Original Research

Modelling Referencing Competency and Individual Performance

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Abstract

Competency is the ability to perform a task efficiently and effectively. One of the necessary skills students need is writing, understanding, and formatting the references section of their work. However, knowledge of this competency is non-existent or unknown in the field of Library and Information Science (LIS). Therefore, the purpose of this study is to investigate the relationship between referencing competencies and individual's performance in the context of undergraduate students. A quantitative method was adopted; 292 respondents were involved, selected from undergraduate students at one of the Malaysian local universities. Descriptive analysis was performed using Statistical Package for Social Sciences (SPSS) version 26. On the other hand, inferential analysis was performed using Partial Least Square Structural Equation Modelling using SmartPLS version 3.2.8. Findings show that knowledge, skills, and ability positively and significantly affect individual performance.

Introduction

The importance of managing an individual's skill and competencies are well discussed in the literature (Abrizah, 1998; Homer, 2001; Jabr, 2010; Khan, Masrek & Nadzar, 2015; Masrek,

Johare, Saad, Rahim & Masli, 2012; Malaysia, 2004; Vakola, Eric Soderquist & Prastacos, 2007). Several researchers emphasize that the capability of mastering a specific set of competencies may not only be beneficial to the individual but also the organization as well (Homer, 2001; Masrek et al., 2012). According to the FLICC Human Resources Working Group (2011), the importance of evaluating one's competencies can be viewed from two perspectives: individual and organization. From the individual perspective, understanding one's competency can help them to (1) establish on-going skills and education demands, (2) decide on career goals for advancement or career prospects, (3) establish performance and expectation, potential motivation for career advancement, and knowledge, skills, or ability training needed, and (4) developed a professional growth plan. At the organizational level, understanding one's competencies can help the library: (1) deciding on the strategic alignment and budget allocation, (2) human resources planning, (3) performance appraisal process, (4) staff development through professional training, (5) career planning and development, (6) deciding on potential successor or succession management planning, and (6) strategic alignment of individual competencies development in line with the organization's mission and goals.

Nowadays, most students' works are dominated by changing technologies. Therefore, the changing environment in higher institutions demands new competencies for undergraduate and postgraduate students. However, there seems lack of studies on referencing competency from the perspective of universities students. Previously, the issue of competencies has been studied by several researchers in the field of library and information management (Haji Abdullah, 1999; Ameen, 2009; Jabr, 2010; Khan et al., 2015; Masrek et al., 2012; Nonthacumjane, 2011; Osman, Goon & Hajrah Wan Aris, 1998; Sa'ari, Jali, Idrus, Mohamed & Adenan, 2014). However, few gaps were identified from these studies. First, most of these studies were only focused on the general competencies of the librarians. However, only a few studies focused on referencing competency among undergraduate students. Second, most of these previous studies also focus on the perspective of professional, para-professional, and teacher librarians. However, studies on competencies from the perspective of undergraduate students are still rare. Third, there is a lack of studies on the impact of mastering specific competencies, especially from individual performance. Lack of knowledge on referencing competency undermines educational institutions' significant investment (Matusiak, 2012; Chiong, Kiing, Ler, Lim & Wong, 2016; S Baharuddin & Mohamad Rosman, 2020).

Based on the issues discussed above, the objective of the study is to investigate the relationship between referencing competencies and individual's performance in the context of undergraduate students. The subsequent sections are organized as follows. First, the paper discusses a few related literatures to understand the underlying issues of competencies and its theory. Second, a research model was developed based on previous studies. Third, the methodology, findings, and discussion of the study were presented, and finally, a recommendation for future study was provided.

Literature Review

There are many different definitions of competency that have been found in the literature. Still, most of the definitions stated that a set of dimensions would determine the individual's job performance outcome. Competency can be defined as the ability to do well something worthwhile whereby it is crucial to appropriately implement the set of attributes such as knowledge, skills, values, and attitudes to ensure one's job performance (Butler, 1978; Kurz &

Bartram, 2002).

Competency in Library and Information Science (LIS)

This study considers that one of the necessary skills students need is writing, understanding, and formatting the references section of their work. This user's competencies in referencing can impact the individual's performance. To cope with the digital transformation, Library and Information Professionals must obtain the appropriate skills to ensure their duties can be done efficiently. They also are required to be competent in various ICT applications such as automation, bibliographic standards, ICT-based library services, web 2.0 skills, mobile information services, ILMS, citation, information retrieval, and so forth (Bajpai & Madhusudhan, 2019). There are five types of competency characteristics which are motives, traits, self-concept, knowledge, and skill, and these five characteristics can be categorized into two categories are first is threshold competencies that usually consists of knowledge and skills, and second is differentiating competencies which are referring to factors that distinguish superior from average performers (Spenser, 1993; Nagata, 2010). A study mentioned that threshold competency, knowledge and skills, are crucial in impacting an individual's performance (Nagata, 2010). The changes and trends in library and information science and higher education have huge implications on an individual's knowledge, skills, and abilities to succeed in their workplace (Saunders, 2020).

