Journal of English language Teaching and Learning

University of Tabriz

Volume 14, Issue 30, (Fall and Winter 2022)

Iraqi EFL Learners' Preferences and Readiness for Mobile Learning in Higher Education during COVID-19 Pandemic

Amir Mashhadi (Corresponding Author)

Department of English Language & Literature, Shahid Chamran University of Ahvaz, Ahvaz, Iran,

Mashhadi.scu@gmail.com

Abbas Al Suraifi

Department of English Language & Literature, Shahid Chamran University of Ahvaz, Ahvaz, Iran,

abbassfahad9@gmail.com

Ahmed Kadhum Fahad

Department of English, College of Education, University of Thi-Qar, Iraq

ahmedkadhum@gmail.com

ARTICLE INFO:

Received date:
2021.05.31
Accepted date:
2021.12.28

Print ISSN: 2251-7995
Online ISSN: 2676-6876

Keywords:

Mobile Learning, EFL Learners, Preferences, Readiness, Higher Education, COVID-19.

Abstract

The expansion of mobile wireless technology into education in recent decades has offered an incredible opportunity to design learning differently and to enhance students' learning experiences that extend beyond the typical teacher-led classrooms. Following the outbreak of COVID-19 and the subsequent closure of educational institutions around the world, distance/mobile learning has become a widely accepted form of information and communication technology-enhanced education. Given the infancy of technology-enhanced education at Iraqi educational institutions, this study was conducted to determine how Iraqi EFL learners preferred information and communication technology-enhanced education and how ready they were to adopt mobile learning for English learning purposes in higher education. This study also examined whether there were any significant differences in the learners' preferences and readiness for mobile learning considering their gender. Methodological triangulation was undertaken using a questionnaire and semi-structured interviews with some Iraqi EFL learners at four public universities so as to seek the research objectives. Descriptive analysis was used to analyze the data from the questionnaire. The data of the interviews were then analyzed using thematic analysis to identify and report the common themes of the two coders of the interviews. The findings revealed a plethora of evidence indicating learners' positive attitudes towards using mobile learning as a viable medium for language learning purposes in intra- and extramural situations, as it expanded the boundaries of learning beyond the limitations of traditional pedantic educational settings. Besides, no significant differences were found in the preferences and readiness of Iraqi EFL learners considering their gender for the adoption of mobile learning in higher education, though females liked mobile learning better than males.

DOI: 10.22034/ELT.2022.51201.2486

Citation: Mashhadi, A., Al Suraifi, A., Fahad, A. K. (2022). Iraqi EFL Learners' Preferences and Readiness for Mobile Learning in Higher Education during COVID-19 Pandemic. *Journal of English Language Teaching and Learning*, 14(30), 351-365. Doi: 10.22034/ELT.2022.51201.2486

1. Introduction

Information and communication technology (ICT) has recently made its way into the education sector, revolutionizing it to the benefits of learners and teachers as well as other educational stakeholders involved (Sharples, 2006). ICT-enhanced educational platforms have indeed helped support formal and informal learning among youths and adults, in classrooms and out on field trips, at home and on the move, providing new learning opportunities that expand beyond conventional teacher-led classrooms. However, each technology has distinctly certain features that promote special forms of use and obstruct others.

Parallel with the cutting-edge advancements in mobile wireless technology, a new term has appeared; namely, mobile learning (hereafter m-learning) in the educational arenas. M-learning has established the legitimacy of 'nomadic' learners enabling the flexible delivery of education on an anywhere-anytime basis (Alexander, 2004) and is realized by the implementation of mobile hardware and networking technology (Winters, 2006). Parsons and Ryu (2006) describes m-learning as the distribution of learning information to learners using mobile devices (MDs) along with their diverse affordances and capabilities.

M-learning is often associated with learning on-the-move in informal learning environments which is made possible using ICT affordances on a ubiquitous basis. However, the rapid adoption of ICT among university students has been providing an unprecedented platform to establish and extend learning communities, to connect students in real and virtual environments, to provide expertise on demand, to enhance students' learning experience by lowering their anxiety, and to support lifelong learning in higher education (Sharples, 2006). M-learning is also deemed to be instrumental in enhancing flexibility in learning by customizing learning to be a more personalized and learner-centered experience (Leadbeater, 2004).

