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Research paper



Educators' Readiness in using Mobile Phone as a Pedagogical Tool for Teaching

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Abstract

Owing to the rapid growth of technology, higher educational institutions are looking for new learning systems. One of the evolutions of classroom technology is using mobile phone for teaching-learning or m-learning. The use of mobile phone in classroom is still new in Malaysia. Therefore, this research aims to study educators' readiness in integrating mobile technology in the teaching process. The objective of this study is to identify the level of technology readiness among educators in higher education institutions towards the implementation of mobile phone as pedagogical tools in the teaching and learning process. Besides that, this study identifies the relationship between the dimensions of technology belief and educator' readiness. In order to achieve this objective, quantitative approach and questionnaire instrument are used to gather data from the respondents. This study adopts Parasuraman's study on Technology Readiness Index (TRI). The findings show that there is a high level of technology readiness among educators with a positive and significant relationship between the dimensions of technology belief and educators' readiness with optimism as the main influencer. The findings from this research may provide some key consideration to the higher education institutions to determine the greatest solution in ensuring the successful of m-learning post-implementation.

Keywords: *m-learning; mobile technology; pedagogical tools; Technology Readiness Index (TRI);*

1. Introduction

The current learning system in most higher education institutions are transforming and evolving. The traditional face-to-face teaching (also known as conventional teaching) is combined with the practice of e-learning. New pedagogical approaches via mobile learning must be implemented especially for specifically for new generation educators and students. There must be an instructional paradigm shift on student learning methods (UNESCO, 2012) [1]. Conventional teaching method is a content oriented where different program will have their associated syllabi. Therefore, based on the previous research done by Ariffin (2011) [2], it was found that conventional teaching method have several disadvantages such as students are not clear with the needs of soft skills in jobs. For instance, the soft skills are communication skills, office skills, and human relationship skills. Meanwhile, the word "informal practice" shows the initiatives of e-learning implementation undertaken by some of the educators through open source e-learning software like module and the emergence of new educational formats such as MOOCs (Massive Open Online Courses) and SPOCs (Small Private Online Courses) [3].

The current learning systems that applied at most higher institutions are traditional face-to-face teaching (also known as conventional teaching) and informal practice of e-learning. Conventional teaching method is a content oriented where different program will have their associated syllabi. Preliminary study was done through personal interview to the educators of Universiti Teknologi MARA (UiTM) and International Islamic College (IIC) to identify the current problems among educators.

Among the problems that were identified are the educators have lack of understanding, confidence and acceptance towards teaching-learning via mobile phone. Flexibility in accommodating to changes and demands are vital in the new educational system approach to support better teaching and learning activity [4-5].

This study aims to explore the impacts of the dimensions of technology belief on educators' readiness towards the adoption of m-learning via mobile phone in the teaching process. The main objectives of this study are to assess the technology readiness among educators in higher education toward technology. The research focus will be on educators' readiness towards the adoption of new learning technology that is m-learning. This study performs quantitative survey where the questionnaires are based on the four dimensions of technology belief in Technology Readiness Index (TRI) introduced by Parasuraman (2000) [6].

The remaining of this paper is organized as follows. In Section 2, the related work of existing literature in the field of mobile and e-learning. Chapter 3 describes the methodology used in this study. The results and findings are depicted in Section 4. The conclusion is in Section 5.

2. Literature Review

The dimension of technology readiness on technology is the important aspect in the adoption of m-learning via mobile phone in the teaching process. It is important to understand their level of readiness because user unwillingness to adopt new technology may impact to the failure of m-learning implementation. This study depends on the dimensions of technology belief that retrieves from Technology Readiness Index (TRI) introduced by Parasuraman (2000). The dimensions of technology readiness

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consist of two elements which are contributors (optimism and innovativeness) and inhibitors (discomfort and insecurity). The four dimensions of technology belief are almost independent to one another. The findings could determine the correlation between the dimensions of technology belief and educators' readiness towards the implementation of m-learning. Educators should identify the needs and potential benefit of m-learning initiative for educational purposes in order to ensure the successful implementation.

