Iraqi University EFL Learners' Acceptance of Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use Technology (UTAUT) E-learning Models

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Abstract: *Recent advancement in technology not only has facilitated the learning process but also increased the access to new and modern tools of electronic learning (E-learning). However, studies in this field are focused mainly on the attitudes of teachers and the different levels of required software and hardware. Therefore, this study aims to determine the factors that may influence the acceptance of E-learning by English foreign language (EFL) students in Iraq, as well as to identify the kinds of barriers associated with E-learning. Building on the literature on technology acceptance model and unified theory of acceptance and use of technology, this study incorporated the perceived ease of use, perceived usefulness, Information Technology IT knowledge, perceived playfulness, and facilitating conditions as independent variables. Data of the study were collected using a questionnaire which was distributed to 91 respondents. The findings indicated that the perceived ease of use, perceived usefulness, IT knowledge, and perceived playfulness significantly influenced the attitude of Iraqi EFL learners to use E-learning. These were followed by attitude to use E-learning and its facilitating condition influence user behavior while technical infrastructure, lack of training and motivation were the main barriers to E-learning use.*

Keywords: E-learning, TAM, UTAUT, Barriers, EFL learners

1. Introduction and Problem Statement

The great advancement in technology has facilitated the acceptance of electronic learning (E-learning) in education. It has not only been proven to be highly effective (Mohammadi *et al*., 2011) but also very useful in assisting learners of English as a Foreign Language (EFL) in their academic studies (Sabtiand Chaichan, 2014). Unfortunately, research on E-learning has generally been confined to teachers' attitude (Albirini, 2006; Diaz andEntonado, 2009; Ramazani, 2012; Keong, Albadly, and Raad, 2014) while other studies have focused on the E-learning software and hardware (ElameerandIdrus, 2010; Basha*et al*., 2013). In addition, most studies conducted in Iraq are conceptual (Fahad, Hassan, and Salman, 2013) and only a few studies were related to EFL student acceptance of E-learning (SabtiandChaichan, 2014).

Furthermore, Iraq is still in the early stages of applying technology to language learning and it remains underdeveloped because of the limitations in basic technology infrastructure required for E-learning systems. Consequently, Iraqi students are not motivated to use computers and technologies associated with learning because they assume that the effort is generally a waste of time.

The objectives of this study are to investigate the factors that influence the acceptance of E-learning by EFL students in Iraq, as well as the barriers of using E-learning.This studywill not only contribute to the acceptance of E-learning by EFL students in Iraq but also develops a new model of acceptance. The study will empirically test the proposed model by employing questionnaires adopted from other researchers. Finally,the findings of the research can be used to provide recommendations for future work.

2. Literature Review

Many models such as the unified theory of acceptance and use of technology (UTAUT), diffusion of innovation (DOI), and technology acceptance model (TAM) have been developed to test the acceptance of E-learning as a teaching tool. Among them, TAM developed by Davis (1989) seems to be one of the more popular models in investigating the acceptance of new technology (Abidin, Pour-Mohammadiand Alzwari, 2012; Díazand Entonado, 2009; Keong*et al*., 2014) because it explains and predicts user behavior in information technology (Legris *et al*., 2003).

The premise of TAM is that the behavioral intention of people to accept and actually use a certain technology is determined by two constructs, namely, perceived usefulness and perceived ease of use. The attitude and belief of the use as proposed in TAM are deemed to be important factors that can influence the use of new technology. People who have positive attitudes toward information technology will have higher acceptance of the use of the technology in question compared with people who have negative attitudes. Many empirical studies (Davis *et al*., 1989; Agarwal *et al*., 2000;Venkatesh*et al*., 2003, 2007) demonstrated the effectiveness of TAM. Figure 1, depicts the conceptualization of TAM.
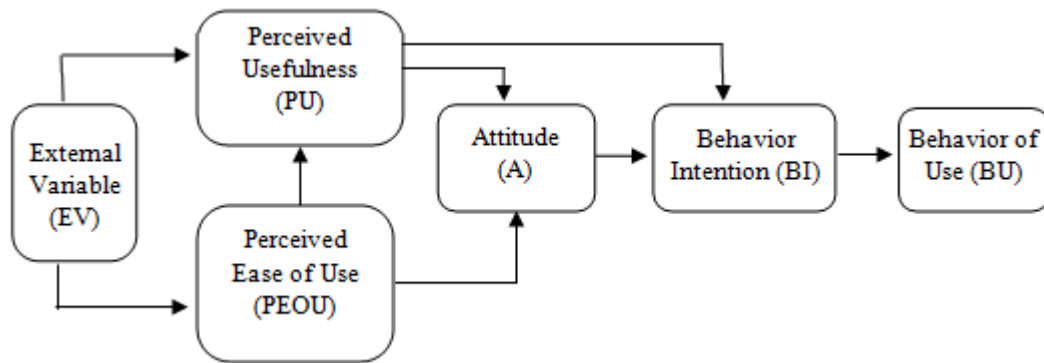
Figure 1: Technology Acceptance Model (Davis, 1989).