Language teaching and learning discipline, among others, seems ready to benefit from the rapid expansion of ICT to better meet learners' educational needs. The application of mobile and wireless technologies to offer language learning and teaching opportunities within and outside the classrooms has risen along with substantial research in the educational arenas (e.g., Cavus & Ibrahim, 2009; Hayati, Jalilifar, & Mashhadi, 2013; Kukulska-Hulme & Shield, 2008; Kukulska-Hulme, 2009; Levy & Kennedy, 2005; Mashhadi, & Khazaie, 2018; Mashhadi, Hayati, & Jalilifar, 2016; Stockwell, 2007, 2008; Teo, Khazaie, & Derakhshan, 2022; Thornton & Houser, 2004, 2005). Despite the rapid growth of research and high potentials of ICT, mobile-assisted language learning (MALL) is an emerging trend in higher education which is still in its infancy (Traxler, 2004). The slow implementation of m-learning in higher education is generally attributable to several factors, among others. Tabor (2016) enumerated such challenges as poor connectivity, small screen sizes of some MDs, their limited memory capacity, limited computation power, low input modeling, short battery life, and lack of learners' willingness to adopt m-learning for academic purposes as the main obstacles for the true integration of m-learning into higher education. In turn, Shudong and Higgins (2005) categorized the limitations of m-learning into three categories: psychological, pedagogical, and technical. In terms of psychological limitations of m-learning, it has been argued that learners are yet to become fully accustomed to m-learning and its revolutionary approach to information

access in general educational settings or regular schools. Therefore, learners might require time to psychologically feel prepared to adopt m-learning practices in wider educational settings. As such, the success of ICT including mobile technology in education depends mostly on learners' preferences and readiness for the adoption of such technology for learning purposes as a learning environment of choice.

It, thus, seems necessary to investigate the problems that hinder the adoption of MALL by conducting surveys and studies looking into learners' readiness and preferences for using ICT affordances including MDs in education. The learners' accomplishment in learning a second language, as Gardner (1985) claimed, is linked to the predictions of attitudes they have towards the language. That is, learners with positive attitudes are more likely to learn the target language more efficiently than those having negative attitudes. Gardner (1985) maintained that the learners' opinions determine their evaluative reaction towards certain references, objects, persons, and situations involved in a learning environment. The structure of the learning environment is accordingly deemed to reflect the feelings, beliefs, and behavior of the learners, among other determining factors. For m-learning to be undertaken as a permanent component of pedagogy in higher education, as the particular context of this study, it appears indispensable that more empirical evidence demonstrating the links between learners' preferences and readiness for m-learning and its real practice be found (Kompf, 2005).

2. Literature review

2.1 Language learners' preferences and readiness for m-learning in higher education

As mobile technologies expand educational resources and enhance learners' access to information on a ubiquitous basis, many studies have accordingly focused on learners' preferences and readiness for adopting m-learning in higher education for language learning purposes, and also the issues influencing the establishment of MDs and their affordances as viable learning tools. Though there are some reports of issues in the proper implementation of m-learning in higher education, the results are mostly indicative of students' favorable attitudes towards m-learning. For instance, Viberg and Grönlund (2013) reported that m-learning was perceived very positively by EFL students from Yunnan University in China and Dalarna University in Sweden. The results also revealed that individualization was the most positive aspect in mobile technology use, followed by collaboration and authenticity. In terms of the individual factors, gender was identified as a predictor of differences in the attitudes students had towards MALL.

In another study, Zou and Yan (2014) evaluated the perception of Chinese university students about the use of MDs for English practice in and outdoors. The results demonstrated a strong motivation among students to learn English via MDs along with the diverse types of m-learning activities available. It was also found that students' attitudes towards m- learning were influenced by their surroundings. In the case of Taiwanese EFL college students, Chung, Chen, and Kuo (2015) explained students' behavioral intentions to use mobile English vocabulary learning by their perceived usefulness, perceived ease of use, self-efficacy, and compatibility of MDs. Adopting an ICT usage questionnaire followed by a series of semi-structured interviews, Caldwell (2018) found that the perceptions of EFL students towards ICT-enhanced education and m-learning at Japanese universities were positive, with many students

appreciating the freedom and convenience of m-learning. Teachers, however, were supposed to consider the affordances and limitations of m-learning when deciding which technology to use. It was also believed that university administrators could improve learning outcomes for students if they better knew about students' preferences with regard to m-learning.

