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The Use of Digital Learning: A Predictive Model of Knowledge, Readiness and Attitude Factors Among Technical and Vocational Education (TVET) Teachers in Secondary Schools

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Abstract: The educational challenges faced by the country are a result of the globalization process, especially in the technical and vocational fields. Teachers need to move according to the flow of technology in the teaching and learning process in the classroom. This study aims to identify the dominant factors in the use of digital learning among secondary school TVET teachers in Selangor. This study also identified the relationship between the readiness, knowledge and attitude of TVET teachers as an independent variable with the use of digital learning as a dependent variable. This quantitative survey study involved 202 TVET teachers as the study sample. The quantitative study of this survey uses a set of questionnaires distributed to a sample of selected day secondary schools in the field of Technical and Vocational Education (TVET). Descriptive data was analyzed using SPSS software version 22.0. The findings of the study show that there is a significant relationship between the variables of readiness (r = 0.672, p=0.001, p<0.05), knowledge, (r = 0.744, sig = 0.001, p<0.05) and the attitude of TVET teachers (r = 0.422, sig = 0.001, p<0.05) with digital learning. Finally, the knowledge variable is a predictor factor that accounts for 64% of the variance in digital learning. In conclusion, all TVET teachers should improve their knowledge, readiness and be more positive towards changes in new era learning towards digital learning that is more open and will be used maximally in the future.

Keywords: Knowledge, Readiness, Attitude, Technical and Vocational Education Teachers, Digital Learning

1. Introduction

In the era of technology and modernization of the 21st century, various efforts should be intensified in preparing the next generation of students to be more competitive and viable. Following this, the Malaysian Ministry of Education (MOE) has drawn up a comprehensive Malaysian Education Development Plan (PPPM) to ensure that international education standards can be achieved. As a result, educational institutions are a platform that is a catalyst for generating human capital to fulfill the goals and aspirations of the National Education Philosophy. In ensuring that the field of education advances along with the development of technology and the current of globalization, the approach and strategy applied in the classroom is important to becomes an indicator towards that goal. Under the Eleventh Malaysia Plan (11th RMK), the effort to shape an individual's identity, be competent and proactive to move forward is an aspiration that has been formed by the Ministry of Education which is the rebranding of TVET for the period 2016-2020 until recently. To ensure that the agenda achieves the set goals, various innovations and transformations have been formulated where TVET instructors need to change their attitude towards new technology and be ready to be retrained and embrace new skills in preparation to face the 21st century learning wave. It is necessary to ensure that TVET teacher training institutions are always responsive to the dynamic world of technology and are equipped with various infrastructures to ensure that the trainees who are born meet the current requirements and requirements (KPM, 2012). Following the development of technology, learning methods are also undergoing a transformation where digital learning based on technical and

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vocational education is implemented in technical and vocational education institutions and centers. The development of information technology through widespread internet applications, the use of websites has become a learning method in applying digital learning in T&L process in a classroom. The use of the internet gives new life to the learning process where traditional learning methods have undergone a thorough transformation. The method of memorizing and recalling information in traditional learning has undergone changes to conventional methods where technological facilities are applied electronically such as methods of accessing, manipulating and generalizing information (Salsidu et al., 2018). This situation has a positive impact in shaping first-class students who have a more critical and innovative thinking style in line with the development of the technical and vocational education world that is implemented nowadays.

With the establishment of technical and vocational educational institutions, skilled and semi-skilled training is intensified to meet the market demand, especially moving forward the challenges of industry 4.0. TVET teachers not only play the role of teaching staff, but also educators, in fact they are people who prioritize practical work or better known as hands-on. In order to ensure that teaching is prioritized, TVET teachers use creative teaching methods and combine innovative methods to make TVET teaching and learning more interesting and enjoyable. Teaching in the 21st century emphasizes teacher teaching methods based on information and communication technology. In the efforts of TVET teachers to make teaching and learning more interesting, the use of technology in learning should be given priority. This helps TVET teachers explain a concept more clearly compared to verbal explanations.

