

# Students' Perspective of the Determinants of E-Learning Adoption in Higher Education Institutions in The UAE

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## Abstract

E-Learning has been connected into many educational institutions to earn the advantages of the faster enhancements in technology that help in improving the learning experience and increase its effectiveness. As a result, many governments and educational institutions implement electronic learning in order to improve students' performance. Therefore, this paper aims to examine the current e-learning adoption landscape among students using Higher College of Technology in United Arab Emirates (focusing on Abu Dhabi campus) as the case study. Thus, researcher used the four dimensions proposed in the UTUAT model as determinants which in turn leads to the actual use of e-learning. The data was collected through questionnaire with 406 valid respondents. The results show that the level of the students adoption is moderate based on the performance expectancy, effort expectancy, social influence, and facilitating conditions. Similarly, findings revealed that the four dimensions performance expectancy, effort expectancy, social influence, and facilitating conditions positively influences students the actual use of e-learning. This study helps the decision makers of the higher educational institutions to have a better understanding of the adoption of e-learning for their students.

**Keywords:** E-Learning; Higher Education Institutions; UAE

## Introduction

The rapid development of global electronic learning systems has necessitated many educational institutions to adopt e-learning technologies in teaching and learning as well as in management and administrative roles. The UAE is one of many nations which have begun investing massively in the integration of e-learning systems into its higher education institutions. In 2013, the UAE government initiated the country's federal electronic learning program which was piloted in three federal higher education institutions-the Higher Colleges of Technology (HCT), Zayed University and the United Arab Emirates University (UAEU) Mostafa et al. (2016). The initiative was one of the largest e-learning imitative reported in the world today with about 14000 students participating in the program. Despite the massive investment by the UAE government in electronic learning in its higher education institutions, Mostafa et al. (2016) report that HEI learners still have a low adoption and acceptance towards e-learning. This is no doubt worrisome as the aim of complementing traditional learning with e-learning initiatives is to ensure that learners maximize the benefits that e-learning has to offer.

The rationale for the integration of e-learning in HEIs has, just like any other technology, its pros and cons. According to Mahdizadeh *et al.* (2008) in developed countries like the United States of America (USA), where there is a vast number of some of the world's highest concentrations of computer use, general computer use in education is still limited to sporadic information

searches. This leads to the question of why countries with established infrastructure fail to adopt the technology that other nations flaunt as being the solution to efficient and innovative educational delivery.

Guri-Rosenblit (2006), posits that that organizational culture, personal preferences, or perhaps other issues such as cost and the perceived benefits of e-learning could be some of the reasons why the technology is not being adopted adequately in HEIs. There is also the assumption that some university administrators, educators and students alike are still sceptical about the pedagogical relevance of e-learning. Likewise, other possible issues range from staff development to the lack of technical support from the institutions, infrastructural development, concerns regarding the faculty workload once e-learning is adopted, as well as the quality of e-learning courses.

Integrating Information and communication technologies such as e-learning into educational institutions can no doubt bring immense and significant benefits to these educational institutions. Still HEIs are faced with challenges of introducing these informative systems into their work environment (Dasuki *et al.*, 2015). According to Mutula (2002) e-learning has been criticized for its lack of immediate feedback in asynchronous learning environments, apart from the lack of empirical evidence regarding its return on investment (ROI). E-learning, despite its potentially overwhelming value to higher education, is still not necessarily comfortable for everyone to use and is characterized by the potential for increased frustrations, anxieties and confusions to users. Irrespective, the benefits and significance of e-learning have been highlighted and underscored by several researchers in the extant literature (Selwyn, 2007; Wang, 2009). For instance, Njenga and Fourie (2010) in their effort to disperse the myth that “e-learning is a saviour stated that its redemptive power is overreaching and every educational institution should adopt it” (p. 202). Hence, HEIs are urged to question why e-learning should be adopted and to establish its value in improving teaching and learning, as such personalized rationale for adopting e-learning may well shape the extent to which it is integrated into the HEIs teaching and learning (Cheng *et al.*, 2012).