2.1 Previous Studies on Acceptance of E-learning

Sabti and Chaichan (2014) used TAM to determine technology acceptance in language learning among thirty 16–18 years old Saudi Arabian high school students in Kuala Lumpur, Malaysia. They found gender differences in technology acceptance, in which more females than males showed positive attitudes toward the use of E-learning. All participants showed positive intention on perceived usefulness and perceived ease of use. In addition, the study identified three obstacles (skills, motivation, and equipment) that affected the acceptance of learners with skills having the most significant effect on technology acceptance.

Meanwhile, Cakir *et al*. (2014) investigated the attitude of Turkish EFL learners toward the application of technology in foreign language learning in universities. The study aimed to determine the factors that influence the acceptance of university students using TAM. A large number of participants (231 males and 271 females) from the higher vocational school who studied English courses via E-learning participated in the study. The findings of the study revealed that anxiety has a negative effect on the application of technology in language learning, whereas perceived ease of use, attitude, and satisfaction have positive effects on academic achievement.

Similarly, Al Adwanand Smedley (2013) used TAM to research on the effect of technology in Jordanian universities to determine the factors that influence the success of E-learning. The study revealed that TAM is effective when used as a theoretical framework to predict the intention of students to use E-learning. In addition, perceived ease of use has a significant effect on perceived usefulness and attitude and students who found E-learning easy to use have favorable attitude toward the usefulness of the system.

Another TAM study by Shroff *et al*. (2011) on the behavioral intention of 720 Hong Kong university students in using an electronic portfolio system showed that perceived ease of use influenced attitude to use and perceived usefulness. However, Lee (2010) utilizing a combined TAM and theory of planned behavior conducted a study in South Korea to investigate the factors that influence students' adoption of E-learning. The study incorporated four constructs, namely, instructor characteristics, teaching materials, design of learning contents, and playfulness. The results showed that the satisfaction of the users had a crucial role on their intention, followed by perceived usefulness, attitude, concentration, and subjective norms.

At King University in Saudi Arabia, a study on 112 EFL learners to determine their attitude toward the use of computer assisted language learning (CALL) revealed that the participants had positive attitudes toward the use of CALL to learn the four skills of the English language (Bulut and Abu Seileek, 2007). Meanwhile, Saadé *et al*. (2007) indicated that the participation and involvement of university students were important to successful E-learning systems. Therefore, the acceptance behavior of students should be assessed and that TAM was a sound theoretical model in which its validity can be extended to multimedia and E-learning contexts.

Lastly, Kung (2005) investigated how online websites were utilized to enhance the reading skillsin English language of 48 foreign learners at the College of Language in Southern Taiwan. The results showed that almost all the students had positive attitudes regarding the online website, which helped them to complete their tasks correctly.

The review on the current literature on TAM above appears to indicate that perceived ease of use and perceived usefulness were the key factors in the use of technology. However, the current study would focus on the extent other factors influence the Iraqi students' acceptance of the use of technology in language learning and to examine the barriers that affect their technology acceptance. This study is important because of the lack of acceptance and adoption of technology in language learning in Iraq and learning and usage will differ according to the culture of users (Linjun,2003).

