Female Students' Attitude towards E-learning in Saudi Higher Education

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Abstract: New technology has been used inside and outside the classroom to enhance student learning. Elearning is becoming increasingly important in the delivery of higher education in developing countries and has attracted more attention from different scholars recently. The study used the concept of e-learning to refer to the smart infrastructures adopted by various universities with the intention of improving education in institutions of higher education. This research aimed to discuss the factors that influence e-learning in Saudi higher education especially for females learning. The study adopted the survey method and used random sampling to identify the sample of 381 female students in Al-Baha University who filled the questionnaires as participants study. The researcher used SPSS different analytical techniques to get the findings of the study. According to the result, the research established that the attitude of the female University students were positively related to e-learning and demonstrated that Usefulness, Flexibility, Interactivity, and University Support were critical determination of female students attitude towards E-learning. Therefore, the research helped to prove that the multiple factors contribute to the formation of the students' attitude should be considered before installing any E-learning in any higher education institution in Saudi Arabia.

Key words: E-learning; Female Students; Higher Education; Attitude; Saudi Arabia; Al Baha

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I. Introduction

The new advancement in communication and information technologies has made an impact on every aspect of our societies. Mainly commerce and education have been influenced (Garrison & Anderson, 2003; Khan, 2005). Education facilitated by e-learning is transforming learning and instruction forms (Garrison & Anderson, 2003) in ways "that extend beyond the efficient delivery or entertainment value of traditional approaches" (Garrison & Anderson, 2003, p. 2). Because of this reason, more and more educational institutions around the world are embracing e-learning systems and investing heavily. E-learning has proved to be the best means in the corporate sector as well as in education system, especially when training programs are conducted by multinational companies for professionals across the globe and employees, teachers and student are able to acquire important skills while sitting in a board room or conference room, which are conducted for employees, faculty and students of the same or the different organizations or universities under one roof. The schools and universities which uses E-learning technologies are a step ahead of those which still have the traditional approach towards learning.

In Saudi Arabia, the government has launched a national plan for the utilization of information technology (IT). The plan urges, "the implementation of e-learning and distance learning and all their prospective applications in higher education" (National Centre for e-Learning and Distance Learning, 2008). E-Learning is still in its infancy in Saudi Arabia. Therefore, the government is still working on the improvement of information technology in all schools across the country. The government has started a program, WATANI School's Net Project to connect learning institutions and educational directories by providing a wide area network covering the entire KSA (Al-Asmari & Khan, 2014). The Council of Higher Education, at its 53 rd session, on 25/11/1429 H, approved Resolution No. (6/52/1429) on the establishment of the e-Learning Center at Al-Baha University on the recommendation of the University Council in its third session of the academic year 1428/1429H, 21/6/1429 H corresponding to 25/6/2008 (Deanship of e-learning in Al-Baha University, 2016). The tools available in Al-Baha University had to be invested to enhance the role of university education in the development of knowledge industries through e-learning. With e-learning, Al-Baha University can move beyond distance and time constraints in implementing the educational process as it wish.

Female student in Saudi Arabia have better access to higher education than they did in the past, elearning now is one of the avenues of education that have made that more possible. However, the success of elearning programs depends on the female students' attitude toward the programs and their willingness to move from traditional forms of learning to the more efficient form of e-learning (Al-Doub, Goodwin & Al-Hunaiyyan, 2008). Previous studies have shown that there are significant differences between the confidence that male and female have in the use of e-learning technology (Al-Fahad, 2009). Compared to male students, female students seems to have less positive attitudes towards e-learning technology (Penny, 2011). In addition to there being few gender-relevant studies on general education in Saudi Arabia, there are even fewer studies investigating gender differences in confidence perceptions of e-learning technology specifically in Saudi Arabia (Al-Harbi, 2011). This study investigates the attitudes and beliefs held specifically by female students in higher learning institutions in Al-Baha Province.

Among the essential learning factors that affect ever discipline in education is motivation (Kahveci, 2010). In the past decade, higher education institutions in Saudi Arabia have invested in content development, training of IT Staff and relevant infrastructure; however, without the adequate motivation from the female students' end, these investments may not be sufficient to cause a shift to e-learning methods (Nassuora, 2012).

The purpose of this study, is to investigate the factors that influence e-learning acceptance by Saudi female students with reference to Al-Baha. This research tries to focus that the Individuals who are disadvantaged for geographic, physical or social circumstances have increasingly better educational chances via e-learning. This research further tries to explain that e-learning supports synchronous and asynchronous communications in various formats ranging from text, voice and audio.