Similarly, Guri-Rosenblit (2006) also explains that e-learning is not necessarily cheaper than traditional face-to-face learning. “Such critics of e-learning identify concerns such as costs, infrastructure, training and support, maintenance, electricity, disposal of the resultant e-waste, copyrights, licensing, maintenance, adaptation, and localization of learning materials etc., as issues which may inhibit the full implementation of the technology in HEIs. Regardless of the aforementioned cons, e-learning in education has been deemed beneficial and valuable. Some of the associated benefits of e-learning in the literature include ensuring the flexibility of the learning process, the speed and accuracy of the research, as well as ensuring efficiency of content dissemination of content and research outputs (Šumak & Šorgo, 2016; Yakubu & Dasuki, 2019). According to (Ndubisi, 2006), e-learning technologies provide HEIs with enhanced, comprehensive and effective teaching through the “integration of electronic multimedia materials, special simulations and demonstrations, accessibility to variety of knowledge databases and experts, continuous contact with instructors and peers; as well as the coherent use of lessons for discussion and amplification”.

In 2012, the government of the United Arab Emirates launched the largest e-learning systems in the gulf region, distributing over 14,000 electronic devices to federal college students. Despite this massive imitative by the UAE government, Mostafa *et al.* (2016) reports that there is a low level of acceptance towards the adoption of e-learning by students in HEIs. Notably, some of the inhibiting factors for e-learning adoption reported in the literature were language barriers, accessibility issues, culture, support, as well as personal preferences (Raman *et al.*, 2014; Yakubu & Dasuki, 2019). The slow-paced adoption of e-learning by students in UAE’s HEIs is worrisome, given that the infrastructural requirements for operating a robust e-learning system are in place. This thus calls for an investigation into the factors or determinants that enables the successful deployment and adoption of e-learning. The UAE is one of such countries in this regard. Hence, it becomes crucial to investigate e-learning adoption from a student’s perspective.

## LITERATURE REVIEW

### *Definition of E-learning*

Since the inception of E-Learning in 1990, E-Learning has become a core element in the educational process, transforming traditional learning environments to integrate technology to create more efficient and attractive learning experiences. Before E-Learning was widely adopted as the name for electronic learning, various other names were used and are references in the literature of other researchers: web-based learning (WBL), web-based instruction (WBI), web-based training (WBT), Internet-based training (IBT), distributed learning (DL), advanced distributed learning (ADL), distance learning (DL), online learning (OL), mobile learning (m-learning), nomadic learning, remote learning, off-site learning. It is necessary to define E-Learning to develop a clear understanding and vision of E-Learning for institutions and educational settings, while the lack of such clear understanding is considered as a barrier to successfully implementing E-Learning (Abdullah, 2011).

Since the commencement of E-Learning in 1990, E-Learning has become an essential element in the educational process, transforming traditional learning environments to combine technology to construct more efficient and attractive learning experiences (Abdullah, 2011). Hence, before e-learning is broadly adopted as the name for electronic learning, several names have been given or called in the literature of other scholars for instance, web-based training, web-based instruction, Internet-based training, distributed learning, advanced distributed learning, distance learning, online learning, mobile learning, nomadic learning,

remote learning, off-site learning and web-based learning (Abdullah, 2011; Yusuf, 2013; Taha, 2014; Mutambik, 2018). Furthermore, it is compulsory to define e-Learning to develop a clear understanding e-Learning for institutions and educational settings, while the lack of such clear understanding is considered as an obstacle to successfully implementing e-Learning (Mutambik, 2018). Many researchers and practitioners from the fields of information and communication technology, computer science, education and educational technology have contributed to defining the concept of electronic learning;

