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Assessing Educators' Personal Characters on the Usage of E-Learning in Wadi-Alhayat, Higher Education Institution, Libya

Abdussalam Mohamed Ali Taher*, Rohaya Dahari

School of Computing, College of Arts and Sciences

Universiti Utara Malaysia, Sintok, Kedah, Malaysia

*Corresponding e-mail: abdussalam815671@gmail.com

Abstract

Enormous researches have emerged in the usage of E-learning. E-learning is so important to today's educational system. The use of e-learning in educational institutions can ease the burdens associated with both teaching and learning processes, thereby improving the overall standard of education. Meanwhile, despite, its numerous benefits, its adoption in Wadi-Alhayat higher education institutions, Libya still remain unsatisfactory. Most educators in the institution have not seen the reason to adopt totally the service into the college educational system due to some issues. This has caused a lot of setback to efficient e-learning usage in the institution. Meanwhile, studies have identified that, educators' personal characters is among numerous factors that can determine the use of e-learning among educators/instructors in higher learning institutions. Therefore, this study aims to assess this factor in relation to the use of e-learning among educators in Wadi-Alhayat higher education institution, Libya. This study used quantitative data where the data was collected through survey questionnaires distributed to educators' in Wadi-Alhayat higher education institution, Libya. This type of data was quantified through the Likert scale, used in decoding the several variables that will be used to investigate the research issue and capture the respondents' responses. The result from Pearson product-moment correlation revealed that relationship between educator's personal character and the use of e-learning is an extremely low, non-significant relationship with a coefficient of correlation value (r) = 0.018. Therefore, finding shows that the hypothesized relationship between educator's personal characters and usage of e-learning in Wadi-Alhayat higher education institution, Libya is statistically not related.

Keywords: e-learning, educators' personal characters, Wadi-Alhayat Institution

Introduction

The low level of e-learning usage in Libya higher education institutions contribute to poor education standard. However, the general decline in the technological development of the country at large is a major contributing factor. Nevertheless, aside from this, it is apparent that most higher education institutions in the country have not adopted fully the use of e-learning approach in their educational system. In fact, the rate of adoption of e-learning services in the Libyan higher educational system is still recorded low (Kenan *et al.*, 2012). Hence, without growing interest in the willingness and adoption of e-learning, the issue of improvement in technology might be difficult to resolve which may hamper the willingness of Libyan higher institutions in competing with the rest of the world.

Though, several factors contribute to the inefficient use of e-learning in the Libya higher education institutions, but certain issues are so pronounced. E-learning utilization in Libyan higher education relate to several issues ranging from adoption to management and development of the services (Bhuasiri *et al.*, 2012). Most importantly, inadequacy and low level of accessibility of technological infrastructures are the most challenging factor to the

utilization of the e-learning services among educators (Kenan & Pislaru, 2012; Kenan *et al.*, 2013).

Similarly, Kenan and Pislaru (2012) identified that, technology and attitude of users limit the use of e-learning in Libyan HEIs. The authors further said that, although, most Libyan universities provides personal computers to faculty members, but the rate of computer literacy is still low due to the non-committal attitude of the educators in adopting e-learning strategies.

Hence, it is obvious that, the general usage of e-learning service in Libya higher education institution faces a lot of challenges. Although, some institutions in the country are seeing improvement, but Wadi-Alhayat is still lacking as most of its educators are still adamant to the traditional face-to-face system of teaching and learning. Most educators in the institution have not seen the reason to adopt totally the service into the college educational system due to some issues. This has caused a lot of setback to efficient e-learning usage in the institution.

Meanwhile, studies have identified that, educators' personal characters is among numerous factors that can determine the use of e-learning among educators/instructors in higher learning institutions. Therefore, this study aims to assess this factor in relation to the use of e-learning among educators in Wadi-Alhayat higher education institution, Libya.

Literature Review

Benefits in the Adopting of E-learning

E-learning has the potential to provides learners and teachers the privilege to get more involved in the learning process and to share ideas and suggestions in different communication modes (synchronous and asynchronous; Direct and Indirect) which is devoid of all obstacles related to time and distance (Taha, 2014).