Following a similar research strand, Alrefaai (2019) at King Khalid University in Saudi Arabia examined the attitudes of graduate EFL students regarding the use of mobile phones in language learning. The findings were indicative of students' favorable attitudes to m-learning, even though they faced some technical issues using MDs for language learning. Another study by Darsih and Asikin (2020) on university students' perceptions of mobile applications in learning English revealed that almost all participants considered MALL to be useful in English learning by downloading and using English mobile applications to help their learning. Furthermore, Krasulia and Saks' (2020) study of MALL perceptions of undergraduate students of Translation Studies at Sumy State University, Ukraine, revealed their optimistic perceptions of MDs for educational purposes, even though they reported some technical constraints and digital literacy issues. Students believed that m-learning promoted self-directed language learning inside and outside the classroom in more authentic and motivating ways. The mobile-assisted tasks included students' doing classroom activities, homework, and self-paced learning using their MDs. In terms of the factors explaining the adoption of m-learning among Chinese EFL college students, Lin and Su (2020) showed that affective, social integrative, and entertainment needs of students influenced their attitude and intention to use m-learning in higher education. This finding corroborates previous results (e.g., Thedpitak & Somphong, 2021; Van, Vu, & Linh, 2021), indicating that students' attitudes towards m-learning significantly influenced their decisions to use MDs for learning purposes.

2.2 MALL in Iraq higher education

M-learning is generally considered a new mode of learning in Iraq education system, and only a limited number of educational institutions have already implemented ICT-enhanced technologies for (language) teaching and learning purposes, mainly due to the lack of associated facilities, poor Internet and ICT infrastructure and high costs involved on large scale application of such technologies in education (Al-Azawei & Alowayr, 2020; Al-Mashhadani & Al-Rawe, 2018; Ameen, Willis, & Abdullah, 2017; Mussa, Sazalli, & Hassan, 2022). Among other education sectors in Iraq, the higher education looks more set to benefit from recent developments in ICT as fertile media for educational purposes, including MALL.

There is, however, a paucity of research on MALL in Iraq based on a review of previous literature (Al-Azawei & Alowayr, 2020). For instance, Jebur's (2020) study at the Department of English, at Mustansiryha University, revealed Iraqi EFL students' positive attitudes towards m-learning. Results showed that MDs were mostly used as dictionaries as well as research and data collection tools. Additionally, MDs were considered as teaching aids and supplementary resources in the English language teaching and learning process to motivate students and actively engage them in the learning process. In another survey conducted in the context of higher education in Iraq, Hamza and Saadalla (2021) reported that EFL university students at a private university in northern Iraq favored mobile applications for teaching and learning English due to their accessibility and flexibility. The students also believed that mobile

applications could provide additional value in the exciting, yet challenging m-learning environment. More recently, Mussa, Sazalli, and Hassan (2022) reported that the behavioral intention of undergraduate English literature students at four universities in southern Iraq to use m-learning was significantly influenced by performance expectancy, effort expectancy and subjective norms. Also, the presence of facilitating conditions and the behavioral intention to use m-learning were found significantly contributing to students' actual use of m-learning. Emerging from the few studies already conducted on m-learning in Iraq is that higher education students are generally keen to embrace it in formal education (Al-Azawei & Alowayr, 2020; Bingol, 2018).

Following the COVID-19 pandemic, the world was forced into a lockdown and almost all educational institutions began offering distance/mobile learning through ICT affordances. In effect, mobile/distance learning which was once an option, is now a sine qua non (Monzeji, Mashhadi, & Maniati, 2021). Language teachers and learners have resorted to using ICT-enhanced educational platforms to maintain education and learning during this time of crisis. Although CALL has been around for more than seven decades, MALL has not yet found a proper place in educational curricula (Traxler, 2004), and as Masters (2008) asserts, "m-learning is not yet part of the mainstream educational media, and is still struggling to establish itself" (p. 5794)4Now that COVID-19 has caused teachers and students to turn to the ICT affordances for educational purposes, studying their preferences and readiness as well as the challenges that they may encounter in adopting m-learning appears to be a much-needed line of investigation in language teaching and learning research. Considering the infancy of technology-enhanced education, especially MALL, at Iraqi educational institutions, this study was intended to examine how Iraqi EFL university learners preferred ICT-enhanced education and how ready they were to adopt m-learning for English learning purposes in Iraqi higher education. This study was indeed motivated by the question of how MALL is perceived by EFL learners in the higher education context of Iraq in order to smooth the process of language teaching and learning that is mostly hampered by the inherent problems of an EFL context. This study also looked forward to opening up new vistas to Iraqi language teachers and researchers to increase their performance and efficacy when using recent technological advancements in various educational settings. In order to accomplish the objectives of this study, the following research questions stand out:

1. What are the attitudes and preferences of Iraqi EFL learners towards m-learning in higher education?
2. Are there any significant differences among the learners' attitudes towards m-learning in terms of gender?

3. Methodology

3.1 Population and sample

Employing a mixed-methods design, this study included male (n=65) and female (n=25) native Iraqi EFL learners ranging from 20 to 28 years old at four public universities, i.e., University of Thi-Qar, University of Missan, University of Al Qadisiyah, and University of Wasit in Iraq, who were selected based on the convenience sampling method (Fraenkel & Wallen, 2003). All the learners had already taken General English for University Students as an obligatory reading

course in the first semester of 2021 and had at least one MD and used it at the time of data collection for some English learning purposes. Informed consent was obtained from the learners for their participation in data collection phases including filling out the questionnaire and taking part in the interview session.