Competency Standard in Library and Information Science

Information professionals can refer to a few competency standards as a guideline to perform their job successfully. Among the standards that can be used are Federal Librarian Competencies, ALA's Core Competencies of Librarianship, and MLA's Competencies for Lifelong Learning and Professional Success

Federal Librarian Competencies

FLICC Human Resources Working Group (2011) had developed a Federal Librarians Competencies in 2011 to describe the federal librarians' knowledge, skills, and abilities needed to perform successfully. This set of competencies is expected to be used for federal librarians and those in other fields. Federal Librarians Competencies measures competencies from seven domains; Organization Knowledge, Library Leadership and Advocacy, Reference and Research, Collection Management, Content, Organization and Structure, Technology and Content Management, and Specialized Knowledge, Skills, and Abilities.

ALA's Core Competencies of Librarianship

American Library Association (ALA) Council in 2009 had approved ALA's Core Competencies of Librarianship. These core competencies had documented the specialized knowledge needed by graduates from library and information studies. There is eight basic knowledge that should be employed by ALA-accredited master's program in library and information studies which are:
1. Foundations of the Profession
2. Information Resources
3. Organization of Recorded Knowledge and Information

4. Technological Knowledge and Skills
5. Reference and User Services,
6. Research
7. Continuing Education and Lifelong Learning
8. Administration and Management

MLA's Competencies for Lifelong Learning and Professional Success

Medical Library Association (MLA) in 2007 had produced an MLA's Competencies for Lifelong Learning and Professional Success that especially meant for health science librarians to be a plan for professionals to succeed in their careers. Besides that, this document also contains information on the recommended actions that need to be taken by information professionals such as librarians in health sciences, MLA, library and information science's graduates, National Library of Medicine (NLM), individuals and professionals in organizations to enhance their professional development and lifelong learning. The professional competencies for health sciences librarians are focusing on: (1) know and understand the application of leadership, finance, communication, and management theory and techniques, (2) understand the principles and practices related to providing information services to meet users' needs, (3) can manage health information resources in a broad range of formats, (4) understand and use technology and systems to manage all forms of information, (5) understand curricular design and instruction and have the ability to teach ways to access, organize, and use information, and (6) understand scientific research methods and can critically examine and filter research literature from many related disciplines.

Human Capital Theory

Schultz (1961) defined human capital as 'knowledge, skills and abilities of the people employed in an organization. Becker (1993) had defined human capital similarly with Schultz's, but he added an extra dimension which is "health of individuals". In an organizational context, this theory proposes that investment in education and training will help the individual enhance their skill level and productivity, resulting in higher earnings (McCracken, McIvor, Treacy & Wall, 2017; Grant, 1996; Hatch & Dyer, 2004). This is significant with Becker's analysis where he claims that investments in education and training will improve productivity; however, he added that the most crucial thing that will contribute to this success is the type of training that determines either employee or the firm who will pay for it (Becker, 1964).

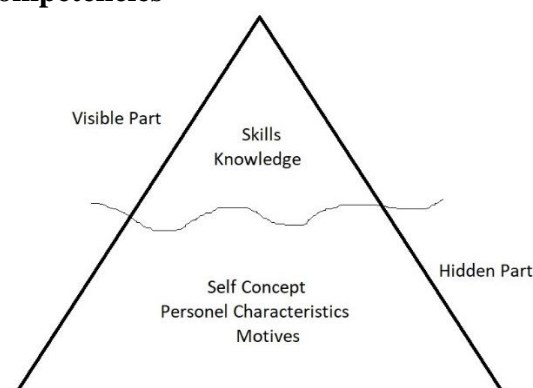**The Iceberg Model of Competencies**

Figure 1: The Iceberg Model of Competencies (Spencer & Spencer, 1993)

The iceberg model above showed that the five components had been divided into two parts: the visible part consisting of skills and knowledge. The second part is a hidden part that consists of self-concept, personal characteristics, and motives. All five components are vital to determine the organization's performance (Ibrahim & Hasnan, 2013). This statement is aligned with the findings by Spencer and Spencer (1993) where it stated that apart from the need of being a competent worker, it is crucial to know how this competency is related to the worker's performance.