UTAUT proposed by Venkatesh*et al*. (2003) is another model frequently used by researchers. The model was developed based on TAM and seven other models. The model consistedof main constructs, namely,performance expectancy, effort expectancy, social influence, and facilitating conditions that influenced the behavioral intention and behavior to use technology. Given that the model was developed based on eight models of new technology acceptance, the model assumes that performance expectancy is similar to perceived usefulness and that effort expectancy is similar to perceived ease of use (Venkatesh*et al*., 2003). Figure 2 shows the UTAUT model.
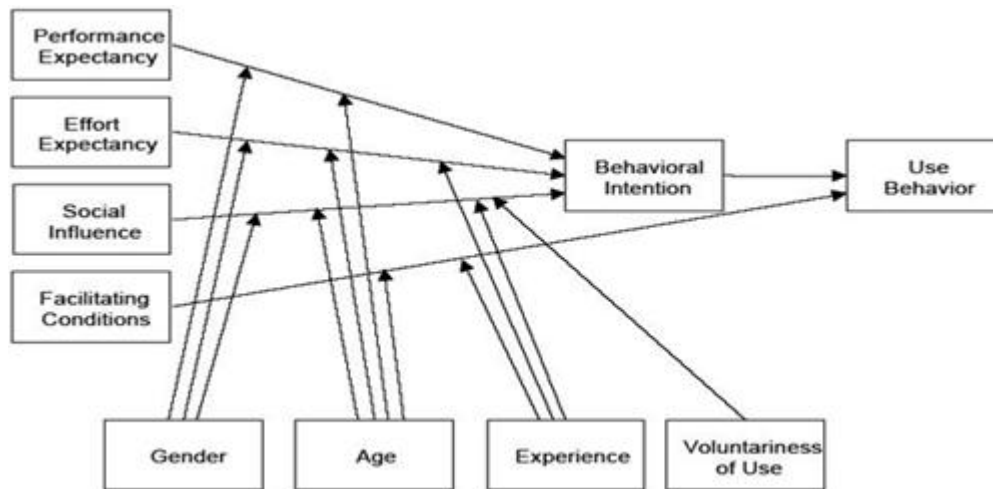
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Figure 2: UTAUT adopted from (Venkatesh *et al*., 2003)

Many researchers (Lederer *et al*., 1998; Davis, 1989; Migliorino and Maiden, 2004; Albirini, 2006) have investigated the factors that influence the acceptance and adoption of E-learning of EFL students. On the basis of the review of the literature, perceived usefulness, perceived ease of use, IT knowledge, perceived playfulness, and facilitating conditions are the factors that potentially affect the acceptance of E-learning. These factors were proposed based on the nature of Iraqi educational system and technical infrastructure.

2.2.1 Perceived Usefulness and Perceived Ease of Use

Perceived usefulness refers to the extent to which the user believes that using the technology will enhance his or her work performance in which a specific system would improve the performance of the learner (Davis, 1989; Lederer *et al*., 1998). Perceived ease of use refers to the evaluation of the learner on a specific system, and no effort is exerted (Agarwal and Karahanna, 2000, p. 674). Teo*et al*.(2008) used TAM and pointed out that the high level of perceived usefulness and perceived ease of use increased the attitude and enhanced the performance toward using a specific system. Therefore, high level of perceived usefulness results in more positive attitude toward the use of technology (Teo*et al*., 2008). In this study, perceived usefulness and perceived ease of use are expected to have significant influence on the attitudes of EFL students in Iraq to use E-learning.

2.2.3 IT Knowledge

A very important aspect of technology acceptance is the level of knowledge regarding the use of the technology. Using E-learning requires the users to have knowledge about the computer, Internet, electronic devices, and communication tools. Lack of IT knowledge usually leads to less online activities (Dimitrova and Chen, 2006). Rasouli *et al*. (2011) conducted a study in the field of E-government and found that IT knowledge is an important factor for users to use the online system. In this study, the level of knowledge of the students regarding the use of E-learning and its related tools is anticipated to significantly affect E-learning acceptance.

