

Workplace Skills and Teacher Competency from Culinary Arts Students' Perspectives

Hanis Mohamed¹, Mohd Hazwan Mohd Puad^{2*}, Abdullah Mat Rashid² and Rahimah Jamaluddin²

¹Ministry of Education Malaysia, 62604 Putrajaya, Malaysia

²Faculty of Educational Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Malaysia

ABSTRACT

Workplace skills are essential skills needed by graduates today to fulfill the demands of employers. Employers in the hospitality industry are looking for well-prepared Culinary Arts graduates that possess adequate training and are equipped with workplace skills to fill up positions in the job market. Apart from skills, teacher competency impacts the acquisition of knowledge and workplace skills among Culinary Arts students and contributes to the issue of unemployment. This study aims to differentiate workplace skills and teacher competency based on gender, socio-economic status, as well as academic and vocational achievements of Culinary Arts students. Furthermore, the relationship between workplace skills and teacher competency is assessed. This correlational study was conducted at Malaysian vocational colleges offering 2-year Culinary Arts programs involving 198 final year students. A 5-point Likert-scale questionnaire was used for data collection. The findings demonstrated that the students' workplace skills and perception of teacher competency were at a moderate level. No significant differences were noted based on gender, socioeconomic status, as well as academic and vocational achievements. Teacher competency and workplace skills were correlated moderately and positively. This study provides a basis and serves as a reference to the Technical and Vocational Education and Training practitioners to design a curriculum for vocational college students in improving the acquisition of students' workplace skills.

Teachers are recommended to play an active role in efficiently integrating workplace skills in the learning process to enhance their competencies.

Keywords: Academic achievement, culinary arts, teacher competency, vocational achievement, vocational college, workplace skills

ARTICLE INFO

Article history:

Received: 30 May 2020

Accepted: 30 November 2020

Published: 26 March 2021

DOI: <https://doi.org/10.47836/pjssh.29.1.06>

E-mail addresses:

hanismohamed76@gmail.com (Hanis Mohamed),

hazwan@upm.edu.my (Mohd Hazwan Mohd Puad)

abmr@upm.edu.my (Abdullah Mat Rashid)

imah_upm@upm.edu.my (Rahimah Jamaluddin)

* Corresponding author

INTRODUCTION

Education and skills are an important combination that contributes to sustainable globalization and socioeconomic growth. In this digital age, the survival of workers depends greatly on the quality of their personal skills. By mastering a wide variety of skills, students can distinguish themselves in this era of competition, multiculturalism, and globalization. Skilled graduates are required to fill in the vacant jobs in the industry, either as semi-skilled workers or skilled workers. These workers are needed to improve lifestyles and better social unity. To be hired for work, graduates should be prepared with the required workplace skills, not just in academic and technical knowledge (Hanafi, 2015; Harreveld, 2010). This idea is shared by the field of Technical and Vocational Education and Training.

Technical and Vocational Education and Training (TVET) plays a role in providing education and skills training that meet the demands of the industry and workplace. TVET aims to equip every individual with the appropriate skills for the work field and to fulfill employers' demands. United Nations Educational, Scientific, and Cultural Organization (UNESCO) has defined TVET as technical and vocational education besides general education that involves the subject of science, technology and mastering practical skills, attitude, understanding, and knowledge in a variety of jobs in the economy sector (UNESCO, 2020). TVET is responsible for processing and producing professional labor as well as acting as a milestone to develop a country

(Ahmad et al., 2015). TVET has also become an important contributor to produce highly-skilled, knowledgeable, innovative, and competitive employees. Thus, TVET institutions have been established to fulfill this responsibility and to produce a pool of high-quality TVET students for the country, who have mastered a specific set of skills for the industry. In accordance with the context of vocational knowledge, TVET is a work-based education and training process with a strong emphasis on industry practice and occupation (Chinedu & Mohamed, 2017; Heusdens et al., 2016).

According to Cole and Tibby (2013), workplace skills are the skills that can support students to build a variety of knowledge, skills, behavior, characteristics, and personal attitudes that meet work demands. Similarly, Yorke and Knight (2004) stated that employability skills shared the same terms with workplace skills, a set of achievements, skills, understandings, and personal attitudes that enabled graduates to obtain jobs, succeed in their careers, and contribute to the economy, society and themselves. Harreveld (2010) mentioned that workplace skills could be described as a skill set to be attained, maintained, and enhanced through learning both on- and off-the-job in formal and informal settings. In order to be competitive in the working environment, graduates need to remain alert about the significant workplace skills that are required to get hired to a position and maintain the job. Graduates who possess workplace skills are a country's important asset that can greatly impact employers and

help boost the economy to a higher level (Puad & Desa, 2020).

In Malaysia, vocational college is one of many positive ways to create human capital that is recognized by the world and to become a high-income country. The establishment of a vocational college aims to develop skilled graduates, meet the industry demand, teach entrepreneurial characteristics, encourage professionalism, support lifelong learning, and raise education to higher levels. A vocational college offers programs and courses that consider the industry demand while being more comprehensive and matching employers' expectations of hiring skilled and trained employees. For the past few years, with the acquisition of hands-on skills and knowledge in the fields, vocational college graduates have a high employability and marketability record.

A report by the Malaysian National Graduates Employability Blueprint (2012-2017) mentioned that some of the issues employers had experienced with graduates included poor communication skills, especially in English (55.8%), low personnel skills in terms of attitude and personality (37.4%), inexperience in solving problems (25.9%) and limited knowledge in the specific field (23.8%). The situation is quite similar in the field of hospitality. Alhelalat and Talal (2015) stated that graduates in hospitality lacked problem-solving skills, learning skills, technology skills, data collection and analysis skills, language proficiency and management skills, and leadership skills in order to meet industry standards. Consequently, while undergoing

industry training, on-job-training (OJT) hospitality students encountered weaknesses in the mastery of employability skills such as communication skills, personnel skills, work commitment, and teamwork skills (Kok & Quah, 2017). The low levels of workplace skills are also related to the instructor factor as the instructor does not clearly understand the requirements of workplace skills. Teachers feel unconfident and incompetent to integrate workplace skills into technical classes in vocational colleges (Hanafi, 2015; Techanamurthy et al., 2015). Therefore, these situations become gaps and warrant further research. Thus, there is a need to study the workplace skills of technical and vocational students as well as teacher competency in vocational colleges to observe the current situation.

