam, 2015; Scruggs & Mastropieri, 2000). The segmentation of Surah Yasin based on themes serves as a mnemonic device because it provides specific structural framework that reduces a long text into smaller sub-text with a specific theme. Such structure enables one's cognition to use the surah's propositional structure, themes and frequency of verses as a collective scaffold not only for memorization of, but also for recalling the verses in the surah.

CONCLUSION

The aim of the current study was to develop a scaffold for the memorization of Surah Yasin based on the framework of three dimensions of which framework is applicable in analyzing the text structure of the entire text of the Quran. The findings of the present study show that thematic-based text structure analysis had yielded a concrete and clear framework that can be systematically utilized as a scaffold for the memorization of Surah Yasin. Within the context of the Quran, not only for Surah Yasin, a similar approach can also be used for other *surahs* in the Quran for the same purpose. Besides Quranic texts, future studies can investigate the use of the three-dimension (3D) thematic-based analysis to analyze the structure of conventional texts, both expository and narrative, since the text

structure framework used in the current study focuses on the organization of text propositions in a comprehensive, systematic, scientific, useful and concrete manner to be used as a tool for text memorization.

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Toponym and Evocation of Cultural Landscape Heritage: A Case of an African Community

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ABSTRACT

The understanding of how places are named by indigenous people has practical applications in the diverse field of studies that deal with human behaviour. However, few studies exist on how cultural landscapes toponym are conceptualized, especially in non-Western landscapes such as Africa. An empirical study, which includes in-depth interviews with the local Nupe respondents in central Nigeria shows that toponym is tied to transactions that evoke identity, power, heritage, and sense of place. The study contributes to our understanding of indigenous people's interactions with the physical environment. This by extension evolves the cultural heritage and values of an African community. Most importantly is that the research demonstrated that toponym can be used to evoke the community's tangible and intangible cultural heritage.

Keywords: Culture, heritage, history, place-name, rural, sense of place, toponym

INTRODUCTION

People conceptualize space by naming it with an underlying power of the ideology of place and history (Fuchs, 2015). Toponym refers to how the name of the place is derived. The root words originate from the Greek words *topos and onomia w*hich respectively

mean place and name (Henshaw, 2006). Toponym (the study of place names) is a branch of onomastic which deals with the scientific study of the origin history and use of proper names (Chiwanga & Mkiramweni, 2019). Understanding how places are named by indigenous people has practical applications in diverse fields of studies that deal with human behaviour such as law, communications, and navigation (Burenhult & Levinson, 2008). The importance of toponym saw the emergence of the field of study called geographic ontology or cultural geography that deals with how domains are conceptualised by a group of people and culture. The exploration of toponym by geographers has led to a better understanding of indigenous cultural landscapes transactions and characterisation. This is evident from the works of many scholars such as Levinson (2008) and McNiven (2011).

Similarly, toponym serves as a premise for understanding the cultural values of communities (Fuchs, 2015). This is because people-place transactions indicate how indigenous values are generated (Stephenson, 2007). Such values also include meanings that are embedded in the toponym by the native people (Mireku-Gyimah & Mensah, 2015). Languages, therefore, encode the varying views and experiences of the world by the indigenous people (Ingram et al., 2019). The way people view and name places are dependent upon the interactions with the environment and cultural factors. As such, landscape features associated with the location are sometimes used to name some places. Place names in Africa are also found to be coined from the description of cultural practices that take place within a landscape (Ingram et al., 2019).

In Africa such as the Natta community in Tanzania, wildlife such as the name of birds are found to be used as a toponym. The naming of the landscape with avifauna shows the socio-cultural relationship that the people have with such particular birds (Chiwanga & Mkiramweni, 2019). Similarly, in a rural West African community of Ghana, the name of a tree was used by the local people to name the town. The bark of the tree was found to be of high medicinal value to the people and as such the name of the town was coined from the tree (Mireku-Gyimah & Mensah, 2015). The toponym is cultural artifacts which are usually encoded with social meaning (Heyd & Honkanen, 2015). The importance of toponym in African is such that names are tied to a belief system that believes that, names can affect the destiny of a particular person or the community, this is evident in the Igbo communities of Nigeria (Okagbue et al., 2017). If the essence of cultural landscape studies is towards people's values and history, then the toponym of a place offers a means of meeting such objectives. This is because toponym is laden with people's past and also present transactions (Fuchs, 2015).

In spite of the significance of toponym in people's history and landscapes, few studies shed light on how the landscape is conceptualised, classified, and represented in the native languages of the local people

(Mark et al., 2011). This situation is more critical in Africa and particularly among its minority ethnic groups (Kumar & Jain, 2013). Furthermore, the European anthropologists affirmed the rich cultural landscape heritage of African communities. For example, an anthropological work that focussed on the minority Nupe ethnic group of central Nigeria acknowledged its rich cultural heritage (Nadel, 1942). In addition, Muhammad and Said (2015) affirmed the enormous cultural heritage of the Nupe community that was yet to be explored. As such, this study explored the cultural landscape of a Nupe ethnic group in central Nigeria through toponym inscriptions. The main research question driving this study is: How does toponym determine landscape, historical, and cultural spectrums of minority ethnic groups?

Toponym Link with Heritage and Sense of Place

Cultural heritage includes the ways of living in communities that get passed on from one generation to another (Rössler, 2006). These ways include cultural practices, objects, artistic expressions, and values of the community. As such, cultural heritage is a composition of both tangible and intangible forms (Gullino & Larcher, 2012). The tangible forms of heritage are expressed in human activities such as buildings, roads, bridges. The intangible landscape heritage is on the other hand reflected in the practices related to matters such as cuisines, religious ceremonies performing arts, values, traditional skills, and oral history (Kamel, 2011). Beneath the intangibility

of some cultural heritage values is their connection with historical transactions. This is because in such performance, places of transactions are named and the cultural values associated with such names become geographically represented (Conedera et al., 2007). United Nations Educational, Scientific, and Cultural Organization (UNESCO) director general aptly implored that cultural heritage belonged to all and therefore must be preserved by all (Bokova, 2015).

Place names are also linked to cultural heritage in that place names and their domestication contribute to people's sense of place, identity, and nationalism. The naming of places is an important means for the promotion of identity as well as understanding the history and social construct of spaces (Alderman, 2008; Vainikka, 2012). Place names are of significant philosophical importance in Africa because names have the power of constructing the personality and trajectory of the community. Names give a useful guide in understanding the sociocultural behaviour among some ethnic groups (Bisilki, 2018). However, the arrival of Europeans in the 15th century for trade, mining, and other activities especially in West Africa had influenced the naming of places such that in the documentation of places, the native names were changed and sometimes misspelled. Consequently, the documented names became official and thus relegating the native names to the background (Mireku-Gyimah & Mensah, 2015). A good example of these changes in toponym is found in South Africa where

some of the colonised towns and territories were named after the place names of the colonisers' motherland. This led to the loss of the indigenous toponym (Khoury, 2017).

Landscape character is that which makes a place unique, this includes the physical components such as geology, landforms, vegetation, and anthropogenic components of people's transactions (Atik et al., 2015). Thus, people-place transactions contribute to the creation of a cultural landscape's character whose names are based on the concept of the world views of the indigenous people. It was noted by Fuchs (2015), that most landscape character and values were assessed based on the metrics developed in Europe and that is inadequate to cover all indigenous landscape characters. As such, Alderman (2008), and Butler and Åkerskog (2014), opined that region and culture should determine how its landscape is classified.

Accordingly, toponym has been found useful in the understanding of the indigenous landscape character as well as the meaning and values indigenous people ascribe to their environment (Butler & Åkerskog, 2014). This suggests that in the determination of cultural landscape character, the understanding of place names of indigenous people is an important factor (Van Eetvelde & Antrop, 2009). Moreover, place names are considered as one of the most important markers of people's transactions with the landscape (Shoval, 2013) and can be used to understand the historic character of the landscape's topography, vegetation, and regional identity (Alderman & Inwood, 2013).

Study Area (Doko Community)

The Nupe people are located centrally in Nigeria. Their settlements are established near the River Niger and River Kaduna (see Figure 1). Thus, their landscape is made up of both the river community and also that of the upland. These two forms of the landscape also constitute the classification of the Nupe ethnic group's professions of practice which are crop farming and fishing.

The study community, Doko belongs to one of the 12 Nupe historical towns (Nadel, 1942; Yahaya, 2003). The cultural landscape transactions of the community cover the upland and the floodplains. The upland is mainly for the cultivation of grains such are corn, sorghum, and bulrush millet while the flood plains are for the cultivation of rice. The community is surrounded by an outcrop of hills from the southwestern side down to the northeastern side. As such the community is placed in a valley with an undulating terrain (Figure 2).

The indigenous people of the Doko community speak Nupe and are also referred to as the Nupe people. The Nupe language is classified as belonging to the West Benue-Congo sub-group of languages called Nupoid (Blench, 2010). Its textual use was documented in the past by expatriate scholars, Christian missionaries, and Muslim men of letters in a period that spans about 300 years. However, its use in literary works dwindled when the mission of the expatriates and religious groups ended. The proximity of the Nupeland in central Nigeria saw the adoption of the Hausa language of the North and the Yoruba of Southern Nigeria. This adoption

of other languages further strengthens the need to have academic documentation of the toponymical character of the cultural landscape of the Nupe community.
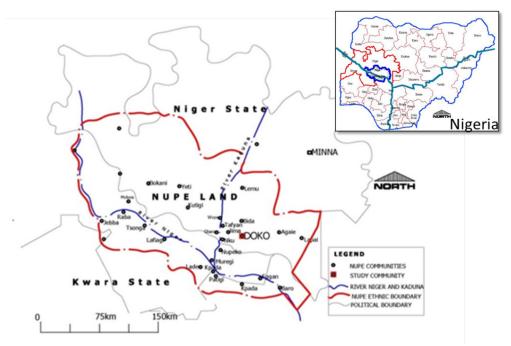
Figure 1. Nupe settlements along river Niger and Kaduna (Muhammad, 2017)

Figure 2. The community and its surrounding hill landscape, source (Muhammad, 2017)

RESEARCH METHOD

An exploratory case study approach was employed to obtain data on the cultural landscape transactions of the Doko community. Firstly, a reconnaissance survey of the landscape features of the community was conducted with the assistance of some elderly members of the community. This included the survey of natural landscape features such as the hill, drainages, and man-made landmark features such as the communication mast that was found conspicuously positioned on the community hill.

The toponym is formulated through indigenous speech through which places and spaces are locally identified (Aksholakova, 2014). As such, for the studied community, Nupe language was used by the researchers for the solicitation of information. This is because, the voice of the participants is important towards the understanding of their cultural transactions (Wheeler, 2014). Moreover, the full dimensions of indigenous place names are only possible through the use of the context of traditional use (Aporta et al., 2014). Thus, in-depth interviews were conducted with local people. The interviews allowed for the elicitation about things that cannot directly be observed such as feelings and thoughts in the world of the Nupe community.

Furthermore, the interviews were mostly conducted with the heads of the compounds whose ages ranged from 45 to 75 years. The Doko community is made up of 52 established compounds as affirmed by (Muhammad, 2017). Each of these compounds is headed by the most senior member of the extended family and they are referred to as *Ndamitso* (the family head). *Ndamitso* is the custodian of the family heritage and as such this made them the most appropriate for the elicitation of information about the toponym and the cultural heritage of the community.