Our National Education Policy has not yet succeeded in achieving the goal (Eng & Keong, 2019), to build an appropriate learning and teaching approach in the field of technical and vocational education among secondary school students. This is due to several problems and needs improvement in terms of implementation. Although there have been many studies such as in Oktavian & Aldya (2020) discussing about learning related to technology learning in the classroom among secondary school TVET teachers has been conducted both inside and outside the country, it was found that no general conclusion can be generalized (Ab Halim & Manis, 2021). This is quite important because many teachers still think that learning methods using technology are difficult to carry out in the classroom (Kamary & Hamzah, 2019).

The teacher's lack of preparedness, knowledge and attitude of the teacher himself in managing the learning class using technology is still ignored and not emphasized. The reason given is because internet facilities in most schools are limited and there are still no broadband networks. The issue of getting internet at school is a new issue in the world of education (Hew & Syed Abdul Kadir, 2016). Although the Ministry of Finance has spent millions of ringgit on information and communication technology, especially the application of digital learning, but the results of the study show that the government's efforts have not received a warm welcome and moderate positive development (Ismail & Yuhanis, 2019). In order to realize the government's desire in the world of industry 4.0, the commitment of TVET teachers is important to produce a skilled workforce according to current developments. In addition, the role of TVET teachers as teaching staff is important as a conveyer of knowledge and encouraging active learning. TVET teachers have not yet fully explored the application of digital learning in improving the T&L process in the classroom. In the context of technical and vocational education, the implementation of digital learning among teachers is still at a moderate level. According to Majid et al. (2019), the use and integration of digital learning in Technical and Vocational Education has not yet reached an encouraging level.

Mazlan et al. (2014) found that there are still teachers using conventional methods in T&L process. This situation causes students to be unable to understand the concepts or skills, especially the practical teaching delivered by the teacher. Mahizer, Zelkepli et al. (2016) found that teachers face time constraints in preparing before PdP especially using digital learning applications and relevance in teaching. From the aspect of knowledge, according to Alagesan & Ambikapathy (2012), if teachers do not have knowledge about the use of digital learning, it becomes a constraint in applying information literacy in the T&L process. Based on the justification that has been discussed, studying the dominant factors in the use of digital learning among secondary school TVET teachers is a necessity. The relationship between teachers' readiness, knowledge and attitude needs to be studied to see which factors will influence the implementation of digital learning during the teaching and learning process. Linking predictive factors in the use of digital learning will allow various information to be explored and can be used as a basis for planning appropriate interventions in integrating digital learning in T&L process. This paper will describe the two main objectives of the study as follows: 1) to study the relationship between readiness, knowledge and attitude towards the use of digital learning among secondary school TVET teachers with teaching and learning, 2) to study the dominant factors that influence the use of digital learning among secondary school TVET teachers in teaching and learning.

2. Literature Review

Today's globalized education emphasizes technology in student learning from the elementary to the highest level. The application of digital learning that uses the latest technology can breathe new life into the learning process and make the learning process more effective (Rosman & Hamid, 2020). The learning process using digital learning is also applied at the secondary school level and implemented comprehensively for all levels of learning as recommended by the Malaysian Ministry of Education (KPM, 2012). In the world of the latest technology development, T&L sessions are easy for students because the teacher's presentation material can be accessed anywhere. In addition, interactive teaching and learning sessions will lead to innovative development and exploration. Therefore, students' acceptance of technology integration allows knowledge to be delivered faster and save time. The trend of using digital learning as a teaching and

learning tool is now growing rapidly in the field of education. This can be seen when the Covid-19 Pandemic occurs where PdP is conducted entirely through digital learning (Abdullah et al., 2021). Many educators and researchers have high hopes for digital learning to provide a platform to access information and ultimately lead to a new revolution in education.