The rapidly change of Information and Communication Technology (ICT) leaves a significant impact on educational development worldwide. Technology has rapidly adopted into educational systems at different level. There are several researchers on the pedagogical use of technology could assists and support better educational activities. According to [7] and technology usage is beneficial to magnify the performance of students, teaching efficiency, and the productivity of educators. Meanwhile, the use of technology in education can be identified as potential pedagogical tools as a pedagogical shift for educational transform and improvement. The use of variety of technology tools and methods that can be applied in the teaching process have proven to be beneficial not only to the students but to the educators [7-8]. Table 1 depicts the list of higher education institution in Malaysia that implemented e-learning via websites.

Table 1: Higher Education Institution E-Learning Portal in Malaysia

Higher Institution	E-Learning	Link
University Sains Malaysia (USM)	ELEARN@USM	http://elearning.usm.my/sidang1718/
University of Selangor (Unisel)	E-Learning Portal	http://elearning.unisel.edu.my/
Universiti Teknologi Malaysia (UTM)	e-Learning@UTM	http://elearning.utm.my/17182/
Southern University College (SUC)	SUCCMS(E-Learning)	http://succms.sc.edu.my/moodle/
Universiti Malaysia Perlis (UMP)	UniMAP ONLINE LEARNING	http://elearninglab.unimap.edu.my/elearning/
International University & Colleges (INTI)	INTI Blackboard Learn	https://elearning.newinti.edu.my/webapps/login/
International Medical University (IMU)	IMU eLearning	https://elearn.imu.edu.my/
Management & Science University. University (MSU)	EKLAS	https://eklas.msu.edu.my/
HELP University	Center for e-Learning: Login to the site	http://elearning2.help.edu.my/acel/login/index.php
University **o**f Malaya (UM)	Spectrum 1	https://spectrum.um.edu.my/

2.1. Mobile Technology

The evolution of mobile technology leads to changes in diversified area as well as education system. Most educators realized the important of mobile phone in their daily life, thus shows the technology acceptance among them. Based on the statistics by Malaysian Communications and Multimedia Commission (MCMC) in 2016, Smartphone was the most common device to access Internet (89.4%) making the country a mobile-oriented society [9].

Mobile technology is widely available which play an important role in the education system, hence enhancing teaching and learning experiences. Mobile technology enables wireless communication between two or more devices that connected to a network wirelessly [10]. Internet access from other mobile devices saw a declining trend. For instance, the use of portable personal computer such as netbook, notebook and laptop to access Internet has dropped to 36.3% (2015: 46.0%), while tablet declined to 18.0% (2015: 24.8%) and feature phone to 9.4% (2015:15.8%). Mobile phone usage in Malaysia has increases. It was reported that 85% of Malaysians own mobile phone(s) [11].

2.2. Learning Paradigm

Learning is a methodology whereby students are required to accomplish a proposed learning conclusion inside a given timeline. This learning result must be measured keeping in mind the end goal to guarantee that the learning has occurred. With instructors as aides or facilitators, notwithstanding learning assets like books, class notes, diaries, learning materials, and specialized devices, the learning procedure gets to be additionally fascinating and significant, and even gainful. Learning is regarded as a source of information and knowledge, skills, habits, attitudes and beliefs which participate by both students and educators. It is a lifelong process begins the moment a person is born and not only knowledge of skills alone, but also the development of emotions, attitudes, values, aesthetics and arts as well as internal features [12]. There are three main perspectives in learning theory were described as the following:

Behaviorism Theory

According to [13], behaviorism is a hypothesis of learning concentrating on noticeable practices and reducing any mental movement. Learning is characterized just as the securing of new conduct. Behaviorists call this system for learning molding. Two separate sorts of molding are depicted and exhibited as suitable clarifications of the path in which creatures and people indistinguishable can be taught to do certain things.