An open-ended interview was conducted with the respondents and all the interviews were recorded with the aid of a tape recorder. The interviews lasted between 25 minutes to 42 minutes. An average of 3 interviews were carried out each day and the whole interviews were concluded on the fifth day because a saturation point was reached after 15 respondents were interviewed. The point of saturation was attained when it was found that most of the toponym and the history have been articulated and the continuation of the interviews was not necessarily going to yield additional valuable information on the subject matter (Miles et al., 2013). It is to be noted that the questions were focused on the history and naming of the compounds as well as places within the community. Probing questions to each interviewee was used to elicit confirmation or otherwise of the stories shared by other interviewees. The content analysis of the transcribed interviews showed that the stories of the interviewees corroborated one another and so are considered to be credible.

Data Analysis

The generation of indigenous landscape typology was developed from the clustering of field notes, interviews, and photographs. These were then transcribed into text and thereafter, a thematic analysis was carried

out on the data which involved the use of computer software QSR Nvivo10 for speed and accuracy (Yonghong et al., 2012).

The outcome of the thematic analysis was the creation of nodes for each place name identified in the transcripts. Thereupon, the place names were then sorted out into categories based on a series of constant comparative analysis (Glaser & Strauss, 2006). This was to ensure that each category of the toponym was well defined and was also different from other categories. Consequently, the output of the analysis was tabulated for comprehension and inferences based on the accounts of the respondents (Matthews, 2010).

RESULTS AND DISCUSSION

The output of the toponym in the cultural landscape of the Doko community is given in Table 1. The output of the thematic analysis showed 5 main themes (categories of toponym). They are toponym derived from leadership title, landscape features, and historic transaction, profession, and the function of a place. It should be noted that the names of compounds and landscape features are considered as places. Streets in the cultural landscape of the Doko community unlike what is obtainable in urban areas are not specifically given names. Rather the local people identified most of the streets by qualifying them with the nearest compound's names. As such the discussion on the toponymical character of the community has the street names exempted because including them will be a repetition of some of the compound names.

Table 1

The toponym of places within the community

	Local naming	Meaning	Category
1	Emindatsowa	A military title given in the rank of warriors	Leadership
2	Emi Ndawodi Sako	Ndawodi Sako's compound	Leadership
3	Emi Nnagudu	Nnagudu's compound	Leadership
4	Emi Bakpagi Yakotsu	Bakpagi Yakotsu's compound	Leadership
5	*Emi Majin*	Majin's compound	Leadership
6	*Emi Michael Legbo*	Micheal legbo's compound	Leadership
7	*Emi Namana*	Namana's compound	Leadership
8	*Emidazhi*	Dazhi (Title of the village leadership)	Leadership
9	*Emindashaba*	Name of the deputy village head	Leadership
10	*Emindazhitsu*	The father of the village (king)'s compound	Leadership
11	*Emitsu Saba*	The deputy chief's compound	Leadership
12	*Emitsudzuko*	Leadership market	Leadership

Table 1 *(Continued)*

	Local naming	Meaning	Category
13	*Manfu*	Imam's compound	Leadership
14	*Defiafu*	Defia' compound	Leadership
15	*Takogbodo*	Named after gbodo	Leadership
16	*Edoni*	Near the stream	Landscape Character
17	*Ejegi*	Name of a small stream	Landscape Character
18	*Ewongi*	A large depression of landscape	Landscape Character
19	*Kpatanko*	The river bank	Landscape Character
20	*Pati Bokugi*	The white hill	Landscape Character
21	*Takogi*	Down into the valley	Landscape Character
22	*Eyeshi Ekobitcha*	An old saying on the landscape	Landscape Character
23	*Kpachinifugi*	*kpachi (Terminalia Schiperina) Tree*	Landscape Character
24	*Dogo Namba*	*Dogo* (*Schizachyrium exile*) grass, Plant	Landscape Character
25	*Edzuta*	*Edzu, Voandzeia Subterranea* Babara beans	Landscape Character
26	*EmiLangba*	*Langba* (*Gardenia ternifolia*) compound	Landscape Character
27	*Kuchitagi/Tifi Majigbe*	*kuchi* the *Ceiba pentandra* tree compound	Landscape Character
28	*Mugorota*	Mungoro (*Mangefera indica)* Mango tree	Landscape Character
29	*Dadofugi*	A name of village in lavun LGA	Historical Transaction
30	*Dende*	*Be demi de* (surprise and sudden)	Historical Transaction
31	*Eguko*	A place of convergence for ritual	Historical Transaction
32	*Emi Woro*	New compound	Historical Transaction
33	*Emi Kutiko*	Named after a type of idol worship	Historical Transaction
34	*Konufu*	Named after a type of idol worship	Historical Transaction
35	*Kpakafu*	Named after a type of idol worship	Historical Transaction
36	*Emi Bashayi*	Tea seller/ snuff	Profession
37	*Emi Jiya Taba*	The Jiya cigarette seller's house	Profession
38	*Emitsu Dzan*	The drummer's house	Profession
39	*Tswata*	Blacksmiths workshop	Profession
40	*Egbangi*	Congregation space	Function of place
41	*Dzuko*	Market	Function of place

Toponym, Functioning to Portray Leadership Roles in the Community

The leadership system in the Nupe community is such that all the compounds are represented in the village council by each of the compound heads. In the Doko community, the oldest male family member is always bestowed with the leadership of the compound and he is thus the custodian of the family values and its well-being and is referred to as *Ndamitso*. Each *Ndamitso* represents a compound that is made up of several households of one ancestral genealogy in the village council.

The analysis in Table 1, shows that 37 percent of the toponymic character of the community is derived from leadership titles. This is not surprising because each compound's title of leadership is hereditary and therefore transferred amongst the members of the family from one generation to another. To further support this assertion is the quotation from a 60-year-old respondent:

> "Our great grandfather who established this compound is called Gbodo and therefore the compound was named Emindagbodo, while his title at the village council is Ndagbodo".

From the quotation, the toponym for the compound and the title of leadership evolved from the founding father of the compound. Evidently, the ancestral lineage as well as the leadership role of the compound is reflected in the place name. For instance, an inference from the anecdote above shows that *Emindagbodo* means the compound of *Gbodo* while *Ndagbodo* means the head of the *Gbodo* family. This showcases the name of the compound tied to leadership roles in the community's transactions. It is also an indication of toponym linked to both the tangible and intangible values of the community (Gullino & Larcher, 2012). The tangible form of the toponym is represented in the physical compounds while the intangible is represented in the values members of the community attribute to the names of their compounds. Several examples of this abound in the community. Accordingly, another respondent aged 63 asserts as follows:

> "Our compound is called Eminndashaba, because our family always produced the deputy village head of this community"

Eminndashaba means the compound of the *Shaba* which literary means deputy. The compound has therefore continued to hold the position of the deputy village head. On the whole, toponym provides and also instils in the local people a sense of continuity from previous generations, their identity, and sense of place. Most important is that the place names are linked to the heritage of the leadership roles of each compound in the community.

Toponym and Depiction of Landscape Features

In the cultural landscape of the Doko community, toponyms associated with landscape features constitute 32 percent of place names (See Table 1). The names were derived from either the topography or landscape features such as plants and water bodies. The compounds that have landscape toponymic names derived from plants are

kpachinifugi, dogonaba, edzuta, emilangba, kuchitagi, and mungorota. These compound names are all derived from the names of plants which are *kpachi (Terminalia schiperina)*, *dogo* (*Schizachyrium exile),* *Edzu (Voandzeia subterranea)*, *kuchi* (*Ceiba pentandra)*, and *mungoro* (*Mangeferia indica)*. Notably, this category of toponyms emerged from the names of plants found in the locations where these compounds were historically established. In like manner, O'Connor and Kroefges (2008) asserted that the extent to which physical landscape character was reflected in the naming of places was dependent on the culture of the people. The foregoing narrative, therefore, connotes that, the landscape character of the Nupe community is highly reflected in the naming of places.

A compound's head, aged 72 gave an account of how the name of his compound came to be in the following quotation:

> " When our forefather came down to this place, he built his hut under the shade of langba (Gardenia ternifolia), other settlers began to refer to him as Ndalangba which means, the man whose hut is under langba tree"

In this narration, it becomes clear the establishment of the compound under a particular species of tree, *Gardenia ternifolia* for instance provided the early settlers the name for the compound. *Gardenia ternifolia* happens to be a rare species within the landscape of Nupeland (Burkill, 1994). As such, *Gardenia ternifolia* became a landmark amongst other tree species and invariably a form of identity (Conedera et al., 2007). Similarly, *Terminalia schiperina*, and *Ceiba pentandra*, which are also used as toponyms are also not amongst the common indigenous trees within the community landscape (Muhammad & Said, 2014). In view of this, the inhabitants were able to use the rare species of trees as a form of identity and place name.

Correspondingly, the landscape character and its natural features are also used as toponyms- They are *Edoni*, (stream) *Ejegi* (small stream), *ewongi* (a large depression) *kpatanko* (river bank) and *patibokungi* (the white hill). In this category, the landscape characters are what informed the naming of places. It is worthy to mention that the landscape features used as place names were based on the initial settlement on the hill before migration down to the plains. This scenario is further explained by the same respondent as follows:

> "I was told that when our compound was first established on the hill-side, it was near an outcrop of rock which was brighter than others and it was called patibokungi, the white hill. Our compound still bears the name patibokungi"

It can be deduced that the migration down to the plains did not change the name of this specific compound. The names are still linked to the historic landscape character of the first settlement. Accordingly, this gives an understanding of the time depth cultural landscape transactions of the Nupe people (Rippon, 2012). Similarly, the people's transactions showcased place name as a descriptor of indigenous plants

and geographic features of the landscape (O'Connor & Kroefges, 2008). Furthermore, it also affords the family members a link to the first settlement which can be traced back to the hill settlement. This suggests that the physical landscape character of people may change, but the place name could serve as a link to the historical landscape character and heritage.

Toponym, Depicting Historic Transactions

People's transactions with the landscape over time create cultural meanings and values which thus becomes part of the community's history. In the cultural landscape of the Doko community, historic transactions have been used in the naming of places. It is found that the deity worshipped by the forefathers before the embrace of Islam was used in the naming of *konufu, emikutiko*, and *kpakafu*. This is explained by the respondent aged 75 in the following quotation:

> "I *grew up to see idols being worshipped and each compound has its own type of idol. The konufu people's idol was called Konu, the kpakafu household was called kpaka while the emikutiko people's idol was called kutiko*"

Each of these compounds had the character of their idols different from each other and as such these three compounds still maintain the names associated with the idols worshipped by their founding fathers. Even though the present-day scenario shows that there is no much existence of idol worship due to the embrace of Islam and Christianity, the names of these compounds

are still maintained. This is attributed to the fact that in the history of the community, the three compounds were considered to have the most powerful idols when compared to the other compounds in the community. The respondent R1 explains further:

> "In those days, the community gathered for ceremonial performances in the names of these idols and this includes the drinking of local beer, and also performances by the masquerades, it used to be very interesting"

Historically, most of the compounds in the community had some form of cultural transactions with the idols which were mostly carried out by family members. However, the households of *konufu, kpakafu*, and *emikutiko* performed their annual rituals in the presence of the whole community. This, thus contributed to the popularity of these idols over the others. As such the names of the idols became a form of identity for the three households. It is to be noted that most of the religious practices of the aforementioned compounds have changed, however, the link to the past practice is still intangibly represented in the name of the compounds

CONCLUSION

The current study set out to explore the conceptual character of toponym in the cultural landscape of a sub-Saharan Africa Nupe community in Nigeria. Based on the findings of this study, the role of toponym in understanding cultural landscapes of indigenous people comes in many

ways. Firstly, toponym can be tied to the portrayal of power and leadership roles of the occupants of a place. In this context also is that the toponym is linked to the unique historical leadership roles of each compound in the community. Secondly, toponym can be tied to the landscape's physical character. It is such that place names are found to be a descriptor of indigenous plants and geographic features. Thirdly, toponym can be linked to the unique historical transactions of the community which saw features and places named based on what uniquely transpired at a particular time in the history of the community. And fourthly, the toponym character is found to portray the profession of the occupants of certain places. The significant finding of this study shows that the four typologies of place names, (leadership positions, landscape character, historic transactions, and professions) evoked the identity and history of the community. In addition, the toponym character of the Nupe people have shown that it is not limited to identity and history, but also a portrayal of a sense of place and power. This implies that toponym (place names) can evoke both tangible and intangible cultural heritage of communities.