Tatweer (2014) defined e-learning as a web-based learning management system that provides different supplementary educational tools including virtual school, e- tests and self-evaluation tool, e-homework assignments tool, question bank tool and lesson planning tool, for students and teachers. Zalah (2018) e-learning is the use of internet technologies for providing solutions that tend to improve performance and knowledge. Furthermore, Al-asmari & Khan, (2014) stated that e-Learning can be defined as the delivery of technology-supported teaching and learning, based on sound pedagogical teaching practices. "e-Learning is not a passive medium for delivery of content, but is an interactive process between the teacher and student, facilitated by the benefits that technology has to offer". Hence, Mbarek and Zaddem (2013) an educational and learning instruction supported by the use of the ICT, allowing learners to acquire new knowledge and skills delivered electronically without worrying about the space-time shift.

### ***The Unified Theory of Acceptance and Use of Technology Model (UTAUT)***

The concert expectation is called the degree of one's confidence in cultivating the use of material technology, and will support the learner to improvement from the work presentation. UTAUT uses the three concepts of current models to capture performance expectations supposed effectiveness (TAM/TAM2 and C-TAM-TAB), extrinsic inspiration (EI), work fitness (MPCU), comparative improvement (IDT) and results Expectation (SCT). UTAUT offers that enactment expectations are strong predictors of the behavioral intentions of individuals using information technology and are worth noting at all levels of capacity in mandatory and voluntary environments. On the other hand, preceding studies have shown that concert expectations and behavioral intentions will be influenced by gender and age, so presentation expectations resolve have a robust regulatory consequence on men (Venkatesh, 2000). Nevertheless, this research simply insists on dependence and liberated variables. Affording to Venkatesh et al (2003), concert expectations are the near of confidence individuals will benefit from using information systems to perform their work. They further stated that the five structures from the mainstream model embody the perception of performance expectations: severity (TAM/TAM2 and C-TAM-TAB), extrinsic inspiration (MM), work fitness (MPCU), relative effectiveness (IDT) and Expected Results (SCT). In addition, they also confirmed that concert expectations are the strongest determinants of the use of its behavioral intentions. Adjusting presentation expectations to the mobile knowledge environment recommends that mobile learners will discover that mobile knowledge is beneficial because it qualifies them to perform pleasant learning events more quickly and adaptively, even the effectiveness of flour learning. Originally, this study hypothesized that H1: The relationship between performance expectations and behavioral intentions using E-Learning (Wang, M. & Shen, 2012).

The perspective of E-Learning, enactment expectations suggest that characters might discovery the suitability of E-Learning since it allows them to speedily admittance evidence at their convenient time and location and on the device of their optimal. Nevertheless, due to inadequate study in advanced learning students in this area, more studies is compulsory to regulate the impact of this variable on e-learning. Alawadhi and Morris (2008) found that concert expectations muscularly influenced the purpose of Kuwaiti students to use e-government incomes. In contrast, no performance expectations were created to be a major element of students' purposes to use chat messages on mobile strategies (Lin, et al., 2004). In a research accompanied by Croop (2009), he investigated students' attitudes and approaches to mobile knowledge through a descriptive hybrid approach, where data was composed through UTAUT tools, focus groups, and interviews. Some of the conditions expressed by focus group students lacked clear spelling advantages by accessing content on mobile phones or PDAs. Therefore, this conflicting search optimization recommends that additional research on this framework is necessary to regulate the importance of concert as a contributing factor to E-Learning behaviour intentions.

In a study of pharmaceutical students receiving PDAs, the results showed that 80% of students had access to drug information content on their PDAs each week. The main factors that are intended to be used and used are obvious help and comfort of use. Discovered that the use of PDAs and use intentions are related to supposed expediency, attitude, performance, and compatibility. The result suggests that mobile devices like PDAs would be considered as important learning maintenance (Siracuse City & Sowell, 2008). Another research looked at students' observations of mobile contact to course content. The results presented that most students strongly decide that mobile access to course contented is helpful to them. In contrast, the survey results show that desktop computers are more satisfying for students because they use the Internet to access course content, but static want to practice portable devices for complementary contact (Ally & Stauffer, 2008). This shows that it is necessary to further study the performance and purpose expectations, and to recognize the usefulness of various academic content and information accessibility of mobile devices.