Workplace Skills Required by the Industry

Workplace skills refer to the ability and efficiency of final semester students of arts culinary vocational college to apply the elements of workplace skills introduced by the Secretary's Commission on Achieving Necessary Skills (SCANS) before they go on-job-training and until they can meet employers' demand in the industry. Workplace skills are a non-technical efficiency owned by an individual that has newly started work in the industry. These skills have become a priority for employers in employee selection. Kane et al. (1990) stated that workplace skills consisted of two skills, namely basic skills and workers' competency that they needed to strengthen

their work performance, as stated in the SCANS Model. The model is orientated around skills and efficiency.

SCANS focuses on a critical aspect of schooling, also referred to as a living system. SCANS comprises of three foundations of skills: (1) basic skills, (2) thinking skills, and (3) personal qualities. This model has identified five competencies that are important for future work success; these are resources, interpersonal, information, systems, and technology. Resources include identifying, organizing, planning, and allocating, while interpersonal refers to working with others in a diverse team. Information includes interpreting and communicating, and systems include understanding complex interrelationships. Technology is identified as working with, selecting, and applying technologies. According to SCANS, all these elements of the workplace skills should not be used separately, but need to be combined and integrated to produce significant performance. SCANS argues that students can obtain huge benefits if they are exposed to working environments that need various workplace skills. Furthermore, SCANS identifies that parents, teachers, and employers can help strengthen the students' workplace skills to prepare students for the real workplace. For instance, both teacher and student spend time in class to discuss on how students gain necessary workplace skills effectively in the current changing workplace (Rashid, Bakar, Asimiran & Tieng, 2009).

Workplace skills contribute about 85% of job needs and job readiness, compared to 15% of academic and basic skills (Wats & Wats, 2009). The data shows that basic knowledge and academics do not guarantee graduates a job if they are not equipped with workplace skills (Prasad & Parasuraman, 2015; Sharma & Sharma, 2010). Workplace skills are also defined as one set of attributes, skills, and knowledge that are truly needed by all employees in the industry to ensure that they become effective employees (Wikle & Fagin, 2015). Meanwhile, Cobb et al. (2015) stated that workplace skills were personnel skills and interpersonal skills that were difficult to be seen and rated. Suleman (2016) stated that it was not easy to define workplace skills because there were no boundaries on skills sets reported by employers in the job advertisement. At the same time, Mustafa et al. (2008) stated that workplace skills did not have a single definition, but the definition varied according to text and context. According to Tyagi and Tomar (2013), workplace skills integrate the right proportion of these components into formidable abilities and eventually transform those skills into competencies. Workplace skills are also referred to with various names in other countries with different cultures, such as soft skills, generic skills, employability skills, non-technical skills, key competencies, common skills, core skills, and others. Table 1 shows the different terminology of workplace skills among different countries.

The Ministry of Education in Malaysia stated that workplace skills are important

Table 1
Terms of workplace skills based on the country

Country	Definition
United Kingdom	Core skills, key skills, common skills, employability skills
New Zealand	Essential skills
Australia	Key competencies, employability skills, generic skills
Canada	Workplace skills
United States	Basic skills, necessary skills, workplace know-how, generalizable skills, workplace skills, transferrable skills
Singapore	Critical enabling skills
France	Transferable skills
Germany	Key qualifications
Switzerland	Trans-disciplinary goals
Denmark	Process independent qualifications
Japan	Non-technical skills, key skills
Malaysia	Employability skills, generic skills, soft skills

Source: National Centre for Vocational Education Research (2004)

elements needed for employees to be flexible, innovative, and able to solve different tasks. Specific workplace skills, such as communication skills, teamwork skills, leadership skills, problem-solving skills, decision-making skills, analytic skills, computational skills, and cultural skills, are needed by employers; these are crucial for employees to succeed in their career journey. This requirement is emphasized in the Malaysia Education Blueprint (2013-2025) (Ministry of Education Malaysia, 2013). There are six key attributes needed by every student to be globally competitive, namely (1) leadership skills, (2) bilingual proficiency, (3) ethics and spirituality, (4) national identity, (5) knowledge, and (6) thinking skills. These skills are top-notch skills for students to be hired and secure a job in the marketplace.

Culpin and Scott (2012) divided workplace skills into hard skills that were

a combination of technical or content knowledge and skills, soft skills from the attitude or interpersonal behaviors, communication, and critical thinking. At the same time, Prasad and Parasuraman (2015) clarified that basic skills and workplace skills were needed for students mastering job-seeking skills. The skills included nine important factors in job-skills: personal behavior, training needs, academic skills, communication skills, soft skills, corporate skills, technical skills, job-seeking skills, and schooling. In addition, Oliver et al. (2014) categorized workplace skills needed by employers into five wide groups, which were (1) basic skills that consist of written communication and oral, problem-solving, and critical analysis; (2) ability to adapt to new situations and workplace, learn with autonomy; (3) expand new ideas and innovations, teamwork and interpersonal skills, information technology skills; (4)

work under pressure and stress management skills, flexible and adaptable, meet the deadlines, and also (5) specific technical skills and domains.

To obtain a job in a competitive market, graduates need to master workplace skills that consist of discipline and integrity, interpersonal skills, professionalism, creativity and innovation, lifelong learning, and applied knowledge skills in the courses joined (Puad, 2015; Tang, 2019a). Besides, it has become a priority for employers to hire graduates equipped with communication skills, interpersonal skills, the ability to work in a group and solve problems critically, and other unique skills (Ismail, 2012; Singh & Singh, 2008). Not only that, industries are prone to select well-trained and ready-made graduates for the workplace (Heusdens et al., 2016).