3.2 Instrumentation

This mixed-methods study included two instruments, namely a questionnaire, and a focus-group interview to examine the Iraqi FFL learners' preferences and readiness for m-learning in higher education. The questionnaire was designed in light of the existing theoretical underpinnings on m-learning application in educational contexts based on a five-point Likert scale ranging from strongly agree (=5) to strongly disagree (=1). The questionnaire consisted of four sections: section A inquired about Iraqi EFL learners' attitudes towards m-learning in higher education, while section B was about their perceived ease of use of m-learning in higher education. The third section was, in turn, related to their perceived usefulness of m-learning in higher education, and section four was related to their perceived readiness for m-learning practices.

Having prepared the list of items based on the previous literature on m-learning, the researchers asked four senior university professors specialized in Educational Technology and Applied Linguistics at Shahid Chamran University of Ahvaz and University of Thi-Qar to gauge the suitability of the questionnaire items. The content and face validity measures of the questionnaire items were calculated based on the consensus of the members of the jury on the suitability of the items.

The researchers did a reliability analysis after developing the potential questionnaire items using a qualitative technique to evaluate the internal consistency of the questionnaire items. To that aim, the questionnaire items, which consisted of 20 Likert-type items, were piloted on 30 Iraqi EFL learners other than the main participants in order to choose the final questionnaire items. The reliability of the questionnaire items was determined to be 0.79 using Cronbach's alpha.

3.3 Research design and procedure

Following the piloting and after the participants of the study were identified, informed consent was sought for each learner choosing to participate in this study. Then, the survey questionnaire was administered to the EFL learners from different universities in Iraq through *Google Forms*. The learners were supposed to select the options that best represented their opinions from the alternatives given in the questionnaire. Having collected the data, the researchers analyzed them based on the respondents' opinions about how they preferred m-learning and how ready they were to embark on such practices for English learning purposes at Iraqi higher education.

To include qualitative data and endorse the findings of the questionnaire, semi-structured interviews were performed with 47 Iraqi EFL learners (Male=32, and Female=15) who voluntarily agreed to take part in an online oral interview through *WhatsApp social networking service*. The interview was held in Arabic so as to help learners discuss the interview items in more details in their native language. The interview included three open-ended items which were developed based on the literature and consulting sessions with the jury of senior professors. In order to triangulate the data of the questionnaire and interviews, the following

interview items relied on the same issues based on which the questionnaire items were developed.

1. How would you like to find m-learning incorporated into your English classes?
2. Please make any further comments about the things you like about m-learning.
3. Please make any further comments about the things you dislike about m-learning.

3.4 Data analysis

To answer the first research question regarding the attitudes and preferences of Iraqi EFL learners towards m-learning, the researchers analyzed the garnered data of the questionnaire in terms of the descriptive statistics including the mean scores, standard deviations and percentages using SPSS version 21. The independent t-test was, in turn, conducted to determine whether any significant differences existed in Iraqi FFL learners' preferences and readiness for m-learning based on their gender, as it was addressed in the second research question. The interview data were then analyzed using thematic analysis to identify and report the common themes of the two coders of the interviews. An inter-rater agreement of 89% was achieved, which was deemed adequate and appropriate (Mackey & Gass, 2005).

4. Results and discussion

4.1 Results of the questionnaire

According to Table 1, the learners who completed the questionnaire supported the m-learning approach and had very favorable attitudes towards the integration of m-learning in Iraqi higher education for learning English. The descriptive statistics including the mean scores and standard deviations of the questionnaire items showed that the Iraqi EFL learners also highly embraced ICT-enhanced English language learning in Iraqi higher education.

Table 4.2. *The mean scores and standard deviations of the questionnaire items*

Items	Mean Ma	Mean Fe	SD Ma	SD Fe
Attitudes towards M-learning				
1. Mobile learning can be used an effective method for learning English.	4.65	4.65	2.46	1.99
2. Mobile learning should be incorporated into conventional English classes.	4.12	4.82	3.25	3.14
3. Mobile learning will increase teacher-student interaction.	4.18	4.73	2.90	1.56
4. Mobile learning will enhance students' motivation for learning English.	4.30	4.92	3.70	2.97
5. Mobile learning should replace conventional English learning methods.	2.36	2.71	2.14	3.15
Perceived Ease of Use of M-learning				
6. Mobile phones cannot be used for learning English since it is not cost effective.	2.54	2.46	3.15	4.16
7. When in online classes, checking social media constantly tempts me.	4.26	4.35	4.12	1.55
8. Mobile learning can promote multi-tasking when learning English.	4.51	4.60	3.13	2.76
9. It is troublesome to read text-based instructional materials on mobile phone's tiny screen.	4.33	4.92	4.10	1.45
10. Taking exams on mobile devices makes me very stressed out.	4.20	4.33	3.08	3.77
Perceived Usefulness of M-learning				
11. Mobile devices can be used for learning all language skills and components.	2.10	2.17	2.96	2.12
12. Mobile learning can help in effective classroom participation.	4.01	4.12	3.15	4.16