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Analysis of American Television and Its Impact on the Cultural Perception on Malaysian Youth

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ABSTRACT

In recent years there has been an increase in Malaysian youth crime and misdemeanor ranging from bullying to rape and murder. The root cause of this problem had never been explicitly addressed but it had been suggested that it was due to television exposure. The question is, to what extent does the exposure affect youth, and which elements of exposure have the greatest influence. These questions were tackled in this study by analyzing the relationship between youth, media consumption, and cultural identity. Using surveys, in-depth interviews, and audience research theories, it was found that youth used television for the purpose of entertainment, and as means for social surveillance: a tool to keep abreast of current trends and affairs and to imitate celebrity lifestyles and practices. This process of mimicry was found to have an important impact on their emotional and social well-being. The desire to copy what is on screen is inherently connected to the collective guilt of maintaining and preserving cultural identity. The dynamics between youth, cultural identity and media stimuli are therefore seen as paradoxical.

Keywords: Audience study, culture, identity, mass media, social surveillance, TV, youth

INTRODUCTION

TV has been described as not only a form of art but also as a new means of communication due to its ability to directly affect audiences, as signs and symbolism are subconsciously accepted, and assumptions and conclusions are based on them. TV seems to be the perfect conduit for such a task as it influences through the concept of

alterity, in which identification defines 'who you are' and 'what you are not' (Orna, 2020). The issue lies in the action of excluding and including, which can be confusing to those from a different cultural background, especially when it is often accompanied by issues of nationalism. Although it can also be used to create a shared national identity, each individual understands the concept of nationhood differently based on their own experiences and upbringing (Fickers et al., 2020).

It is often difficult to separate the notion of national identity from cultural identity. They are as synonymous with each other as media is to society, being both interconnected, elaborative, and complex entities, which can be understood through various means of interpretation. In its most basic form, identity is transmitted not deliberately but through unconscious reaction to natural stimuli (Deller, 2019). TV has replaced these natural stimuli as it no longer mirrors society but it has morphed into a determining factor in the formation of cultural identities (Kellner, 2020). National and cultural identities do however share a common goal: the transmission of messages. Oftentimes more than one meaning is associated with a message and it changes independent to the context it resides in. This can be interpreted using social semiotics as it allows for the significance of actions to be established and deciphered (Berger, 2020), therefore presenting a better understanding of privileged versus suppressed realities (Price, 2019). This is achieved by using the synchronic and diachronic systems of

interpretation (Abell, 2020) which enables a better appreciation of how TV contributes to changes in cultural reality based on theoretical and practical studies.

If a cultural reality is made of a group of sign systems brought together by certain commonalities (Stivers, 2020), the country as a whole should be concerned about what is being consumed through mass media. A study conducted in 2014 by the Malaysian Communications and Multimedia Commission (MCMC) showed that Malaysian youth aged between 15-24 noted TV as one of their top 10 daily activities (MCMC, 2014). In the same year, Selangor's State police chief Senior Deputy Commander Datuk Shukri Dahlan reported a 10 % spike in teenage crime compared to 2013, with those as young as 10 involved in violent crimes such as blackmail, snatch theft, gangsterism, and drug abuse. There was also a 47 % increase in crimes nationwide including rape and murder involving those between the ages of 12-17 (Mahidin, 2018). A different survey conducted in 2012 by the Asia Foundation pointed to TV as being the main factor in making Malaysian youth more informed (Leong et al., 2012). If 72 % of their day is spent on television, it begs the question of what they are picking up it.

TV is a useful source of learning and information, while at the same time poses levels of risk to users, and since it is a well-documented fact that visual texts from TV is pregnant with signs and symbolism that convey various meanings to audiences (Das, 2019) this paper intends to study the activity

of watching TV and how cultural norms are formed because it (Donohue, 2019).

TV's signs and symbolism undoubtedly carry assumptions about reality which is often widely accepted without much deliberation. In order to interpret them, the theory of connotation and denotation was used. Related to this is the theory of identification or more specifically the theory of parasocial interaction (PSI) which comes from the field of identity theory. This theory explains the dynamics of how and why information is picked up from stimuli and structured into their lives and daily routines (Giles, 2019). This theory is important because when interpreting media, the audience must not be viewed as an entity separate from it and its organic links to situational context (Lloyd, 2020). Finally, the theory of structural criticism or reader response was used to identify and explain how reality is interpreted from the perspectives of aesthetics, economics, and other cultural issues (Harari, 2019). This is important as it allows for a comprehensive understanding of how reality is perceived based on everyday human communication (Glazier, 2020).

Semiotics

The process of decoding messages is oftentimes done automatically and without much thought. This is where semiotics is needed as it clarifies the mechanisms for a better understanding of how reality is constructed (Berger, 2020). The traditional understanding of semiotics is that most things can be taken as a sign and tools for

discussing media texts (Kemple, 2019). Semiotics is therefore, the theory of media literacy as it investigates meaning and how it is formed through signs and codes (Sun, 2019). Semiotics therefore claims that TV can be viewed as a vehicle to organize signs into rational systems representing reality (Kress, 2019). Therefore, connotation and denotation is used to make apparent any sign systems that are concealed or not readily distinguishable. This branch of semiotics occurs when a sign or symbol is interpreted as to its literal dictionary definition, as well as the associations and emotional responses that are connected to it.

Identity Discourse

The debate on identity has become an important vehicle for understanding the dynamics of human communication (Bolin, 2019). Its rise to prominence is partly due to our increased fascination with human society in the age of globalization. However, the postmodern age of mass media has brought upon itself a hybrid form of the formation of identity (Paus-Hasebrink et al., 2019), and the different conditions brought by the modern world means that new dimensions have been added to the idea of both the personal and collective self (Ward et al., 2019). This new process of identification with regards to mass media involves a loss of self-identity and therefore PSI refers to relationships that are formed when viewers interact with characters on screen. PSI is seen as a form of social interaction where its effects are measured by an outsider observing the media user and

not by the personae (Hsu, 2020). In spite of this, viewers have expressed a feeling of reciprocal interaction proving that the verbal and nonverbal performances are accepted as real and authentic. This is a central theme of media consumption as it creates an illusion of real face-to-face interaction leading to the formation of parasocial relationships (PSR) (Hu et al., 2019). This type of persuasion sees the viewer assuming the behavior of another individual, which may result in changes in personal behavior and opinion (Giles, 2019). Identification therefore is a direct result of the relationship between the viewer and on-screen character, whereby the audience accepts the faux reality as real and representation of the character on screen as a complete individual (Agius & Keep, 2018).

Structural Criticism

According to structural analysts, sign systems must be viewed in their own context and cannot be studied from a different point of time. The interpretation of signs and symbols is based on learned knowledge or experiences, which is personal to each individual. A variety of interpretations is only limited by the limitations of the individuals themselves (Bertrand & Hughes, 2019). These limitations not only cause a struggle with the ontological aspects of TV as a medium, but also its narrative conclusions based on rationale (Koehn, 2019). Meaning that familiar perceptual and conceptual systems from the three-dimensional world is employed to decode the received stimuli. Decoding therefore becomes easy as they are seen as extensions

or the objectification of the human mental process (Lubashevsky, 2019). This is vital as it explains the different ways in which signs and symbols are interpreted from different perspectives.

Discourse theory, connotation, denotation, and the reader-response theory tie in as they all deal with some form of a sign. Each sign is interpreted differently depending on various factors. This is done instantaneously by the viewer upon receiving stimuli. The stimuli are decoded using connotation and denotation, where representation and/or meaning both referring to the other are created and analyzed using the reader-response theory. This is expressed through contents, interpretations, abstractions, concepts, and ideas. The representation, also known as the signifier, is then analyzed using the discourse theory and expressed through codes or elements of culture. This is seen in Figure 1.

The purpose of this study is to illustrate how mass media is used as a tool, the associated causes and impacts, and how it helps maintain or change social preconceptions and assumptions of the world. Its effects are far-reaching and highlights the ways the human psyche is influenced towards one thing and not another. The fluidity with which culture deals with matters such as ethics and values results in a constantly shifting understanding of local identities depending on which group is most dominant.

This constant flux of emotions can lead to a lowered sense of consciousness similar to that of hypnosis (Thurlow, 2018). This
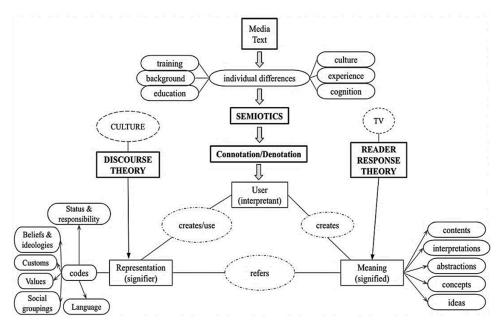
Figure 1. Relationship between theories

mental vertigo results in loss of control that leads to a re-assimilation of the self as the viewer is unwittingly forced to identify with images on the screen. These issues are at the center of this study: to what extent does TV play a role in shaping the perception.

MATERIALS AND METHODS

The research employed a non-probability sampling technique. The main aim was to uncover the intricacies of the selected sample. The population is youth between the ages of 18–23 who are undergraduates from the Faculty of Creative Multimedia (FCM) of Multimedia University (MMU). The sample was chosen as the admission policy requires an intermediate mastery of the English language and the nature of courses offered suggest that students are technologically savvy.

A mixed-method approach was used to conduct research in order to obtain robust results (Creswell & Poth, 2017). Utilizing survey questionnaires and in-depth interviews allow for quantitative and qualitative data to be collected. The rationale being that questionnaires have been optimized for discovering respondents' views on how TV programs affect their understanding of society and culture, and focus groups allow better insight into the reasoning's behind those perceptions (Leavy, 2017). The survey contains 32 questions relating to the research objectives. Information from the focus group was used to discuss findings from the questionnaires. The study is described as exploratory and descriptive where at the exploratory stage, a case for investigation is compiled through extensive literature review and the

problem, issues, topics, scope, theories, and technologies are defined (Robson, 2002). The study is seen as descriptive as it uses the findings of the study to describe the demographics, variables, and items investigated in the study. This is summarized in Figure 2.
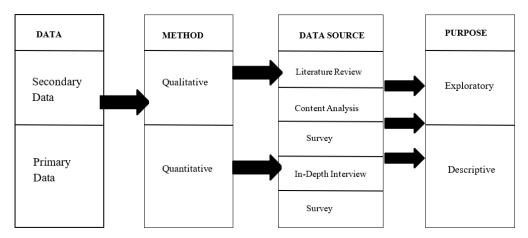
Figure 2. Research design diagram

RESULTS AND DISCUSSIONS

A total of 400 surveys were circulated among the students of MMU. Out of the 400 distributed, 335 were returned viable. The response rate of 83.7 % nonetheless represents a high response rate among respondents with only 0.3 % failing to comply. Among 335 respondents, 178 were identified as female and 157 as male. The gender distribution in the sample is therefore identified as 53.1 % females to 46.9 % males. The demographic details of the respondents are summarized in Table 1.