Cognitive Theory

This theory focuses on the process of knowing and acquiring knowledge through the insight of process information for discussion, reasoning, problem solving and brainstorming activities. According to [14], this theory means increased knowledge in long-term memory or schema changes or structural knowledge. This information has stored and released back when needed.

Constructivism Theory

Constructivists' perspective has adapting the consequence of mental development. That is, learning happens when new data is incorporated with and included onto a singular's present structure of information, comprehension and aptitudes. There are three principles element of learning which are educator, student and learning environment (Table 2).

Table 2: Definitions of M-Learning

Element	Role
Educator	the prime mover in teaching and learning process.
Student	the key members in the learning methodology in light of the fact that without them the learning procedure is not liable to happen
Learning environment	the place where showing and learning happens in the best and profitable way.

Numerous analyst approach m-learning is started with e-learning. Indeed, prior study done by [15] characterized m-learning allude to e-learning utilizing versatile engineering or as another manifestation of e-learning.

2.3. Mobile Learning: M-Learning

Early forecasts of m-learning advancement have theorized that m-learning would have a brief separate personality before in the long run mixing into general e-learning [16]. Nonetheless, it appears to be as though progressions in portable innovation have just further given m-taking in its own particular character. The relationship between distance learning, e-learning, and m-learning is as yet being investigated with different analysts concentrating on parts of instructional method, innovation, and social elements keeping in mind the end goal to characterize m-learning. In addition, there are a number of innovation in education using technology approaches. These approaches, combines mobile computing with traditional lecture-style teaching, and promote innovative teaching methods such as game-based method [17-18]. Therefore, mobile technologies have great potential for facilitating more innovative educational methods. M-learning has numerous series of definitions from straightforward depictions to its consistently an expansion of e-learning to more modern definitions identifying with versatile students' inclination and teaching method that backings an adaptable of ubiquitous learning and student-centered [19-20]. M-Learning is not limited by area and is available at whatever time, anyplace. Table 3 defines m-learning from the different perspective.

Table 3: Definitions of M-Learning

Author (year)	Role
Abachi & Muhammad (2014) [21]	Educators found that mobile phone can furnish students with the chance to pick and at last use the best innovation accessible to them towards attaining the best learning results.
Abu-Al-Aish (2014) [22]	Mobile phone shows the potential of making technology is working for them.
Barker (2012) [23]	Many of the educators are currently using technology which has proved to be very popular in giving instructions to their students.
Barseghian (2012) [24]	Educators believe that mobile phone is just another tool, like pen and paper.
Schuler, C. (2009) [25]	Mobile learning has been defined as the process of learning mediated by handheld devices such as smart phones and tablet computers.
Koebler (2011) [26]	Mobile phone preparing students for real life. The device accessible so dependably and anyplace, learning gets to be practical.
Taylor & Maor (2000) [27]	Educators have the capacity work with colleagues worldwide in distinctive schools and institutes to pilot activities and create best practice.

3. Research Methodology

For this paper, it describes five phases which includes problem identification and planning, survey instrument, population and sample, data collection and data analysis. The first activity was conducting preliminary study to identify the main problem and project background. This study begins with conducting pilot testing after validity test had taken place. Five sets of questionnaires were sent through email for pilot testing. The interview was done among the educators in higher education institutions. The purpose is to identify the research background, problems, aim, questions, objectives, scope and significance. From this interview, the educator attitudes, perceptions and factors towards the m-learning implementation were analyzed. The result from the preliminary interview produced valuable result that motivated this study. After pilot testing result offers item consistency, there are four sessions has been decided to proceed for data collection.