2.2.4 Perceived Playfulness

Phuangthong and Malisawan (2005) proposed an adoption model in their preliminary research on mobile learning (M-learning) and suggested that perceived enjoyment would have a direct effect on the attitudes of people. Building upon TAM, Huang *et al*. (2012) pointed out that individual differences significantly influenced user acceptance of M-learning, in which the perceived enjoyment and perceived mobility predicted the adoption intention of users.

Moon and Kim (2001) extended and empirically validated TAM for the web context by adding an intrinsic motivation factor, that is, perceived playfulness, to TAM. They found that perceived playfulness has a significant positive influence on behavioral intention to use the web. Huang *et al*. (2012) found that perceived playfulness significantly affects the adoption of mobile English learning. However, Iqbal and Qureshi (2012) followed a similar approach, employing TAM variables and perceived playfulness. Their findings showed that perceived playfulness does not significantly affect the adoption of M-learning as other constructs do. In this study, the variable perceived playfulness is expected to have significant influence on the attitudes of EFL students in Iraq to use E-learning.

2.2.5 Facilitating Conditions

Facilitating condition is one of the constructs of UTAUT and defined as the extent in which a user assumes that an institutional foundation is present to encourage the system use (Venkatesh *et al*., 2003). Facilitating conditions have been recognized to predict usage behavior (Venkatesh *et al*., 2003). Thompson *et al*. (1991) indicated that facilitating conditions have an important role to simulate the behavior and intention of individuals. Facilitating conditions showed a positive effect on the behavior of the individuals. Iqbal and Qureshi (2012) incorporated facilitating conditions to determine their influence on acceptance of M-learning in Pakistan. The findings indicated that facilitating conditions significantly influenced the acceptance of M-learning. In this study, facilitating conditions are expected to significantly influence the behavior of EFL students in Iraq to use E-learning.

2.2.6 Attitude toward Use

Ajzen and Fishbein (2005) suggested that the attitude to use leads the behavior and indicates the method users to accept or decline an item. The applied efforts to execute E-learning depends on engagement of the attitude of individuals. A profitable E-learning involvement requires individuals to have a positive attitude toward E-learning (Huang and Liaw, 2005). In this study, the attitude to use technology is expected to have significant influence on the behavior of EFL students in Iraq to use E-learning.

2.3 Barriers to E-Learning

Previous studies related to the barriers of E-learning have focused and divided the barriers into four main areas, namely, information and communication technology (ICT), environment issues, student characteristics, support for students, and provision of authentic activities (Vrazalic*et al.*, 2009). In a study conducted on 875 employees by Mungania (2003), he pointed out seven types of E-learning barriers that include personal or dispositional, learning style, instructional, situational, organizational, content suitability, and technological barriers.

Vrazalic *et al.* (2009) mentioned that Internet accessibility of students in some countries could be classified as one of the main barriers. This type of barrier is under information and communications technology (ICT) environment issues. Such reason is strongly influenced by the country technical infrastructure and the connectivity of the country to high technology, as well as the financial situation of the citizens. Vrazalic *et al.* (2009) also claimed that barriers for E-learning include the family restriction of using technology and barriers of connectivity, capability, and content (Vrazalic *et al.*, 2009). Oye*et al.* (2011) found that the barriers are heterogeneous encompassing personal, organizational, content, situation, instructional, and technological barriers.

Few studies investigated the barriers in the developing countries in general and in Iraq in particular. Typically, the issues on ICT knowledge and technical infrastructure are among the barriers for the use of E-learning. Thus, this study aims to identify the barriers to the use of E-learning by EFL students in Iraq.