Research Model

Competency can be defined as applying related knowledge, skills, and ability to successfully perform many tasks in a working environment. The competency model focuses on behaviors and includes four elements: knowledge, skills, attitudes, and attributes (Kang & Ritzhaupt, 2015). Competency often provides the basis for skills standards, which specify the level of knowledge, skills, and abilities needed as potential measurement criteria for assessing individual performance. There are three elements in referencing the competencies model (knowledge, skills, and ability) discussed in this study. The following figure 2 shows the proposed research model of the study.
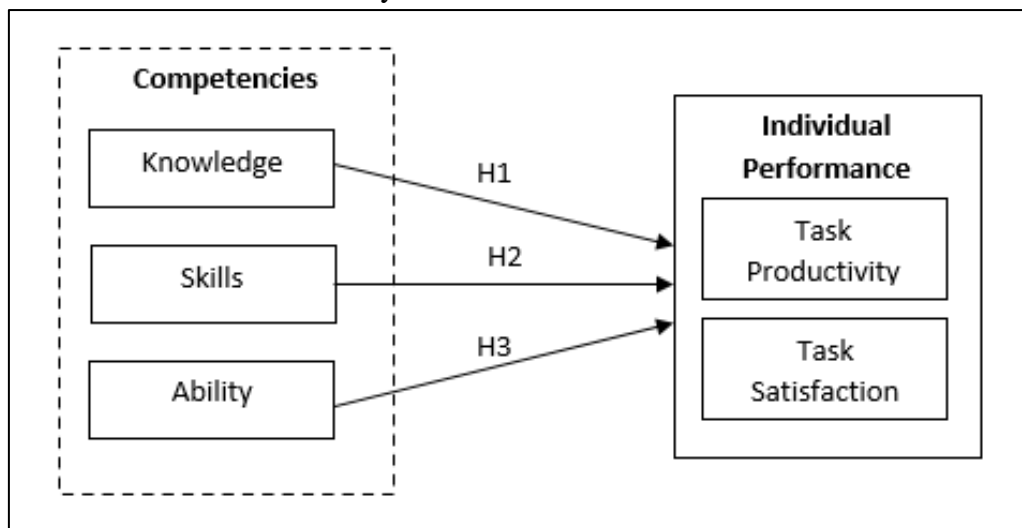

Figure 2: Research model

Knowledge

Knowledge is a person's values through study, observation, or experience, integrated into skills (Abel, 2008). Knowledge of referencing competencies includes knowing the subject that covers referencing and the user's standards. There are three (3) referencing standards that usually have been used, which are APA (American Psychological Association), MLA (Modern Language Association), and Chicago/ Turabian. Knowledge also covers everything required in education or training and can be classified into theoretical knowledge, knowledge on what exists, and procedural knowledge (Macris, Papadimitriou & Vassilacopoulos, 2008).

In the academic field, primarily when we focus on student performance, they need to have knowledge in creating references in completing their tasks and avoid plagiarizing others' work. Using the knowledge in creating references will make their difference from others, thus impacting their performance. Failure to cite other authors' writing is considered plagiarism,

which is a form of cheating (Lindahl & Grace, 2018). Moreover, in their study, it's stated that correct referencing is not always a matter of wrong or right. This is because it has different views on issues in the academic field, such as appropriate referencing, what is common knowledge, and self-plagiarism. Besides that, students mostly have used referencing software such as Endnote, Mendeley, and Zotero. Knowledge gaps in referencing could affect the quality of scientific writing. For instance, Chivers (2007) mentions that referencing could help students better appreciate the importance of creating citations and acknowledging others' works. All the study shows that competencies serve as the basic skill of standard that could specify the level of knowledge, skills, and abilities and act as a potential criterion to measure individual performance. Therefore, the following hypothesis is developed:

H1- *Knowledge of referencing has a significant and positive relationship with individual performance.*

Skills

Skills can be defined as utilizing knowledge to execute a task. Referencing skills can be gained through training, whether technical or manual training. Academic learning skills that include referencing skills can be best learned in the context where the student could develop their learning skills within the discipline or faculty they choose to study (Stagg, Kimmins & Pavlovski, 2013). Their study also mentions that most of the lecturers will assign marks to make sure their student uses the correct citation style in their assignments. Students can also be given a failing grade if they incorrectly cite others' work. Furthermore, to build up good writing practices and referencing styles among students, it is useful if educators or librarians could help them understand the research culture of tertiary study. The study showed that skills in referencing are critical in academic writing and have a significant and positive relationship with individual performance.

Perry (2010), in his study, stated that in tertiary education, referencing in research and other academic learning skills often not been taught clearly among students. Typically new students' especially first-year university students, came to the university from different backgrounds where they perceive that referencing others works as an issue of compliance. Fraser-Arnott (2017) has emphasized a relationship where skills, knowledge, and attributes are a foundation for the successful performance of the behavior.

In their study, Lindahl and Grace (2018) stated that lack of correct referencing skills has a connection with the issue of plagiarism. If students do not have referencing skills, it will lead them to cheat and plagiarise' others writing. Assessment tasks and marking should be linked to build referencing skills (especially in the first year) and ensure that students learn these skills in a discipline-related context (Jaschik, 2008). Skills in referencing can be gained through training done generally by the librarian and lecturers.

Francoise and Vidmantas (2011), in their study on competence and qualifications in Europe, stated that the model of education and training tends to produce different qualifications. Good referencing skills can be found within people who know how to summarize from the source article as a whole and can use their own words (Badenhorst, 2018). Therefore, the following hypothesis is developed:

H2- *Skills on referencing have a significant and positive relationship with individual performance.*

Ability

Ability is defined as the quality or capability to do something. Applying knowledge and skills on referencing is a capability that a student should have to produce excellent academic tasks. To Obiewa (2004), students with referencing knowledge and skills will be able to (1) determine the landscape and extent of information needed, (2) identify potential resources in terms of types and format, (3) access necessary information needs efficiently and effectively, (4) make a comparison, filter, and effective judgment on the resources from different sources, (5) analyze and synthesize key ideas from different resources to develop new concepts, ideas, or opinions, and (6) understand the underlying issues associated with the usage and ethical issues, especially in the aspect of economic, legal, and social issues.