There were four problems identified. The problems are lack of understanding on the level of technology acceptance among educators, how mobile phone can be used for learning, the benefits of m-learning to student learning and lack of confidence among educators in integrating technology in the teaching process. The information from literature review is used to build a conceptual model of how to graphically illustrate among the variables involved in this study. There are four independent variables and one dependent variable that have been adapted from literature due to the similarity of the subject. These independent variables are retrieved from the Technology Readiness Index (TRI) that consists of four dimensions of technology belief which are Optimism, Innovativeness, Discomfort and Insecurity that are almost independent of one another, therefore, an individual could harbor all feelings toward technology. These independent variables have been examined and the level of educators' readiness and its relationship with dimensions of technology belief has been determined accordingly. Statistical analysis was conducted to investigate and measure the relationship between independent variables and dependent variables.

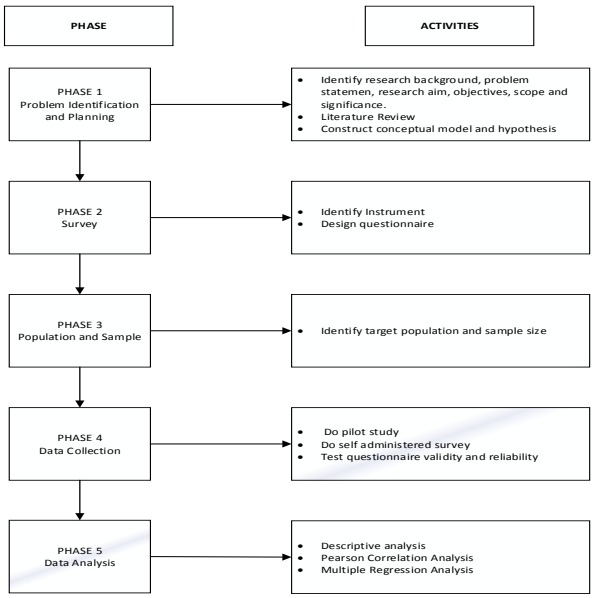

Fig. 1: Research Methodology Phases and Activities

The dimensions of technology readiness consist of two elements which are the contributors (Optimism and Innovativeness) and inhibitors (Discomfort and Insecurity). These dimensions are almost independent to one another which could influence an educator's level of technology readiness. However, not all dimensions will affect m-learning readiness to the same extent. These hypotheses will test the influences of technology belief's dimensions and its relationship with educators' readiness as these relationships have been validated in Erdoğmuş & Esen (2011) [28]. Therefore, the following are the list of hypotheses that formulated for this study:

Hypothesis 1:

Ha: There is a positive and significant relationship between the dimensions of technology belief and Educators' Readiness.

H0: There is no relationship between the dimensions of technology belief and Educators' Readiness.

Hypothesis 2:

Ha: There is a positive and significant relationship between Optimism and Educators' Readiness.

H0: There is no relationship between Optimism and Educators' Readiness.

Hypothesis 3:

Ha: There is a positive and significant relationship between Innovativeness and Educators' Readiness.

H0: There is no relationship between Innovativeness and Educators' Readiness.

Hypothesis 4:

Ha: There is a positive and significant relationship between Discomfort and Educators' Readiness.

H0: There is no relationship between Discomfort and Educators' Readiness.

Hypothesis 5:

Ha: There is a positive and significant relationship between Insecurity and Educators' Readiness.

H0: There is no relationship between Insecurity and Educators' Readiness.

Hypothesis 6:

Ha: Optimism does influence the most to Educators' Readiness.

H0: Optimism does not influence the most to Educators' Readiness.

Hypothesis 7:

Ha: Innovativeness does influence the most to Educators' Readiness.

H0: Innovativeness does not influence the most to Educator's Readiness.

Hypothesis 8:

Ha: Discomfort does influence the most to Educators' Readiness.

H0: Discomfort does not influence the most to Educators' Readiness.

Hypothesis 9:

Ha: Insecurity does influence the most to Educators' Readiness.

H0: Insecurity does not influence the most to Educators' Readiness.