Al-Harbi (2010) opined that, e-learning transcends time and geographical barriers and provides a convenient learning environment. Kwofie and Henten, (2011) and Alkharang and Ghinea, (2013) also states that one of the major advantage provided by e-learning is flexibility. E-Learning permits flexibility in service delivery by allowing the incorporation of some communication tools such as audio-chatting, online discussion, and video conferencing that provide learners with the opportunity to interact with others and the teachers effectively (Al-Adwan and Semedly, 2012).

In addition, e-learning provides enormous benefits that include: Better accessibility to information, Improved content standardization and delivery, on-demand availability, personalized instruction, enhanced interactions, accountability, time and space minimization, and convenience (Taha, 2014). These have the potential to create a meaningful and enabling learning environment that can enhance communication and interactions.

Factors Influencing the Usage E-learning Utilization in Wadi-Alhayat

Though, e-learning is becoming widely accepted to support teaching and learning in the higher education institutions, there are still several challenges related to its exploration and utilization (Alkharang and Ghinea, 2013; Bhuasiri *et al.*, 2012; Kwofie and Henten, 2011; Mapuva, 2009). For instance, e-learning requires much cost, technical readiness, academic confidence, motivation, social support, technical skills and competencies, and stable and standard technological infrastructures (Kwofie & Henten, 2011).

Furthermore, Bhuasiri *et al.* (2012) highlighted that, learners' characteristics and motivation, e-learning environment, instructors' characteristics, institution and service quality, course and information quality and infrastructure and system quality are crucial to e-learning adoption.

Nevertheless, extant research have indicated that wider acceptance of e-learning depends on several factors which include technology, human, institution and organization, management, environment, ethics and pedagogy (Andersson and Gronlund, 2009; Mapuva, 2009).

In particular, Alkharang and Ghinea (2013) identified that effective use of e-learning relates to technical (Internet speed, technology (IT &ICT) infrastructures, bandwidth, computer and network security, privacy and data confidentiality), management (management awareness and support), and languages. Meanwhile, Abdelraheem (2006) highlighted that lack of ICT infrastructures, cultural restrictions, leadership perception, copyright issues, instructors and learners' experience, e-learning strategy, and local content are problems to e-learning usage.

Thus, the use of e-learning in any organization depends on several factors that can determine the success of such service (Alkharang and Ghinea, (2013); Andersson and Gronlund, (2009); Mapuva, (2009)). Selim (2007) identified that personal characteristics of Instructors (such as; technological skill, teaching style), students characteristics (technical competency, motivation, perception of learning content and system, collaborative and interactive ability), technology internet speed, accessibility, multimedia features), and management support (computer availability, technical support) are the to determine the success of e-learning.

Study carried out at King Saud University by Alhomod and Shafi (2013) noted that the level of e-learning implementation could be assess through Technical Support; Management Support; Organization Commitment; Sufficient Users Training; Positive attitude of users; Sufficient e-learning initiatives; Availability of Info on E-learning Website; Easy To Use tools; Sufficient Manpower; Sufficient Training to Engineers; and Support from other Departments.

Therefore, to assess the usage of e-learning in Wadi-Alhayat, most of these factors offered the needed direction. Summary of the factors as presented in the discussion and it shown in Table 1 below.

Table 1
Factors that can enhance Utilization of E-learning

Factors	Authors
Personal characteristics of Instructors; Positive attitude of users.	Selim (2007), and Alhomod & Shafi, (2013)

Personality Trait

Personality trait theory, though often used in the domain of psychology but now it being use in the domain of information technology to describe attitudes that reflects people's tendency to use new information technologies independently of the communicated experience of others (Schillewaert, Ahearne, Frambach, & Moenaert, 2005). According to Karahanna et al., (2002), this theory play significant role in the adoption of a particular information system, and it determines people's intention to use and accept a technology.

Therefore, in relation to this study, personal characteristics of educators are considered as a trait that determines their individual intuition in accepting to use e-learning. For the educators, the traits relates to their technological skill, teaching style, and attitude. This plays significant role in determining their willingness to accept the use of e-learning. According to Kenan and Pislaru, (2012), although, most Libyan universities provide personal computers to faculty members, but the rate of computer literacy is still low. This aspect indicates the willingness of the educators in adopting e-learning strategies.

Methodology

Population and Sample

The population of this study is the body of lecturers from the Wadi-alhayat institution, Libya. Educators are chosen because of their important role in the adoption and usage of e-learning in for teaching. In sum, the school has a population of 70 educators. Sixty-two (62) educators considered sufficient for the responses needed for this research. According to Kline (2011), for a population of 70, sampling size of 59 and above is enough for the investigation of a particular issue within such population.