Driving Quality Teachers through Competency

There is plentiful literature demonstrating that instructors are essential to student success, including the acquisition of knowledge and skills. The instruction and interaction of teachers with students is the cornerstone around which effective schools are built (Arnold, 2011; Wenglinsky, 2002). In terms of skills development, a quality teacher plays a significant role in influencing students' workplace skills. To optimize students' workplace skills, factors such as teacher outreach, retention, preparation, professional development, evaluation, and teacher competency need to be focused on. Competency is a combination of the

knowledge, skills, understandings, and attitudes expressed and demonstrated in behaviors when performing a task (Topor et al., 2010). Competency is a characteristic that an individual possesses in connection with their work performance (Muslim & Yunos, 2014; K. M. Salleh et al., 2016). To optimize student learning, teachers must have expertise in a wide-ranging array of competencies in an enormously complex environment where hundreds of critical decisions are required each day (Hansen et al., 2007).

Typically, the finest teachers display enthusiasm and excitement for the subjects they teach. More than just generating excitement, they provide a road map for students to reach the goals set before them. The best teachers are proficient in all aspects of teaching such as instructional delivery, formative assessment, and classroom management. Equally significant, they are fluent in a multilayered set of social skills that students recognize and respond to, which leads to more excellent learning (Attakorn et al., 2014; Sofian, 2008). These skills must be defined as explicit behaviors that teachers can master for use in classrooms.

This study focuses on two variables, namely workplace skills and teacher competency. Both variables are based on theories and models related to the field of study. The theory of Bronfenbrenner Ecology forms the basis for the theoretical framework of this study. The theory has been proven significant in providing insight into

all the surrounding factors that contribute and play a role in individuals' growth and development, including workplace skills and knowledge. The ecological model of Bronfenbrenner's theory explains the differences in an individual's knowledge, development, and competencies through the support, guidance, and structure of the society in which they live. In the vocational college context, teacher competency plays a role in influencing students' workplace skills. The interactions between several overlapping factors affect a student significantly. This theory can also help develop government policies and programs that can benefit our society, such as vocational colleges.

Thus, this paper aims to investigate the perception of workplace skills and teacher competency among Culinary Arts students in Malaysian vocational colleges. The researchers conducted the study based on the following questions. (1) Are there differences in workplace skills and teacher competency based on gender, socio-economic status, the academic and vocational achievement of Culinary Arts students in Vocational Colleges? (2) What is the relationship between workplace skills and teacher competency?

METHOD

The researchers used quantitative research by using a correlational study design. In this research, the study population comprised the final year students of Malaysian Vocational College Diploma (DVM) in Culinary Arts programs in Malaysian vocational colleges.

The total population was 377 students of Culinary Arts from 16 vocational colleges in Peninsular Malaysia. The sample of the study included 198 students. Respondents were selected based on a proportional and stratified randomized sampling method. Vocational colleges in Peninsular Malaysia were categorized into central, northern, and east coast zones. Based on the zones, a proportional number of samples were assigned. Permission to conduct this research was obtained from the (1) Department of Education Planning and Research, Ministry of Education Malaysia, (2) the Department of Technical and Vocational Education and Training, Ministry of Education Malaysia, and (3) the Ethics Committee for Research Involving Human Subjects of Universiti Putra Malaysia.

The researchers used a self-rating questionnaire as the research instrument. The questionnaire was developed by adapting and adopting material from the previous studies related to technical and vocational training education. The questionnaire measures the level of students' workplace skills. The questionnaire was prepared in the Malay language after being verified by experts in the field. The authors utilized a self-rating strategy with a five-point Likert scale questionnaire to gather respondents' feedback on the perception of workplace skills and teacher competency. This part contains 40 items measuring the seven elements of workplace skills that need to be evaluated: a) basic skills, b) thinking skills, c) resources skills, d) informational

skills, e) interpersonal skills, f) system and technology skills, and g) personal qualities. The researchers used instruments adapted from the Department of Labor (1992), Kadir (2014), and Kazilan (2008). Data was collected from the respondents by using mail. To do so, the researchers contacted one culinary art instructor from each vocational college involved in this study and sent the questionnaires to them by mail. The instructors then randomly disseminated the questionnaires to students based on the list names registered for each culinary art class. All the randomly chosen respondents completed the instruments and returned them to their instructors. The instructors mailed the collected questionnaires back to the researchers.

RESULTS AND DISCUSSIONS

Demographics

Based on respondents' demographic information in Table 2, male respondents made up 33.3% of the total respondents, while the rest were female students. 28 students had a family monthly income under RM980, 86 students under RM3860, 69 students between RM3860 to RM8319, and 15 students above RM8319. The table also shows that 101 students received excellent results, 89 students received credit results and eight students received pass results for their academic CGPA. While for the vocational CGPA, 48 students obtained excellent competency, 123 students obtained good competency, and 27 students obtained competent results.

Table 2
Demography of respondents (N=198)

Demography	Frequency	Percentage (%)
Gender		
Male	66	33.3
Female	132	66.7
Family monthly income		
Under RM980.00	28	14.1
Under RM3860.00	86	43.4
Between RM3860- RM8319.00	69	34.8
RM8319.00 and above	15	7.6
Academic CGPA		
3.67 – 4.00 (Excellent)	101	51.0
2.67 – 3.33 (Credit)	89	45.0
2.00 – 2.33 (Pass)	8	4.0
0.00 – 1.67 (Fail)	-	-
Vocational CGPA		
4.00 (Excellent Competent)	48	24.2
3.67 (Good Competent)	123	62.2
2.67 – 3.33 (Competent)	27	13.6
0.00 – 2.33 (Not Competent)	-	-

Gender, Socioeconomic Status, and Student Achievement Factors

Based on the findings in Table 3, the researchers identified that the overall level of workplace skills for males was medium where $M = 4.26$ and $SD = 0.34$ while the level of workplace skills for females was also medium where $M = 4.19$ and $SD = 0.30$. The overall level of workplace skills for the students with family monthly income under RM980 was medium where $M = 4.31$ and $SD = 0.32$. The overall level of workplace skills for the students with family monthly income between RM980 to RM3890 was

also medium where $M = 4.21$, $SD = 0.32$. Next, the overall level of workplace skills for students with family monthly income between RM3860 to RM8319 was medium where $M = 4.18$ and $SD = 0.30$. The overall level of workplace skills for the students with family monthly income above RM8319 was medium where $M = 4.22$ and $SD = 0.32$.