II. Literature Review and Conceptual Framework

The Theory of Acceptance Model (TAM) which was developed by Davis (1989) is widely used in the field of user behavior and technology acceptance. TAM predicts user attitude toward using the system based on the influence of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). In addition, a direct relationship between external variables such as prior experiences with technology influenced PU and PEOU is also proposed by TAM.

TAM has been found robust when applied to diverse technologies in many research thus, TAM selected and adopted. This present study propose a model to extend TAM in order to study the factors which influence students' attitude toward E-learning in Al-Baha Higher Education (Al-Baha University). To be able to advance TAM, The conceptual framework in this study adopted two system attributes: Perceived Flexibility and Perceived Interactivity from Pituch and Lee (2006) study and University Support based on Selim (2007) study. Consequently, Flexibility, Interactivity and, University Support conceptualized to include in this version of TAM that used for this study.

The basic factors which influence students' attitude toward E-learning were developed and summarized into three levels: individual level, system level, and institutional level. The user level includes student's Attitude (ATU) and Internet Experience (IE). The system level includes e-learning system characteristics, specifically, Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Perceived Flexibility (PF) and Perceived Interactivity (PI). The institutional level has one factor which is University Support (US). The proposed model could cover the explanation of students' attitude in the E-learning context. The conceptual framework is shown in Figure 1.

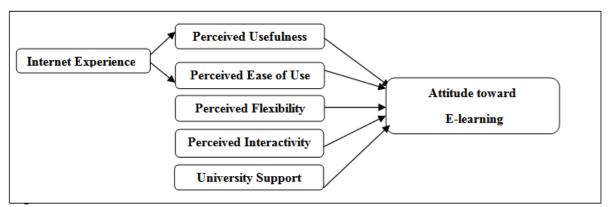


Fig 1: The Research Model

Eagly & Chaiken (2007, p. 1) define Attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor". Attitude toward any IT are determined by beliefs about that IT that associating with its attributes (Ajzan and Fishbein, 1980). For that, a favorable attitude toward E-learning will be depend on students' believe it has positive attributes, In contrast, they will have an unfavorable attitude if they associate E-learning with negative attributes. Thus, the aim for studying

students' attitudes toward E-learning is that their positive attitude might reflect the students' subsequent use of the technology (Smith, Caputi & Rawstorne, 2000).

In this research, Internet experience is used to mean the student's level of knowledge regarding Internet services' and their usage experience. It reflects the students' history of using Internet, and the kind of functions for which they use the Internet. The role of prior experience in adoption of IT has been studied by Taylor and Todd (1995), who found that prior experience can have a salient effect upon IT adoption and usage. Oh, Ahn and Kim (2003) have also observed significant evidence for the influence of prior experience upon PE and PEOU. Thus, the concept of "Internet experience" is critical for comprehension of technology and the related benefits it might provide to form positive attitudes towards E-learning by making students found it useful and feel comfortable to use it. Hence, based on the previous research, this study's first hypotheses examine the existence of these links between prior experience and future expectations:

H1: Internet Experience has a positive effect on Perceived Usefulness.

H2: Internet Experience has a positive effect on Perceived Ease of Use.

Many schools are increasingly adopting e-learning systems where students can access course materials from the web. Indeed, the Technology Acceptance Model (TAM) suggests that perceived usefulness (PU) has a significant effect on learners' attitude. In such a way, positively valued outcomes influence students' behavior (Sanchez & Hueros, 2010). PU refers to the magnitude in which people believe that using a technological system can improve job performance (Davis,1989). In addition, PU can predict the behavioral intention of accepting a specific technology. In particular, some studies conducted to show the importance of online educational systems portray that PU is critical in explaining people's attitude toward the adoption of instructional technology (Liaw & Huang, 2013). For example, university students get more educational opportunities from e-learning. As a fact, they download free e-books that enable them to reduce their school expenses (Lee, 2010). When PU levels increase students develop favorable e-learning attitude. For instance, students who use e-learning to access learning materials develop a positive attitude in adopting the technology (Sanchez & Hueros, 2010). Hence, they have a high likelihood to attract others who may not be using e-learning systems. Students develop either a positive or negative attitude toward a particular course depending on its usefulness in completing real-life tasks efficiently. Consequently, they are likely to get motivated to study a subject that enables them to acquire technical skills. In reality, goal-oriented learners who use technology to achieve their long-term objectives have a positive attitude toward e-learning. In other words, students who know the usefulness of technology find it constructive in undertaking their daily activities. Based on the discussion above, the following hypothesis can be applied:

H3: Perceived Usefulness has a positive effect on Students' attitude toward E-learning.