Effort expectation is the use of information technology to simplify the degree of personal contact. UTAUT uses the three measurements from the popular model to measure the perception of motion expectations. These measurements are considered simplicity of procedure (TAM2/TAM) complications (MPCU) and simplicity of use (IDT) (Venkatesh, 2003). The study concluded that conceptual concepts related to expected workloads would be a stronger determinant of female

personal behavioral intentions. Therefore, this study assumes that H3: facility conditions and behavioral intentions to use E-Learning there is a positive correlation among them. Therefore, this study assumes that there is a positive correlation between H3: facility conditions and communication intentions using E-learning. Among adult learners of institutions of higher learning, the hard-working expectations of E-Learning indicate that it will affect mobile use or the behaviour of library content in the initial stages and decline over time as users gain more experience. Carlsson et al. (2006) found that the expected work has a positive outcome on the committee of individuals to use mobile device services when researching mobile service adoption rates. Similarly, job expectations have been found to have a significant impact on individuals' plans to use evidence cabins (Wang and Shih, 2008). Just as the efforts of Venkatesh et al. (2003) are expected to be seen as ease of use of information systems. The main structures of the model related to the expected work are difficulty (MPCU), observed affluence of use (TAM/TAM2) and easiness of use (IDT) (Venkatesh et al., 2003). Some scholars believe that the structure related to hard work expectation will become the main determinant of individual's intention towards women (Venkatesh & Morris, 2000; Venkatesh, Morris & Ackerman, 2003) and the old employee (Morris & Venkatesh, 2011). In alternative improvement, the effort-oriented paradigm is predictable to become additional compelling in the early periods of new behaviors (Davis et al., 2013, Szajna, 1996, although E-Learning is in its infancy, it is understood that job expectations It would be an important determinant of behavioral intentional use of mobile knowledge.

Promoting conditions are considered to be the level of individual beliefs that exist in organizations and technology settings that funding the use of information systems (Venkatesh et al., 2009). UTAUT uses the three dimensions of the current model to illustrate the concept of teaching environments. These structures are considered simplicity of use (TAM/TAM2), difficulty (MPCU) and ease of use (IDT) (Venkatesh, 2003). When performance and job expectations do not exist, promoting the environment is an indispensable determinant. Similarly, studies have shown that when the structure of performance and job expectations are both present, the predictive factors that promote conditions as learning intent using technology are low. Conversely, promotion conditions are considered to be a straight forecaster of definite practice of knowledge (Venkatesh et al., 2011). Research shows that providing users with assets, training, and material can have an important impact on the satisfaction, use, and behavioral objectives of using information technology. Hence, lacking of exercise and sustenance for mobile education, shortage of technical abilities can become a prospective obstacle. This has proved to be an obstacle for institution customers. In a research on the custom of handheld computers to handle museum visits, 70% of companions reported their expenses at the exhibition. However, 45% of people think this technology is challenging, especially old technology (Burton & Proctor 2003). When reviewing the literature, Naismith (2004) classified E-Learning undergraduate and employee exercise as a key component of actual mobile method use. Wang and Shih (2008) found that convenience environments have a moderately constructive outcome on the use of material kiosks by individuals. Flynn, Concannon and Campbell (2005) also emphasized the significance of help learners with leadership and practical care to promote knowledge technology commitments.