Two groups of researchers, Mushtaq and Khan (2012), and Ali, Haider, Munir, Khan and Ahmed (2013) agree that student academic performance plays a crucial role in producing the best quality graduates who will be great leaders and workforce for the future and contribute to the nation's socio-economic development. Therefore, the measurement of students' academic performance has received close attention from researchers.

Students' academic achievements mean the extent to which students achieve their academic goals. Most of the researchers in previous studies have measured the academic performance by Grade Point Average (GPA) in a particular year or semester GPA of a student depends on many factors. The ability to reference, which is one of the information literacy skills, is beneficial in helping students produce more excellent and quality work to complete their tasks and assignments (Ahmad & Rahman, 2019).

For some new students pursuing college or university, their differences in referencing are based solely on fear (McGowan, 2005), and many are familiar with the basic concept of plagiarism. Some students bring their satisfying academic processes from their former school; however, this is not appropriate at higher institutions (Chanock, 2008). Students understand that they cannot copy words without reference but fail to understand why; the reason is unclear and often closes with an unfamiliar academic language (Stagg, Kimmins & Pavlovski, 2013). As such, academic institutions need to educate new students on referencing skills so that they are well versed in this skill which will undoubtedly assist them in completing the assignments in a more quality, ethical and structured way that contributes to an outstanding outcome.

According to Banik and Kumar (2019), there are five components and indicators of referencing under the information skills index to be assessed for students' performance. The components and indicators include identification, searching, evaluation, application, and acknowledgment. Referencing abilities are outlined under application and acknowledgment indicators. Application indicator involves students' ability to use the computer and the Internet, produce bibliographies or citation lists, and present the works to the lecturers. The acknowledgment indicator involves students' ability to understand the concepts of fair use, copyright, and plagiarism. The finding of a study conducted by Banik and Kumar (2019) demonstrates that the ability to engage students in their information literacy skills is enhanced by providing them with proper quality education, making them proficient in computers, the Internet, and fair use acknowledgment of information. Therefore, students' academic performance can be significantly enhanced and contribute to their performance leading to national development.

Being a lifelong learner is one of the essential factors that make us successful in the

information community. On the other hand, the way to become a lifelong learner is by having sufficient information skills, including referencing skills used to verify the authenticity of the sources for their subject matter. It also shows how deeply students have understood the topic very well and contribute to excellent individual performance and achieve job satisfaction. As there is a significant positive relationship between referencing skills and students' academic performance, we should provide them with relative skills to improve their academic performance. Therefore, the following hypothesis is developed:

H3- *Ability on referencing has a significant and positive relationship with individual performance.*

Methodology

The following figure 3 shows the summary of the research methodology. A thorough literature review was conducted on competency and reported in section two of this paper. Then, a research framework was developed based on the literature review. Three variables underlying the concept of referencing competency, knowledge, skills, and ability were selected to predict individual performance. A higher-order construct was proposed for the individual performance; it consists of task productivity and task satisfaction. Data collection started with instrument development. The items were adopted from a similar previous study within the library and information science, psychology, and information system. The studies are Stevens and Campion (1994), Kiran and Diljit (2012), Austin (2012), Abu-Dalbouh (2013), Surya (2014), Masrek and Gaskin (2016), and Omar, Zahar and Rashid (2020). The instrument was pre-tested before being sent for an expert's review. Three experts in information management were involved; these experts have more than 10 years of experience in the relevant fields, have produced a paper on similar topics, and have experience in management. Items were modified based on expert's recommendations before a pilot study involving 50 participants. Then, the actual data collection was conducted for a week in February 2020, involving a total of 292 respondents. The respondents were selected based on convenience sampling and enrolled for either diploma, degree, or other kinds of certificate within Malaysian universities. The selection of respondents is based on the several factors (1) gaps identified from previous studies of Khan et al. (2015), Masrek et al. (2012), Chiong et al. (2016), and Matusiak (2012), (2) majority of undergraduate students needs to have good citation skills to complete their information tasks and (3) researcher easy access to sampling frame. Then, the data were clean and coded before being interpreted based on descriptive and inferential analysis. Statistical Package for Social Sciences (SPSS) version 26 was used for descriptive analysis, while SmartPLS was used for inferential analysis using Partial Least Square Structural Equation Modeling (PLS-SEM). The subsequent section will discuss the findings of the study.
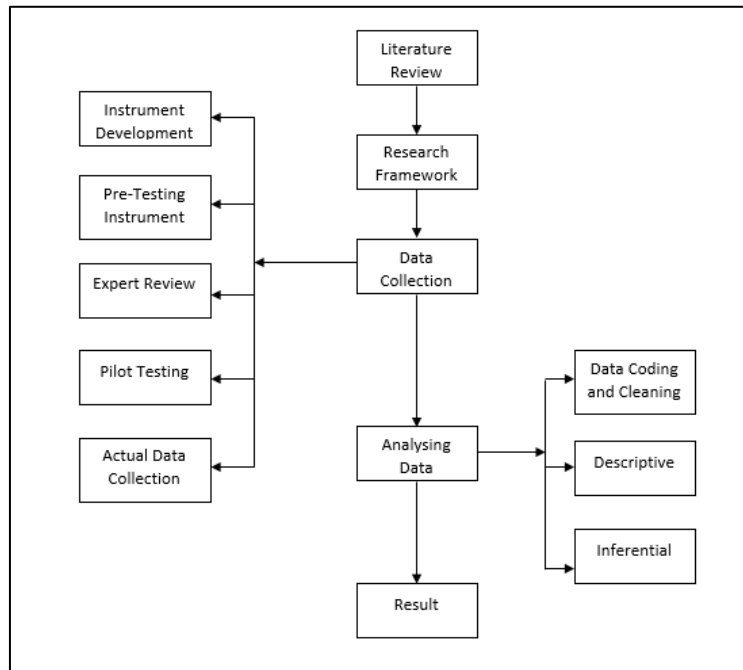
Figure 3: Summary of the Research Methodology