A vast majority of people frequently apply the technology that is easy to use in their daily lives. Specifically, PEOU refers to the degree in which individuals believe that the use of a particular system does not require an extra effort (Davis, 1989; Shroff, Deneen, & Eugenia, 2011). The perception of the ease of use determines whether students will adopt a particular technology in their learning process. Moreover, it influences their attitude of accepting e-learning system (Teo, 2010). Numerous studies portray that PEOU significantly affects students' attitude toward educational technology (Teo, 2010). For example, in a study performed in a Malaysian university, students were found to adopt blackboard within a short period due to its ease of use. Similarly, university students from another institution of higher education were investigated on their use of elearning system (Shroff, Deneen, & Eugenia, 2011). Researchers found out that learners used some technologies frequently more than others (Ngai et al., 2007; Jung et al. 2008; Park, 2009). The commonly used systems had a friendly user-interface such that students navigated without difficulties. Based on the above studies, there was enough evidence that PEOU significantly influences the attitude toward e-learning systems. In simple terms, students use e-learning systems since the technology enable them to access course materials quickly. Thus, students accept systems that are easy to use and avoid the complex ones (Joo, Lim, & Kim, 2011). With this in mind, some technologies appear complicated such that it can take more time for a person to learn how to use them. Indeed, those are the systems that students do not use since they cannot find a new path to navigate them. Based on the effect of PEOU on students' attitude toward e-learning systems, we can derive the following hypothesis:

H4: Perceived Ease of Use has a positive effect students' attitude toward E-learning.

Currently, many people use systems that are flexible so that they can work on multiple tasks simultaneously. The e-learning flexibility concept involves time, place, delivery and logistics, content, instructional approaches, and entry requirements (Pituch & Lee, 2006; Wanner & Palmer, 2015). It also allows learners to choose and control their learning process, in such a way, that they can partake different activities conveniently at their own pace, place, and time. In addition, students' become more responsible for their studies when they are the ones who plan them. Most importantly, flexible e-learning systems offer appropriate support

to the users to cater for their personal needs. For instance, in the context of Saudi Arabia, educational technology flexibility encourage students in the rural areas and young married women to continue with their studies with no disruptions (Cheng, 2011). On the contrary, conventional learning methods cannot provide such flexibility for this group of learners. The independence students get in e-learning enables them to manage their time well and know the place where they will perform their online activities. For example, students may choose to do an assignment at night when there are no distractions. Numerous studies that have examined e-learning PF portrays that it is an essential aspect of online education (Bhuasiri,Xaymoungkhoun, Zo, Rho, & Ciganek, 2012). System functionality refers to the intention of using a particular educational technology (Pituch & Lee, 2006). In other words, we can define it as the e-learning system's ability to offer flexible access to assessment and procedural media. System functionality can promote or hinder perceived flexibility. Recently, many schools are providing online courses to students from different parts of the world. In fact, the flexibility of an online course significantly influences students' attitude and their satisfaction. The primary reason for a majority of students to take online courses is because of their flexible schedules that conventional methods lack (Hao, 2004). Hence, the following hypothesis explains the research on e-learning perceived flexibility:

H5: Perceived Flexibility has a positive effect on students' attitude toward E-learning.

Many schools adopt cooperative learning techniques such as teamwork and workshop so that students can interact with others. Indeed, high interaction levels are appropriate in an educational environment that requires space and time separation (Sun & Hsu, 2013). Interactivity is critical in the e-learning context (Bates, 2005; WongWai, 2002). Online learning offers various tools that enhance and promote interactivity. Most importantly, e-learning provides a two-way communication strategy to its users. For this reason, students interact with both their colleagues and teachers (Blasco-Arcas,Buil, Hernandez-Ortega, & Sese, 2013). Interactivity enables senders and receivers to control the communication process. The most common types of interaction include student-student, student-instructor, and student-content relationships. Consequently, interactivity allows students to acquire knowledge maximally. Furthermore, interactivity significantly influences students' intentions of using e-learning (Pituch & Lee, 2006). To be specific, learners have a high likelihood of using e-learning if they believe that the system offers effective student-teacher and student-student interaction. Moreover, interactivity enables students to develop either a positive or negative attitude toward a particular website (Croxton, 2014). PI influences students' attitudes toward educational technology. As a result, the following hypothesis is correct about PI:

H6: Perceived Interactivity has a positive effect on students' attitude toward E-learning.