## RESEARCH METHODOLOGY

The study was conducted at Higher colleges of Technology (HCT) in United Arab Emirates. The sample of this study consists of students who are studying at HCT Abu Dhabi at campus only. A total of 406 valid responses were received from a total of 490 questionnaires administrated, which shows a response rate of 82.9%. The survey consists of 5 different sections. Each variables has five (5) items asking regarding e-learning based on Performance Expectancy, Effort Expectancy, Social Influence, Facilitating conditions and Actual Use of e-Learning; the questions were adopted and adopted from Venkatesh *et al.* (2003) with further adjustment to fit the scope of this study. actual use of e-learning was referred to as the physical and mental acts associated with the use of e-learning by students. This was measured using five items also. All scales in the questionnaire were structured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Table 3.1 shows a breakdown of the constructs in the questionnaire, their designation as independent, dependent and mediating variables as well as the number of items in each scale.

Thus, to analyse the data gathered from the questionnaires, Statistical Package for Social Sciences (SPSS) version 23 was used. This software has largely been used and accepted by researchers as a data analysis technique (Stevens, 2012; Bryman, 2015). In addition, SPSS was also employed to conduct preliminary data analysis, including frequencies, mean, and standard deviation (Rovai et al., 2013; Green & Salkind, 2010). Therefore, descriptive and correlation analysis were used to answer the research objectives

## RESULTS

### *Respondents Perception of Performance expectancy*

Table 1 shows the mean and standard deviation of respondent's performance expectancy towards e-learning. The results show that the cumulative mean score of respondents' performance expectancy towards e-learning is 3.19, indicating a mean score above the average mean on a 5-point Likert scale. Venkatesh *et al.* (2003) defined performance expectancy as the extent to which an individual believes that using a system will help him or her attains gains in job performance. In the context of this study, performance expectancy refers to the student's belief that using e-learning will be beneficial and interesting in achieving high



performance in learning. Thus, an average mean score of 3.19 for performance expectancy indicates that students have a positive view and the belief that e-learning will be beneficial and interesting to them in yielding high performances in learning.

Table 1: Descriptive Statistics for Performance Expectancy

Performance expectancy items	N	Mean	Std. Deviation
PE1	406	3.39	1.265
PE2	406	2.89	1.368
PE3	406	3.22	1.267
PE4	406	3.26	1.312
PE5	406	3.18	1.360
Aggregate		3.19	

**Respondents perception of Effort expectancy**

Table 2 also shows the mean and standard deviation of respondents’ effort expectancy towards e-learning. Venkatesh *et al.* (2003) defined effort expectancy as the “degree of ease associated with the use of a system. In the context of this study, effort expectancy refers to students’ belief that using e-learning in facilitating their learning will be easy for them, i.e. it will require little effort. Results in Table 2 shows that the average mean for effort expectancy is 3.30, indicating that students perceive that using e-learning in their learning will require little effort.

Table 2: Descriptive Statistics for Effort expectancy

Effort Expectancy Items	N	Mean	Std. Deviation
EE1	406	3.47	1.248
EE2	406	3.26	1.311
EE3	406	3.35	1.310
EE4	406	3.54	1.272
EE5	406	2.90	1.288
Aggregate		3.30	

**Respondents perception of Social Influence**

Social influence, according to Venkatesh *et al.* (2003) is the extent to which an individual perceives that important social groups or elements believe that such individual should use the new system. In this study, social influence refers to the influence and support from people such as friends, peers, social cycle, educators, management of universities as well as academic administrators to use e-learning as part of their learning tools. Table 3 shows that the average means for social influence as 3.27, indicating that students believe that they received support from relevant management and academic groups, peers, educators etc., on using e-learning as part of their learning process.

Table 3: Descriptive Statistics for Social influence

Social influence items	N	Mean	Std. Deviation
SS1	406	3.28	1.182
SS2	406	3.27	1.210
SS3	406	3.34	1.203
SS4	406	3.30	1.225
SS5	406	3.16	1.209
Aggregate		3.27	

**Respondents perception of Facilitating Conditions**

Facilitating conditions is defined as the degree to which an individual believes that organizational and technical infrastructure exists to support the use of a system (Venkatesh *et al.*, 2003). Hence, in this study, facilitating conditions is regarded as the accessibility of an appropriate learning environment and infrastructure within the university that can foster the use of the technologies being considered. Such conditions include individuals' knowledge and skills and an environment that stimulates and supports students' willingness to use e-learning. Table 4 shows that the average mean score for facilitating conditions is 3.29, indicating that respondents perceive that the organizational and technical infrastructure including the knowledge and skills as well as the enabling environment that supports and stimulates students’ willingness to use e-learning was provided.