The data reports that female students are perceived to have a statistically significant higher level of reasons to watch American TV programs than males because of the actors, celebrities, and characters. The mean of respondents was calculated as 4.6236 with the standard deviation of 0.83626 as compared to the males with a mean of 4.3631 and standard deviation of 1.13879. The values are tabulated in Table 2.

With regard to the general effects of watching American TV on youth, it suggests that Language is the element with the highest influence constituting 67.5%, whereas Beliefs and Ideologies constitute only 2.1% of the overall effects. In addition, all respondents mentioned that relaxation and entertainment were the main reasons for watching the American TV. It was also found that respondents acquired information, news, and learning materials from watching American TV channels intended for relaxation and entertainment rather than specific informative, news, or learning channels.

Table 1

Participants demographic statistics

		Frequency	Percent (%)
Gender	Male	157	46.9
	Female	178	53.1
Ethnicity	Malay	219	65.4
	Chinese	83	24.8
	Indian	33	9.9
Age	19	14	4.2
	20	52	15.5
	21	107	31.9
	22	135	40.3
	23	27	8.1

Table 2

Participants general perception of American TV media affects

		Frequency	Percent (%)
Effects of American TV media	Values	41	12.2
	Customs	9	2.7
	Language	**226**	67.5
	Views on Society	31	9.3
	Belief/ideologies	7	2.1
	Roles in society	21	6.3
American TV media is a source of	Manipulation	65	19.4
	Information	56	16.7
	Education	43	12.8
	Relaxation and Entertainment	171	51.5

Results presented in Table 3 demonstrate that youth prefers movies to other genres with the mean of respondents calculated as 4.663. The lowest mean of respondents enjoying news consumption was 1.857. The results are further supported by data obtained

from in-depth interviews showing similar findings. The results support the previous findings, which proves that American TV is used for the purposes of relaxation and entertainment.

Table 3

Participants general consumption of American TV media genres

	Mean	SD	Skewness	Kurtosis
Movies	**4.663**	0.592	-2.422	9.527
Sitcoms	4.475	0.769	-1.563	2.770
Cartoon	4.370	0.797	-1.265	1.750
Reality Shows	4.164	0.785	-1.306	3.091
Documentaries	3.415	1.681	-0.482	-1.494
News	**1.857**	1.051	1.129	0.397
Summated USTV Consumption	3.824	0.386	-0.1380	0.2660

On the perception of TV content, respondents generally found that scenes of premarital sex were too much, whereas scenes of smoking were about right. The discrepancy in the number of respondents finding extramarital sex and premarital sex scenes as too much with 129 and 280 counts respectively. This may be attributed to respondents not being able to differentiate between the two. In-depth interview data shows that everyone agreed that there are too many sex-related scenes in the American TV. The findings are presented in Table 4.

Table 4

Participants perception of adequacy American TV media content

Item	Too Much	About Right	Too Little
Violence	96	222	17
Premarital Sex	280	55	0
Extramarital Sex	129	206	0
Foul Language	266	59	0
Homosexuality	253	72	10
Nudity	266	52	17
Smoking	39	268	28

In terms of media usage and purpose, youth watching American TV to learn about social behaviors is represented by the highest mean of 4.672, while the lowest mean of 2.806 represents youth watching American TV for its elements of love and romance. When asked specifically, respondents admitted that they learned social behavior from watching American TV although perhaps not consciously so.

The results also demonstrate that youth watching American TV spent more time on media, which had the highest calculated mean of respondents than those watching other forms of mass media. When asked respondents answered that TV offered various content selections compared to other forms of mass media. Notably, respondents also found local media content as tame and boring.

Additionally, the calculated mean of respondents representing youth watching more non-American TV compared to other media is 4.519 as observed in Table 5. Interviewees stated that programs on American TV networks were more varied and 'fun' to watch while local content was dull and boring. Table 5 summarizes the data collected from an investigation to determine the media uses and purposes, amount of media usage, and respondents' trust and confidence in media.

Table 5

Participants use and purpose of American TV media consumption

	Items	Mean	SD	Skewness	Kurtosis
Media use and purpose	I watch American TV program to learn social behaviors	4.672	0.855	-2.848	7.490
	I watch American TV programs for actors/ celebrities/ characters on screen	4.501	0.997	-2.049	3.044
	I watch American TV programs for fashion and lifestyle.	4.403	0.998	-1.658	1.583
	I watch American TV programs to keep up with current affairs (i.e. the news).	4.170	0.669	-1.117	3.628
	I watch American TV programs for fantasy elements.	4.081	1.312	-1.374	0.565
	I watch American TV programs for violence and gore.	3.988	1.345	-0.707	-1.394

Table 5 *(Continued)*

	Items	Mean	SD	Skewness	Kurtosis
	I watch American TV programs for love and romance.	2.806	1.689	0.214	-1.661
	SUMMATED Media use and purpose	4.089	0.449	-0.396	0.266
Amount of media	I spend more time with American TV program than I do on other forms of mass media (i.e. newspapers, radio, and social media)	4.418	1.020	-2.101	3.858
	I watch American TV program regularly	4.287	0.967	-1.499	1.626
	I spend a minimum of 1-hour daily watching American TV programs.	4.227	1.114	-1.385	0.777
	SUMMATED Amount of media	4.310	0.595	-0.895	0.421
Trust and confidence	I prefer watching American TV program compared to locally available content.	4.430	0.886 -	-2.334	6.240
	I watch more non-American TV program (i.e. British or Asian).	**4.519**	**0.922**	**-2.482**	**6.283**
	SUMMATED Trust and confidence	4.475	0.638	-1.790	3.269

Results show that American TV influences respondents' beliefs and behaviors as summarized in Table 6. The highest calculated mean of represents respondents finding American TV as having a negative impact on youth (Item 14) with a value of 4.725. Findings that it is acceptable to call parents by their first names (Item 10) are represented with the lowest calculated mean of 1.985. Data from in-depth interviews prove that respondents are aware that American TV does produce negative effects on social behavior. Notably, respondents specifically highlighted the scenes of smoking, sexual nature, and bad language.

Interviewees were adamant that American TV would "never" be able to affect certain cultural behaviors, particularly those related to national and religious customs such as "removing shoes before entering the house" and "respect for parents".

Table 6

Participants perceived negative impact of American TV media

	Items	Mean	Std. Deviation	Skewness	Kurtosis
Q10	It is acceptable to call parents by their first names.	1.985	1.175	1.222	0.558
Q11	It is acceptable to refer to older people by their first name	2.666	1.507	0.281	-1.480
Q12	I will do whatever I feel it takes in order to get what I want or feel is due to me	3.663	0.962	-0.662	-0.590
Q13	It is acceptable to show sex scenes on American TV media	2.203	1.030	0.512	-0.075
Q14	**American TV media has negative impact on youth**	**4.725**	0.538	-2.423	7.824
Q15	American TV media normalize bad behavior and make it acceptable	4.307	1.046	-1.353	0.434
Q16	It is acceptable to show violence on American tv media	3.567	0.932	-0.398	0.500
Q18	I have more role models who are fictional characters from American TV media that I do in real life	3.633	1.327	-0.424	-1.311
Q19	Body image ideals shown on American TV media have made me consider body augmentation, plastic surgery, or other body enhancements such's as piercings, tattoos, and diet pull.	2.857	1.598	0.028	-1.638
Q20	Religion plays an important role in my life	4.003	1.426	-1.327	0.246
Q21	American TV media has made me devaluate the institution of marriage	2.355	1.316	0.488	-1.247
Q22	I learn the English language by watching American TV media	3.806	1.027	-1.305	1.356

Table 6 *(Continued)*

	Items	Mean	Std. Deviation	Skewness	Kurtosis
Q23	I find myself copying the speech patterns and speech styles of characters I see on American TC media	3.036	1.528	-0.061	-1.581
Q24	I learn more English at institutions of education compared to while watching American t media	2.899	1.385	0.176	-1.290
Q25	Children should stay with their parents until they are married	3.624	1.343	-0.520	-1.054
Q26	I am responsible for the wellbeing and happiness of my parents until they pass away	3.881	0.927	-1.596	2.734
Q27	I have taken culture and habits from American tv media and adopted it into my daily life	4.131	1.132	-1.269	0.672
Q28	Success is measured by how rich a person is	2.552	1.114	0.612	-0.716
Q29	It is justified to use violence to settle disputes	2.245	1.334	1.190	0.221
Q30	Everyone has the opportunity to succeed and those who don't is because they are uninitiated and lazy	2.081	1.217	1.148	0.295
Q31	I am envious of the lifestyles shown on American TV media.	3.776	1.207	-1.034	0.144
Q32	I sometimes find myself thinking about how different my life would be if I lived like what is shown on American TV media.	3.066	1.487	0.052	-1.540
	SUMMATED perceived impact of American TV consumption	3.230	0.246	0.068	0.567

Table 7 shows the calculated means of respondents according to the general consumption of American TV. It shows the highest calculated mean represents youth's trust and confidence in American TV.

Interviewees claimed they picked and chose what facts and information to trust. However, they were unable to explain how or why this happened, with the exception of one respondent who mentioned that the overall presentation of the story could either make facts more believable or not.

Most of the interviewees were inclined toward "just accept as truth" about most information they were exposed to until it was rebuked. Such inclination is observed in the low mean of 1.857 which represents youth preferring American TV news channels over other channels. Only 1 respondent expressed skepticism toward what they saw on mass media, labelling it as 'conspiracy theories'.

Youth's preference for movies (mean = 4.663) over news channels (mean = 1.857) implies the pressing need for access to news and informative contents that are attractive. The youth find that it is more entertaining to watch programs where facts and information are embellished with dramatic or theatrical elements. The high value of trust and confidence placed on American TV (mean = 4.672) may explain why youth use it to learn about social behaviors.

Additionally, respondents claimed that they watched a minimum of 1-2 hours of American TV daily (mean = 4.227). This is particularly significant as interviews show respondents admitting that they spent too much time watching TV, notwithstanding the fact that they did not seem to want to change their viewing habits. The calculated

Table 7

Summative means for general consumption of American TV media

	Summative Mean	*Summative STD*	*Summative Skewness*	*Summative Kurtosis*
Participants general consumption of American TV media genres	3.824	0.386	-0.138	0.266
Purpose of American TV media usage	4.089	0.449	-0.396	0.266
Amount of American TV media usage	4.310	0.595	-0.895	0.421
Trust and confidence in American TV media	**4.475**	0.638	-1.790	3.269
Impact of American TV media towards participants beliefs and behaviors	3.230	0.246	0.068	0.567

Table 8
Core ideas from in-depth interviews

	Positive views on TV media
	Negative views on TV media
	High interactivity and engagement
Core Ideas	Learning opportunities
	Social Experience
	Increased confidence
	Inclusivity
	Learning opportunities

mean of respondents adopting culture and habits from American TV into their lifestyle is also notably high with a value of 4.131.