Universities offer assistance to students in various fields. The support they provide can be technical or in the form of training sessions to students (Cheung & Vogel, 2013). Indeed, the former assistance involves experts helping students with software, hardware, internet connection, and troubleshooting skills. In fact, technical experts enable students to understand various technology and accept its use for educational purposes (Cheung & Vogel, 2013). On the contrary, training learners on how to use the web can be vital for the adoption of e-learning systems. More so, students can solve small problems on their own when they undergo training. They also learn how to maintain computers appropriately. Most importantly, the support offered by the university administration is critical to the success of e-learning (Selim, 2007; Alharbi & Drew, 2014). Overall, university support motivates students to adopt educational technology quickly. Several studies conducted to measure the importance of university support show that it significantly influences the information technology (IT) system use and acceptance (Selim, 2007; Al-Adwan, Al-Adwan & Smedley, 2013). The institution support ensures that there is proper allocation of relevant resources. Additionally, organizational support gives room for students to ask questions pertaining a particular technology for a better understanding. For this reason, university support enables students to adapt quickly to various IT systems. E-learning cannot be useful in many institutions of higher education without technical assistance. For example, students should acquire training on how to troubleshoot their personal computers when they encounter difficulties connecting to the Internet. As a result, university support makes learners to develop a positive attitude toward the use of educational technology. The following hypothesis summarizes the research on the relevance of university support in the learning process:

H7: University Support has a positive effect on students' attitude toward E-learning. III. Research Methodology

This present study limited to selected female student in higher education in Kingdom of Saudi Arabia. The scope of this study is confined to only eleven Colleges - female section at Al-Baha University. A descriptive research design is employed to study the female students' attitude towards E-learning at Al-Baha University. The sample of 381 female students at Al Baha University is randomly selected. A well structured questionnaire consisting of 38 questions was pilot tested, developed and administered to all the 381

respondents. The researcher personally went across colleges and a list of female students was be drawn after which student was be randomly selected during lecture time. As well as using anonymous online questionnaire. The survey's URL has been distributed over the what's up application and some social media websites. The questionnaire was also translated into Arabic to facilitate the marking by the respondent. Due care was taken while translating the questionnaire. This was prior tested by re-translating the Questionnaire from Arabic to English so that there is no bias and the meanings of the wordings of the questions remain unchanged.

IV. Results

In carrying out the analysis, a statistical tool, SPSS was used to analyze and as assist in interpreting the data Table 1 below gives the mean, median, mode and standard deviations for age, nationality, marital status, year of study and college. The total number of respondents were 381 and all respondent to the background information requested by the researcher.

Table 1: Descriptive statistics

Stat	istics					
		Age	Nationality	Marital status	Year of study	College
N	Valid	381	381	381	381	381
	Missing	0	0	0	0	0
Mea	ın	1.88	.01	1.19	2.76	5.63
Median		2.00	.00	1.00	3.00	5.00
Mode		2	0	1	4	2
Std. Deviation		.664	.089	.410	1.151	3.166

The ages of the respondents were not widely varied and majority of the respondents were single, in year four or above and faculty of applied medical sciences.

The table 2 below has four columns where the first column lists different factors that were tested. They include factor, mean std. deviation and total responses (N).

Table 2: Factors Descriptive statistics

Factor	Mean	Std. Deviation	Analysis N
perceived usefulness of E-learning	3.9353	.89567	381
Perceived ease of use	4.0617	.79934	381
perceived flexibility of E-learning	4.1144	.74546	381
Perceived interactivity of E- learning	3.9309	.83327	381
support from university	2.3743	1.00780	381
Attitude towards E-learning by students	3.7922	1.03473	381

The mean of the perceived usefulness of E-learning as a factor is 3.9353 indicating that the respondents agreed to a greater extent that E-learning is very useful in their studies. The standard deviation is 0.89567. Since the standard deviation is less than 1, it implies that the responses on this factor were not widely varied. For the perceived flexibility of E-learning as a factor, its mean and standard deviation was 4.1144 and 0.74546 respectively, meaning respondents largely agreed to a greater extent that E-learning system is flexible and responses did not vary widely. Interactivity was also noted as a favorable outcome when institutions highly use e-learning systems and the outcomes of the analysis provided mean=3.9309 and standard deviation of 0.83327. Also, the normal distribution of the responses in this instance indicated that the respondents had a positive view of the system's ability to enhance collaboration among its users.

The deviation indicates that all respondents were agreeing almost equal extent. The support from university was also positive and was favored by the respondents with and 2.3743 and 1.0087 mean and standard deviation. This is due to the fact that the study was done across several colleges. Technologically driven systems always attract different perceptions and the respondents had a positive attitude towards e-learning the institutions. A high mean and concentrations of the responses proved the participants had shards views (Mean=3.7922, standard deviation=1.03473). The group that has little faith in e-learning had some reasons that can easily be solved like promotion to internet addiction that was less than perfect of the total outcome.

A coefficient of determination was used to measure the validity of the model and its ability to forecast the applicability of the model in future education set up (Sarantakos, 2007). The r² was used for measuring the level of contribution the independent variables offered to support the valid of argument presented in the dependent variable.