13. Mobile learning makes learning easy and affordable at anywhere, anytime.	4.51	4.82	4.12	2.18
14. It would be easier to complete class assignments using mobile devices.	2.53	2.46	3.96	3.99
15. It is easy to engage in group discussions in online classes using mobile devices.	2.72	2.96	4.88	5.61
Perceived Readiness for M-learning				
16. I would like to use mobile devices for learning English.	4.12	4.30	2.90	2.90
17. I would like to receive updates and English materials on my mobile devices.	3.87	3.99	1.80	3.81
18. I would like to pay for mobile technology and the necessary infrastructure in online learning.	2.37	2.14	3.70	4.51
19. I would like to encourage other students to use mobile devices for learning English.	4.98	4.96	2.80	3.10
20. I would follow the predefined time intervals for learning English online.	4.93	4.95	4.12	2.09

In terms of the efficacy of the m-learning approach for learning English in higher education, the majority of Iraqi EFL learners (i.e., male learners M= 4.65, SD= 2.46; female learners M= 4.65, SD= 1.99) rated it favorably. More specifically, 59 out of 65 male students (90.76%) and 21 out 25 female students (88%) believed that m-learning could be an efficient medium for learning English in higher education. This result conforms to the findings of previous literature in terms of learners' positive feedback about using m-learning for learning English in higher education (e.g., Caldwell, 2018; Darsih, & Asikin, 2020; Yurdagül, & Öz, 2018; Zhonggen, Ying, Zhichun, & Wentao, 2019). The incorporation of m-learning into conventional English classes was also well-received by almost all participants (male learners M= 4.12, SD= 3.25; female learners M= 4.82, SD= 3.14). This shows that 58 out 65 male EFL learners (89.22%), and 23 out of 25 female EFL learners (92%) thought that m-learning should be incorporated into conventional English classes.

Most of the participants (male learners M= 4.18, SD= 2.90; female learners M= 4.73, SD= 1.56) reported greater teacher-student interaction as a result of using the m-learning approach to learn English. There were also highly positive reports from Iraqi EFL learners (male learners M= 4.30, SD= 3.70; female learners M= 4.92, SD= 2.97) of increased motivation as a result of using the m-learning approach for English learning purposes in higher education. These results are in line with Al-Azawei and Alowayr (2020), Lin and Su (2020), Yang (2012), and Zou and Yan, (2014) who reported that using MDs for English learning in higher education increased students' motivation.

The findings of the survey also indicated that male (M= 4.51, SD= 3.13) and female learners (M= 4.60, SD= 2.76) believed they could multitask when using their MDs to learn English. There were also encouraging reports from male (M= 4.01, SD= 3.15) and female learners (M= 4.12, SD= 4.16) showing that m-learning could help in their effective classroom participation. The results were consistent with those of previous studies in that the m-learning could lead to student increased participations in the learning activities (Attewell, 2005; Basoglu & Akdemir, 2010; Yang, 2012). In turn, m-learning was deemed by the respondents (male learners M= 4.51, SD= 4.12; female learners M= 4.82, SD= 2.18) to make learning easy and affordable on an anywhere-anytime basis. In effect, they appreciated the ubiquitous nature of learning English through MDs. The findings are in agreement with those of previous literature (e.g., Rahman, 2020; Yurdagül & Öz, 2018).

In line with the construct of the 'perceived readiness for m-learning', the majority of learners (male learners M= 4.12, SD= 2.90; female learners M= 4.30, SD= 2.90) embraced MDs for learning English. Likewise, some Iraqi EFL learners (male learners M= 3.87, SD= 3.99; female learners M= 1.80, SD= 3.81) reported their readiness to receive updates and English materials on their MDs. This indicates that 84.61 % male Iraqi EFL learners and 92% of females liked to receive updates and English materials on their MDs. In addition, nearly all of the respondents (male learners M= 4.98, SD= 2.80; female learners M= 4.96, SD= 3.10) were ready and willing to encourage other students to use MDs for learning English, including 90.76% male learners and 100% females.

