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THE MODERATION OF LEARNERS' ATTITUDE ON THEIR ELEARNING ADOPTION AND TRAINING PERFORMANCE

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Abstract

The existing research project focuses on examining the connections among learners' attitude to elearning in training, their implementation of elearning in training and training performance. Significantly, it attempts to underline the moderation of learners' attitude to elearning in training. The research data was gathered by undertaking a survey of 437 learners in Vietnam. The findings indicate learners' attitude to elearning has positive influence on their implementation of elearning in training, which can in turn lead to the best possible training performance. The empirtical findings also deliver statistical evidence on the moderating role of learners' attitude to elearning in training in the influence of learners' implementation of elearning in training on their training performance. The research is beneficial to training administrators by providing them with insight into the relations among learners' attitude to elearning, their implementation of elearning in training and training performance. Consequently, they can decide on good online training courses that could enhance the learners' training performance.

Keywords: Attitude, Elearning, Performance, Moderation

JEL Classification Code: C12, C13, C51, I20, M15

1. Introduction

The current improvement in information technology and internet has facilitated virtual training and real-time interactions. In addition, information technology and internet have also been gradually reflected as a vital instrument to offer learners with learning resources to conquer knowledge (Lee, 2010). The method of traditional teaching has been gradually improved into an innovative technique, accredited as elearning. Elearning has been employed to facilitate teaching processes due to techniques generated from technology information and internet. From Salloum et al. (2019), elearning has become a significant system, which educational institutions have been globally selected. Elearning not only allows instructors to shape the training perception, helps learners to obtain good knowledge by discussing to improve their thinking skills. Accordingly, numerous benefits have been obtained because of accepting elearning for training. Several educational organizations have decided on elearning practices to offer their learners with distance teaching packages, which are aimed to deliver training and teachings to learners that are unable to join (Tarhini et al., 2017). Accepting elearning for learning and training is beneficial to teachers in training and learners in learning, where they do not need to meet up in traditional classes to discuss lessions. The infrastructure of elearning in developing countries has been ineffectually established, the adoption of which is considered still less than the suitable level. The above mentioned opinions reveal a lack of inclusive understanding of the causes and effects of elearning in developing countries.

Additionally, in the elearning setting, learners' attitude to using elearning for study is likely a

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driving force of their accepting elearning in study (Davis, 1986); while, numerous scholars (Harwell & Jackson, 2021; Franklin & Nahari, 2018; Hartshorne, & Ajjan, 2009) underlined the implementation of elearning in learning could result in learners' good learning performance. Furthermore, a study by Jawad and Shalash (2020) showed the acceptance of elearning in training organizations is a significant antecedent in improving learners' learning performance. As above mentioned, learners' attitude to employing elearning for study is an antecedent of adopting elearning in training, which in turn leads to improved training performance. Therefore, their implementation of elearning in training and training performance. As a result, learners' attitude to employing elearning in study can moderate the implementation of elearning and training performance.

Nevertheless, it seems that no studies have argued and explored the moderating effect of learners' attitude to using elearning in learning on the association between the implementation of elearning in learning and their training performance. The present research tries to discover the relations amongst learners' acceptance of elearning, attitude to using elearning in study and their training performance. Especially, it pursues to investigate and scrutinize the moderation of learners' attitude to using elearning for study in their implementation of elearning in training and learning performance. The existing study keeps going on as follows. Successively, the literatutre review will review the related literature and then develop the research hypotheses. Subsequently, the methodology will guide the data collection and facilitate the data analyses. The empirical results will be delivered in a subsequent part. Continually, some conclusions will be summarized in the last part.

2. Literature review

Elearning in education establishments plays a vigorous role in facilitating the processes of training, particularly for online training courses. Elearning, which is a strategy for informing necessary knowledge, skills, and attitudes in establishments, is to stay; the possibility, efficiency, and prospective of which depend mainly on how it is designed, distributed, and assessed (Derouin et al., 2005). The acceptance of elearning is likely comparable to the adoption of a new system of technology (Davis, 1986). Users' attitude to utilizing the new technology is their positive opinion of utilizing the new system of technology (Cheong and Park 2005). Particularly, users' positive attitude to using the new system of technology can encourage them to decide to use it. Accordingly, it is useful for the **elearning** setting to forecast and assess learners' adoption of **elearning in training**. From (Farahat, 2012), attitude is the extent of attention associated with a user's actual behavior. Positive attitude can boost their willingness to adopt a new tool of technology.