Table 3 offers a clear summary of the variables that were considered and ones that

were discarded during the entry process. Therefore, any thorough scrutiny helped to attain the best items that positively influenced female student's attitude towards e-learning systems.

Table 3: Model Summary Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726 ^a	.527	.520	.71703

a. Predictors: (Constant), Internet Experience, University Support, Perceived Interactivity, Perceived Ease of use, Perceived Usefulness, Perceived Flexibility

The above findings R² Square is a standard statistical measurement, which is also referred to as a coefficient of determination. It is important since it helps in measuring the variance in the dependent variables and assists the researcher to know whether to interpret the variables separately or jointly. The findings show that the model had an R-coefficient of 0.726. The R-squared coefficient shows that the explanatory variable in the model accounts for 73% of the model. On the other hand, the remaining portion is explained or considered for by the error term. The same means that the error term accounts for apportioning of 27 % of the model.

The study found that there was a relationship between different explanatory variables and the dependent variable such that the independent variables explained the better part of the changes in the dependent variable. The results provided a vivid interpretation of the data. It was evident that the independent variables highly influenced the dependent variable. This means that, female student's attitude towards e-learning was highly influenced by Internet Experience, Perceived Usefulness, Perceived Ease of Use, Perceived Flexibility, Perceived Interactivity, and University Support. The results obtained were 73% of the overall model and recorded a R²=0.520. Therefore, the results showed that independent variables accounted for 52% while the other factors accounted for variation that can occur during the study process (Weber & Hamlaoui, 2018). This, therefore, means that the independent variables contribute 52% of the performance while other factors and random variations not studied in this research contribute 48% of the performance. The institution ought to carry out a survey among the students and understand or examine how best they can be able to make the learning process more interactive according to the specifications of the female students (Liaw and Huang, 2011). The same would go a long way in encouraging the female students to see like fun to continue and do their higher degree and diplomas. It would not change the syllabus or make the different theories and concepts in the outline easy, but it will encourage these female students in learning the theories and concepts (Yacob et al., 2012).

V. Discussion, Limitation, Contribution and Future Research

The first and second hypotheses of this study was to identify the relationship between Internet experience and TAM factors (Perceived Usefulness and Perceived Ease of Use). The two hypotheses were tested and both of them were found to be significant. Hence, Internet experience has a positive effect on both Perceived Usefulness and Perceived Ease of Use. Therefore, it is likely that as Internet experience increases, usefulness and ease of use also increase.

The fact that students' Internet experience has an impact on Perceived Usefulness and Perceived Ease of Use) is supported by previous studies (Taylor & Todd, 1995; Oh, Ahn& Kim,2003). The results of the current study suggest that prior Internet experience of students strengthens their perception that using E-learning system will help them perform learning tasks easily through the Internet channel. This study also found that the Internet experience has a positive effect on the perception about the expected effort required for using E-learning system. This finding is explained by the fact that when students are familiar with and have expertise of Internet, they perceive the use of E-learning system as being a simple procedure. In sum, as suggested in the literature review findings on technology adoption, prior experience is critical to the comprehension of the technology, related functionality, and benefits.

The coefficient table 4 shows that the explanatory variable included in this study had a varying relationship with the dependent variable. The same shows that there were explanatory variables which had a positive influenced on the dependent variable while one explanatory variables have an inverse relationship with the dependent one.

Table 4: CoefficientsCoefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		В	Std. Error	Beta		
	(Constant)	788	.272		-2.902	.004
1	Usefulness	.413	.060	.357	6.873	.000
	Flexibility	.189	.076	.136	2.493	.013

Interactivity	.302	.057	.243	5.278	000
Support	.191	.037	.186	5.125 .0	000
Ease	039	.064	030	617 .5	537
Experience	.179	.065	.115	2.764 .0)06

a. Dependent Variable: Attitude

The support offered to students in this case based on the coefficients table 4 had a positive relationship with the female student's attitude. This is because the students may lose the affinity for education amid their course period (Mehra & Omidian, 2011). The findings also show that when the individual's female students have been exposed to positive experiences with the education in the Universities, then even their minds will be at ease and they will be encouraged to continue. However, if the students have been exposed to adverse experience and the same have continued to reoccur then it will discourage the students from learning and engaging in any meaningful academic activities. This is because these students will not relate positive things or happenings with education. The findings show that a positive change in experience of the students leads to a positive difference in the attitude of the female students towards education or higher learning.