For this study, there are two types of questions presented in respondent data collection. The sampling frames applied in this study was based on the estimated listing numbers of educators from all schools/ centers. The element of the population were 100 educators (N=100). Elements in population were obtained by an estimation of 25 educators per school/ center. Convenience sampling technique non-likelihood examining was utilized as a part of this exploration as this study requires the information rapidly. Convenience alludes to the gathering of data from parts of the populace who are advantageously accessible to give it. Reason behind this, it was difficult to approach educators as their class timetable, other job responsibilities and often with a compact schedule and working hour.

Once the questionnaires of pilot study have been rectified according to the reliability analysis result, data has been collected in two weeks by using self-administered survey methods. Sets of printed copies of the questionnaires were distributed to the respondents at four different school/ centers. Respondents were required to complete the questionnaires which manually collected after two weeks from the date of distribution. This survey method was chosen because of the potential anonymity of the respondent, which can increase the validity of responses. Data collected was analyzed by using SPSS version 22.0 software due to the usage of structured questionnaires to obtain quantifiable data regarding level, relationship and regression.

4. Result Analysis and Finding

The first finding demonstrates a rundown of the mean score and standard deviation of all variables in the study. This section deliberates the result of research question one which illustrates the results from the analysis of data on Educators' Readiness. The analysis involved percentage, mean, standard deviation, and level of Educators' Readiness (n = 83). The independent variables that is the dimensions of technology belief, the highest mean score is Optimism with a mean score of 3.78 (SD 0.382), followed by Insecurity with a mean score of is 3.74 (SD 0.422). Discomfort is 3.72 (SD 0.427) and the lowest mean score is Innovativeness with a mean score of 3.70 (SD 0.430). Besides, for the dependent variable that is Educators' Readiness is 3.87 with a standard deviation of 0.392. The items were scored using a Likert scale which is 'Strongly disagree (1)' to 'Strongly agree (5)'.

In this section, the relationship between each four independent variables (Optimism, Innovativeness, Discomfort and Insecurity) with Educators' Readiness is identified. A summary correlation coefficient result findings. The results indicated that Educators' Readiness was a significant positive correlated with dimensions of technology belief, Optimism, Innovativeness, Discomfort and Insecurity ($p < 0.05$). The relationship is stronger when the R-value is closer to 1.000. Table 5 demonstrates the relative contribution of each of the predictor variables (Optimism, Innovativeness, Discomfort, and Insecurity) to the difference in the dependent variable (i.e. Educators' Readiness). The Unstandardized Coefficients B column gives the coefficients of the independent variables in the relapse mathematical statement including all the predictor variables.

Table 5: Relative Contribution of Independent Variables Predicting Dependent Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.231	.220		1.046	.299
Optimism	.855	.065	.834	13.097	.000
Innovativeness	.034	.072	.037	.472	.638
Discomfort	-.026	.090	-.029	-.291	.771
Insecurity	.102	.073	.110	1.399	.166

a. Dependent Variable: Educators' Readiness

The Standardized Beta Coefficient column (Refer Table 5) shows the contribution an individual variable made to the model. The beta weight is the average amount the dependent variable increases when the independent variable increase by one standard deviation (all other independent variables are held constant). Optimism shows the higher beta value ($\beta = 0.834$, $p < 0.05$) that has the greatest influence to the Educators' Readiness. However, the other three (3) variables which are Innovativeness ($\beta = 0.037$), Discomfort ($\beta = 0.029$) and Insecurity ($\beta = 0.110$) do not slightly contribute to Educators' Readiness ($p > 0.05$).

This theory implies that the higher the score of a contributor on one variable, the higher the score will be on the other variable. Likewise, if a member scores low on one variable then their score will likewise be low on the other variable. Thus, null hypotheses 1, 2, 3, 4, and 5 were rejected. The relationships were further analyzed in regression analysis.