According to Hazwani (2017), teaching and learning can be accessed anywhere and is more flexible because digital learning materials can be accessed easily. Virtual learning is also a learning method that is implemented online, implemented and accessed at any time without limitations (*ubiquitous learning*). Learning through this method encourages the use of web-based technology for teachers and students for the learning and teaching process (Abdullah et al., 2021). The main goal of digital learning is to produce independent students where learning methods are no longer teacher-centered. Students are responsible for their own learning based on the efforts made to achieve the desired performance. In addition, digital learning also encourages the active involvement of students in the learning process and increases their level of acceptance of the introduced methods. By accessing digital learning, the learning environment is more conducive in terms of learning materials and more flexible time management (Basar et al., 2021).

The teachers and lecturers started preparing with various digital applications such as Google Classroom, Google Meet, BigBlueButton, Zoom and so on. The approach of cyber teaching and learning *(cybergogy*) which previously only supported face-to-face teaching has been made the main approach in continuing education trust (Basar et al., 2021). Website-based learning allows the T&L process to be carried out even if both parties, the students and the teacher, are not at the educational institution. Nowadays, most countries use digital technology in learning sessions to enhance TVET learning and create new paradigms and environments. The use of digital technology in learning not only improves skills but also increases knowledge in the world of education. In addition, digital learning can also help students develop their minds from the aspects of communication, information literacy, creativity and collaboration and develop the ability to use technology for various purposes (Abdullah et al., 2021). According to Bui (2022), students at school have high expectations for the integration of digital learning in the classroom because the new generation born grows with the latest technology. The younger the students, the higher their expectations for the integration of modern technology in the classroom.

The approach or method of teaching and learning students can be implemented successfully, with the presence of skilled and knowledgeable educators. Therefore, a teacher must be dedicated to his profession, and it is necessary to prepare himself with high knowledge and ensure that the teaching and learning process can achieve its objectives (Alagesan & Ambikapathy, 2012). Teachers act as facilitators in a classroom. Therefore, in order to ensure that teachers can successfully integrate the use of digital technology during T&L, it is necessary for teachers to be knowledgeable about its application in the T&L process. Nevertheless, teachers who have extensive knowledge but lack skills in integrating technology with the learning process will cause T&L to be unattractive (Rosman & Hamid, 2020). Students are unable to concentrate in lessons due to T&L being less interesting and boring. Here it clearly shows that the level of teacher knowledge is an important indicator in determining the effectiveness of T&L that uses web-based learning technology. According to Jamaludin (2021) the attitude highlighted by the teacher is an indicator of the student's personality in ensuring that teaching and learning objectives are achieved. With the presence of caliber teachers, skilled and competitive students can be born. But, at the same time, it is also a concern and worry for some teachers to practice new teaching methods introduced in education even though the approach of using digital learning in teaching and learning has been applied for a long time. Here it clearly shows that teachers need to prepare themselves with new skills in line with the flow of 21st century learning technology.

Among the constraining factors that prevent the application of learning using digital technology in the classroom in secondary schools is that teachers do not have knowledge about it because no exposure is given to them (Ismail et al., 2018). Second, the lack of expertise in this teaching method (Ariffin et al., 2021). Teachers who are currently serving, especially non-novice teachers, are less exposed to technology. There are also some teachers who cannot discuss with each other because they face the same problem, which is limited knowledge and experience in relation to the application of digitization in classroom learning. Also, the limited time allocation in the timetable to apply technology directly in the classroom limits the use of ICT (Najib et al., 2017). Therefore, these obstacles cause many teachers to still use traditional teaching methods which are considered easier, cheaper and do not take a long time.

2.1 Digital Learning

According to Castillo-Merino & Serradell-López (2014), digital learning is based on web technology. In addition, digital learning is a process of accessing T&L materials and giving priority to collaborative activities such as interweaving and networking. Directly, digital learning has the ability to encourage interaction to preserve the teaching and learning process. E-learning refers to a learning system based on formal teaching but with the help of electronic resources. Although teaching can be in or out of the classroom, the use of computers and the Internet is a key component of learning. It is a network that enables the transfer of skills and knowledge, and the delivery of education to a large number of recipients at the same or different times. The basis of internet usage measures the extent to which TVET teachers use internet resources as a medium to obtain information. Meanwhile, the basis of office multimedia refers to the use of multimedia that uses mediums such as websites and software to help the PdP process of TVET teachers.