The overall level of workplace skills for students with excellent academic CGPA results is medium ($M = 4.24$, $SD = 0.30$). In contrast, the overall level of workplace skills for students with credit results for academic CGPA was medium where $M = 4.19$ and SD

Table 3
Workplace skills of respondents ($N=198$)

Demography	Mean of Workplace Skills						
	Basic	Think- ing	Resources	Informa- tional	Interper- sonal	System & Technology	Personal
Gender							
Male	4.29	4.23	4.20	4.21	4.23	4.29	4.32
Female	4.40	4.14	4.07	4.08	4.22	4.06	4.28
Family monthly income							
Under RM980	4.46	4.27	4.23	4.22	4.26	4.22	4.44
RM980 - RM3860	4.35	4.21	4.09	4.12	4.22	4.14	4.27
RM3860 - RM8319	4.34	4.10	4.06	4.07	4.24	4.12	4.27
RM8319 and above	4.34	4.14	4.26	4.20	4.14	4.05	4.33
Academic CGPA							
3.67 - 4.00 (Excellent)	4.40	4.20	4.09	4.14	4.26	4.17	4.30
2.67 - 3.33 (Credit)	4.34	4.12	4.11	4.11	4.19	4.09	4.30
2.00 - 2.33 (Pass)	4.15	4.41	4.42	4.06	4.20	4.22	4.13
0.00 - 1.67 (Fail)	-	-	-	-	-	-	-
Vocational CGPA							
4.00 (Excellent Competent)	4.42	4.15	4.04	4.14	4.28	4.13	4.34
3.67 (Good Competent)	4.38	4.20	4.15	4.14	4.22	4.13	4.29
2.67 - 3.33 (Competent)	4.20	4.11	4.08	4.03	4.16	4.16	4.23
0.00 - 2.33 (Not Competent)	-	-	-	-	-	-	-

= 0.32. The overall level of workplace skills for students with pass results for academic CGPA was medium (M = 4.23, SD = 0.40). The overall level of workplace skills for students with excellent competent results for academic CGPA was medium (M = 4.23, SD = 0.32). In contrast, the overall level of workplace skills for students with good competent results for vocational CGPA was medium (M = 4.22, SD = 0.031). The overall level of workplace skills for students with the competent results for vocational CGPA was medium (M = 4.15, SD = 0.35).

Table 4 shows the overall level of teacher competency based on gender. The male respondents' competency was medium where M = 4.26 and SD = 0.43. While the overall level of teacher competency based

on gender, females was also medium (M = 4.14, SD = 0.42). The overall level of teacher competency based on the students' family monthly income of under RM980 was medium (M = 4.20, SD = 0.44). The overall level of teacher competency based on the students' family monthly income of between RM980 and RM3860 was medium (M = 4.23, SD = 0.42). The overall level of teacher competency based on the students' family monthly income of between RM3860 and RM8319 was medium (M = 4.11, SD = 0.45). Finally, the overall level of teacher competency based on the students' family monthly income of above RM8319 was medium where M = 4.17 and SD = 0.39.

The overall level of teacher competency for students with excellent academic CGPA

Table 4
Teacher competency of respondents (N=198)

Demography	Mean	Standard Deviation
Gender		
Male	4.26	0.43
Female	4.14	0.42
Family monthly income		
Under RM980	4.20	0.44
RM980 - RM3860	4.23	0.42
RM3860 - RM8319	4.11	0.45
RM8319 and above	4.17	0.39
Academic CGPA		
3.67 - 4.00 (Excellent)	4.14	0.42
2.67 - 3.33 (Credit)	4.22	0.42
2.00 - 2.33 (Pass)	4.26	0.61
0.00 - 1.67 (Fail)	-	-
Vocational CGPA		
4.00 (Excellent Competent)	4.14	0.50
3.67 (Good Competent)	4.18	0.40
2.67 - 3.33 (Competent)	4.22	0.44
0.00 - 2.33 (Not Competent)	-	-

results was medium ($M = 4.14$, $SD = 0.42$). Whereas, the overall level of teacher competency for students with credit results for academic CGPA was medium where $M = 4.22$ and $SD = 0.42$. Next, the overall level of teacher competency for students with pass results for academic CGPA was medium where $M = 4.26$ and $SD = 0.61$. The teacher competency level for students with excellent and competent results for vocational CGPA was medium ($M = 4.14$, $SD = 0.50$), while the overall level of teacher competency for students with good competent vocational CGPA results was medium where $M = 4.18$ and $SD = 0.40$. Additionally, the overall level of teacher competency for students with competent vocational CGPA results was medium where $M = 4.22$ and $SD = 0.44$.

Based on Table 5, the findings show that there were no significant differences in workplace skill levels based on gender differences according to each component of basic skills, thinking skills, resources skills, informational skills, interpersonal, system,

and technology skills, and personal skills as the p-value was under 0.05 where $p = .60$, $p = .56$, $p = .06$, $p = .09$, $p = .16$, $p = .09$ and $p = .74$, respectively. Furthermore, the results show that there was no significant differences in the workplace skill levels based on socio-economic status according to each component of basic skills, thinking skills, resources skills, informational skills, interpersonal, system and technology skills, and personal skills as the p value was under .05 where $p = .69$, $p = .20$, $p = .017$, $p = .51$, $p = .81$, $p = .60$ and $p = .14$, respectively.