In this study, all hypotheses were identified whether significant or non-significant. The four null hypotheses that is Hypotheses 2, 3, 4, and 5 were rejected because there were significant relationships between Optimism ($r = 0.892$), Innovativeness ($r = 0.561$), Discomfort ($r = 0.535$), and Insecurity ($r = 0.495$) and Educators' Readiness. These variables have positive relationship with Educators' Readiness as being shown by the significant positive relationship (Refer Table 6). It has a large correlation between variables and significant as the significant level of 0.01 ($p < 0.05$).

Table 6: Ranges of Scores [29]

Scores	Level
3.68 – 5.00	High
2.34 – 3.67	Medium
1.00 – 2.33	Low

In influencing Educators' Readiness, Optimism recording a highest beta value ($\beta = 0.834$, $p = 0.000$). Optimism has the greatest

influence to Educators' Readiness. However, Innovativeness (β = 0.037), Discomfort (β = 0.029) and Insecurity (β = 0.110) do not slightly contribute to Educators' Readiness (p > 0.05). This finding has some implication. Educators' readiness is affected by the increase of Optimism. Innovativeness, Discomfort and Insecurity do not affect Educators' Readiness directly when using mobile phone as pedagogical tools in the teaching process at the college. Thus, effort should be made to foster the Educators' Readiness to ensure the successful of m-learning via mobile phone implementation.

The dimensions of technology readiness were examined and the findings were used to determine whether the hypotheses were accepted or rejected. The four contributor variables are Optimism, Innovativeness, Discomfort and Insecurity. The variance or coefficient of determination or the R Squared in the effect of variable relation shows a significant correlation between the four independent variables (Optimism, Innovativeness, Discomfort, and Insecurity) and dependent variable (Educators' Readiness) with a value of R = 0.897. The R-square value tells the portion of the variance accounted for by the independent variables. From the result shown in model summary, 80.4% of the dimensions of technology belief determined Educators' Readiness. On the other hand, the value of Adjusted R Square obtained indicated that 79.4% of Educators' Readiness can be explained by independent variables. The other 20.6% may be explained by different factor.

ANOVA reveals F-Value and Significant value. The F-value is mean square regression (2.528) divided by the mean square residual (0.032) yielding 80.016. The p associated with this F value is at the significant level of 0.000b. This value specified is compared to alpha level 0.005 and since it is smaller, it can be justified that the independent variables reliably predict the dependent variable. In the degree of freedom (df) table, the first number represent the numbers of independent variable.

Predicting Dependent Variable shows the highest number is 0.834 for Optimism, which is significant at 0.000 levels. Therefore, Optimism makes the strongest unique contribution in explaining the dependent variable (Educators' Readiness). The B value for Optimism is 0.855. It means, if 2.1% Optimism dimension is being improved for Educators' Readiness, the readiness level among educators will be at 85.5%. The second dimension was Insecurity at the beta value of 0.110, followed by Innovativeness at the Beta value of 0.037 and the last dimension with the lowest Beta value is 0.029 for Discomfort. Standardized means that these values for each of the different variable have been auto converted to the same scale for easy comparison purposes. Without forgetting the hypotheses, the last part attempt to answer all four assumptions.

Alternative hypothesis 6 predicted that Optimism dimension in technology belief will influence the most to Educators' Readiness. The result of the study indicated that Optimism is the highest (β = 0.834) contributor to Educators' Readiness. P-value is at 0.000 (p < 0.05), therefore there is a significant relationship between Optimism and educators' Readiness. Alternative hypothesis 6 was accepted and null hypothesis 6 was rejected.

Alternative hypothesis 7 predicted that Innovativeness dimension in technology belief will influence the most on Educators' Readiness. The results of the study indicated that Innovativeness is the second highest (β = 0.037) contributor to Educators' Readiness. However, p value is at 0.638 (p > 0.05), therefore there is no significant relationship between Innovativeness and Educators' Readiness. Alternative hypothesis 7 was rejected and null hypothesis 7 was accepted.