Findings

Table 1 shows the demographic analysis of respondents. The result shows that more than half of the respondents (n=216 or 74.0%) were female, while male respondents were accounted at 26.0% or n=76. In relation to respondent's age, the majority of respondent were relatively between 20-30 years (n=203 or 69.5%), followed by below 20 (n=86 or 29.5%), and 31-50 (n=3 or 1.0%). On the other hand, the majority of student were from Kelantan (n=119 or 40.8%), followed by Perak (n=30 or 10.3%), Kedah (n=29 or 9.9%), Terengganu (n=27 or 9.2%), Selangor (n=24 or 8.2%), Pahang (n=20 or 6.8%), Pulau Pinang (n=14 or 4.8%), Johor (n=9 or 3.1%), Negeri Sembilan (n=8 or 2.7%), Kuala Lumpur (n=7 or 2.4%), Perlis (n=3 or 1.0%), while Melaka and Sarawak with n=1 or 0.3%.Concerning the respondent's faculty, more than half (n=119 or 40.8%) of the sample are from the Faculty of Information Management, followed by Faculty of Business and Management (n=74 or 25.3%), Faculty of Art and Design (n=6 or 2.1%), Faculty of Administrative Science and Policy Studies (n=3 or 1.0%), and Faculty of Accountancy (n=2 or 0.7%). On the other hand, most of the students (n=193 or 66.1%) enrol for diploma, followed by degree (n=94 or 32.2%), and others (n=5 or 1.7%).

Table 1
Descriptive Analysis of Demographic Profiles

Item		Frequency	%
Gender	Male	76	26.0
	Female	216	74.0
Age	Below 20	86	29.5
	20 - 30	203	69.5
	31 - 50	3	1.0
State	Kelantan	119	40.8

Item		Frequency	%
	Terengganu	27	9.2
	Pahang	20	6.8
	Kedah	29	9.9
	Perlis	3	1.0
	Pulau Pinang	14	4.8
	Kuala Lumpur	7	2.4
	Selangor	24	8.2
	Negeri Sembilan	8	2.7
	Melaka	1	0.3
	Johor	9	3.1
	Sarawak	1	0.3
	Perak	30	10.3
Faculty	Faculty of Information Management	207	70.9
	Faculty of Administrative Science and Policy Studies	3	1.0
	Faculty of Business and Management	74	25.3
	Faculty of Accountancy	2	0.7
	Faculty of Art and Design	6	2.1
Level of Study	Diploma	193	66.1
	Degree	94	32.2
	Others	5	1.7