The factors that contribute to the students' attitude such as Usefulness, Flexibility, Interactivity, Support, Ease, and Experience, agree with Elina and Erkki (2007) findings. The students would first consider the usefulness of the research and the course they are supposed to take before engaging in the same. On the other hand, the researcher found that the Flexibility of the female students was also a factor which influenced the student's attitude towards learning. This was also used to mean that the students would be better off if they are working towards a particular program and that they are flexible in such a way that they can conduct research and spend more hours in the library which will ensure that they get a good grade. Interactivity is also good a factor that influences the attitude of these female students to engage in higher education.

Such a plan will ensure that students engage in their education with dedication and with comfort. In the midst of flexibility, the students can work towards attaining better grade and graduation from their course. If one is comfortable and flexible, they may be able to give education their best which means that they will end up getting good results and outcomes of their graduation. The same will also lead to the acquisition of useful skills and abilities to perform and become the best they can become courtesy of interactivity because the instructor is allowing them to contribute and give their take on the different concept. On the other hand, the study also found that the female students have a better chance performing at their best if they are given the necessary support. The study found that an increase in positive support from University increase the attitude of the female students which in turns affects their performance positively.

Regarding academic contribution, the study provides an in-depth understanding of the level of influence female students' psychology has on their ability to utilize the e-learning systems. Further, the results showed that multiple factors contribute to the formation of the students' attitude and that assists to generate more literature to understand learner's behaviors. These findings coincide with Kar, Saha, & Mondal (2014) study, where their research found out that female learners have a better attitude towards e-learning especially in Universities (Kar, Saha, & Mondal, 2014). Therefore, the research helps to prove that the variables should be considered before installing any e-learning in any higher education institution in Saudi.

The different practitioners can use the findings of the study in decision making. This is because both the private and public sectors will adopt the study. The private sector may choose the study in benefits and costs analysis while they are contemplating the improvement in technology in their academic institutions in Saudi to provide e-learning for their students.

The study will be ideal for the formulation of different policies both in private and public sectors. In this case, policymakers will use the findings to improve learning through implementation of better education policies that will develop high learning institutions. Appropriate mechanisms of e-learning can improve the Saudi Arabian education system a whole to make it a world-class center for excellence.

When carrying out the research, various challenges arose that influenced the whole process at a great extent. The limitations included inadequate accesses to the information concerning the student's performance since the University would want to play safe and ensure that they have been insulated against the victimization that would follow from the members of the public if they would expose the performance of their students it would work against their standards and future clients. In this regard, the researcher assumed that all the information given was therefore correct for this study. Further, getting the students to volunteer information about them and convincing them that they would not be victimized was a challenge.

The study explored the female student's attitude towards e-learning, the researcher acquired findings and established that the different objectives of the study that was set up initially during the beginning of the study. The researcher, therefore, encourages the future scholars to explore more on the study since the researcher did not exhaust the topic of the research. Scholars can focus on studying the impact of attitude towards e-learning on both genders since both genders are influences to a particular level by the change in

education system. The researcher would, therefore, consider the influence if any of e-learning on academic performance. It will enable the future scholars to investigate how e-learning makes the learning process ore viable manageable and acceptable. It will also check the comparison between the conventional manual methods and the new method so that the net effect can be reported as the findings of that particular study.

In the future, scholars need to focus more on how cultural beliefs and cultural practices contribute the attitude female students possess towards education in Saudi Arabia. This would bridge the gap that this study could not fill but is still relevant to the society. The researcher examined the female student's attitude towards the e-learning in the university level and the institutions of higher learning in Saudi. This was represented by a case study of Al Baha University; the same (attitude) does not necessarily measure or indicate the progress and performance of the student. Since the current study measure the attitude of the students it does not necessarily mean that the attitude was taken to be an indicator of performance. The thoughts as a concept in this study was used to denote increased interest and affinity for education as opposed to the performance of the students. The fact that the researcher did not use attitude as a measure of performance leaves a gap and an opportunity for future scholars to explore more from that perspective. The future scholars may thus examine the effects of elearning or the installation of the same in the institution of higher learning and its impact on the performance of the students. In case a researcher takes up the title the study would cover the effect of e-learning not the performance of students in Al Baha University in Saudi. This means that the study will not only consider the female students or the women in the University it will also cover their male counterparts which indicate they will be considered as a single lot (students). The findings of such a study will be used as a decision making criteria for the installation of the e-learning system. The said institution under the study will also make sure that they have executed the pilot project before rolling out or launching the project. The future scholars can also embark on examining the ability of the students or the majority of the students to use the e-learning. This is because wherever will have the skills on how to use and maneuver in the e-learning platforms.