2.2 Teacher's Readiness

According to Borotis et al. (2008), readiness involves a way of applying a form of process of integrating the emotional (psychological), mental and physical aspects of an individual doing a response. Readiness is related to teachers' awareness, knowledge, perception, and attitude towards their abilities and skills for technology integration as well as gaining experience in the use of educational technology (Msila, 2015).

2.3 Teacher's Knowledge

According to Paroutis & Al Saleh (2009), knowledge has the ability to be used for a purpose and clarify the understanding of a subject. Knowledge in the use of technology including multimedia materials, the internet, interactive boards or computers in the classroom or virtually. The use of technology makes the PdP process enjoyable and allows students to understand a subject in depth.

2.4 Teacher's Attitude

Attitude can be defined as a form of behavior, feelings, individual activities and experiences related to the internet in determining the information entity obtained against its function (Morse et al., 2011). Attitudes also include feelings and emotions as well as thoughts and beliefs (Crites Jr et al., 2017). In this study, attitudes are defined as the feelings, views and values of TVET teachers towards digital learning as a tool that helps the planning process, namely teaching objectives, induction sets, T&L activities, pedagogy, resources and assessment activities for Technical and Vocational Education.

2.5 Theories Applied

In this study, two theories are used as a guide, namely the Theory of Planned Behavior (TBP) and the Technology Acceptance Model (TAM).

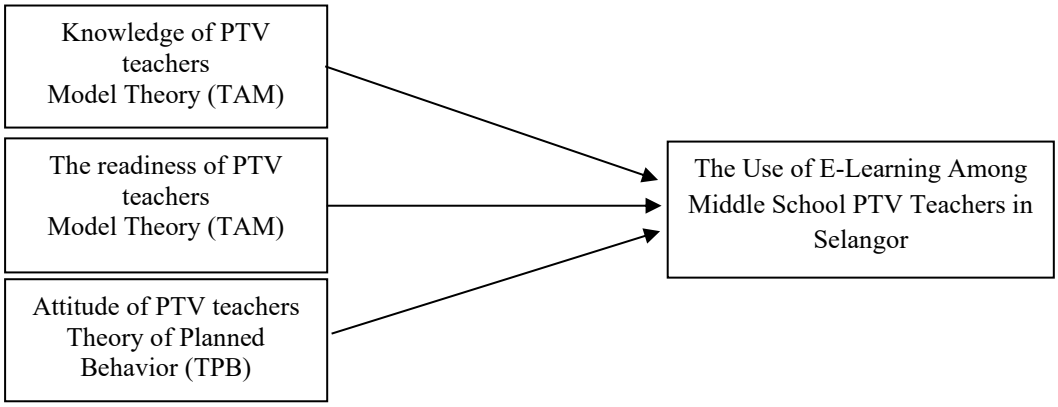

Fig. 1: Theoretical framework

Fig. 1 shows the theoretical framework of the study based on Davis (1989) which is using the Extended MPT who consider that teacher readiness, teacher knowledge and teacher attitude are the main factors that influence the practice of using digital learning in PdP process.This TAM model is used to explain the readiness and awareness of TVET teachers towards the use of e-learning among TVET teachers, which is able to predict the use of e-learning by teachers that is practiced based on two factors, namely the teacher's readiness and the teacher's knowledge of the use of technology in learning. According to Davis (1989), TAM is an information system theory designed to explain how users understand and apply an information technology. The original construct of the TAM model formulated by Davis (1989) is perception of ease of use, perception of ease of use, attitude, intention, behavioral intention (teacher) and behavioral intention, actual use describes all the variables measured in the study This is based on the model shown in Fig. 1. The perception of usefulness (perceived usefulness) is a phase where a person believes that the user of a certain system will be able to increase the person's work performance. Based on this definition, the use of the system can increase work performance for a user of the system, namely the TVET teacher in this study. Thompson (1991) stated that individuals who use the system will have an understanding of the advantages of using a good system (usefulness). While the perception of ease of use (perceived ease of use) is a level where a person believes that when the system is used, it is able to reduce the person's effort in doing something.