There were no significant differences in the workplace skill levels based on the students' academic CGPA according to each component such as basic skills, thinking skills, resources skills, informational skills, interpersonal skills, system and technology skills, and personal skills as the p value was under .05 where $p = .24$, $p = .08$, $p = .12$, $p = .82$, $p = .53$, $p = .36$ and $p = .46$, respectively. Additionally, the results show that there were no significant differences in the workplace

Table 5
Analysis of workplace skills differences according to demographic group (N=198)

Components of Workplace Skills	Differences			
	Gender	Socio-Economic Status	CGPA Academic	CGPA Vocational
	t, p-value	F, p-value	F, p-value	F, p-value
Basic skills	-1.66, .60	0.47, .69	1.42, .24	2.23, .11
Thinking skills	1.47, .56	1.55, .20	2.46, .08	0.57, .56
Resources skills	1.93, .06	1.65, .17	2.08, .12	1.17, .31
Informational skills	1.80, .09	0.76, .51	0.19, .82	0.61, .54
Interpersonal	0.08, .16	0.32, .81	0.62, .53	0.87, .41
System and Technology skills	3.59, .09	0.61, .60	1.02, .36	0.04, .95
Personal	0.72, .74	1.80, .14	0.78, .46	0.77, .46

Note. *Significant at confidence level .05

skill levels based on the students' vocational CGPA according to each component such as basic skills, thinking skills, resources skills, informational skills, interpersonal skills, system and technology skills, and personal skills as the p value was under .05 where $p = .11$, $p = .56$, $p = .31$, $p = .54$, $p = .41$, $p = .95$ and $p = .46$, respectively.

Based on the teacher competency level analysis for gender differences as shown in Table 6, the researchers concluded that there was no significant gender level difference in the p -value = .168 where it was under .05. Not only that, the researchers concluded that there were no significant differences in socioeconomic status levels as the p -value = .352 was under .05. Next, there were no significant differences in students' academic CGPA levels where the p -value was $p = .396$, under .05. Lastly, there were also no significant differences in students' vocational CGPA levels where the p -value was $p = .731$ under .05.

Relationship between Teacher Competency and Workplace Skills

Based on Table 7, the findings show that the significant relationship between workplace skills and teacher competency was moderate and positive ($r = .512$, $p < .05$). Both workplace skills and teacher competency tended to increase together with the upward slope. However, the relationship does not guarantee growth or benefit. It just denotes that both variables move together in the same way.

Workplace skills refer to the combination of knowledge, skills, and efficiency that are owned by employees in order to qualify themselves, obtain a job, and maintain the position. Employers emphasize workplace skills as one of the prerequisites to employ workers in their organization. Workplace skills are not technical skills and are not academic, but involve a few skill aspects such as basic skills, thinking skills, interpersonal skills, resource skills, informational skills, system and technology skills, and personal skills.

Table 6
Analysis of teacher competency differences according to demographic group (N=198)

	Differences			
	Gender	Socio-Economic Status	CGPA Academic	CGPA Vocational
	t, p-value	F, p-value	F, p-value	F, p-value
Teacher competency	1.94, .16	1.09, .35	0.93, .39	0.31, .73

Note: *Significant at confidence level .05

Table 7
Correlation between workplace skills and teacher competency (N=198)

	r	p-value	Interpretation
Workplace Skills - Teacher Competency	.51	.001	Moderate and positive relationship

Note: *Significant at confidence level 0.05

Based on the findings, the researchers found out that the overall level of workplace skills for males is medium where $M = 4.26$ and $SD = 0.34$ while the level of workplace skills for females was also medium where $M = 4.19$ and $SD = 0.30$. The overall level of workplace skills for students with family monthly income under RM980 was medium where $M = 4.31$ and $SD = 0.32$. Similarly, the overall level of workplace skills for students with family monthly income between RM980 to RM3890 was medium where $M = 4.21$ and $SD = 0.32$. The overall level of workplace skills for students with family monthly income between RM3860 to RM8319 was also medium ($M = 4.18$, $SD = 0.30$). Additionally, the overall level of workplace skills for the students with family monthly income above RM8319 was medium where $M = 4.22$ and $SD = 0.32$.

The overall level of workplace skills for students with excellent academic CGPA was medium ($M = 4.24$, $SD = 0.30$). Not only that, the overall level of workplace skills for students with credit results for academic CGPA was medium where $M = 4.19$ and $SD = 0.32$. The overall level of workplace skills for students with pass results for academic CGPA was medium ($M = 4.23$, $SD = 0.40$). The overall level of workplace skills for students with excellent competent results for vocational CGPA was medium ($M = 4.23$, $SD = 0.32$). Furthermore, the overall level of workplace skills for students with good competent results for vocational CGPA was medium where $M = 4.22$ and $SD = 0.31$ and the overall level of workplace skills for students with competent vocational CGPA

results was medium where $M = 4.15$ and $SD = 0.35$.

The mean interpretation used in this research shows that the workplace skills of the final semester students of Culinary Arts Diploma of Vocational College in Peninsular Malaysia is at a medium level. This finding is equal to Adnan's (2005) findings of final semester students' workplace skills in hospitality courses in three polytechnics that were also found to be at a medium level. It is also the same as the study done by Rufai (2014) that mentioned that the workplace skills of mechanical engineering students in the technical college of North Nigeria were at the medium level. This situation shows that students of the vocational and technical stream at all age levels and educational institutions face problems in mastering and understanding the importance and the need for workplace skills in their lifestyle. Therefore, vocational college institutions need to identify various methods and strategies to expose their students to workplace skills before they get into on-job training and begin working in the industry. This exposure can be expected to provide students with an understanding of the need for mastering workplace skills as their job guarantee. Finding from Saari and Rashid (2013a) shows the type of company where student attached during on-job training can correctly estimate about 46 percent of students would get a job offer. Furthermore, there is a significant difference between workplace skills of student attached with multinational corporation company and other companies (Saari & Rashid, 2013b).