Table 4: Descriptive Statistics for Facilitating conditions

Facilitating conditions items	N	Mean	Std. Deviation
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FC1	406	3.13	1.265
FC2	406	3.34	1.331
FC3	406	3.50	1.318
FC4	406	3.26	1.307
FC5	406	3.24	1.247
FC6	406	3.29	1.303
Aggregate		3.29	

**Respondents Behavioural intention towards e-learning**

Table 5 shows the mean and standard deviation of students’ behavioural intention towards e-learning. An average mean score of 3.30 was recorded for student’s behavioural intention towards e-learning. Behavioural intention, according to Venkatesh *et al.* (2003), is defined as a person’s subjective probability that he or she will perform the behaviour in question. In the context of this study, behavioural intention was conceptualized as the subjective probability that students will use e-learning as part of their learning. Hence, with an average mean of 3.30, results show that respondents are more inclined to use e-learning as part of their learning activities.

Table 5: Descriptive Statistics for Behavioural intention

Behavioural intention Items	N	Mean	Std. Deviation
BIU1	406	3.45	1.244
BIU2	406	3.39	1.273
BIU3	406	3.41	1.234
BIU4	406	3.24	1.238
BIU5	406	3.02	1.245
Aggregate		3.30	

**Respondents actual use of e-learning**

Use behaviour is defined as the physical and mental actions associated with the actual use of a system. In this study, use behaviour implies the physical and mental acts associated with the use of e-learning by students. Table 6 shows that respondents’ ratings in terms of the overall mean score for actual use of e-learning was 3.29, indicating that respondents believe that their actual use of e-learning was significantly high.

Table 6: Descriptive Statistics for Actual use of e-learning

Actual use of E-learning items	N	Mean	Std. Deviation
AU1	406	3.50	1.266
AU2	406	3.26	1.208
AU3	406	3.36	1.221
AU4	406	3.24	1.238
AU5	406	3.11	1.164
Aggregate		3.29	

Table 7: Correlation between the Independent variables and dependent variable

	Social Influence	Facilitating Condition	Performance Expectancy	Effort Expectancy	Behavioral Intention to Use	Actual Use of E-Learning
Social Influence	1	.227**	.368**	.239**	.077	.253**
		.000	.000	.000	.121	.000
	406	406	406	406	406	406
Facilitating Condition	.227**	1	.306**	.254**	.146**	.164**
Condition	.000		.000	.000	.003	.001

	406	406	406	406	406	406
Performance	.368**	.306**	1	.272**	.107*	.183**
Expectancy	.000	.000		.000	.031	.001
	406	406	406	406	406	406
Effort	.239**	.254**	.272**	1	.091	.227**
Expectancy	.000	.000	.000		.068	.000
	406	406	406	406	406	406
Behavioral	.077	.146**	.107*	.091	1	.160**
Intention to Use	.121	.003	.031	.068		.001
	406	406	406	406	406	406
Actual Use of	.253**	.164**	.024	.227**	.130**	1
E-Learning	.000	.001	.635	.000	.009	
	406	406	406	406	406	406

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

The Table 7 presents a summary of the relationship between the four dimensions of the UTAUT model (i.e. performance expectancy, effort expectancy, social influence and facilitating conditions) and their actual use of e-learning. As shows on the above Table 7, there is a significant positive relationship between the independent variables and dependent variables at P-value=.000. Hence, it can be concluded that the respondents agreed to performance expectancy, effort expectancy, social influence and facilitating conditions influence their actual use of e-learning.