However, a large number of students (male learners M= 2.36, SD= 2.14; female learners M= 2.71, SD= 3.15) including 81.52 % males and 84% females were of the opinion that m-learning should not replace rather supplement conventional English learning methods. Based on this finding, it can be inferred that they mainly opted for a blended language teaching and learning method in which m-learning practices are tightly linked to the course content materials and build on and reinforce classroom learning. This finding conforms to the findings of Mashhadi, et al., (2016) showing that sole substitution of m-learning might deprive learners of real interactions and the vibrant environment of conventional language classes.

As for 'the perceived ease of use of m-learning' for learning English, a few students (male learners M= 2.54, SD= 3.15; female learners M= 2.46, SD= 4.16) involving 26.15% males and 20% females raised their concerns about financial issues and though that using MDs for learning English is not cost effective. These results lend support to the findings of AbdulRazak and Ali (2019), Ameen, Willis, and Abdullah, (2017), and Fujimoto (2012) who voiced their concerns regarding incurring the cost of technology-enhanced education. This is also evident in Iraqi FFL learners' unwillingness (male learners M= 2337,SD= ..70; female learners M= 2.14, SD= 4.51) to pay for ICT costs in m-learning projects. Accordingly, educational decision makers and other stakeholders in Iraqi higher education should financially support m-learning projects and avoid incurring high costs on m-learners.

As expected, a large proportion of the respondents (male learners M= 4.26, SD= 4.12; female learners M= 4.35, SD= 1.55) including 76.91% males and 84% females reported their strong temptation to check social media when they were in online classes. This, in turn, could lead to their inattentiveness or divided attention to learning contents, and also their lack of participation in class discussions. Similarly, some male learners (M= 2.72, SD= 4.88) and female learners (M= 2.96, SD= 5.61) found it difficult to engage in group discussions in online classes using MDs for learning English.

Similar to the findings of some previous studies (e.g., Alrefaai, 2019; Dashti & Aldashti, 2015; Krasulia & Saks, 2020), in terms of technical and digital literacy challenges in m-learning projects, some respondents (male learners M= 2.53, SD= 3.96; female learners M= 2.46, SD= 3.99) reported it was cumbersome to complete class assignments using MDs. Similarly, nearly all students found it troublesome to read text-based instructional materials on mobile phones' tiny screens. These inherent technical limitations in MDs shows that they cannot be used for learning all language skills and components, as opined by male learners (M= 2.10, SD= 2.96) and female learners (M= 2.17, SD= 2.12) in this study. In terms of the

construct of 'the perceived ease of use', taking exams on MDs made a majority of learners (male learners M= 4.20, SD= 3.08; female learners M= 4.33, SD= 3.77) very stressed out. This highlights the needs to develop tests in m-learning projects based on the affordances and limitations of MDs. As for the predefined time intervals for learning English online, nearly all male learners (M= 4.93, SD= 4.12) and female learners (M= 4.95, SD= 2.09) found it difficult to meet the timetables and deadlines. As they later maintained in the interview session, they liked to read the m-learning content on an anytime-anywhere basis and when they felt ready and willing to do so. This result lends support to Thornton and Houser (2005) who reported that m-learners in their study ignored the predetermined intervals for the study of learning contents on their MDs.

4.2 The comparison of male and female learners' attitudes towards m-learning

The independent t-test was conducted to answer the second research question intended to investigate whether any significant differences existed in male and female Iraqi FFL learners' preferences and readiness for m-learning based on gender. As the results revealed, no significant differences existed between male (M = 3.77, SD = 2.82) and female learners' (M = 3.86, SD = 3.65) attitudes towards MALL in higher education, though female learners liked MALL slightly better than male learners (Table 2). These results are conforming to those of Yang (2012) who reported that gender was not a pivotal factor in the attitudes of male and female learners regarding m-learning in higher education. However, Ameen and Willis (2019), and Viberg and Grönlund (2013) identified gender, among the personal factors, as a predictor of differences in students' attitudes toward m-learning.

Table 2. *The results of the t-test for learners' attitudes towards m-learning based on gender*

Gender	N	Mean	SD	df	p
Male	65	3.77	2.82	88	0.07
Female	25	3.86	3.65	88	0.07

4.3 Results of the semi-structured focus-group interviews

Regarding the first interview prompt seeking to find out how Iraqi EFL learners liked to find m-learning incorporated into their English classes, a majority of learners believed that m-learning should be geared to their language proficiency and the course content in the classroom so that it can provide a fruitful language learning experience. Moreover, they opined that m-learning practices should supplement rather than replace conventional teaching and learning practices given that the sole substitution of m-learning can conceivably deprive learners of proper interaction and lively atmosphere of typical language classrooms. In effect, the Iraqi EFL learners mostly opted for the blended language teaching and learning approach in which m-learning practices are tied closely with the course content materials, and build upon and reinforce the learning happening in class. The interviewees also asked for integrated practices of various language skills and components including speaking, writing, reading, listening, vocabulary, grammar, pronunciation, and so on. through the m-learning approach. They commented that integrating supplemental materials into the conventional process of L2 learning through the m-learning approach encourages them to practice further extramurally, and also helps them better retrieve the learning content.