Content analysis of the interviews discovered 3 main themes: personal, kith and kin, and societal. These themes are broken down into several categories, which are summarized in Table 8. There are 5 core ideas discovered from the content analysis, which relate to the research hypothesis as follows:

1. Behavior is picked up unknowingly.
2. The perception of reality is based on media, experience, and knowledge.
3. Understanding of right and wrong is through experience and knowledge and influenced by those who shape the narrative.
4. A sense of belonging.
5. Knowledge, attitude, and beliefs about the world.

Learning appears to be a recurring element within the 5 core ideas. It is also the driving force behind the need for better understanding of particular concerns and questions and how things relate to one another.

The 1st core idea refers to issues of learning which seems to be the undertone of almost all matters brought up during the interview sessions. The 4th core idea relates to self-learning and discovery and more so to societal connectedness and questions about identity. The 5th core idea is on self-learning emergeing from questions and issues that are provoked by real-life events. Cross analysis of the results through measuring the frequency of occurrence was conducted to organize the data (Bruce & Bruce, 2017). The summary of results is presented in Table 9.

Theme 1. This theme questions how behavior is picked up from watching American TV. Regardless of gender and age all interviewees voiced concern about the behavior that they picked up from watching TV. The findings indicate that youth are aware that TV has some influence on their behavior.

Table 9

Summary of results

Domain	Themes	Core Ideas	N	Frequency
Impact On Behavior (RQ1)	Behavior is picked up unknowingly	Learning opportunities	5	General
Component In Media that Can Effect Change (RQ2)	Perception on reality is based on media, experience, and knowledge	Interactivity and engagement	5	General
Other Factors that Cause Change (RQ3)	The understanding of right and wrong is determined by those who shape the narrative	Views on topics and issues (either positive and negative)	3	Typical
Component in Media that Can Effect Change (RQ2)	Social experiences	A sense of belonging	4	General
Other Factors that Cause Change (RQ3)	Increased confidence		3	
Impact On Behavior (RQ1)	Knowledge, attitude and beliefs about the world	Inclusivity	4	General

Responses obtained range from bewilderment to disbelief when respondents were asked to think about the habits that they picked up from watching TV. However, respondents voiced their annoyance over the implication that they were too young to be able to distinguish between good and bad elements on TV. Such a response suggests the discernment among youth in relation to what they watch and absorb.

> *"I hate it when I hear people saying that they gonna [sic] censor things on the TV. Because like [sic] yes, we watch a lot of TV and stuff but that doesn't mean we just gonna [sic] swallow what we see completely. I think like the people who control that [sic] should give us more credit like we can decide what's good and what's not."(Interviewee 3)*

Theme 2. All interviewees responded that they receive local and international news largely via TV or Facebook. The interviewees admitted that they do not read newspapers citing that it is too boring or depressing, with repetitive issues being covered.

> *"I only read the papers if it's on the train and someone has left it on the seat. Or on the bus when my phone is dying. I don't even listen to the radio because there's nothing good on it. So I've always got my headphones in and on the phone." (Interviewee 2)*

When asked if they viewed themselves as well-informed citizens, all respondents answered in affirmative. This prompts a discussion centering around the ramifications of such habits. Respondents argued that news and information have to be vetted for accuracy but they pointed out their inconsistent commitment to doing so. The lapse in the process of verifying information is blamed on time constraints and so on associated with daily life.

Theme 3. Closely related to the previous theme, this theme discusses the normalization of certain behaviors on TV. Specifically, all interviewees mentioned the portrayal of sex scenes, which seem to appear more frequently than before.

> *"...there is a lot of that on TV nowadays... even before there was [sic] but it was not so explicit. Today you have total nakedness of the man and woman. Sometimes it's weird because you're watching a movie with your parents then suddenly there's like a naked man on screen. I guess being naked is ok but there's [sic] also full on [sic] sex scenes. One time I had to leave the room [sic] I was so embarrassed." (Interviewee 4)*

Among all interviewees who alluded to the fact that negative influences from outside are brought home via TV, 2 female interviewees voiced their opinions regarding the issue.

> *"I think my generation grew up with this new media and so we are more careful of it. Like it's part of us now. You see one thing from the west and you think is [sic] that [sic] right or not...I wouldn't*

say it's being paranoid but it's just the way it is. Plus, after the classes here we know about globalization and like [sic] all the media theories so it prepares you for what to see...like [sic] I think those kinda [sic] classes were good because you learn you know [sic]. Before that, I was kinda [sic] careful but I didn't know what to be careful about. Like [sic] maybe it was an automatic response but now I know why I need to be careful... like [sic]I have a name I can put to it." (Interviewee 3).

All respondents however strongly rejected the use of any sort of censorship claiming that it is useless and could possibly lead to more harm.

> *"...no way censorship is good. First of all, the person doing the censoring they have to see all the things they are censoring...I think it's better to teach people what to look for instead of banning it. Because you know kids they're just gonna [sic] go [sic] look for it elsewhere. Like they said downloading movies is illegal and they put blocks on the torrent sites but c'mon [sic] we know how to use VPN...so honestly if they educate not just us but everywhere on what's coming in and what it does it's way better than banning outright..." (Interviewee 5)*

Theme 4. All interviewees are proud of their patriotism and consider themselves as part of the global community. The response suggests that global issues are just as important to the respondents as national issues are.

"We see the shows on TV and think that's not how it is here but actually it is. Like everyone wants to fit in and belong...shows like Glee show you what the US kids do but if you think about it, it's actually the same here. Probably if we watch more shows like umm [sic] from Korea or Spanish shows or I dunno [sic] shows from the Middle East, we'd be like that, but we get it from the US so we follow them I guess." (Interviewee 1)

Theme 5. Some of the respondents spoke about how TV shows of late had become more engaging with a variety of TV shows and easy access via pay-per-view subscriptions such as Netflix and iFlix. One of the keywords used was accessibility and opportunity. The general tone on the issue was positive, where they were pleased with the overall accessibility and opportunity that technologies related to media streaming had brought to them. Most agreed that if it were not for TV they would not be as knowledgeable about the world outside national borders as they are today. TV is therefore seen as having a positive role in their lives with benefits that surpass the negative effects.

"I can't condemn TV too much because I feel that it's actually a window of experience. Obviously, you can get carried away like I guess umm [sic], a hammer can build things or break things. Depends on what you use it for, right? I think that's what happened with the internet but now we can even see what space looks like. Otherwise, that would only be for people who worked in NASA la [sic]."(Interviewee 3)

The outcomes from the in-depth interview sessions are summarized in Table 10 according to the five main discoveries identified as domains.

Table 10 shows that 4 out of the 5 domains yielded specific outcomes from the interviewees. Realization of the impact of watching TV on the behavior of an individual prompting youth to feel the need for a change in attitudes related to TV watching habits as observed in the first domain. This includes the need for self-reflection, which outcome is similarly concluded for the fifth domain of study.

The findings from the two domains demonstrate increased consciousness among youth in regard to the stimuli received from TV watching. In the second domain, the study yielded no significant outcome. The finding may be attributed to the lack of ability among youth to differentiate and connect the individual components of TV shows to their associated effects, due to their tendency to view TV as one whole entity. However, it has been mentioned several times that other social networks, both online and offline, can be equally responsible for affecting one's perception about reality, which can be created and maintained.

Special mention made to online social networks such as Facebook and others, which suggests that elders in the community can influence youth to change. The third domain seems to be of typical response, which is associated with the increasing skepticism about the true motives of media outlets. Interestingly, by the end of the interview sessions, the respondents found themselves questioning more about the real

Table 10

The outcome from in-depth interview sessions

Domain	Themes	Specific Outcome
Impact On Behaviour	Behaviour is picked up unknowingly.	Need for an increase in self-reflection.
		Changed attitudes while watching TV.
Component In Media that Can Effect Change	Perception on reality is based on media, experience, and knowledge.	None of special note.
Other Factors that Cause Change	The understanding of right and wrong is determined by those who shape the narrative.	Increased skepticism about the *true* function of media outlets.
Component In Media that Can Effect Change	Social experiences.	Increased self-confidence.
Other Factors that Cause Change	Increased confidence.	Increased awareness and appreciation of own culture.
Impact On Behaviour	Knowledge, attitude, and beliefs about the world.	Need for an increase in self-reflection.

agenda of mass media. The fourth domain obtains two outcomes: an increase in self-confidence and an increase in appreciation of one's own culture and heritage. The outcome may be attributable to the hidden thoughts and emotions the respondents have regarding the issue, which keeps bottled up due to the absence of the premise for sharing views. The interview sessions have therefore provided a place for youth to articulate their thoughts.

CONCLUSIONS

The findings support the fact that youth sift through media texts and pick what they want from it. According to one research, the purpose of doing so is for surveillance, relaxation, and as a substitute for friendship (Ismail et al., 2019). One of the main issues that motivate this research is to understand the power play that exists between social groups. Power structures like hegemony are defined as dominance and control expressed either subtly or overtly through various means and tools manifesting itself through cultural appropriation and economic might sitting comfortably on the boundary between compulsion and consent. The modern iteration of its definition has moved away from Antonio Gramsci's concept to evolve into one without maintaining an ecosystem that is built on fear and intimidation, where control is exerted through influencing cultural and social

institutions. One of the easiest means is through media to carve out boundaries between what is acceptable and what is not. This is one of the many tendrils of globalization. It is enforced globally through various key methods: economic power, military might, international organizations, global allies, and ideas, and culture. The last mechanism is perhaps the most influential. This study will lead to further investigations into how cultural norms are shaped or eroded through the use of media including suggestions for monitoring it. TV has a strong social presence and impact on societ predicated by the fact that it is everywhere. It targets everyone and policing can be cumbersome and at times impossible. As TV is a tool for the creation of meaning and transmission of cultural values this research attempts to describe the impacts, identify the mechanisms involved and analyze the inner workings.

While TV is viewed as an important cog within the wheel of mass media its function can be broken down into several parts: legitimation, concealment and camouflage, integration, disintegration, and reification. Legitimation is described as ideals being presented as acceptable to different groups in a society. Concealment and camouflage occur when certain elements are either minimally shown or misrepresented for the benefit of one group. Integration arises when all members of that group are made to appear equal to one another when in fact there may be differences. Disintegration or fragmentation occurs when power is maintained through social schisms. Lastly,

reification is a phenomenon of normalizing unequal social structures by waving them off as normal or expected. If a media organization or entity is formed based on the national policy to educate citizens on the types and effects of media content then it can be used as a buffer against the challenges of globalization.

Significance of the Study

This study will benefit society in a way it equips audiences with knowledge about media influence and its associated effects. It provides information about how media can negatively affect audiences, thus preparing individuals with the knowledge to tackle challenges and warning them of dangers to be avoided. There is a great demand for media literate individuals where mass media permeates every aspect of life. This justifies the need for more effective and lifelong learning opportunities. Guidelines for schools and training centers may be derived from this study which informs on what should be prioritized and how the curriculum should be structured. This study may serve as a basis for future research which could explore other related critical areas. Theories and frameworks may be derived with regard to media influences from a Southeast Asian perspective. Other significant findings will be promote good working environments for media content creators and administrators. This research will also be beneficial to marketers and business practitioners so better practices can be performed allowing for more specific targets to be met.