Next, research findings show that final semester students of Culinary Arts Diploma of Vocational College in Peninsular Malaysia had trust in and are confident with their workplace skills, especially in basic skills. Basic skills are important criteria that students need to possess in order to qualify for vocational college. Without basic skills such as reading, calculating, speaking, and listening, students might encounter problems with the education system in vocational colleges as 80% of vocational education emphasizes practical learning and only 20% is theory. They must obtain a competent level for the practical examination and pass the theory examination as one of the conditions to get a Malaysia Vocational Diploma.

Other than that, students are so confident that their workplace skills are already being exposed to implementing a final year project in the first year and second year. With the final year project, students are guided individually to create products and good project writing through reading reference materials up until the level where they need to present their research findings to the evaluator. Indirectly, this assists students to master basic skills and personal skills.

However, there are studies that have found different results compared to this research. The research done by Atan et al. (2015) on the readiness of workplace skills students of the final semester in Diploma of Hotel and Catering in Johor Bahru Politeknik showed a high level of workplace skills. Research by K. M. Salleh et al. (2016) also indicated that their

respondents, consisting of 322 technical graduates, had high workplace skill levels. The same was noted in research done by Kok and Quah (2017); their study findings identified that employers found the workplace skills students of Hospitality (Culinary and Hotel Operation) Community College to be of a high level while they were on the job training. These varying study findings could be due to a few factors, including different participant ages and the course studied. The respondents are vocational college students who complete their education in Malaysia Vocational Diploma as young as 20 years old. Other institutions such as community colleges, training skills institutes, polytechnics, and public universities have considered taking students with the Malaysian Certificate of Education (SPM). Students of the vocational college were chosen based on their PT3 results that are not in the excellent category. Apart from that, student exposure during their on-job-training is another factor that gave additional results. Students who had already done their on-job training had been directly exposed to workplace skills compared to the final semester students of DVM, who were yet to take part in their on-job training.

Overall, this research finding shows that final semester students of Culinary Arts Diploma of Vocational College in Peninsular Malaysia have acquired workplace skills before going for on-job training and working in the industry. The vocational college education system is work-based learning orientated, which includes working

competency, entrepreneurship, and soft skills. The Core Abilities (CA) module aims to help students acquire those skills; it is compulsory for students to get competent in this module before they are awarded the Malaysia Vocational Diploma. The research findings could also provide employers with a new perspective about assessing workplace skills in graduates from vocational colleges during their on-job training in the industry. In this relation to this, vocational education transformation shows that it can produce skilled graduates based on courses. These graduates have workplace skills as needed by the employer (Zakaria & Nair, 2019).

The relationship between lecturer competency and workplace skills has a substantial impact in contributing to the acquirement of workplace skills. Therefore, essential parties such as the Division of Technical and Vocational Education and Training (BPTV) as well as the vocational college management need to ensure that vocational college lecturers understand the importance of workplace skills to students. They need to encourage lecturers from the vocational stream and core stream to integrate workplace skills during the teaching and learning process, both in the classroom and outside. BPTV also needs to draft suitable training for the lecturers to be always prepared with the latest information about workplace skills in accordance with the needs of the industry (Zakaria et al., 2017).

Next, the lecturer needs to understand the need for workplace skills clearly and it is important to the students so that the

curriculum objective can be achieved (Tang, 2019b). Other than that, to increase the understanding of workplace skills among students, the lecturer needs to be smart in delivering content and knowledge by using various suitable strategies and interesting methods. Lecturers can be an inspiration to motivate and trigger students' interest (Buntat, 2004; A. Salleh, 2015). Encouraging a positive lecturer and student relationship creates a fun learning situation and increases students' intrapersonal skills (Sidik et al., 2018).

CONCLUSIONS

In conclusion, there is a growing demand for workplace skills among employers in the hospitality industry. In this study, the perceptions of workplace skills among graduates in culinary arts programs could not be differentiated by any demographic information taken into consideration. Interestingly, this finding differs from prior research in this field that has found skills to be related to demographic factors such as gender and family background. However, the skills could be triggered or influenced by other factors or variables that have not been considered in this study. The same pattern is identified in the other variable, teacher competency. The students' perceptions of teacher competency were not influenced by demographic information, gender, social-economic status, and student achievement.

Moreover, workplace skills and teacher competency shared the same tendency and moved a similar direction in terms of relationships. Both variables are moderately

related to each other. Teacher competency can be a crucial factor for administration to focus on in order to influence workplace skills, without considering student background and demography. These findings can be used for curriculum developers to plan and design the future curriculum for TVET programs, especially Culinary Arts programs in secondary and tertiary educational institutions. Gender and background should not be factors that differentiate students' performances and ability in mastering TVET skills. The quality and skills assurance division also need to align their focus on internal improvement and teacher competency, which are more crucial and manageable than other unstudied extraneous factors. The limitation of this study is that the study population was limited to only vocational college students in the culinary arts program. Therefore, the inference and generalization of findings are limited to this specific population.

ACKNOWLEDGMENT

This study was funded by the Ministry of Education Malaysia under the *Hadiah Latihan Persekutuan (HLP)* program. Special thanks to Dr. Mohd Hazwan Mohd Puad, Hanis Mohamed, and Dr. Abdullah Mat Rashid for their contribution to this study.