3. Methodology

3.1 Population and Data Analysis

This study involved respondents in daily secondary schools in the Technical and Vocational Education (TVET) stream. This includes teachers involved in teaching for Technical and Vocational Education subjects who are under the supervision of the Head of Technical and Vocational Fields such as Trade, Basic Economics, Economics, Principles of Accounts, Home Economics, Life Skills, Vocational Subjects, Basic Vocational Education , Engineering Drawing, Engineering Technology, Information and Communication Technology, Agricultural Science and Design. Based on data obtained from the Education Data Sector, Education Policy Planning and Research Division of the Ministry of Education, the total study population, which is the daily secondary school TVET teachers studied in the state of Selangor, totaled 419 people. Through Cochran & Hopkins's (19661) sample count technique, the minimum number of samples to be obtained is 200 people. After the data collection process and the data cleaning process were done, a total of 202 respondents were used for the purpose of data analysis. This study uses a survey-based quantitative research design, the data collection process involves several parties such as the Education Research and Development Division of the Malaysian Ministry of Education (EPRD) and the State Education Department (JPN). When all permissions have been processed, the researcher prepares documentation to be sent to the selected day secondary schools to obtain official permission. The researcher went to the field and conducted the study by distributing a set of questionnaires to be filled out by the respondents. Respondents were given 30 minutes to answer all the questions given.

3.2 Instrument

The questionnaire used in this study is divided into four parts, namely respondent demographics, knowledge, readiness, attitude and digital learning among TVET teachers. All these questionnaires have been adapted and modified from Alagesan & Ambikapathy (2012). Each questionnaire uses a four-point likert scale for the agreement scale, 1 = Strongly Disagree, 2 = Disagree, 3 = Agree and 4 = Strongly Agree. All measured items contain a total of 68 items. All questionnaires that have been adapted go through a back translation process by experts appointed in the field of language before they are used for the data collection process

3.3 Reliability and Validity

After the instrument was validated by the experts involved, the researcher conducted a pilot study for the validity and reliability process of each item and construct to be measured. Reliability is based on the Cronbach Alpha value obtained after a pilot study was conducted. A total of 30 respondents were involved in a pilot study conducted in one of the schools in the same zone. After the reliability analysis was obtained, the instrument was improved before being used for the purpose of the field study. The Cronbach Alpha values obtained for all variables in this study ranged from 0.773 to 0.944 for each sub construct. This means that this instrument has validity and reliability to be used for the actual data collection process for dependent and independent variables in this study.

3.4 Data Analysis

The process of descriptive data analysis, correlation and regression was carried out using SPSS 22.0 software to identify the relationship between all the measured variables and predict the biggest factors contributing to digital learning among secondary school TVET teachers in Malaysia through multiple regression tests.

4. Results

4.1 Objective 1: Studying The Relationship Between Readiness, Knowledge and Attitude Towards The Use of Digital Learning Among Secondary School TVET Teachers with Teaching and Learning

Pearson's correlation test was conducted to find out the relationship between TVET teachers' readiness, knowledge and attitude towards the use of digital learning in teaching and learning. After fulfilling the conditions mentioned above then pearson correlation analysis is used. The results of the Pearson correlation test are as follows.