Suggestion 1: Developing New Models of Thinking. For decades, historians and social scientists worldwide have been using the Western concept of media to develop their own material and research. While the advantage is vast, it overlooks the characteristics and nuances of individuals and societies that do not fall within that category. The Western idea of media serves as a surrogate for Eastern thought. The first suggestion is to understand that a new model needs to be created for developing and testing theories on human behavior from an Asian perspective.

Suggestion 2: Enhancing Media Attractiveness. Training governmental organizations so actions can be put in a more concerted manner to develop and train key stakeholders such as donors, industry experts, professional practitioners, and agencies must be treated with utmost urgency for the advancement of the local media industry. The need for training, formal and lifelong, in media professionalism, skill development programs and ethics is vital for those involved in media. Agencies involved in talent development should be well-connected to the media industry so resources such as formal training and funding, donations, and grants can be shared. Media giants should also familiarize themselves with stakeholders by forming links with academics and training agencies as well as professional bodies and other non-governmental organizations.

This study proves that youth do not prefer local media because of the little value of entertainment it delivers. The theoretical impact suggests that adopting the style of American TV to a certain extent may be able to increase the likelihood of youth watching local media. For local content creators to be encouraged by the idea of creating better content, they must be allotted funds and other forms of assistance with clear codes of conduct that are non-discriminatory and clear in its objectives. The main objective should be creating content that viewers want to watch. Infrastructure sharing prevents wasting resources where opportunities are equal for all involved. There must be an incubation program that can assist creative entrepreneurs and start-ups in developing quality content. Marketing strategies should be employed to attract companies with much-needed manpower, locally and internationally, who can assist in this. It is important that the government conducts periodic surveys for data collection and analysis on media and the associated impact so they are ready to face challenges related to the constant change in the media environment (Damratoski et al., 2011).

Suggestion 3: Improve Media Literacy. The impact of media globalization observed within the country signifies the need for constant efforts in monitoring media exposure. It should be a catalyst to fully develop a program that helps stakeholders differentiate between the associated negative and positive effects. A critical look must be given into the advocacy of media globalization as a key concept in research related to local media.

Working hand in hand with academics and other media-related organizations, the government must try to accelerate media literacy among citizens. Researchers think that media literate citizens will not be prone to 'news abuse', which is described as one narrative that is placed above another using various methods in order to create conditions that are selectively favorable to only a certain segment of society (Damratoski et al., 2011). Citizens should have free and easy access to projects, programs, and classes that equip them with the skill to understand and critically analyze all aspects of various types of media contents.

The government must work closely with media regulators worldwide to ensure local media can keep up with the latest trends in global media. Setting their sights farther abroad ensures that the authorities are well exposed to different natures of media practices (Steiner & Xu, 2018). There should be a body within the government that can monitor the current and latest trends in media worldwide, trickled down to smaller agencies, and lastly reaching the end consumers. The need for effective monitoring also signifies the potential demand for media specialists in regulatory agencies.

ACKNOWLEDGEMENTS

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Fundamental Motor Skills Proficiency in Children with Down Syndrome

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ABSTRACT

Subsets of motor skills proficiency are evaluated based on bilateral coordination, balance, running speed and agility, upper-limb coordination and strength. This study was designed to determine the correlation of motor skills proficiency subsets among children with Down syndrome. Thirty-three participants (N = 33, 23 boys and 10 girls) aged 4–12 years underwent selected motor skills proficiency subtests of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, Short Form. The measurements included synchronised jumping in place on same side, synchronised tapping of feet and fingers on same side, walking forward on a line, standing on one leg on a balance beam with eyes open, one-legged stationary hop, dropping and catching a ball with both hands, dribbling a ball with alternating hands, knee push-ups, and sit-ups. Running speed and agility were found to be moderately correlated with upper-limb coordination ($r = 0.36$, $p < 0.05$). There was no significant relationship between gross motor composite of body control (bilateral coordination subtest and balance subtest) and gross motor composite of strength (running speed and agility subtest, and strength subtest). The motor skills proficiency parameters identified in this study will influence the motor development of children with Down syndrome and therefore, a goal-directed conditioning program can be prepared for their motor progression.

Keywords: Children with down syndrome, motor function, motor skills proficiency, physical performance

INTRODUCTION

Down syndrome (DS) is a medical anomaly characterised by three copies of chromosome 21 (Pitetti et al., 2013). It is highly associated with delayed developmental milestones especially in the motor skills development (Gupta et al., 2011; Volman et al., 2007; Wang & Ju, 2002). Physical activities involving extensive motor skills such as jumping, influences the developmental milestones of children with DS. Standing broad jump is an example of a locomotive fundamental movement skill (FMS), a building block of an active lifestyle for individuals (Gallahue et al., 2006).

Early development of motor skills proficiency is essential among children with DS (Capio & Rotor, 2010). Apart from delayed cognitive and psychosocial developmental milestones, children with DS are challenged with delayed motor skills development due to limitations in their motor skills proficiency. Focusing only on the motor control system of the musculoskeletal system, the delayed motor development among children with DS is attributed to joint hyperextensibility and muscle hypotonia (Capio & Rotor, 2010; Haley, 1986, 1987; Rast & Harris, 1985; Wang & Ju, 2002) or specifically poor hip abductors and knee extensors (Mercer & Lewis, 2001; Pitetti et al., 2013).

In healthy children, Jiang et al. (2017) reported that static balance, dynamic balance, proprioception, and gross motor development level of locomotor skills and object control skills increased with age. However, children with DS have different development of motor skills. The performance of most motor tasks during early childhood favour boys over girls due to biological and environmental causes as reported in the meta-analysis study of gender differences in motor performance (Thomas & French, 1985). The endocrine system, physical development, and a child's perception of gender role determines their performance on motor tasks.

Motor developments are analysed using extensive performance instruments with functional relevance to the test content. Referring to the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2) (Bruininks & Bruininks, 2005a), motor skills proficiency is categorised into gross manual control (upper-limb coordination and manual dexterity), body control (bilateral coordination and balance), strength and agility (running speed and strength), and fine manual control (fine motor precision and fine motor integration). Psychometric studies of the BOT-2 instrument were conducted according to focused parameters (Brown, 2019; Carmosino et al., 2014; Venetsanou et al., 2009). Hasan et al. (2012) did a study on gross motor development in Malaysia using a different study instrument; the Test of Gross Motor Development-2 (TGMD-2) (Ulrich, 2000), which tested locomotor skills and object control skills in children with DS. Subtests of motor skills proficiency such as bilateral coordination, balance, running speed and agility, upper-limb coordination, and strength contribute to the standing broad jump movement framework.

There is limited research analysing the motor skills proficiency in children with DS. Previous studies done on a subset of children demonstrated that they performed poorly on motor skills proficiency (Bellows et al., 2017; Hasan et al., 2012; Westendorp et al., 2011), including balance, object control skills (Bellows et al., 2017), and locomotor skills (Hasan et al., 2012; Westendorp et al., 2011). Bellows et al. (2017) measured the motor skills proficiency of typical developing children with low socioeconomic status, Hasan et al. (2012) examined the motor development of children with DS, and Westendorp et al. (2011) analysed the motor competence of children with learning disabilities. In terms of gender comparison, Hasan et al. (2012) reported that although there was a strong correlation between locomotor skills and object control skills, there was no significant difference between boys and girls with DS in object control skills and locomotor skills. On the contrary, there was significant difference between typical developing boys and girls in upper-limb coordination (object control skills) and running speed and agility (locomotor skills) (Duger et al., 1999). However, Duger et al. (1999) found no significance difference between genders on other motor skills proficiency subsets such as balance, bilateral coordination and strength.

This study placed emphasis on motor skills proficiency assessment among children with DS using Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, Short Form, (BOT-2-SF) (Bruininks & Bruininks, 2005a), and explored the descriptive analysis and correlation of motor skills proficiency subsets to identify the key areas of their delayed motor developmental milestones. It is crucial to establish FMS or early motor functions to master further dynamism of motor behaviour. Apart from environmental conditions, the interactions between the motor functions and the biology of individual, such as gender, also affect motor development (Gallahue et al., 2006). Therefore, gaining more research evidence related to fundamental motor development in children with DS would also improve the index of the study instrument.

The purpose of this study was to assess the motor skills proficiency subsets among children with DS aged 4–12 years in the Klang Valley using BOT-2-SF. The difference of genders and their correlation with motor skills proficiency subsets were also investigated.

METHODS

This is a cross-sectional study and the procedures of this study was approved by the Research Ethics Committee of Universiti Teknologi MARA (600-IRMI (5/1/6)).

Participants

Thirty-three participants consisting of children with DS (N = 33); aged between 4 to 12 years old were selected from institutions for DS in the Klang Valley. Twenty-three boys with DS with the mean age of 9.54 ± 2.27 years old and 10 girls with DS with the mean age of 8.35 ± 2.94 years old were recruited for this study. The sample size corresponded to previous local

studies of Hasan et al. (2012) and Teng (2012). The recruited participants healthy (no chronic diseases), with body mass index (BMI) in the normal or underweight category, as calculated through the formula of participant's weight in kilogram divided by the square of height in meters (de Miguel-Díez et al., 2003). The recruited boys with DS had a mean BMI of 17.73 ± 2.50 kg/m^2, whilst the girls with DS had a mean BMI of 17.76 ± 4.25 kg/m^2. The selected children with DS acknowledged their involvement in the study with prior active consent from their parents or guardians. They also screened with the Physical Activity Readiness Questionnaire for Children (PAR-Q) (Limerick University Department of Physical Education and Sport Sciences, n.d).

Instrumentation

The performance measurements used were selected subtests of BOT-2-SF in accordance to the test guidelines. These consisted of nine motor skills proficiency tests; the evaluation of body control composite of bilateral coordination subtest (synchronised jumping in place on same side, and synchronised tapping of feet and fingers on same side), body control composite of balance subtest (walking forward on a line and standing on one leg on a balance beam with eyes open), gross manual control composite of upper-limb coordination subtest (dropping and catching ball with both hands, and dribbling ball with alternating hands), strength and agility composite of running speed and

agility subtest (one-legged stationary hop), and strength and agility composite of strength subtest (knee push-ups and sits-up). The study was equipped with apparatus such as table, chair, paper tape, balance beam, tennis balls, mat, and measuring tape.

Procedures

The performance measurement testing was organised into five stations according to the subtests: Station 1 (bilateral coordination subtest), Station 2 (balance subtest), Station 3 (running speed and agility subtest), Station 4 (upper-limb coordination subtest), and final base is Station 5 (strength subtest).

The testers were individuals who had conducted both the familiarisation process and evaluation of the performance measurements on the study participants. The tester's evaluation process of the study instrument was crosschecked prior to the testing. The familiarisation process of skill demonstrations and verbal instructions were standardised according to the Administration Easel of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (Bruininks & Bruininks, 2005b). Each participant was evaluated through nine performance measurement tests, and expected to spend about an hour to complete all five stations.

RESULTS

The performance measurement outcomes were assessed through the selected BOT-2-SF subtests. In determining group effect, the effect size, *Cohen d,* of the analysed gender

groups were calculated for each dependent variable in accordance to Thalheimer and Cook (2002). The effect size is described as small if $d \geq 0.2 < 0.5$, moderate if $d \geq 0.5 < 0.8$, and large if $d \geq 0.8$ (Cohen, 1988). Correlation analysis between the motor skills proficiency subsets were measured using Pearson correlation coefficient, r. The correlation coefficient is described as small if $r \geq 0.10 \leq 0.29$, medium if $r \geq 0.30 \leq 0.49$, and large if $r \geq 0.50 \leq 1.0$ (Cohen, 1988).