Reliability Test

Pallant (2011) explained that reliability test is conducted as a means of examining the internal consistency of the items used to test the underscored variable. Table 2 below presents the Cronbach's Alpha scores being the result of the reliability test. The acceptable Cronbach's Alpha score for this kind of study is 0.6 and above, as according to Pallant (2011). It can be depicted in Table 2 that all the variables obtained acceptable scores of Cronbach's Alpha. This result indicates that the questionnaire adopted for data collection in this study is reliable. Impliedly, the items have internal consistency, hence truly tested what they are meant to test in the study.

Table 2

Reliability test

No	Construct	Number of Items	Cronbach's Alpha
1	Educator's Personal Characters	5	0.893
2	Usage of E-learning	7	0.858

Findings

Demographic Profile of the Respondents

The result of the demographic profile of the respondents shows that out of the 62 respondents analyzed in this study, 57 (91.9%) are male and only 5 (8.1%) are female. Most of the respondents (58.1%) in this study are between 30 -39 years of age. Fifteen (24.2%) fall within the age range of 25-29 years and 11(17.7%) are between 40-59 years of age. Thirty-eight (61.3%) of the respondents hold a Master's degree, 10 (16.1%) are Doctors of Philosophy (PhD), 9 (14.5%) have a Bachelor's degree and the least educational level of the respondents is Diploma. The result shows that 5 (8.1%) have a Diploma degree. Out of the 62 respondents, 40 (64.5%) collect between \$600 and \$1,500 as their annual income, followed by 14 (22.6%) that collect below \$500 as their annual income. Six (9.7%) claim they collect between \$1,600 and \$3,000 and the least annual income collected by the respondents is \$3000 and above, as it is just only 2 (3.2%) of the respondents that collect that as their annual income.

Level of Technological Infrastructure

Descriptive analysis presented in Table 3 below shows the level of technological infrastructure among educators in Wadi-Alhayat, Higher Education Institution in Libya. The result shows that, 33 (53.2%) do not have access to computers and 29 (46.8%) have access to computer. Although more educators do not have access to computer, but there is no much difference among educators that have access to computers and those that do not have access to computers. Thirty-six (58.1%) educators among the respondents have access to internet

technology and 26 (41.9%) do not have access to internet. More than averages of the respondents obviously have access to the internet. Fifty (80.6%) do not have access to Ipads and smart devices but 12 (19.4%) respondents have access to Ipad/smart devices. Educators with no access to Ipad or smart devices are significantly more than educators that have access to Ipads and smart devices. Thirty-nine (62.9%) have access to laptops while 23(37.1%) have no access to laptops.

Forty (64.5%) respondents claimed they have access to computers for teaching in classrooms while 22 (35.5%) claimed there are no access to computers for teaching in their class rooms. Fifty-three (85.5%) respondents claimed there are no projectors for teaching in classrooms, only 9 (14.5%) of the respondents claimed to have access to projector for teaching. In addition, 40 (64.5%) recorded that they have access to electronic board in class rooms while the remaining 22 (35.5%) claimed they have no access to electronic board for teaching. Thirty-eight (61.3%) have no access to internet technology in their classrooms and the remaining 24 (38.7%) have access to internet technology in their class rooms. Lastly, huge percentages (93.5%) of the respondents have no electronic learning portal, only 4 (6.5%) claimed to have access to electronic learning portal.

Table 3
Level of Technological Infrastructure

No	Construct	Items	Frequency	Percentage (%)
1	Access to Computers	Haves	29	46.8
		Have-nots	33	53.2
2	Access to Internet	Haves	36	58.1
		Have-nots	26	41.9
3	Access to Ipads/Smart Devices	Haves	12	19.4
		Have-nots	50	80.6
4	Access to Laptops	Haves	39	62.9
		Have-nots	23	37.1
5	Access to computer for teaching	Haves	40	64.5
		Have-nots	22	35.5
7	Access to projector for teaching	Haves	9	14.5
		Have-nots	53	85.5
8	Access to electronic board for teaching	Haves	22	35.5
		Have-nots	40	64.5
9	Access to internet technology for teaching	Haves	24	38.7
		Have-nots	38	61.3
10	Access to electronic learning portal for teaching	Haves	4	6.5
		Have-nots	58	93.5

Pearson Product-Moment Correlation Analysis

The Pearson product-moment correlation analysis was employed in this study to determine the strength and the direction of the bivariate relationship between each of the

independent variable (educator's personal characters) and the dependent variable (usage of e-learning). The result of the correlation analysis is presented in Table 4 below.