REFERENCES

- Adnan, N. A. (2005). *Profil kemahiran generik pelajar aliran teknikal di politeknik* [Profile of generic skills of technical stream students in polytechnics] (Master's thesis). Universiti Tun Hussein Onn Malaysia.
- Ahmad, M. J., Jalani, N. H., & Hasmori, A. A. (2015, September 14-15). *TVET di Malaysia: Cabaran dan harapan* [TVET in Malaysia: Challenges and Expectations]. In *Seminar Kebangsaan Majlis Dekan-Dekan Pendidikan Awam 2015*. Batu Pahat, Johor, Malaysia.
- Alhelalat, J. A., & Talal, A. (2015). Hospitality and non-hospitality graduate skills between education and industry. *Journal of Business Studies Quarterly*, 6(4), 46-55.
- Arnold, I. (2011). John Hattie: Visible learning: A synthesis of over 800 meta-analyses relating to achievement. *International Review of Education*, 57, 219. <https://doi.org/10.1007/s11159-011-9198-8>
- Attakorn, K., Tayut, T., Pisitthawat, K., & Kanokorn, S. (2014). Soft skills of new teachers in the secondary schools of Khon Kaen Secondary Educational Service Area 25, Thailand. *Procedia - Social and Behavioral Sciences*, 112, 1010-1013. <https://doi.org/10.1016/j.sbspro.2014.01.1262>
- Atan, N. A., Zakaria, M. A., & Sabidin, F. (2015). Tahap kesediaan kemahiran generik pelajar semester akhir Diploma Hotel dan Katering: Kajian kes [Level of generic skills readiness of final semester Diploma in Hotel and Catering students: A case study]. *Tourism and Hospitality Essentials Journal*, 5(2), 947-954. <https://doi.org/10.17509/thej.v5i2.2005.g1387>
- Buntat, Y. (2004). *Integrasi kemahiran "employability" dalam program pendidikan vokasional pertanian dan industri di Malaysia* [Integration of "employability" skills in agricultural and industrial vocational education programs in Malaysia] (Doctoral dissertation). Universiti Teknologi Malaysia.
- Chinedu, C. C., & Mohamed, W. A. W. (2017). A document analysis of the visibility of sustainability in TVE teacher education programme: The case of a Malaysian HEI. *Pertanika Journal of Social Sciences & Humanities*, 25(S), 201-216.

- Cobb, E. J., Meixelsperger, J., & Seitz, K. K. (2015). Beyond the classroom: Fostering soft skills in pre-professional LIS organizations. *Journal of Library Administration*, 55(2), 114-120. <https://doi.org/10.1080/01930826.2014.995550>
- Cole, D., & Tibby, M. (2013). *Defining and developing your approach to employability: A framework for higher education institutions*. The Higher Education Academy. https://www.heacademy.ac.uk/sites/default/files/resources/Employability_framework.pdf
- Culpin, V., & Scott, H. (2012). The effectiveness of a live case study approach: Increasing knowledge and understanding of “hard” versus “soft” skills in executive education. *Management Learning*, 43(5), 565-577. <https://doi.org/10.1177/1350507611431530>
- Department of Labor. (1992). *Learning a living: A blueprint for high performance. A SCANS report for America 2000*. Secretary's Commission on Achieving Necessary Skills. <https://eric.ed.gov/?q=Learning+a+Living%3a+A+Blueprint+for+High+Performance.+A+SCANS+Report+for+America+2000.&id=ED346348>
- Harreveld, R. (2010). Philipp Gonon, Katrin Kraus, Jürgen Oelkers & Stefanie Stolz (eds): Work, education and employability. *Vocations and Learning*, 3, 257-263. <https://doi.org/10.1007/s12186-010-9044-3>
- Heusdens, W. T., Bakker, A., Baartman, L. K. J., & De Bruijn, E. (2016). Contextualising vocational knowledge: A theoretical framework and illustrations from culinary education. *Vocations and Learning*, 9, 151-165. <https://doi.org/10.1007/s12186-015-9145-0>
- Hanafi, Z. (2015). Kesepadanan latihan terhadap pekerjaan dalam kalangan graduan kejuruteraan elektrik di kolej komuniti [Training match on job among electrical engineering graduates in community colleges] (Doctoral dissertation). Universiti Teknologi Malaysia.
- Hansen, D. T., Driscoll, M. E., & Arcilla, R. (Eds.) (2007). *A life in classrooms: Philip W. Jackson and the practice of education*. Teachers College Press.
- Ismail, M. H. (2012). Study on employability of graduates in Malaysia: A survey of employer perspectives. *Prosiding PERKEM VII*, 2(2012), 906-913.
- Kadir, Z. A. (2014). Faktor peramal kemahiran kebolehpasaran dalam kalangan pelajar di Kolej Komuniti dan Institut Kemahiran Belia Negara [Predictive factors of marketability skills among students at Community Colleges and the National Youth Skills Institute] (Master's thesis). Universiti Putra Malaysia.
- Kane, M., Berryman, S., Goslin, D., & Meltzer, A. (1990). *The secretary's commission on achieving necessary skills: Identifying and describing the skills required by work*. U.S. Department of Labor. <https://wdr.doleta.gov/SCANS/idsrw/idsrw.pdf>
- Kazilan, F. (2008). *Kemahiran employability dalam kalangan pelajar Institusi Kemahiran Mara di Malaysia* [Employability skills among students of Mara Skills Institution in Malaysia] (Master's thesis). Universiti Putra Malaysia.
- Kok, R. A., & Quah, W. B. (2017). Isu dan cabaran yang dihadapi oleh pelajar latihan industri (bidang hospitaliti) dalam penyediaan perkhidmatan pelanggan di restoran [Issues and challenges faced by industrial training students (hospitality) in service preparation customers at restaurant]. In *Ekspresi minda warga TVET* (pp.63-67). Kolej Komuniti Bandar Darulaman, Kementerian Pendidikan Tinggi.
- Ministry of Education Malaysia. (2013). *Malaysia education blueprint 2013-2025*. <https://www.moe.gov.my/menunedia/media-cetak/penerbitan/dasar/1207-malaysia-education-blueprint-2013-2025/file>