Descriptive Categories of Motor Skills Proficiency

The descriptive ratings of the participants' performance are presented in Table 1. The total score was the summation of the scores of the BOT-2-SF subtests (bilateral coordination, balance, running speed and agility, upper-limb coordination, and strength). Table 1 shows that most participants performed below average in the performance measurements of BOT-2-SF subtests and only 38.2% of them managed to achieve the best performance at the average level.

Comparison Between Genders on the Motor Skills Proficiency Subsets

The gender difference on the motor skills proficiency subsets is shown in Table 2. The results of this study showed that there was no statistical significance between the performance of boys and girls with DS in the subtests of BOT-2-SF (bilateral coordination, balance, running speed and agility, upper-limb coordination, and strength). Gender difference on motor skills proficiency subsets of gross motor composites is shown in Table 3. There was also no statistical significance between the performance of boys and girls with DS in the assessment of BOT-2-SF gross motor composite of body control and gross motor composite of strength and agility. All motor subtests and gross motor composites had moderate effect sizes except strength subtest and body control composite, which had small sizes respectively for gender groups. The bilateral coordination subtest had a relatively small effect size (Cohen, 1988).

Table 1

Descriptive ratings for participants (N = 33)

Total scale score point	Descriptive category	Total	Percentage (%)
45–55	Well-Above Average	0	0
34–44	Above Average	0	0
23–33	Average	12	38.2
12–22	Below Average	21	61.8
1–11	Well-Below Average	0	0

Table 2

The gender frequency distribution of the subtests of BOT-2-SF (N_{Total} = 33)

	Boys with DS, N = 23		Girls with DS, N = 10		Cohen *d*
	M±SD	Min-Max	M±SD	Min-Max	
BC	4.26±0.96	3–7	4.55±1.08	3–7	0.14
BA	7.48±1.34	3–8	6.91±1.32	4–8	0.53[b]
RS	3.13±1.71	0–6	2.00±1.48	0–5	0.58[b]
UC	4.52±3.09	0–8	2.60±2.27	0–8	0.67[b]
ST	3.65±1.58	2–7	3.00±1.33	2–6	0.44[c]

Note: BOT-2-SF: Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, Short Form; M: mean; SD: standard deviation; BC: bilateral coordination; BA: balance; RS: running speed and agility; UC: upper-limb coordination; ST: strength. Effect sizes were calculated by dividing the mean difference between boys and girls by the pooled standard deviation of both groups. Pooled standard deviation was calculated as the square root of the pooled estimate of the population variance.

$$[SD^2 = ((N_{Boy} - 1) \times SD_{Boy}) + ((N_{Girl} - 1) \times SD_{Girl})/ (N_{Boy} + N_{Girl})]$$

[a] Cohen *d* value ≥ 0.8 indicates a large effect size

[b] Cohen *d* value ≥ 0.5 < 0.8 indicates a moderate effect size

[c] Cohen *d* value ≥ 0.2 < 0.5 indicates a small effect size

Table 3

The gender frequency distribution of the BOT-2-SF gross motor composite of body control, gross motor composite of strength and agility (N_{Total} = 33)

	Boys with DS, N = 23		Girls with DS, N = 10		Cohen *d*
	M±SD	Min-Max	M±SD	Min-Max	
BC	11.74±1.71	7–15	11.20±1.40	8–13	0.34 [c]
SA	6.78±2.04	2–11	5.20±2.44	3–11	0.75 [b]

Note: BOT-2-SF: Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, Short Form; M: mean; SD: standard deviation; BC: body control; SA: strength and agility.

[a] Cohen *d* value ≥ 0.8 indicates a large effect size

[b] Cohen *d* value ≥ 0.5 < 0.8 indicates a moderate effect size

[c] Cohen *d* value ≥ 0.2 < 0.5 indicates a small effect size

Correlation Within Motor Skills Proficiency Subtests of BOT-2-SF and Correlation Between Gross Motor BOT-2-SF Composite of Body Control and Composite of Strength and Agility

The correlation between the subset of motor skills proficiency is shown in Table 4. Only the upper-limb coordination subtest had a positive moderate association with the running speed and agility subtest ($r =$ 0.36, $p < 0.05$) and there was no significant relationship between other motor skills proficiency subsets. Comparison between the association of gross motor composite body control and composite strength and agility showed that there was no significant relationship between the composite of body control and composite of strength and agility ($r = 0.16$)

Table 4

Bivariate correlations between BOT-2-SF subtests of bilateral coordination, balance, running speed and agility, upper-limb coordination, and strength (N = 33)

	BC	BA	RS	UC
BA	-0.06			
RS	-0.24	0.27		
UC	-0.17	0.18	**0.36***	
ST	-0.03	0.20	-0.01	0.28

*p < 0.05

Note: BOT-2-SF: Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, Short Form; BC: Bilateral coordination; BA: Balance; RS: Running speed and agility; UC: Upper-limb coordination; ST: Strength.

DISCUSSION

This study served to determine two objectives: (i) to compare the subsets of motor skills proficiency in 23 boys and 10 girls with DS; (ii) to investigate the relationship between motor skills proficiency subsets in the motor skills proficiency development of children with DS.

More than half of the participants had below average results. They scored poorly on all motor subtests; bilateral coordination (M = 4.30 ± 0.98), balance (M = 7.27 ± 1.35), running speed and agility (M = 2.85 ± 1.68), upper-limb coordination (M = 3.94 ± 2.97), and strength (M = 3.45 ± 1.52). These motor skills proficiency results were in agreement with studies done by Hasan et al. (2012), Bellows et al. (2017), and Westendorp et al. (2011). Hasan et al. (2012), who had assessed the gross motor development of 30 children with DS aged 3–10 years demonstrated that 60% of the participants did not achieve average level of gross motor development of TGMD-2, including poor performance on locomotor skills (M = 6.03 ± 3.34) and average performance on object control skills (M =

9.60 ± 3.63). Using BOT-2, Bellows et al. (2017) who did a longitudinal study, found that typical developing children with low socio-economic status scored significantly low on balance ($p = 0.016$, N = 226), with upper-limb coordination ($p < 0.001$, N = 227) at the baseline, and even after a two-year follow up. The mean score of balance for all participants (N = 175) and the upper-limb coordination of the control group (N = 66) were significantly lower than the normative sample ($p ≤ 0.001$). In a different study, 104 children with learning disabilities scored significantly lower on TGMD-2 of locomotor skills (M = 37.7 ± 4.4, $p < 0.001$) and object control (M = 34.7 ± 5.6, $p < 0.001$) (Westendorp et al., 2011).

The poor prevalence of motor performance in this study confirms poor or delayed motor development milestone in children with DS. Their low score in strength, balance and bilateral coordination suggested that the children had muscle hypotonia and poor coordination. The results reflected their disordered musculoskeletal system with low muscle tone and symmetry, laxity of tendons, and instability of articulations on their delayed motor development (Malak et al., 2015). It also reported that the poor motor development was due to the delayed in the development of the motor control system of central nervous system. Therefore, it is thought that these resulted in the psychomotor development delayed although children with DS are often scored by psychologist as being within the mild to moderate range of mental impairment (Malak et al., 2013).

The insignificant finding on gender performance on the selected BOT-2-SF motor subtests and BOT-2-SF gross motor composite was supported by Hasan et al. (2012). There was also no significant relationship between gender and locomotor skills ($p = 0.70$, $N_{Boy} = 16$, $N_{Girl} = 14$), and object control skills ($p = 0.96$, $N_{Boy} = 16$, $N_{Girl} = 14$) (Hasan et al., 2012). Our findings demonstrate the insignificant biological factor on motor performance among the study participants, and imply that environmental factor may play a larger role in motor development. A local study on predominantly Malay-Malaysian women with DS, ranging 1-40 years old with median age 12.7, attained menarche at median age of 12.18 years old (Yaacob et al., 2012). Therefore, the effect of endocrinology on motor development in children with DS is inconclusive. However, environmental factors such as physical conditioning or intervention may play a role in motor progression.

The correlation between running speed agility and upper-limb coordination found in this study had been further validated by Hasan et al. (2012) and Westendorp et al. (2011). Hasan et al. (2012) found a strong positive association between locomotor skills (running speed and agility) and object control skills (upper-limb coordination) ($r = 0.608$, $p = 0.00$) when he and colleagues assessed the gross motor development of children with DS. Westendorp et al. (2011) demonstrated a positive relationship between locomotor skills and object control skills ($r = 0.27$, $p < 0.01$) among children

with learning disability. Our finding of the correlation between running speed and agility with upper-limb coordination signifies the importance of functional skills integration of skill-handling while maintaining body stability and space orientation. The functional skills of stability, locomotor skill, and object control skill involve multiple body segments orientation and kinematics dynamic during the performance. Therefore, the correlation of motor skills proficiency subsets proved that functional skills integration was required in the dynamics of motor development of children with DS. The absence of correlation among other motor skills proficiency subtests and gross motor composites may be due to the group analysis of this study, as the composite comparison annotates the individual's strengths and weaknesses (Bruininks & Bruininks, 2013).

One of the limitations in this study was that the sample size was small, which might have prevented BOT-2 from providing a more in-depth motor proficiency assessment corresponding to age and gender. Secondly, as the data collection was gathered from the instrument's scores, maximum performance may not be attainable. For instance, ball dribbling without alternating hands was sufficient to be given a passing score. Previous motor proficiency studies faced similar problems when using similar methods of data collection (Castetbon & Andreyeva, 2012). This study estimates had not fully conformed to the study instrument protocol, due to the resources available. Therefore, the formal descriptive category

of study instrument produced was not in conformance to formal data reporting of BOT-2-SF and the selected performance measurements were not framed according to the standard assessment of BOT-2-SF.

CONCLUSIONS

This study was conducted to measure motor skills proficiency among children with DS in the Klang Valley. Most of the children (61.8%) were lacking in motor competency. Boys and girls with DS showed no significant differences in motor proficiency. There was a positive relationship between upper-limb coordination, running speed and agility. With complementary data, a goal-directed developmental conditioning could be developed for the motor progression of children, especially with DS. Future research should emphasise on the gross motor training of DS children with specific focus on strength proficiency with element of longitudinal progression-conditioning protocol.

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Case Study

Egypt and the United States after the Egyptian Revolution in 2011

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ABSTRACT

This study aimed to pursue two main objectives, i.e., understanding the effect of new developments in Egypt in a post-revolution era, which had affected the United States' hegemony, and explored how the United States had attempted to maintain its hegemony in Egypt. Having conducted a comprehensive analysis of academic documents, and ethnic, academic, and administrative elites, two main conclusions were drawn. Firstly, it was understood that the recent developments in Egypt had affected the United States hegemony in Egypt, and secondly, the United States had been able to cope with the new conditions and maintained its hegemony in Egypt.

Keywords: Egyptian Revolution, Egypt-United states relationships, foreign policy, hegemony

INTRODUCTION

Problem Formulation

The United States' interest in Egypt is justified, as after tolerating the turmoil of a hegemonic cycle and fending off its main rival such as Great Britain, and Japan, the United States became more interested in regionalism. On the other hand, Egypt is a blessed land which can fulfill the United States' primary interests. Among the main

reasons the United States' is interested in Egypt are:

1. Egypt's geopolitical location
2. Its role in Israel-Palestine conflict
3. Suez Canal
4. Its influence in Arab League

It seems that the United States' presence has affected the objectives of the 2011 revolution in Egypt. Although Egypt seeks independence, the United States' interests in Egypt continued (Jadallah, 2014). This situation makes understanding the depth of the United States' hegemony in Egypt a worthy topic.