Table 1: Test of Correlation Pearson

Variables	Learning Digital Usage		Interpretation
	r	Sig.	
Readiness	0.672	0.001	Moderate
Knowledge	0.744	0.001	High
Attitude	0.422	0.001	Moderate

**Significant at the level of 0.01, N=202*

Table 1 proves a significant relationship between the willingness of TVET teachers with medium positive strength and the use of digital learning with value (r = 0.672, p=0.001, p<0.05). Thus, there is a positive and moderate correlation between teacher readiness and the use of digital learning in teaching and learning. The higher the readiness of TVET teachers, the higher the use of digital learning in teaching and learning. This finding is confirmed by Cohen (1988) that there is a strong relationship between variables when the variables have a strong positive relationship. The results also show that there is a significant relationship, a positive direction of high relationship strength for the knowledge of TVET teachers with the use of digital learning with value (r = 0.744, p = 0.001). The higher the knowledge of TVET teachers, the higher the use of digital learning in teaching and learning. This shows that there is a positive and high correlation between knowledge and the use of digital learning in teaching and learning. Meanwhile, there is also a significant relationship between the attitude of TVET teachers with moderate positive strength and the use of digital learning with value (r = 0.744, p< 0.001). Therefore, there is a positive and moderate correlation between attitudes and the use of digital learning in teaching and learning. The higher the attitude of TVET teachers, the higher the use of digital learning in teaching and learning. This finding shows that the strength of the correlation between variables when each variable has a strong positive relationship as suggested by Cohen (1988).

4.2 Objective 2: Studying The Dominant Predictor Factors that Influence The Use of Digital Learning Among Secondary School TVET Teachers in Teaching and Learning

For the second objective, Table 2 which refers to the Model Summary table shows the findings that there is a change in the dependent variable caused by the independent variable. The statistical test is significant at the 0.05 level, this means that the factors (readiness, knowledge and attitude) can be significant predictors for the use of digital learning in the teaching and learning of TVET teachers. To explain in detail, the knowledge factor contributes as much as 55% (adjusted R2=0.552) of the variance value of digital learning. Next, the readiness factor contributed as much as 63% (adjusted R2=0.625) of the variance value towards digital learning. Meanwhile, the attitude factor contributes as much as 64% (adjusted R2=0.638) of the variance value towards digital learning.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Attitude	.744[a]	.554	.552	.24703
Readiness	.793[b]	.629	.625	.22593
Knowledge	.802[c]	.643	.638	.22213

Table 3 shows the regression analysis conducted on knowledge [F (1,200) = 248.346, Sig = 0.000, p<0.05)], readiness [F (2,199) = 168.495, Sig = 0.000, p<0.05)] and attitude [F (3,198) = 118.833, Sig = 0.000, p<0.05)] is a significant variant that predicts the use of digital learning in teaching and learning.

Table 3: ANOVA Analysis

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.155	1	15.155	248.346	.000[b]
	Residual	12.205	200	.061		
	Total	27.359	201			
2	Regression	17.201	2	8.601	168.495	.000[c]
	Residual	10.158	199	.051		
	Total	27.359	201			
3	Regression	17.590	3	5.863	118.833	.000[d]
	Residual	9.769	198	.049		
	Total	27.359	201			

Based on Table 4 shows that the results of multiple regression analysis aspects of readiness, knowledge and attitude affect the use of digital learning in teaching and learning of TVET teachers. According to the level of importance, the highest predictive factor is the knowledge of TVET teachers which contributes as much as 55.4 percent (Beta = 0.452, t = 8.292, Sig = 0.000). Next, the readiness factor contributed as much as 7.5 percent (Beta = 0.356, t = 6.459, sig = 0.006). The attitude factor contributed as much as 1.4% (Beta = 0.187, t = 2.806, Sig = 0.006) to the use of digital learning in teaching and learning. Factors predicting knowledge, readiness and attitude towards the use of digital learning in teaching and learning as shown in Table 4.

In conclusion, among the three predictive factors that were tested, the factor of knowledge about digital learning is the most dominant factor that is the main contributor and has a stronger influence in the use of digital learning.

Empirically, the factors of knowledge, readiness and attitude are among the factors predicting the increase in the use of digital learning among TVET teachers in secondary schools in Malaysia.