Based on Bhuasiri et al. (2012), elearning was one of the most imperative causes leading to success in educational institutions due to the quality of training improved. The acceptance of elearning in teaching institutions has become a fascinating topic for academics and training executives owing to simplification in teaching processes. The adoption of elearning in training is likely an effect of learners' attitude to elearning in training, but a cause of learners' learning performance. It can recommend learners' attitude to elearning in study is one of the important

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antecedents to the acceptance of elearning in study, which will in turn improve their learning performance (Sibanda & Donnelly, 2014).

Based on Eslamian and Khademi (2017), the implementation of elearning in studty likely motivates effectual engagement of learners, enhancement in training, and agreement of the learners to accomplish their learning plan that simplifies communications among learners and resources, and learners and mentors by utilizing animatronics and image for teaching lessons. The efficiency of elearning is based on if learners could gain what is taught. Additionally, Cavanaugh (2001) emphasized the technique of online teaching and that of traditional teaching in person are analogous. The technique of elearning could improve learners' school performance that likely boosts them to register in online teaching programs. Furthermore, learners adopting online training services will achieve superior school performance in comparison with the teaching courses in person (Franklin & Nahari, 2018; Park & Lee, 2021). The research results discover the implementation of elearning in learning positively affects the training effectiveness of teachers and learners. Sibanda and Donnelly (2014) underlined a positive effect of accepting elearning in training on the commitment of learners which will result in training performance. The research outcomes reveal no noticeable variations in training performance where the technique of elearning are offered. However, developments in the delivery of the marks are discovered.

Mothibi (2015) analyzed the influence of learners'adopting elearning and their school performance in training establishments. A positive influence of elearning on learners' training performance was discovered. Grounded on Fatima and Jabeen (2021), the implementation of elearning in training could boost learners' ability to take on tasks faster. Al-Qahtani and Higgins (2013) discovered a statistical difference in training performance among diverse techniques of teaching comprising elearning. The method of elearning had better be wholly grasped by mentors; thereby information can be quickly conveyed to learners remarkably and well (Tuna et al., 2018). Consequently, the implementation of elearning in teaching can lead mentors and learners to achieve effectual training aims (Hakim et al., 2019). Moreover, prior scholars (Sugiyanta & Sukardjo, 2018; Hoerunnisa et al., 2019; Hwang et al., 2019) indicated, the implementation of elearning in teaching could enhance learners' attention and inducement, and school performance.

Reis (2010) scrutinized learners' attitude to elearning in management and revealed learners are reflected to have positive attitude to elearning programs in study. Additionally, Lazim et al. (2021) emphasized learners' attitude is a vital sign for elearning and revealed learners' positive attitude can produce a positive result when they are willing to adopt elearning for their study. Moreover, Abdulla (2012) analyzed learners' attitude to elearning courses, indicating the linkage between learners'attitude to elearning and their adoption of elearning programs. Various studies (Yu et al., 2007; Yu, 2006) offered statistical evidence on the influence of learners' attitude to elearning on their adoption behavior of elearning in training. Furthermore, Jan et al. (2012) exploring the acceptance of elearning in training recognized learners' positive attitude to utilizing elearning is a driving force of their accepting elearning in training. The abovementioned arguments can posit learners' acceptance of elearning in training can be

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determined by their attitude to utilizing elearning in training. Prior research indicated learners, who have good attitude to elearning, likely adopt elearning for their study, which can result in their good training performance (Reis, 2010; Lazim et al., 2021; Jan et al., 2012), because learners' positive attitude could yield positive outcomes when they are willing to accept elearning for their study. Consequently, learners' attitude to utilizing elearning in training is one of the most important factors to their acceptance of elearning in training and their training performance. Generally, it can posit:

H1: Learners' application of elearning in training can lead to their improved learning performce

H2: Learners' positive attitude to employing elearning in training can increase their application of elearning in training

H3: Learners' attitude to employing elearning in training can moderate the connection between their application of elearning in training and learning performance

3. Methodology

Application of elearning (APE) is designed on the 4 items that are (APE1) - Intending to utilize elearning in training as much as possible, (APE2) - Intending to utilize online instruction to sopport study, and (APE3) - Intending to suggest elearning to friends, (APE4) - Intending to utilize elearning to sopport study, modified from Okazaki and Renda dos Santos (2012).