Alternative hypothesis 8 predicted that Discomfort dimension in technology belief will influence the most to Educators' Readiness. The result of the study indicated that Discomfort is the lowest (β = 0.029) contributor to Educators' Readiness. However, p value is at 0.771 (p > 0.05), therefore there is no significant relationship between Discomfort and Educators' Readiness. Thus, alternative hypothesis 8 was rejected and null hypothesis 8 was accepted.

Alternative hypothesis 9 predicted that Insecurity dimension in technology belief will influence the most to Educators' Readiness. The result of the study indicated Insecurity is the second lowest (β = 0.110) contributor to Educators' Readiness. However, p value is at 0.166 (p > 0.05), therefore there is no significant relationship between Insecurity and Educators' Readiness. Thus, alternative hypothesis 9 was rejected and null hypothesis 9 was accepted.

Table 7: Hypothesis Results

Hypotheses	Beta Value	Significant	Results
Hypothesis 6	0.834	0.000	H_a: Accepted H_0: Rejected
Hypothesis 7	0.037	0.638	H_a: Rejected H_0: Accepted
Hypothesis 8	0.029	0.771	H_a: Rejected H_0: Accepted
Hypothesis 9	0.110	0.166	H_a: Rejected H_0: Accepted

Based on p-value (p < 0.05), alternative Hypothesis 6, and null Hypothesis 7, 8 and 9 were accepted while null Hypothesis 6, and alternative Hypothesis 7, 8 and 9 were rejected. The result was obtained through the reading of Beta values by using multiple regression analysis as shown in Table 7.

The main objective of this study is to examine which dimensions of technology belief influence the most to educators' readiness towards the adoption of m-learning via mobile phone in the teaching process. In this study, educators' readiness was selected as the dependent variable to be predicted by the four independent variables which are Optimism, Innovativeness, Discomfort and Insecurity. The interpretations are as follows:

a) The dimensions of technology belief including Optimism, Innovativeness, Discomfort, and Insecurity explain 89.7% of the variance (R2) in Educators' Readiness.
b) Optimism (β = 0.834, p < 0.05) recording a highest beta value. This value indicates that Optimism has the greatest influence to Educators' Readiness. For every units increase in the Optimism dimension, Educators' Readiness will be affected 0.834 units, provided other variables remain unchanged.
c) The three dimensions of technology belief which are Innovativeness (β = 0.037, p > 0.05), Discomfort (β = 0.029, p > 0.05) and Insecurity (β = 0.110, p > 0.05) indicated they are not significantly contributed to Educators' Readiness.

This study contributes to empirical contribution. It has given an overview of the dimensions of technology belief that is Optimism, Innovativeness, Discomfort and Insecurity on the educators' readiness towards the adoption of m-learning via mobile phone in the teaching process.

5. Conclusion

This paper studied the emerging systems and technologies among educators and students in higher education. The potential benefits of mobile phone that revealed in this study could increase the understanding on the integration of m-learning into teaching and learning process among educators and students. This paper is an arrangement of analysis and findings of the study. The results are focused on the gathered through survey by circulating questionnaires to the respondents. Information assembled from the overview was initially tried on its unwavering quality to guarantee results from the analysis are substantial. The main part of the discoveries depicted about the level of educators' readiness towards the implementation of m-learning through mobile phone in the teaching procedure at higher institution. The second part recognizes correlation between the dimensions of technology belief and educators' readiness. The dimensions of technology belief include Optimism, Innovativeness, Discomfort and Insecurity. Finally, the last part of this study defined which dimensions of technology belief have influence the most to educators' readiness towards the

adoption of m-learning via mobile phone in the teaching process. Since the respondents are only educators, it is recommended to expand it to students. The comprehensive findings may help college to come out with better practice of m-learning via mobile phone in the teaching and learning process. Future studies could expand to several different higher education institutions and compare the different teaching experiences at different higher education institutions. This may result in different level of educators' readiness and outcome. In addition, this also could benefit top management in decision making when it comes to IT investment in an increasingly mobile work environment.

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