VI. Conclusion

It is, therefore, evident that institutions can improve students' attitude through devising a better approach for E-Learning system. This means that the institutions can add excitement to the learning process which will make more students attracted and motivated to learn. The study findings support that female University student's needs motivation for them to keep a constant affinity for their training and education in the institution of higher learning in Saudi Arabia. These students will need a change in culture which includes support and motivation. In most cases, women are made to think that they are not supposed to proceed to those higher education level, get a higher diploma, higher degree or even a doctorate. These policies have existed for decades since the laws formulated by the Saudi government and align with the country's traditions.

The same means that support from the parents will encourage the female students to perform between and to grow an interest in finishing school to proceed with their career. The higher education institutions should also appreciate the role played by them encouraging the progress of the female students who have passed and acquired the minimum entry points. The institutions that are Universities and college should bring in facilities and amenities that are suitable for the support of the female students to make it easy for them to cope with the academic requirements. Some of the things that the University can do include making sure that they give facilities for the support of the girl child, this does not mean that the female students will not do a different syllabus or courses from the one done by the male students. Therefore, these factors will encourage female students and give them an equal opportunity with their male counterparts.

Competing interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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References

- [1]. Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behaviour. Englewood Cliffs, NJ: Prentice-Hall.
- [2]. Al-Adwan, A., Al-Adwan, A. & Smedley, J. (2013). Exploring students' acceptance of e-learning using Technology Acceptance Model in Jordanian universities. International Journal of Education and Development Using Information and Communication Technology, 9(2), 4-18.
- [3]. Al-Asmari A.M., & Khan M.S.(2014). E-learning in Saudi Arabia: Past, present and future, Near and Middle Eastern Journal of Research in Education, Retrieved from: http://dx.doi.org/10.5339/nmejre.
- [4]. Al-Doub, E., Goodwin, R., & Al-Hunaiyyan, A. (2008). Student's attitudes toward e-learning in Kuwait's higher education institutions. Proceedings of the 16th Conference on Computers in Education, 841-848
- [5]. Al-Fahad, F. N. (2009). Students' Attitudes and Perceptions towards the Effectiveness of Mobile Learning in King Saud University, Saudi Arabia. Turkish Online Journal of Educational Technology-TOJET, 8(2), 111-119.