3. Conceptual Model and Research Hypotheses

Based on the above literature, Figure 3 presents the conceptual model of this study. The variables; ease of use, usefulness, IT knowledge, and perceived playfulness directly influence the attitude to use, which are similar to the conceptualization of TAM (Davis, 1989).IT knowledge was determined as an important factor that influenced the acceptance of using new technology (Rasouli *et al.*, 2011).Furthermore, many researchers found that perceived playfulness influenced the acceptance of new technology (Huang *et al.*, 2012; Iqbaland Qureshi, 2012). Following the research model of Venkatesh *et al.* (2003), facilitating condition was linked directly to the behavior, as well as attitude to use the technology.
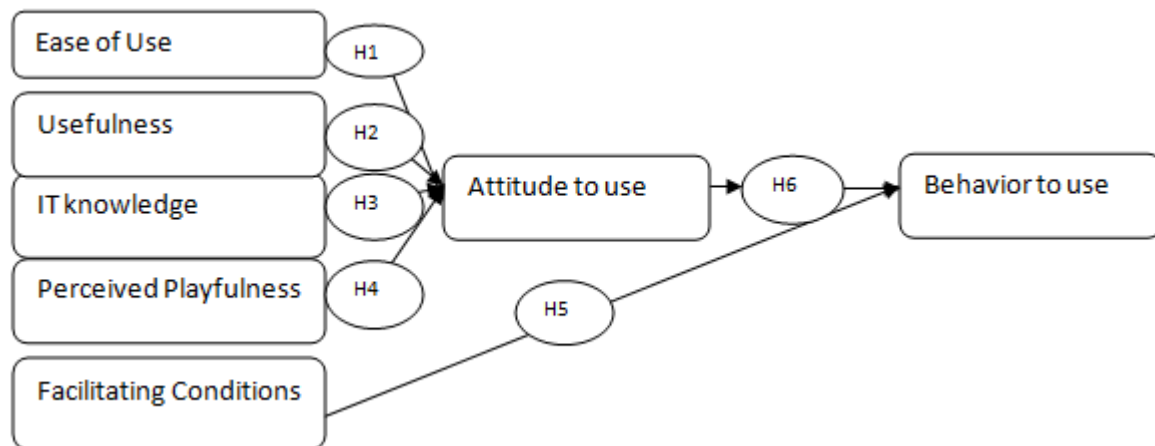

Figure 3.conceptual model of E-learning

Based on the conceptual model, the following statement can be hypothesized:

H1: Ease of use positively influences the attitudes of EFL students to use E-learning.
H2: Usefulness positively influences the attitudes of EFL students to use E-learning.
H3: IT knowledge influences the attitudes of EFL students to use E-learning.
H4: Perceived playfulness influences the attitudes of EFL students to use E-learning.
H5: Facilitating conditions influence the behavior of EFL students to use E-learning

H6: Attitude to use influences the behavior of EFL students to use E-learning.

4. Method

This quantitative study was both analytical and empirical. Through the former, the review of the literature was conducted to develop the research model which incorporated TAM, UTAUT, and the factors that influence the acceptance of E-learning. Then, six related hypotheses were formulated (see above) based on the adopted model. Through the latter, the conceptual model was tested empirically by collecting data using a questionnaire. The hypotheses were tested using

SPSS version 21.0 to analyze the responses and to determine the causal relationship between the variables.

4.1 Population and Sampling

Sekaran (2003:262) defined population as "the entire group of people, events, or things of interest that the researcher wishes to investigate", but sampling is "the process of selecting a sufficient number of elements from the population, so that results from analyzing the sample are generalizable to the population". The population of the study includedall EFL students at Al-Anbar state in Iraq. However, only two colleges, the college of art and college of education were included in this study because of time, cost constraints and the willingness of the colleges to participate in this study. The total number of EFL students in the two colleges is 1089. However, a random sampling of 278 students was selected.

4.2 Instrument

The questionnaire for data collection was adopted from several researchers. The variables ease of use (four items with reliability of 0.89), perceived usefulness (four items with reliability of 0.89), attitude to use (three items with reliability of 0.85), and behavior to use (three items with reliability of 0.85) were adopted from Masrom (2007). Perceived playfulness which contained three items was adopted from Iqbal and Qureshi (2012) because it had a reliability of 0.79 while IT knowledge with five items with reliability of 0.87 was adopted from Rasouli*et al.* (2011). Five items of facilitating condition with reliability of 0.80 were adopted from Venkatesh *et al.*(2003).Finally, ten barrier items with reliability of 0.76 were adopted from Almuqayteeb (2009).

4.3 Pilot Study

A pilot study was conducted to ensure that the questions in the questionnaire were clear and easily understood. A total of 30 questionnaires were distributed to respondents who were not included in the sample. The feedback of the respondents were received and addressed accordingly. Then the questions were checked for reliability. The results revealed that the alpha scale was greater than 0.7, indicating that the questions were reliable.