A further indication was that course assessment and exams in any m-learning agenda need be tailored to course content, and care should be taken to develop test items based on m-learning requirements and conditions, especially the technical affordances and limitations of MDs. Some learners asked for support and training in taking exams and doing assignments through MDs, as they were not used to taking MDs for test purposes. Likewise, some complained that dry presentation of content materials in some m-learning practices makes them unappealing as there is no out-of-class feedback from instructors, causing them not to feel rewarded for the time they put into m-learning practices.

An interesting revelation is that, based on the learners' reports, Iraqi university instructors' limited use of educational technology was deemed to link to their digital literacy, attitude, age and access to ICT-affordances. This result conforms to Dashtestani (2014) who identified Iranian EFL instructors' limited technological knowledge as an important obstacle to the implementation of online EFL instruction. It, thus, seems required that more in-service training in cutting-edge developments in ICT be provided for instructors to help them keep abreast of new developments in the m-learning approach.

As for the second interview item asking Iraqi EFL learners to make any further comments about the things they liked about m-learning in higher education, it was found that some learners liked the ubiquity and push aspects of m-learning practices which, in turn, broadened the boundaries of learning over the conventional classroom limits, and also promoted extramural regular study. Personalized and bite-sized learning provided through most MDs was also appreciated by some interviewees as it increased their motivation for learning English, and helped them tailor their learning practices to their needs. A majority of learners opined that, owing to the benefits of anywhere anytime learning through MDs, they could review some missed sessions, which were recorded online, while they were on the move. Some liked blended L2 learning as it could help them alternate between ICT-enhanced and conventional learning experiences on the basis of their accessibility. This report lends support to Neuman (2005) who believed that in the blended learning and teaching scenarios learners could make optimal use of the instructional medium based on their availability and suitability so as to enrich their learning experience.

Regarding the things they disliked about m-learning as addressed in the third interview prompt, a few Iraqi EFL learners found following the predefined time schedule for some m-learning practices difficult and unappealing. They believed that one of the basic tenets of m-learning approach was anywhere-anytime learning, thus sticking to fixed timed intervals in some m-learning projects to receive or practice the intended materials violates such a unique aspect of m-learning. Others pointed to the lack of necessary infrastructure, hardware, software and Internet for the true integration of m-learning in Iraqi higher education context suffering from deeply-rooted social and economic conditions from the past decades, especially in the postwar period.

Financial concerns were also raised by some learners as they could not afford or were unwilling to pay extra expenses for their learning via MDs. In a similar strand, they disliked some inherent technical limitations of MDs, including limited amount of text input, inconvenient keypad mechanisms, small screen, low battery, low connectivity, and lack of

compatibility of MDs with some network configurations in Iraq. They maintained that most learners in Iraq were not accustomed to using their MDs for learning purposes, and were thus not fully ready to embark on large-scale m-learning practices in higher education. These comments are conforming to Shudong and Higgins (2005) who argued that there were psychological, pedagogical and technical limitations to m-learning adoption. They believed that many students are not ready psychologically to accept MDs as true instructional tools because they are not fully accustomed to ICT-enhanced learning and its revolutionary access to information yet.

Some respondents referred to the difficulties of true follow-up and evaluation of m-learning outcome in many pedagogical practices. Learners' application of MDs mainly for non-academic purposes was also regarded as a hindrance to the widespread adoption of MDs in Iraqi education system. This conforms to Fujimoto (2012) who identified learners' use of ICT affordances mostly for non-educational purposes as an obstacle to their proper integration into learning activities.

5. Conclusion and implications

Given the infancy of technology-enhanced education, more especially MALL, at Iraqi educational institutions, this study examined how Iraqi EFL learners perceived ICT-enhanced education and how ready they were to adopt m-learning for English learning purposes at Iraqi universities. This study also sought if there were any significant differences in Iraqi EFL learners' preferences and readiness for m-learning considering their gender. The results were indicative of learners' positive attitudes towards using MDs for language learning practices in intra- and extramural settings, as it expanded the boundaries of learning beyond the confines of conventional classrooms. In addition, no significant difference was identified in the preferences and readiness of Iraqi EFL learners for the use of m-learning in higher education, though females preferred m-learning slightly more than males did.