Table 4: Results of Regression Analysis

Variables	Unstandardized Coefficients		Standardized Coefficients	*t*	Sig.
	B	Std. Error	Beta		
Knowledge	0.452	0.055	0.476	8.292	0.000
Readiness	0.356	0.055	0.347	6.459	0.000
Attitude	0.187	0.067	0.132	2.806	0.006
Constant	0.119	0.184		.645	0.519

5. Discussion

From the results of the study, the results of the correlation analysis of teachers' willingness to use digital learning among TVET teachers showed a moderate relationship ($r = 0.672$, sig = 0.001, $p<0.05$). So teacher readiness is closely related to the use of digital learning in T&L. Next, the correlation between teachers' knowledge and the use of digital learning among teachers shows a high relationship with the value ($r = 0.744$, sig = 0.001, $p<0.05$). This shows that there is a positive and high correlation between knowledge and the use of digital learning in teaching and learning. In addition, the correlation findings between teachers' attitudes towards the use of digital learning with teaching and learning are at a moderate level with values ($r = 0.422$, sig = 0.001, $p<0.05$). This finding shows that the strength of the relationship between the dependent variable and the independent variable each has a moderate and strong positive relationship with the use of digital learning in teaching and learning.

The findings of this study are supported by Bakar et al. (2010) there is a significant positive relationship between student attitudes towards learning and achievement motivation. The relationship between teachers and students can improve student achievement (Schofield & Davidson, 2017). Teachers need to be concerned about students who do not show interest in the subject being taught. The findings of Yamada & Otchia (2021) stated that teacher support and involvement has a relationship with student achievement motivation. In summary, the findings of this study show that the attitude of TVET teachers plays a role in the use of digital learning. With the use of digital learning in PdP, the learning atmosphere becomes interesting and fun. This method also stimulates and motivates students to pay attention and focus on the lesson. In conclusion, the readiness, knowledge and attitude of TVET teachers have a significant relationship with the use of digital learning among TVET teachers in secondary schools in Selangor.

As for predictor factors, three significant factors explain the readiness, knowledge and attitude of teachers towards the use of digital learning in the T&L process. Predictor factors of readiness, knowledge and attitude influence the use of digital learning in teaching and learning of TVET teachers. This indicates that TVET teachers who have a high level of readiness can launch their PdP planning process. TVET teachers' acceptance of the internet is high and strengthens their desire to use digital learning in PdP TVET (Davis, 1989). Empirically, the three predictive factors that were tested, namely the factor of knowledge about digital learning are the main contributors and have a stronger influence in the practice of using digital learning. This study shows that the use of digital learning in teaching and learning will increase when the factors of knowledge, readiness and attitude are linked to the teacher. Since globalization, liberation and the development of digital learning have brought new challenges to TVET teachers, then TVET teachers bear the heavy responsibility of becoming IT literate (Information Technology) and advancing in line with the development of digital learning in the country. In relation to that, it is important and necessary to identify the actual scenario of predictor factors for the use of digital learning among TVET teachers in the state of Selangor.

6. Conclusion

This study has empirically confirmed the existence of a significant relationship between the variables of teacher readiness, knowledge and attitude towards digital learning among TVET teachers. Next, this study which tests predictive factors that promote digital learning among TVET teachers provides further input based on previous studies. In summary, the intention of PPPM 2013-2025 which upgrades the field of technical and vocational education to a better level must be worked on well including the awareness and readiness of PTPK among the teachers themselves. The use of technology should be comparable to the recognition given by the government. The existence of a significant relationship between the readiness, knowledge and attitude of TVET teachers towards digital learning in the PdP process gives a good sign in helping classroom management in the 21st century. Teachers should be ready to accept changes to determine the success of students in the future. This study proves that teachers are very influential in determining the success of any changes implemented in the country's education system. From the point of view of knowledge development, this study contributes new knowledge about the readiness, knowledge and attitude of TVET teachers themselves in facing change. This shows that TVET teachers are ready to accept changes and integrate technology because learning materials are obtained from

ICT-based sources. Therefore, the Malaysian Ministry of Education and the authorities should work hand in hand to constantly improve resources based on digital learning so that it is always in line with the use of the latest technology in the field of technical and vocational education.

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Conflict of Interest

The authors declare no conflicts of interest.

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