4.4 Data Collection

An online survey was created using Google.doc. It was written in English because all the respondents were enrolled in an English language program, and they could answer the questionnaire in English. The questionnaire was mailed to 278 respondents. The respondents were given two weeks to answer the questionnaire. A reminder was sent after one week, and a follow-up procedure was conducted. Data were collected in November 2014. A total of 91 completed questionnaires were returned and were deemed usable. They represented a response rate was 33% which was comparable to other researchers who conducted studies in this field (Keong *et al.*, 2014). According to Sekaran (2003), 30 to 500 responses were sufficient for social research.

5. Research Findings

Data analysis was conducted by using SPSS version 21.0. Descriptive, reliability, and regression analyses were conducted. Descriptive analysis was employed to determine the descriptive information of the respondents and the barriers to the use of E-learning. Reliability analysis was employed to determine the internal consistency and Cronbach's alpha of the variables. Finally, regression analysis was employed to test the hypotheses of the study.

Table 1 shows the descriptive information of the respondents. The majority of the respondents (79.1%) were males and 20.9%were females. The majority of the respondents (74.7%) were in the 20–24 age group because all respondents were undergraduate students. The respondents were divided between the two colleges. A total of 47 respondents (51.6%) were from the educational science college and 48.4%were from the art and science college. All students use the Internet. The majority of the respondents (44%) used the Internet for more than four but less than six years, followed by 22%who used the Internet for more than six years. Table 1 shows the statistical information of the respondents.

Table 1: Background Information of Respondents.

		Frequency	*Percent*
Gender	Male	72	79.1
	Female	19	20.9
	Total	91	100.0
Age	Less than 19 years	6	6.6
	20-24 years	68	74.7
	25-29 years	17	18.7
	Total	91	100.0
College	Art and science	44	48.4
	Educational sciences	47	51.6
	Total	91	100.0
Internet Usage	Yes	91	100.0
Length of using the internet	less than 1 year	17	18.7
	1-3 years	14	15.4
	4-6 years	40	44.0
	more than 6 years	20	22.0
	Total	91	100.0

5.1Reliability Analysis

Sekaran (2003) described Cronbach's alpha as a good tool to determine the internal consistency and reliability of the variables. A Cronbach's alpha greater of 0.7 is considered acceptable. Table 2 shows the reliability analysis of the variables.

Table 2: Reliability Analysis.

Variable	*Number of items*	*Cronbach's Alpah*	*Status*
Ease of use	4	0.82	Acceptable
Perceived Usefulness	4	0.74	Acceptable
IT knowledge	5	0.77	Acceptable
Perceived playfulness	3	0.76	Acceptable
Facilitating conditions	5	0.81	Acceptable
Attitude to use	3	0.87	Acceptable
Behavior to use	3	0.85	Acceptable
Barriers	10	0.86	Acceptable

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All the variables have Cronbach's alpha higher than 0.7, indicating that the measurements are reliable.

5.2 Hypotheses Testing

Six hypotheses were derived from the model of this study. The hypotheses tests were conducted by using regression analysis. Table 3 shows the results of regression analysis.

Table 3: Coefficients of Variables

		Standardized Coefficients		t	P-Value
		Beta	Std. Error		
Attitude to use	(Constant)	10.795	1.324	8.152	.000
	Ease of use	.140	.064	.616	.009
	Usefulness	.171	.065	1.093	.000
	IT knowledge	.166	.048	1.382	.000
	Perceived Playfulness	.279	.076	1.135	.000
Behavior to use	(Constant)	.598	.664	.900	.000
	Facilitating Conditions	.108	.023	.342	.000
	Attitude to Use	.955	.043	22.147	.000