The following Figure 4 shows the initial measurement model of the study. A total of one run was performed during the initial measurement model analysis. Table 2 shows the summary of the measurement model analysis. Hair, Sarstedt, Hopkins and Kuppelwieser (2014) suggestions were followed to achieve convergence validity. Hair et al. (2014) suggests that the factor loading of all constructs should be ≥ 0.5, the average variance extracted (AVE) ≥ 0.5, and composite reliability ≥ 0.7. The initial model assessment is shown in Figure 1 and Table 2 indicted that all thresholds have been fulfilled, indicating that the convergence validity of the study has been ascertained. The factor loading for knowledge between 0.822 to 0.904 (AVE=0.771, CR=0.944), skills between 0.780 to 0.920 (AVE=0.755, CR=0.925), ability between 0.879 to 0.936 (AVE=0.822, CR=0.948, task productivity between 0.914 to 0.946 (AVE=0.876, CR=0.972), and task satisfaction between 0.928 to 0.936 (AVE=0.870, CR=0.964).
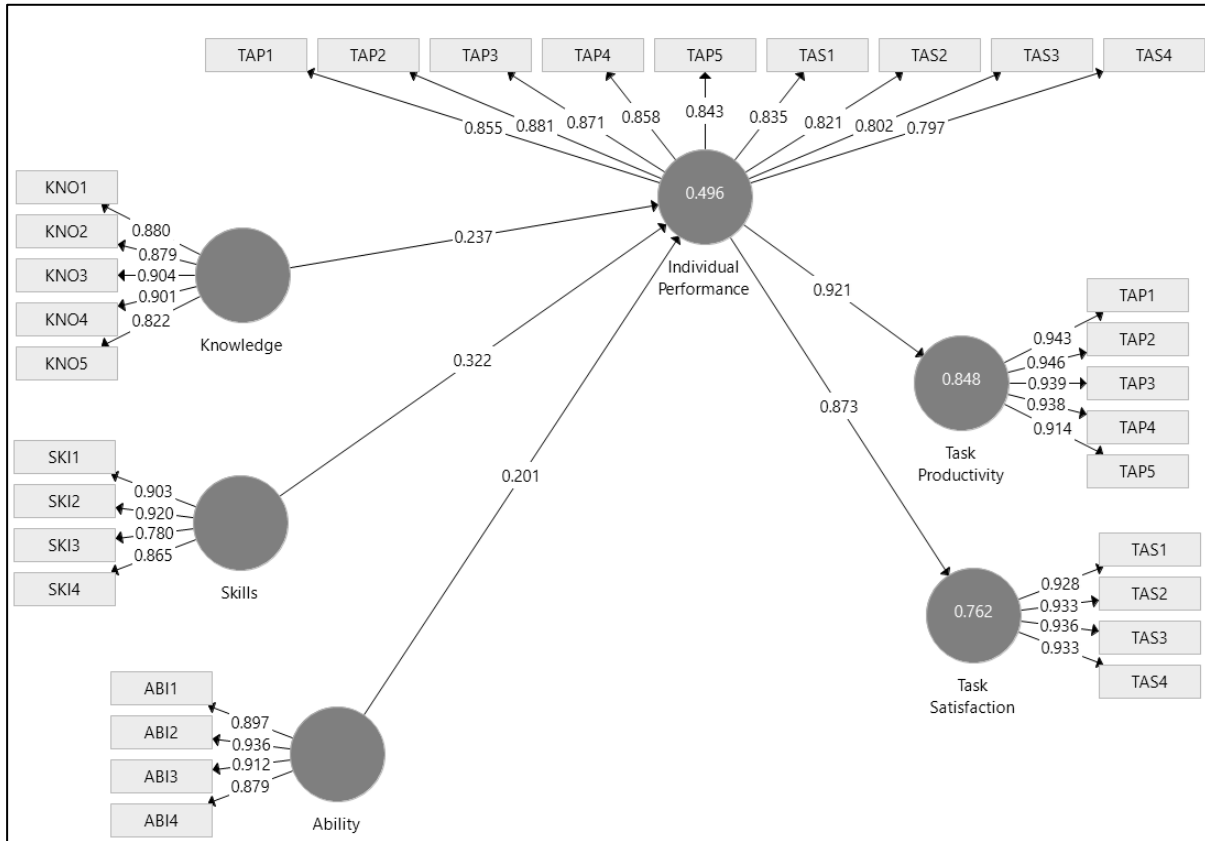
Figure 4: Initial Measurement Model

Table 2
Final Assessment of Convergence Validity

Construct	Indicators	Factor loading	Average Variance Extract (AVE)	Cronbach's alpha	Composite Reliability
Knowledge (KNO)	KNO1	0.880	0.771	0.925	0.944
	KNO2	0.879			
	KNO3	0.904			
	KNO4	0.901			
	KNO5	0.822			
Skills (SKI)	SKI1	0.903	0.755	0.890	0.925
	SKI2	0.920			
	SKI3	0.780			
	SKI4	0.865			
Ability (ABI)	ABI1	0.897	0.822	0.927	0.948
	ABI2	0.936			
	ABI3	0.912			
	ABI4	0.879			
Individual Performance (INP)			0.707	0.948	0.956

Construct	Indicators	Factor loading	Average Variance Extract (AVE)	Cronbach's alpha	Composite Reliability
Task Productivity (TAP)	TAP1	0.855	0.876	0.965	0.972
	TAP2	0.881			
	TAP3	0.871			
	TAP4	0.858			
	TAP5	0.843			
Task Satisfaction (TAS)	TAS1	0.835	0.870	0.950	0.964
	TAS2	0.821			
	TAS3	0.802			
	TAS4	0.797			

Next, the data is assessed for discriminant validity. First, the Fornell-Larcker Criterion was conducted. The following table 3 shows the result of the Fornell-Larcker Criterion. The result shows that the AVE's square root is bigger than its previous AVE value. Therefore, discriminant validity has been ascertained for the study.