Learning performance (LEP) is assessed on the 6 elements that are (LEP1) - Online lessons have improved my analytic skills; (LEP2) - Online programs attempt to obtain the best out of all tbeir learners; (LEP3) - Online courses have aided me to cultivate the ability to plan my own job; (LEP4) - Online lessons have stimulated me to advance my academic interests as much as possible; (LEP5) - Online lessons have improved my written communicating skills; and (LEP6) - Because of doing online lessons, one feels more confident about confronting unfamiliar difficulties, modified from Gopal et al. (2021).Attitude to employing elearning (AEE) is evaluated on 4 components. The 4 questions are (AEE1) Using elearning is a good idea, (AEE2) I would feel that using elearning is pleasant, (AEE3) in my opinion, it would be desirable to use elearning and (AEE4) in my view, using elearning is a wise idea intention, modified from Jan et al. (2012).

The data was collected from a sample of learners in Vietnam National University of Ho Chi Minh. The first sample of 1500 learners was asked to get the data for our research. However, only 1023 learners were to offer the responses. And finally, only 437 good replies with sufficiently required information for this paper were obtained. Salloum et al.'s (2019) analyses were undertaken to test the measurement of items and construct validity. Then, the current project used regressions to examine the causal interactions; while it applied the procedures of hierarchical multiple regressions to examine the moderating influence.

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4. Empirical results

To analyze the validity and reliability of the constructs with numerous elements, this research performed the reliability and factor analyses for the constructs. The results are shown in Tables 1, 2 & 3.

Table 1: Validity and reliability analyses

Factor	Item	Correlations	Loading	Cronbach's α	Communalities	KMO	CR	AVE
APE	APE1	.686	.798	.876	.668	.807	.893	.735
	APE2	.760	.871		.771			
	APE3	.747	.857		.738			
	APE4	.781	.878		.792			
LEP	LEP1	.765	.844	.904	.726	.886	.918	.562
	LEP2	.789	.840		.756			
	LEP3	.706	.766		.628			
	LEP4	.766	.788		.693			
	LEP5	.625	.741		.524			
	LEP6	.742	.789		.720			
AEE	AEE1	.645	.719	.879	.785	.816	.911	.678
	AEE2	.756	.840		.879			
	AEE3	.803	.881		.902			
	AEE4	.774	.833		.870			

Table 2: Square root of AVE

	AEE	APE	LEP
AEE	**.823**		
APE	.243	**.857**	
LEP	.487	.242	**.749**

Table 3: Cross-loadings

	AEE	APE	LEP
AEE1	**.719**	.187	.230
AEE2	**.840**	.046	.229
AEE3	**.881**	.072	.193
AEE4	**.833**	.108	.253
APE1	.181	**.798**	.047
APE2	.093	**.857**	.170
APE3	.052	**.871**	.006
APE4	.054	**.878**	.172
LEP1	.121	.127	**.844**
LEP2	.154	.203	**.840**
LEP3	.229	.023	**.766**
LEP4	.254	.183	**.788**
LEP5	.164	-.014	**.741**
LEP6	.261	.060	**.789**

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Based on Table 1, the correlations all surpass the 0.5 level. Additionally, the Cronbach's αs all exceed the 0.7 value. Furthermore, the communalities all surpass the 0.5 threshold. Moreover, the KMOs are all greater than the 0.7 limit. To evaluate the measurement of elements, the procedures of Salloum et al. (2019) were employed. All the loadings, Chronbach's αs, as well as CRs surpass the 0.7 limit. Furthermore, the AVEs exceed the 0.5 value. Those figures endorse the convergent validity of the research model. The values of square root of AVE in Table 2 all surpass their correlations. The loadings of every element in Table 3 all exceed that of its corresponding factor, demonstrating the measurements of constructs in the research model achieve the goodness of fit. Overall, all the constructs content the construct validity and reliability. Therefore, the constructs utilized in the current article are dependably reserved for next analyses.

Successively, regression analyses were performed to scrutinize the causal bonds, the findings of which are exhibited in Table 4. With Model 1, the F gains the 29.550 value with P_F of 1%. R^2 designates learners' attitude to utilizing elearning in training explains 6.4% in the implementation of elearning in training ($F = 29.550$; $P_F = 0.000$; $R^2 = 0.064$). Those figures show Model achieves the goodness of fit. Learners' attitude to utilizing elearning in training positively influences their implementation of elearning in training at the 1% significance level with the influential estimate of 0.225 ($\beta = 0.225$; $t = 5.436$; $P_t = 0.000$), offering statistical evidence in supporting H2: "Learners' positive attitude to utilizing elearning in training can increase their implementation of elearning in training".