Table 4
Pearson Product-Moment Correlation Analysis

		Usage of E-Learning	
	Pearson Correlation		.018
Educator's Personal Characters	Sig. (2-tailed)		.892
	N		62

The result presented in Table 4 above, the Pearson product-moment correlation revealed that the relationship between educator's personal character is an extremely low, non-significant relationship with a coefficient of correlation value (r) = 0.018.

Multiple Regression Analysis

The result of the multiple regression analysis in this study as shown in Table 5 shows that R^2 -squared (R^2) = 0.541, therefore, 54.1% of the variance in usage of e-learning is explained by the independent variable (educator's personal characters).

Table 5
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.736 ^a	.541	.517	.50681	.541	22.805	3	58	.000

Furthermore, the result of the analysis as shown in Table 6 revealed a statistical significant relationship between educator's personal character and usage of e-learning. The equation of the analysis ($F (3, 58) = 22.805, P < 0.05$). The significant value obtained =0.000 which is lesser than the significant level 0.05. Therefore, the null hypothesis is accepted which means that educator's personal character is significantly related to usage of e-learning.

Table 6
Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	17.573	3	5.858	22.805	.000 ^a
Residual	14.898	58	.257		
Total	32.470	61			

From the Table 7 below, the result of the analysis shows that educator's personal character has contribution only 5% in explaining usage of e-learning ($\beta = 0.051$). The obtained significance for educator's personal character is 0.572 which is greater than 0.05. Therefore, Educators' personal character does not influence the usage of e-learning among educators in Wadi-Alhayat higher education institution, Libya.

Table 7
Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	.210	.484		.433	.666
Educator's Personal Character	-.040	.071	-.051	-.568	.572

Based on the statistical analyses conducted in this study, findings were found in the hypothesized relationships and the result shows that relationship between educator's personal character and usage of e-learning is statistically not related.

Discussion and Conclusion

The study objectively aims at examining the impact of educator's personal character on the usage of e-learning by educators from Wadi-Alhayat higher education institution, Libya. According to the findings, it can be seen that, majority of the respondents do not have access to electronic board, projector, computer and electronic learning portal. The implication of their lack of access to this is directly impactful on the success of e-learning. The lack of access to electronic learning portals which is conceptually regarded as the virtual hub of the entire e-learning activities is obviously high. Ostensibly, it was found that more than averages of the respondents have access to internet technology. It is also discovered that there is a medium level of technical-know-how among educators from Wadi-Alhayat higher education institution, Libya.

The result from the correlation and regression conducted in this study unanimously imply that educator's access or lack of access to technological infrastructure such as; computers in classrooms, projectors, electronic boards, laptops and electronic learning portals have a significant effect on educator's usage of e-learning. The finding of this study is similar to the conclusions presented by previous studies. Past studies such as Selim (2007) and Al-Fadhli (2009) consistently concluded that availability of technologies, access to technology and lack of access to technologies such as learning applications and sundry affect the success of e-learning usage.

The result of the correlation and regression presented in this study also shows that the hypothesized relationship and effect of educator's personal characters on usage of e-learning is not significant statistically. The findings imply that the characters of educators, like their attitude, approach and perception towards e-learning do not affect their usage of e-learning applications. In other words, this finding exposes the dissimilarity between the characters of users of e-learning the functionality of e-learning as system. The implication to this finding can be explained with the fact that e-learning as a technology is becoming inevitable lately. So much that, even those that are not interested to use e-learning, not motivated to use e-learning and do not have embracing attitude towards the usage of e-learning could not do without the technology. In essence, attitude of educator's cannot impact their acceptance of e-learning in their teaching styles.

Limitations and Future Research

This study has limitations. First, the sample was collected from educators at Wadi-Alhayat higher education institution, Libya. More research can be conducted at several department, and in different universities to improve the generalization of the findings. Second future research might also examine the other critical factors (i.e. Students' perspectives, e-

learning characteristics, and university support) influencing the success of universities' e-learning adoption in detail. Finally, the study assessed e-learning usage from educators' perspective and further research may evaluate it from students' perspective.

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