The United States has benefited from the geopolitical position of Egypt in the past. Flint (2006) pointed to the military power in Egypt, which was considerably strong and had been used to provide the security of Israel. On several occasions, the United States had strengthened Egypt's military power to secure Israel, especially after the 1979 Israel-Egypt treaty. This situation also marks the role of Egypt in Palestine case. Egypt has been involved in 4 different wars with Israel in 4 decades (1947-1971) (Flint, 2006) Therefore, Egypt had a considerable role in the fight against Zionists. However, the Camp David Treaty by Anwar al-Sadat changed the prospect of Egypt over Israel, which led to strengthening Israel.

Egypt After 2011

The first political party that gained power after the Egyptian revolution in 2011 was the Freedom and Justice Party (FJP). The elected president, Muhammad Al-Morsi, gained power through parliamentary and democratic elections. As a political party that did not have much experience in politics, FJP received frequent consultations from the Muslim Brotherhood party to the extent that, for many, FJP was not an independent party (Sharp, 2014). Morsi's election as a president resulted in winning 47.2 percent of all seats in the parliament. Morsi worked as the Egyptian president for one year and three days. Although the duration of him ruling Egypt was short, during Morsi's time and due to the anti-western agenda of both FJP and Muslim Brotherhood, the relationships of Egypt with the United States was negatively affected (Wolkov, 2015). Morsi was planting the seeds to cause a shift in foreign policy with the United States. This issue was a real threat to the United States' hegemony, as Morsi began to establish mutual relations with Tehran, and had a plan to cut the relationship with Israel (Wolkov, 2015).

By the advent of the FJP party in Egypt, the unique alliance with the United States had come to a state of imperfection (Wolkov, 2015). America's aid policy in Egypt was altered. For example, in April 2011, a bill was given to Congress in the United States (H.R.1514) to consider an aid contingent on Egypt due to being faithful to Camp David treaty. This bill failed at the subcommittee of the Middle East and South Asia and was found unnecessary. Later on the same year, on August 17, which was the date due for biannual military exercise (Bright Star) between Egypt and the United States, it was announced that the military exercises had been canceled (Holland & Mason, 2013).

Therefore, the end of a unique alliance between Egypt and the United States, in general, affected the United States' policy in Egypt. Tourism was also largely affected by the United States and Egypt (Roston & Rohde, 2011). Wolkov (2015) stated that the unique alliance between the United States, Egypt, and Israel was under tension and subject to change for ten months until the United States' new plans began to affect the relationship and change it back to normal.

The advent of El-Sisi changed this situation. It seems that in the El-Sisi era, the objectives of the Egyptian revolution were forgotten. According to Weinbaum (2019), Egypt and the United States have close foreign relationships, although the Egyptians sought independence. Smith (2020) stated that, even after the revolution in 2011, Egypt's experience with democracy was not a lasting one. Smith (2020) pointed to El-Sisi's election as a dubious one. Finally, Egypt became a close ally to the United States again to the extent that Trump called El-Sisi a 'fantastic guy' (Lima, 2016).

Conceptual Framework

The main query in this study is the United States' hegemony in Egypt after the Egyptian revolution in 2011. Power Transition theory was used as the basis of analysis. The Power Transition theory is a theory through which one can seek how the transition of power has affected the relationship between nations (Flint & Taylor, 2007). In this theory, the effects of both domestic variables and global variables are sought. Thus, in the current study, both domestic variables and international variables were taken into account.

This theory is often used to justify power in international relations (Tammen, 2000). Therefore, this theory is among the theories which can best suit the purpose of this study. On the other hand, one of the most significant aspects which should be investigated in the Power Transition Theory is that of domestic variables. In the case of Egypt, the domestic variables played a considerable rule in the revolution. As Korany and El-Mahdi (2012) stated, The Egyptians sought their societal rights and independence in 2011; thus, domestic factors' role could not be ignored.

The power transition theory, as stated earlier, is a theory of international systems; however, it is also used to justify regional hierarchies (Lemke, 2002). In Lemke's (2002) view, every region has a dominant power and other small powers; thus, international hierarchies are first made of regional hierarchies. While this theory can be used to explain war trends among states in the last five centuries, its general statement is that if a nation achieves hegemonic power, it is challenged by great powers.

METHOD

This study has a qualitative design. Soft data was collected through 1) content analysis of previously published articles, and documents, and 2) conducting a semi-structured interview with 12 ethnic, academic, and administrative elites who were informed of the Egyptian revolution in 2011. Among the published documents

reviewed for this study, some articles provided influential insights. These articles include Sharp (2014, 2017), Wolkov (2015), Jadallah (2014), and Hamid (2012). To implement the Power Transition theory, the researcher categorized the extracted themes into domestic and global variables. This categorization was done for both the published documents and the interview results.

To analyze the data of both published documents and the semi-structured interviews, the researcher makes use of Hsieh and Shannon's (2005) qualitative content analysis approach. In Hsieh and Shannon tradition, the successful content analysis consists of 8 main stages, i.e.,

1) preparation of data, 2) defining the units or themes of analysis, 3) developing categories and coding scheme, 4) pre-testing the coding scheme on the sample, 5) coding all the text, 6) assessing the consistency of coding employed 7) drawing inferences based on coding or themes, and 8) presentation of results. Hsieh and Shannon's (2005) qualitative analytical approach has been used in over 13000 studies in various fields such as medicine, forestry, politics, law. Accordingly, the researcher followed the eight steps in the research to accomplish the purpose of the research, which is to answer the questions of the research. Figure 1 reveals the steps taken to analyze the data.

Step 1
- preparation of data
- refers to collection of data from scientific databases. It also entails collecting data from key informants through interviews and political speech

Step 2
- defining the units or themes of analysis
- the main themes for the analysis were extracted

Step 3
- developing categories and coding scheme.
- these themes were coded and main categories were extracted

Step 4
- (pre-testing the coding scheme on sample)
- The researcher studied the categories and omitted the irrelevant ones

Step 5
- coding all the text
- the data were coded based on tehir relationships

Step 6
- assessing the consistency of coding employed.
- consistency in views about the events

Step 7
- drawing inferences on the basis of coding or themes
- data were interpreted

Step 8
- Presentation of results.
- results were presented

Figure 1: Steps in qualitative content analysis

RESULTS AND DISCUSSION

Before discussing the findings, and to understand the extracted themes in this study in light of the Power Transition Theory, the themes are presented in Table 1. The themes are categorized into domestic themes and international themes in order to make them easier to understand.

The analysis of the documents revealed that several changes in Egyptian foreign policy after 2011 had an impact on the United States' supremacy. After the 2011 revolution in Egypt, the relationships between Israel and Egypt were not as close as they used to be in Mubarak's Era. Also, Egypt began relationships with the Islamic Republic of Iran, which has been the long term supporter of Palestine against Israel. These new relationships had a tremendous effect on the United States' hegemony in Egypt to the extent that Obama announced Egypt as "neither a friend nor an enemy". Needless to mention, President Bush announced the national threat as 'axes of Evil,' Iran was considered to be among the most critical regions in these axes.

It was mentioned that the first party held in Egypt after 2011 was the freedom and justice party (FJP), and Morsi was elected as the first President of Egypt after the revolution. FJP was in close association with the Muslim Brotherhood, and like the Muslim Brothers, they had an anti-western agenda. Previously the United States had

Table 1

Themes extracted from the respondents' responses

Themes			
Domestic		International	
Elites' views	Published documents	Elites' Views	Published Documents
Forgetting the revolution's objectives	Aborting FJP	Trumps' attempts to rebuild the relationships	The aid Policy
Benefitting from the inexperience of Egyptian politicians	Forming protests in Egypt	Continuation of aid from the United States to Egypt	Working on intimacy between the two countries by the United States
Moving away from the revolution agenda	Exposing Western culture to Egyptians	Economic and military aid to Egypt	
Egypt's decision to strengthen its relationship with the United States			

the most active role in Egypt among western countries. To deal with this problem and to maintain its hegemony in Egypt, the United States adopted two main policies. As some points, President Obama's administration attempted to change FJP's new president, as his anti-western ideology was threatening the United States' supremacy. Later, the United States adopted a tolerance policy and continued to spread its hegemony by giving Muslim Brotherhood large sums of donation.

It was also mentioned that the United States is an industrial country and attempted to move from agriculture to industry in the 19th century. This issue is significant as industry is a hegemonic asset and can be used to make other countries dependent. The industry helped the United States to increase its agricultural products excessively (tripled in the 1910s). The surplus of its grains and products could be exported to other countries. The United States well realized Egypt's need for wheat, and made Egypt dependent on American wheat. This issue was among the strategies the United States used even after 2011 to maintain its leadership in Egypt. It continued to donate wheat to Egypt so much that it was called 'the wheat weapon' by Dethier and Funk (1987).

Previously, the role of culture on spreading the United States' hegemonic power had been mentioned by many scholars (i.e., Doyle, 1989; Rosenberg, 1982). The United States sets its values in other regions of the world by spreading its culture. Culture provokes the need for new products and increases interest in types of art and sport which might not have even been known to people of a country. In turn, it opens the gate for musicians, artists, filmmakers, businessmen, and traders to sell their products in the target country. Over time, it turns into dependence and a regional tendency among the people, and they will be more interested in welcoming the people of the new culture.

As mentioned earlier, public consent is among the most significant domestic variables in Power Transition theory, as suggested by Modelski (1987). The United States has always made extensive use of Western culture to win public consent. Having introduced itself as a civilized country (Jadallah, 2014), which is detached from the uncivilized world, the United States has won the consent of many people in Egypt. Thus, even after the 2011 revolution in Egypt and the sudden act of Morsi's government in closing businesses related to Mubarak's family and the Western world, many Egyptians wish to continue buying Western products. Many musical and film festivals, along with many Western sports events, are being held in Egypt. This is another approach adopted by the United States to suppress the effect of new developments in Egypt on its hegemony.

The United States-Egyptian relationship did not significantly change between January 2011 and December 2014. Attempts made to leverage the United States' assistance had mixed results in influencing Egyptian domestic politics. Even though the relationship encountered rough points, it

always returned to normal, as each side, especially the United States, had too much at stake in the relationship. As a result, Egypt increased security cooperation with Israel and began to pay closer attention to fighting terrorism. However, the United States was more ambitious and sought to bring about domestic political reform. These efforts failed, as they were against various Egyptian governments' interests. The United States was forced to backtrack in order to preserve the greater relationship.

CONCLUSION

It is concluded that the objectives of the Egyptian revolution in 2011 were not fully met. The reasons include forgetting the revolution's objectives, aborting FJP, Trumps' attempts to rebuild the relationships, the aid Policy, benefitting from the inexperience of Egyptian politicians, the continuation of aid from the United States to Egypt, working on intimacy between the two countries by the United States, moving away from the revolution agenda, exposing the Western culture to Egyptians, economic and military aid to Egypt, and Egypt's decision to strengthen its relationship with the United States.

ACKNOWLEDGEMENT

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Journal article with 3 or more authors (*Pertanika*'s format)	*For all in-text references, list only the first 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) …	Erlo, 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

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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 a 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/

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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

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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 .....

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