The first hypothesis of this study is that the ease of use positively influences the attitude to use technology. The finding of the study showed that ease of use significantly influenced the attitude to use technology (B= 0.140, P-value= 0.009). For the second hypothesis, usefulness significantly influences the attitude to use technology (B= 0.171, P-value= 0.000). For the third hypothesis, IT knowledge positively influences the attitude to use technology (B= 0.166, P-value= 0.000). Perceived playfulness significantly influences the attitude to use technology (B= 0.279, P-value= 0.000). All four hypotheses were significant because their P-values were less than 0.05. For the fifth hypothesis, facilitating conditions positively influence the behavior to use technology because the sign of the coefficient was positive, and the relationship was significant because the P-value was less than 0.05 (B= 0.108, P-value= 0.000). Similarly, according to the last hypothesis, attitude to use technology positively influences the behavior to use because the P-value of the relationship was less than 0.05 (B= 0.955, P-value= 0.000). Therefore, H1, H2, H3, H4, H5, and H6 were supported. Further discussion of the result is given in discussion section.

5.3 Barriers to the Use of E-learning

One of the objectives of this study is to identify the barriers to the use of E-learning by EFL students in Iraq. Table 4 shows the barriers from the perspectives of the students.

Table 4: Barriers of Using E-learning

Code	Item	Mean	Std. Deviation
BAR1	Lack of guidance and consultation from others on how to use such tools for learning English	3.58	.534
BAR2	Lack of equipment and infrastructure at college and at home	4.11	.526
BAR3	Holding negative beliefs or reservations about using computers and Internet in learning English	2.93	.490
BAR4	Lack of enough experience how to deal with technological tools in learning English	3.71	.509
BAR5	Lack of appropriate training on using these technological tools in learning English	4.03	.490
BAR6	Lack of adequate information literacy about computers and the Internet	3.81	.509
BAR7	Lack of time of learning about computers and the Internet for learning English	3.14	.490
BAR8	Lack of self-confidence to use such technologies in learning English	3.23	.490
BAR9	Lack of personal interest to use computers and the Internet in learning English	3.20	.539
BAR10	Lack of motivation to use computers and the Internet for learning English	3.94	.327

Most of the barriers are significant in their mean score value. However, the greatest barriers based on the students' perception were lack of infrastructure which had the highest mean value of 4.11, followed by training on the use of technology with mean score value of 4.03. The third main barrier is the motivation to use the E-learning method with a mean score value of 3.94. The study reports only on the first three barriers following the approach of other researchers who tend to report on the highest three barriers only (Aydemir, 2013).

6. Discussion

Based on the results that were generated in Table 3, all the hypotheses were supported. For the first hypothesis, the relationship is positive and significant between ease of use and attitudes of EFL students to use E-learning. Thisfinding is consistent with the findings of other researchers. Sabtiand Chaichan(2014) found that ease of use strongly influenced the attitude of Saudi students to use E-learning. Similarly,

Cakir *et al*. (2014) discovered that the attitudes of EFL Turkish students to use E-learning was also influenced by it.

For the second hypothesis, perceived usefulness was found to have significantly influenced attitude to use technology. The finding is consistent with the findings of Shroff (2011) in the attitude of students in Hong Kong as well as that of Al Adwanand Smedley (2013) in the attitude of Jordanian students.

For the third hypothesis, IT knowledge was found to have influenced the attitude of EFL students in Iraq to use E-learning which is similar to that of Dimitrova and Chen (2006) and Rasouli *et al*. (2011) who also found that IT knowledge influenced the attitude to use new technology.

The fourth hypothesis was also well supported and the relationship between perceived playfulness and attitude to use was found to be significant. This result is similar to that of Moon and Kim (2001)who claimed that perceived playfulness had a significant positive influence on behavioral intention to use the web. Likewise, Huang *et al*.

(2012) stated that perceived playfulness significantly influencedthe adoption of E-learning in English.

For the fifth hypothesis, the influence of facilitating conditions on behavior to use technology was found to be significant too which concurs with the finding of Thompson *et al*. (1991) and Iqbal and Qureshi (2012).

For the last hypothesis, the attitude to use technology strongly influenced the behavior to use technology. This finding is consistent with the findings of other researchers (Saadé *et al*., 2007 Cakir *et al*. 2014).