## DISCUSSION AND CONCLUSIONS

Given the slow-paced adoption of e-learning in the United Arab Emirates (UAE) despite the UAE governments' intervention in providing adequate e-learning resources and infrastructure in the country, students in federal colleges in the UAE still exhibit disdain towards e-learning adoption for learning. In fact, UAE is among the lowest performers in terms of e-learning adoption when compared to other neighbouring middle eastern countries such as Oman, Lebanon, Turkey, Kuwait and Qatar (Mostafa et al., 2016). According to Mostafa et al. (2016), students in higher education in the UAE currently exhibit a low acceptance towards e-learning, and despite the best efforts by the government in introducing the "smart learning initiative" in 2014, to develop an innovative educational learning environment, the current state of e-learning adoption in the UAE is still worrisome. The study sought to determine the level of the e-learning actual use using the four dimensions of the UTAUT model (performance expectancy, effort expectancy, social influence, and facilitating conditions). Using self-report questionnaire students in Higher Colleges of Technology were asked to rate the extent to which they perceived the e-learning. Overall, students adoption of the e-learning was moderate. This implies that they perceived the level of performance expectancy, effort expectancy, social influence, and facilitating conditions to be somewhat substantial. Likewise, findings from the study revealed that performance expectancy, effort expectancy, social influence, and facilitating conditions positively influences students the actual use of e-learning.

The novel findings from this study are at the very least crucial and an addendum to the e-learning literature and the literature on information system adoption. The study has contributed to proposing an adapted model for e-learning adoption based on the original UTAUT model, with extensions of the nature of the direct relationship between performance expectancy, effort expectancy, social influence and facilitating conditions on actual use of the learning. Furthermore, the study has also contributed to the theory and practice of technology adoption in higher education institutions in a developing country context. The researcher established that the majority of research on technology acceptance using the UTUAT model has been based in western and developed nation context (Salloum & Shaalan, 2018). This study has thus provided empirical grounds for comparison between the findings of this study and those reported from western context. Findings from this study have implications for higher education institutions in the UAE, educational managers and administrators, educators and instructors, as well as relevant governmental agencies in charge of the developing e-learning policies and standards for HEIs. The outcomes of this research can be used to improve learning experiences for students since the factors and determinants for e-learning adoption have been established by the findings of this study, educational managers, educators and university administrators alike can effectively plan and implement appropriate learning environment that adequately integrates e-learning systems for learners to benefit from.

### Limitations of the Study

Furthermore, the sampling frame constituted some elements of bias as one only one institution was purposely selected as a case study from the other universities which have implemented e-learning systems. Also, a convenience sampling was used; it was not feasible to obtain a random and feasible sample of the entire student population in the research site. Hence, findings from this

study may not be generalized to institutions which have not yet implemented e-learning systems, whereas only institutions which share similar characteristics as HCT and have implemented similar e-learning systems can the findings of this study be inferred to.

## CONCLUSION

This study examined the the adoption of the e-learning and direct relationship between the four element of the Unified Theory of Acceptance and Use Technology (UTAUT) namely; performance expectancy, effort expectancy, social influence and facilitating conditions on actual use of e-learning from HCT students perspective. Findings revealed the overall adoption of the e-leering among HCT's student is moderate Similarly, findings revealed that the four dimensions performance expectancy, effort expectancy, social influence, and facilitating conditions positively influences students the actual use of e-learning. Thus, there is a need to examine the integration of several theories in order to come up with a unified and holistic overview of e-learning adoption. Several model and theories exist in technology acceptance, therefore integrating these models to test hypothesized relationships and factors can better improve our understanding of e-learning adoption. Likewise, this study considered only the perspectives of students in establishing the findings of the study. it would be interesting to explore a comparative view of a faculty member and students views regarding e-learning adoption. Factors crucial to both faculty members and students could be well understood if such study were carried out.

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