- Mustafa, M. Z. M., Nor, N. M., Salleh, K. M., Madar, A. R., Ibrahim, B., Sulaiman, N., & Razzaq, A. R. (2008, August 18). *Pelaksanaan modul soft skills di Politeknik Kementerian Pengajian Tinggi Malaysia* [Implementation of soft skills module at Polytechnic Ministry of Higher Education Malaysia] [Paper presentation]. Seminar Kebangsaan Kemahiran Insaniah dan Kesejahteraan Sosial (SKIKS) 2008, Melaka, Malaysia.
- Muslim, N., & Yunos, N. (2014). The direction of generic skills courses at National University of Malaysia (UKM) towards fulfilling Malaysian qualifications framework. *Asian Social Science*, 10(4), 195-202. <https://doi.org/10.5539/ass.v10n4p195>
- Oliver, D., Freeman, B., Young, C., Yu, S., & Verma, G. (2014). *Employer satisfaction survey. Report for the Department of Education*. Workplace Research Centre. <https://www.voced.edu.au/content/ngv%3A63946>
- Prasad, N. H., & Parasuraman, J. (2015). Acquisition of corporate employability skills: A study with reference to engineering graduates. *IUP Journal of Soft Skills*, 9(2), 22-43.
- Puad, M. H. M. (2015). *The role of employability skills training programs in the workforce of Malaysia* (Doctoral dissertation). Purdue University.
- Puad, M. H. M., & Desa, H. M. (2020). Dissecting perceptions of new graduates on work orientation and self-confidence in employability skills training program. *Universal Journal of Educational Research*, 8(1A), 70-75. <http://doi.org/10.13189/ujer.2020.081310>
- Rufai, A. (2014). *Conceptual model for technical and employability skills of Nigerian mechanical engineering trades programme* (Doctoral dissertation). Universiti Teknologi Malaysia.
- Salleh, A. (2015). *Keterlibatan, sokongan pembelajaran dan pencapaian pelajar berdasarkan gender peringkat persekolahan dan lokasi* [Engagement, learning support and student achievement based on gender at school level and location] (Doctoral dissertation). Universiti Kebangsaan Malaysia.
- Salleh, K. M., Subhi, N. I., Sulaiman, N., & Latif, A. A. B. (2016). Generic skills of technical undergraduates and industrial employers perceptions in Malaysia. *International Journal of Applied Business and Economic Research*, 14(14), 907-919. <http://dx.doi.org/10.5539/ass.v8n12p295>
- Sharma, G., & Sharma, P. (2010). Importance of soft skills development in 21st century curriculum. *International Journal of Education & Allied Sciences*, 2(2), 39-44. <http://doi.org/10.4236/jhrss.2016.42011>
- Sidik, I. F., Awang, M. M., & Ahmad, A. R. (2018). Sokongan persekitaran sosial di pelbagai jenis sekolah menengah dalam meningkatkan kemahiran insaniah pelajar [Social environmental support in various types of secondary schools in improving soft skills among students]. *Jurnal Pendidikan Malaysia*, 43(1), 67-76. <http://dx.doi.org/10.17576/JPEN-2018-43.03-08>
- Singh, G. K. G., & Singh, S. K. G. (2008). Malaysian graduates' employability skills. *UNITAR e-Journal*, 4(1), 14-44.
- Sofian, S. K. S. (2008). *Participation of vocational trainees in a supervised work experience and the acquisition of employability skills* (Doctoral dissertation). Universiti Putra Malaysia.
- Suleman, F. (2016). Employability skills of higher education graduates: Little consensus on a much-discussed subject. *Procedia - Social and Behavioral Sciences*, 228, 169-174. <https://doi.org/10.1016/j.sbspro.2016.07.025>
- Tang, K. N. (2019a). Beyond employability: Embedding soft skills in higher education. *The Turkish Online Journal of Educational Technology*, 18(2), 1-9.

- Tang, K. N. (2019b). Innovate higher education to enhance graduate employability. *Pertanika Journal of Social Sciences & Humanities*, 27(3), 1727-1738.
- Techanamurthy, U., Alias, N., & Dewitt, D. (2015). Problem-solving skills in TVET: Current practices among culinary arts instructors in community colleges in Malaysia. *Turkish Online Journal of Educational Technology*, 2015, 467-475.
- Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of Prevention & Intervention in the Community*, 38(3), 183-197. <http://doi.org/10.1080/10852352.2010.486297>
- Tyagi, K., & Tomar, A. (2013). Soft skills for successful career. *Pertanika Journal of Social Sciences & Humanities*, 21(1), 341-350.
- United Nations Educational, Scientific and Cultural Organization. (2020). *What is TVET*. UNEVOC. <https://unevoc.unesco.org/go.php?q=What+is+TVET>
- Wats, M., & Wats, R. K. (2009). Developing soft skills in students. *International Journal of Learning*, 15(12), 1-10. <http://doi.org/10.18848/1447-9494/CGP/v15i12/46032>
- Wikle, T. A., & Fagin, T. D. (2015). Hard and soft skills in preparing GIS professionals: Comparing perceptions of employers and educators. *Transactions in GIS*, 19(5), 641-652. <https://doi.org/10.1111/tgis.12126>
- Wenglinsky, H. (2002). How schools matter: The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives*, 10(12), 1-30. <https://doi.org/10.14507/epaa.v10n12.2002>
- Yorke, M., & Knight, P. T. (2004). *Learning & employability: Embedding employability into the curriculum*. The Higher Education Academy. http://www.employability.ed.ac.uk/documents/staff/heabriefings/esect-3-embedding_employability_into_curriculum.pdf
- Zakaria, N., Ma'arof, R., & Ibrahim, B. (2017). Relationship between employability skills towards career management among vocational students. *Pertanika Journal of Social Sciences & Humanities*, 25(S), 73-80.
- Zakaria, N., & Nair, R. (2019). Enhancing the employability of graduates through an industry-led initiative. *Pertanika Journal of Social Sciences & Humanities*, 25(S), 201-216.