Table 3
Result of Fornell-Larcker Criterion

	ABI	INP	KNO	SKI
ABI	0.906			
INP	0.650	0.841		
KNO	0.798	0.640	0.878	
SKI	0.808	0.663	0.753	0.869

Even though discriminant validity has been ascertained for the study, however, Henseler, Ringle, & Sarstedt (2015), and Ramayah, Cheah, Chuah, Ting, and Memon (2018) suggest that further analysis should be conducted using Heterotrait-Monotrait Ratio (HTMT) and bias-corrected confidence intervals. Table 4 shows the result of HTMT for the study. Based on the table, there is no discriminant validity issue because there is no value above 0.9, indicating a sufficient result to confirm discriminant validity.

Table 4
Result of Heterotrait-Monotrait Ratio (HTMT)

	ABI	INP	KNO	SKI
ABI				
INP	0.693			
KNO	0.863	0.680		
SKI	0.888	0.721	0.831	

The next step is to assess the bias-corrected confidence intervals. The following table 5 shows the result of the bootstrapping technique. Table 5 shows no value of 1 straddle between 5.00% and 95.00% confidence interval, therefore indicating no issues with the discriminant validity.

Table 5
Bias-Corrected Confidence Intervals

Constructs	Original Sample (O)	Sample Mean (M)	Bias	5.00%	95.00%
KNO -> INP	0.201	0.201	0.000	0.03	0.382
SKI -> INP	0.237	0.233	-0.004	0.126	0.379
ABI -> INP	0.322	0.326	0.004	0.137	0.488

Table 6 shows the result of the structural model analysis. The findings show that all hypotheses are accepted; KNO → INP, SKI → INP, and ABI → INP. KNO has a significant and positive relationship with individual performance (H1: Supported, t=3.219, p=0.001). Similarly, SKI also has a significant and positive relationship with individual performance (H2: Supported, t=3.089, p=0.002).

Table 6
Relationship between Variables (Direct Effect)

| Hypothesis	Relationship	Coefficient	Std Deviation	t-value	p-values	Decision
H1	KNO -> INP	0.237	0.074	3.219**	0.001**	Supported
H2	SKI -> INP	0.322	0.104	3.089**	0.002**	Supported
H3	ABI -> INP	0.201	0.106	1.903*	0.058*	Supported
Note: *t > 1.645, p-value > 0.05, ** t > 2.58, p-value < 0.01						
ABI also have a significant and positive relationship with individual performance (H3: Supported, t=1.903, p=0.058). The following figure 5 shows the final structural model of the study.						
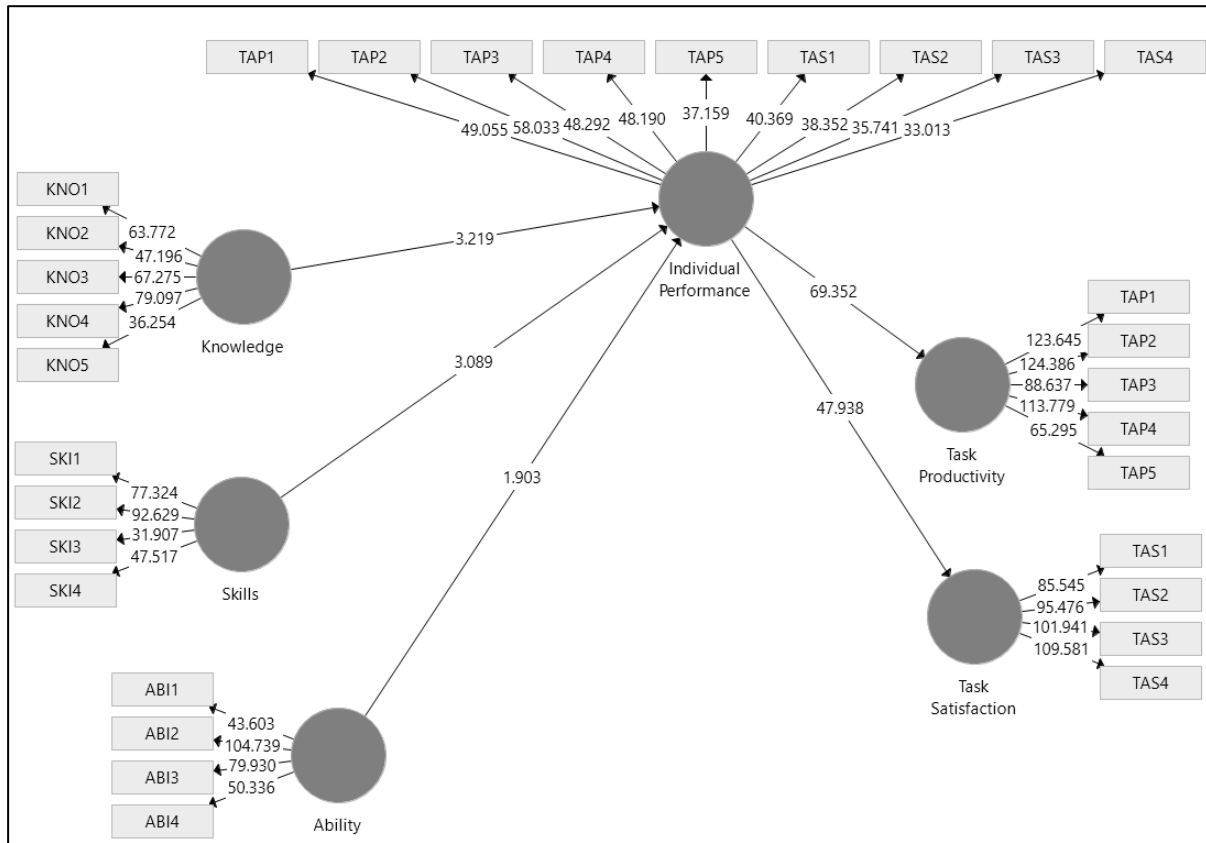
Figure 5: Final Structural Model of the Study