- [6]. Al-Harbi, K. A. S. (2011). E-Learning in the Saudi tertiary education: Potential and challenges. Applied Computing and Informatics, 9(1), 31-46.
- [7]. Alharbi, S., & Drew, S. (2014). Using the Technology Acceptance Model in understanding academics' behavioral intention to use learning management systems. International Journal of Advanced Computer Science and Applications, 5(1), 143-155.
- [8]. Bates, A. (2005). Technology, e-learning and distance education (2nd ed.). London: Routledge.
- [9]. Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., & Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. Computers & Education, 58(2), 843-855.
- [10]. Blasco-Arcas, L., Buil, I., Hernandez-Ortega, B., & Sese, F. J. (2013). Using clickers in class. The role of interactivity, active collaborative learning and engagement in learning performance. Computers & Education, 62(3), 102-110.
- [11]. Cheng, Y. (2011). Antecedents and consequences of e-learning acceptance. Information Systems Journal, 21(3), 269-299.
- [12]. Cheung, R., & Vogel, D. (2013). Predicting user acceptance of collaborative technologies: An extension of the technology acceptance model for e-learning. Computers & Education, 63(4), 160-175.
- [13]. Croxton, R. A. (2014). The role of interactivity in student satisfaction and persistence in online learning. Journal of Online Learning & Teaching, 10(2), 314-324.
- [14]. Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and Use Acceptance of Information Technology. MIS Quarterly, 13(3), 319-340.
- [15]. Deanship of e-learning in Al-Baha University, (2016). Retrieved Feb 2,2018, from http://bu.edu.sa/web/42964365/about-college
- [16]. Eagly, A. H., & Chaiken, S. (2007). The Advantages of an Inclusive Definition of Attitude. Social Cognition: Vol. 25, Special Issue: What is an Attitude?, pp. 582-602.
- [17]. Elina and Erkki (2007). Identifying Students' Attitudes on e-learning the effects of experience and Institutional support, University of Joensuu, Finland.
- [18]. Garrison, D., Anderson, T. (2003). e-Learning in the 21st century: A Framework for Research and Practices. Routledge, New York.
- [19]. Hao, Y.-W. (2004). Students' attitudes toward interaction in online learning: Exploring the relationship between attitudes, learning styles, and course satisfaction". Unpublished doctoral dissertation, The University of Texas at Austin. Texas.
- [20]. Joo, Y. J., Lim, K. Y., & Kim, E. K. (2011). Online university students' satisfaction and persistence: Examining perceived level of presence, usefulness, and ease of use as predictors in a structural model. Computers & Education, 57(2), 1654-1664.
- [21]. Jung, M.-L., Loria, L., Mostaghel, R., & Saha, P. (2008). E-Learning: Investigating university student"s acceptance of technology. European Journal of Open, Distance and E-learning EURODL, 1.
- [22]. Kahveci, M. (2010). Student's perceptions to use technology for learning: Measurement integrity of the Modified Fennema-Sherman Attitudes Scales. The Turkish Online Journal of Educational Technology 9(1), 185-201.
- [23]. Kar, D., Saha, B., & Mondal, B. (2014). Attitude of University Students towards E-learning in West Bengal. American Journal of Educational Research, 2(8), 669-673. doi:10.12691/education-2-8-16
- [24]. Khan, B. (2005). Managing e-Learning: Design, Delivery, Implementation and Evaluation. Information Science Publishing, Hershey.
- [25]. Lee, M. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation-confirmation model. Computers & Education, 54(2), 506-516.
- [26]. Liaw, S., & Huang, H. (2011). A study of investigating learners attitudes toward e-learning, 5th International Conference on Distance Learning and Education, IPCSIT vol.12, IACSIT Press, Singapore.
- [27]. Mehra, V. And Omidian, F. (2011). Examining Students' Attitudes Towards E-learning: A Case from India, Malaysian Journal of Educational Technology, V.11(2), 13-18.
- [28]. Nassuora, A. B. (2012). Students acceptance of mobile learning for higher education in Saudi Arabia. American Academic & Scholarly Research Journal, 4(2), 24-30.
- [29]. National Centre for e-Learning and Distance Learning (2008). http://www.elc.edu.sa.
- [30]. Ngai, E., Poon, J., & Chan, Y. (2007). Empirical examination of the adoption of WebCT using TAM. Computers & Education, 48 (2), 250-267.
- [31]. Oh, S., Ahn, J., & Kim, B. (2003). Adoption of broadband internet in Korea: The role of experience in building attitudes. Journal of Information Technology, 18 (December), 267-280.
- [32]. Park, S. (2009). An analysis of the Technology Acceptance Model in understanding university students" behavioural intention to use e-Learning. Educational Technology & Society, 12 (3), 150-162.
- [33]. Penny, K. (2011). Factors that influence student e-learning participation in a UK higher education institution. Interdisciplinary Journal of E-Learning and Learning Objects, 7(1), 81-95.
- [34]. Pituch, K., & Lee, Y.-K. (2006). The influence of system characteristics on e-learning use. Computers & Education, 47(2), 222-244
- [35]. Sanchez, R. A., & Hueros, A. D. (2010). Motivational factors that influence the acceptance of Moodle using TAM. Computers in Human Behavior, 26(6), 1632-1640.
- [36]. Sarantakos, S. (2007). Data analysis. London: SAGE.
- [37]. Selim, H. M. (2007). Critical success factors for e-learning acceptance: Confirmatory factor models. Computers & Education, 49 (2), 396-413.
- [38]. Shroff, R. H., Deneen, C. C., & Eugenia, M. (2011). Analysis of the technology acceptance model in examining students' behavioral intention to use an e-portfolio system. Australasian Journal of Educational Technology, 27(4), 600-618.
- [39]. Smith, B., Caputi, P., & Rawstorne, P. (2000). Differentiating computer experience and attitudes toward computers: Anempirical investigation. Computers in Human Behavior, 16, 59–81.
- [40]. Sun, J., & Hsu, Y. (2013). Effect of interactivity on learner perceptions in web-based instruction. Computers in Human Behavior, 29(1), 171-184.
- [41]. Taylor, S., & Todd, P. (1995). Assessing IT Usage: The Role of Prior Experience. MIS Quarterly, 19(2), 561-570.
- [42]. Teo, T. (2010). A path analysis of pre-service teachers' attitudes to computer use: Applying and extending the technology acceptance model in an educational context. Interactive Learning Environments, 18(1), 65-79.
- [43]. Wanner, T., & Palmer, E. (2015). Personalising learning: Exploring student and teacher perceptions about flexible learning and assessment in a flipped university course. Computers & Education, 88(2), 354-369.
- [44]. Weber, A.S., & Hamlaoui, S. (2018). E-Learning in the Middle East and North Africa (MENA) region. (2018). Cham: Springer.
- [45]. Wong Wai, M. J. (2002). Flexibility and interactivity in the context of web-based curriculum: Managing change. Unpublished doctoral thesis, University of Leicester.
- [46]. Yacob, A., Kadir, A.Z.A., Zainudin, O., Zurairah, A. (2012). Student Awareness Towards E-Learning In Education, Procedia Social and Behavioral Sciences, 67, 93-101 [16].