Regarding the barriers, the study found that technical infrastructure, training, and motivation were the main barriers for students to use E-learning. This result revealed the need to establish acceptable technical infrastructure for students to use the technology. In addition, the findings showed the importance of encouragement from the university, family, and government to convince students to use the technology to improve their academic achievement. Generally, the findings of the study were consistent with findings of Sabti andChaichan (2014), who highlighted that student acceptance of E-learning had some obstacles such as motivation, equipment, as well as skills required to use the system.

7. Conclusion

This quantitative study was conducted to determine the factors that influence the E-learning acceptance of EFL students in Iraq. The literature was reviewed to develop the research model based on TAM and UTAUT models. A total of 91 respondents participated in this study. Six hypotheses were developed and tested using regression analysis. All hypotheses were supported. Three main barriers, namely, technical infrastructure, training, and motivation, hindered the use of E-learning. The findings were discussed in relation to similar studies in the field.

Before the final remark, several recommendations and limitations are discussed. Previous studies in the acceptance and use of technology are mainly quantitative. A qualitative approach is recommended since E-learning remains a new method in many countries of the world. By conducting a qualitative study and using interviews as instruments, researchers can reveal new variables to include in their models and learn about the factors that influence the behavior of learners. In addition, future research can expand the population to include a large number of respondents.

This study, conducted in Al-Anbar state, Iraq, investigated the E-learning acceptance of EFL students. Thus, the study is limited to the perception of students on E-learning. Teacher or academic staff perception was not included in this study. The study was developed based on the theoretical models of TAM and UTAUT, in which the variable facilitating conditions were adopted.

8. Acknowledgment

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Appendix A
Perceived ease of use (PEU)
PEU1: I found E-learning easy to use.
PEU2: Learning to use E-learning would be easy for me.
PEU3:My interaction with E-learning was clear and understandable in language learning
PEU4: It would be easy for me to find information at E-learning.

Perceived usefulness (PU)

PU1: Using E-learning would enhance my effectiveness in language learning.

PU2: Using E-learning would improve my course performance in learning language

PU3: Using E-learning would increase my productivity in my course work

PU4: I found e-learning useful .

IT knowledge (ITK)

ITK1:I have sufficient knowledge to deal with internet application

ITK2:I have the knowledge necessary to use E-learning

ITK3:I am familiar with the procedures that are used in E-learning

ITK4:I can complete a course successfully using E-learning

ITK5: Overall, I think I have the required knowledge to deal with E-learning

Perceived playfulness

PP1: when using e-learning I will not realize the time elapsed

PP2: when using e-learning, I will not forget the work I must do

PP3: Using e-learning will give enjoyment to me for my learning

Facilitating conditions (FC)

FC1:I have the resources necessary to use the e-learning

FC2: I have the knowledge necessary to use e-learning

FC3: Given the resources, opportunities and knowledge it takes to use e-learning, it would beeasy for me to use e-learning.

FC4: I think that using e-learning fits well with the way I like to learn.

FC5: Using e-learning fits into my learning style.

Attitude towards use (ATU)

ATU1: I like the idea of using E-learning.

ATU2: I have a generally favorable attitude toward using E-learning.

ATU3: I believe it is (would be) a good idea to use this E-learning for my course work.

ATU4: Using E-learning is a good idea.

Behavioural to use (BIU)

BTU1: I intend to use E-learning during the semester.

BTU2: I will return to E-learning often.

BTU3: I intend to visit E-learning frequently for my course work.

Adopted from :Masrom (2007) ,Iqbal and Qureshi (2012),Rasouli*et al*. (2011) Venkatesh*et al*. (2003).

Appendix B

1. Lack of guidance and consultation from others on how to use such tools for learning English.
2. Lack of equipment and infrastructure at college and at home.
3. Holding negative beliefs or reservations about using computers and Internet in learning English.
4. Lack of enough experience how to deal with technological tools in learning English.
5. Lack of enough experience how to deal with technological tools in learning English.
6. Lack of adequate information literacy about computers and the Internet.
7. Lack of time of learning about computers and the Internet for learning English.
8. Lack of self-confidence to use such technologies in learning English.
9. Lack of personal interest to use computers and the Internet in learning English.
10. Lack of motivation to use computers and the Internet for learning English.

Adopted fromAlmuqayteeb (2009).