With Model 2, the F obtains the 24.916 value at the 1% significance level. R^2 demonstrates learners' attitude to utilizing elearning and their implementation of elearning in training conjointly explain 5.4% in learner' training performance ($F = 24.916$; $P_F = 0.000$; $R^2 = 0.054$), demonstrating Model 2 obtains the goodness of fit. Learners' implementation of elearning in training affects their training performance at a 1% statistical significance with the estimate of 0.213 ($\beta = 0.213$; $t = 4.992$; $P_t = 0.000$), in statistical support for H1: "Learners' implementation of elearning in training can improve their training performance".

Table 4: Regression analyses

Model	Dependent factor	Independent factor	β	S.E.	t	P_t	F	P_F	R^2
1	APE	C	2.766	.166	16.705	.000	29.550	.000	.064
		AEE	.225	.041	5.436	.000			
2	LEP	C	2.935	.160	18.343	.000	24.916	.000	.054
		APE	.213	.043	4.992	.000			

The moderating influence of learners' attitude to employing elearning on the relationship between learners' application of elearning in training and their learning performance is tested with the procedures of hierarchical multiple regressions. First, the interaction of APE & AEE was created by multiplying APE with AEE. Then the hierarchical multiple regressions were undertaken. The results are presented in Tables 5 & 6. With Model 3, the independent variables

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(APE & AEE) are first included, followed by including the interaction of APE & AEE into Model 4. The outcomes reveal APE and AEE affect LEP at a 1% significance level.

Table 5: Hierarchical multiple regressions

Model	Dependent factor	Independent factor	β	S.E.	t	P_t	F	P_F
3	LEP	C	1.881	.175	10.765	.000	70.688	.000
		APE	.109	.040	2.755	.006		
		AEE	.370	.035	10.498	.000		
4	LEP	C	.527	.563	.936	.350	49.841	.000
		APE	.499	.159	3.133	.002		
		AEE	.723	.144	5.026	.000		
		APE*AEE	-.100	.040	-2.528	.012		

The insertion of the interaction (APE & AEE) into Model 4 increases the explanation power to 25, 7% from 24, and 6% with the change significance at the 1% level. Furthermore, the influence of APE*AEE on LEP is statistically significant at the 5% level. Consequently, it can suggest hypothesis H3 is significantly supported where learners' attitude to employing elearning moderates the association between learners' application of elearning in training and their learning performance.

The moderating influence of learners' attitude to employing elearning on the relationship between learners' application of elearning in training and their learning performance is tested with the procedures of hierarchical multiple regressions. However, the influential coefficient of APE*AEE on LEP is -0.1, reflecting, when learners' attitude to employing elearning is more positive, the relationship between learners' application of elearning in training and their learning performance is weaker. Overall, the results indicate statistical support for H3: "Learners' attitude to employing elearning in training may moderate the bond between their implementation of elearning in training and their training performance". Accordingly, when examining the causal bond between learners' implementation of elearning in training and their training performance, the moderating role of learners' attitude to employing elearning in training should be taken into consideration.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	S.E.	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
3	.496[a]	.246	.242	.70159	.246	70.688	2	434	.000
4	.507[b]	.257	.252	.69727	.011	6.391	1	433	.012

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5. Conclusion

The current research work seeks to investigate the interactions among learners' attitude to elearning, their implementation of elearning in training, and training performance. Meaningfully, it attempts to emphasize the moderation of learners' attitude to elearning. The empirical results reveal learners' attitude to elearning positively affects their implementation of elearning in training that will in turn improve their training performance. More importantly, the empirtical results deliver statistical evidence on the moderating effect of learners' attitude to elearning in the link between learners' accepting elearning in training and their training performance.

The significance of learners' attitude to elearning in training is highlighted in the existing research, where it is not only one of the vital determinant of learners' training performance, but it also plays a moderating role in the research model between learners' accepting elearning in training and their training performance. The current research is one of the first to provide statistical evidence on the moderation of learners' attitude to elearning in training between learners' implementation of elearning in training and their training performance. It is beneficial to educational executives because it offers them with a better understanding of the bonds among learners' attitude to elearning, their implementation of elearning in training and training performance. Consequently, educational managers could make better decisions on designing good online training courses, which will help to improve their learners' training performance.

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