Once the structural model has been confirmed, the next step is to assess the value of R^2. The purpose of assessing the R^2 is to determine the predictive capability of the research model. For this study, we refer to the value of Adjusted R^2 instead of the regular R^2 because the regular value of R^2 increases whenever new variables are added to the model. Thus it is more appropriate to use the Adjusted R^2 (Wherry, 1931). Table 7 below shows the analysis of the coefficient of determination score of the study. The adjusted R^2 (0.491) indicates that the exogenous variables (knowledge, skills, and ability) are capable of explaining a total of 49.1% of the variances of the endogenous variables (Individual performance measured in terms of task productivity and task satisfaction) (Hair et al., 2017).

Table 7
Result of Coefficient of Determination Score

Construct	R Square	R Square Adjusted	Decision		
			Cohen (1988)	Chin (2010)	Hair et al., (2017)
Individual Performance	0.496	0.491	Substantial	Moderate	Moderate

Discussion

Our findings show that improving referencing competencies positively and significantly affect individual performance, measure task productivity, and task satisfaction. The finding of this study is similar to Velnampy (2008) and Masrek et al. (2012). Our findings suggest that the combined effect of user's knowledge, skills, and ability is sufficient to predict individual

performance outcome variables. The result suggests that individuals who possess good knowledge of referencing standards and formats, have a good skill in formatting the referencing, and communicate the referencing standards and practices to others have a positive and significant relationship with individual performance.

Referencing competency helps individuals, especially students and academicians, access and filter varieties of resources on the Internet, especially using the digital library. The competency helps them access relevant resources and perform forward and backward search, especially for research purposes. Besides, referencing competency also helps individuals to improve their productivity through reducing workload, improving the quality of the publication, speeding up research works, and improving the accuracy of information being disseminated to others. Other than productivity improvement, it also affects task satisfaction among individuals. Our findings show that individuals are more satisfied in the aftermath of interaction with the element of referencing competency. The study's finding is similar to Kiran and Diljit (2012) finding that interaction with several factors such as technological contributed to the quality assessment and thus improved the performance of the users.

Our findings have also proven that when comparing the three elements of referencing competency (knowledge, skills, and ability), knowledge has the largest t-value, followed by skills and ability. The findings indicated that users must have the necessary knowledge to be competent in referencing. Even though there is a lot of referencing software available in the market, such as EndNote and Mendeley, however, it is good to acknowledge that the ready-made citation has several flaws, such as (1) inaccurate details, (2) duplication of citation, and (3) incomplete details. Thus, users must have the necessary knowledge of citation to determine reliability. Lack of knowledge may lead to poor citation quality, thus affecting the performance of the individual.

Our studies also contributed towards filling the research gaps in the literature. This study provides findings from undergraduate students from local universities in Malaysia. Besides, we also developed a validated research model concerning referencing competency and individual performance. Researchers specializing in competency and individual performance may extend this model to include more predictors of individual performance.

Conclusion

This study attempted to investigate the relationship between referencing competencies and the impact on an individual's performance. In completing the research, a quantitative research methodology was adopted. Three factors underneath referencing competency, knowledge, skills, and ability were included. A higher-order construct was developed for individual performance, represented by task productivity and satisfaction. Next, the instrument was developed, collected, and analyzed using SPSS and Partial Least Square Structural Equation Modelling using SmartPLS.

The contributions of this paper are as follows: first, the paper provides empirical support of the relation between referencing competency and individual performance. Second, it provides empirical evidence on individual performance as a higher-order construct for task productivity and satisfaction. Third, a validated research framework on the relationship between referencing competency and individual performance in the context of a Malaysian local university. Fourth, this study added to the body of knowledge on the topic of individual's

competency and performance.

This study will be limited in a few ways. First, we only use minimal factors as predeterminants of individual performance. Future studies may include other dimensions such as core competencies and technology management competencies. Second, this study measure individual performance from the perspectives of task productivity and task satisfaction. Future studies may include more variables such as task innovation, emotional benefits, and functional benefits.

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