Despite the increasing interest in the application of MDs and their affordances in education, the concept of ICT-enhanced instruction is a multifaceted issue, and there are still some major technical and administrative impediments to mainstreaming ICT in education. More research is thus needed on the likely match between instructional strategy and technology use in m-learning practices so as to promote large-scale pervasive, lifestyle-integrated learning. Furthermore, despite the comparative merits of the m-learning approach, a language class should not be fully ICT-centered as it can conceivably diminish the role of the instructor, who should be the primary source of input and inspiration in class. Overall, the adoption of educational technologies should be decided not only by technology affordances, but by how it is perceived by educational institutions, instructors, learners, parents and other stakeholders involved. By the same token, technology use should be closely aligned with the institution-wide strategic plan and the prevalent pedagogies, curricula and assessment processes adopted in any educational system.

References

AbdulRazak, N. S., & Ali, M. A. (2019). Challenges of Implementation E-Learning Platforms in Iraqi Universities. *Engineering and Technology Journal*, *37*(4), 400-406.

Al-Azawei, A., & Alowayr, A. (2020). Predicting the intention to use and hedonic motivation for mobile learning: A comparative study in two Middle Eastern countries. *Technology in Society*, *62*, 101325.

Alexander, B. (2004). Going Nomadic: Mobile learning in higher education, *EDUCAUSE Review*, *39*(5), 28-35.

Al-Mashaadani, M. A., & Al-Rawe, M. F. (2018). The future role of mobile learning and smartphones application in Iraqi private universities. *Smart Learning Environment, 5(28)*, 1-11.

Alrefaai, I. (2019). Exploring EFL Graduate Students' Attitudes toward, and Use of, Mobile Phones in Language Learning. *Arab World English Journal (AWEJ) Special Issue: The Dynamics of EFL in Saudi Arabia*, 70-84

Ameen, N., & Willis, R. (2019). Towards closing the gender gap in Iraq: understanding gender differences in smartphone adoption and use. *Information Technology for Development*, *25*(4), 660-685.

Ameen, N., & Willis, R., & Abdullah, M.N. (2017). The use of e-learning by students in Iraqi universities: Potential and challenges. *Proceedings of the 8th International Visible Conference on Educational Studies & Applied Linguistics,* (pp. 369-381).

Attewell, J. (2005). From research and development to mobile learning: Tools for education and training providers and their learners. *Proceedings of the 4th World Conference on mLearning* (pp. 1-6).

Basoglu, E. B., & Akdemir, .. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *Turkish Online Journal of Educational Technology, 9* (3), 1-7.

Bingol, M. A. (2018). Student preferences for m-learning in higher education institutions. *Journal of Education in Black Sea Region*, *4*(1), 35-43.

Caldwell, M. (2018). Japanese university students' perceptions on the use of ICT and mobile-learning in an EFL setting. *Call-Ej*, *19*(2), 187-212.

Cavus, N., & Ibrahim, D. (2009). M-learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, *40*, 78–91.

Chung, H. H., Chen, S. C., & Kuo, M. H. (2015). A study of EFL college students' acceptance of mobile learning. *Procedia-Social and Behavioral Sciences*, *176*, 333-339.

Darsih, E., & Asikin, N. A. (2020). Mobile assisted language learning: EFL learners' perceptions toward the use of mobile applications in learning English. *English Review: Journal of English Education*, *8*(2), 183-194.

Dashtestani, R. (2014). English as a foreign language-teachers' perspectives on implementing online instruction in the Iranian EFL context. *Research in Learning Technology*, 22.

Dashti, F. A., & Aldashti, A. A. (2015). EFL college students' attitudes towards mobile learning. *International Education Studies*, *8*(8), 13-20.

Fraenkel, J. K., & Wallen, N. E. (Eds.). (2003). *How to design and evaluate research in education.* The McGraw-Hill Company, Inc. New York.

Fujimoto, C. (2012). Perceptions of mobile language learning in Australia: How ready are learners to study on the move? *The JALT CALL Journal, 8(3)*, 165-195.

Gardner, R. C. (1985). *The attitude/motivation test battery: Technical report*. University of Western Ontario.

Hamza, H. A., & Saadalla, F. J. (2021). Using English language learning mobile applications among Iraqi EFL university learners. *Review of International Geographical Education Online*, *11*(5), 3507-3516.

Hayati, A., Jalilifar, A., & Mashhadi, A. (2013).Using short message service (SMS) to teach English idioms to EFL students. *British Journal of Educational Technology, 44(1)*, 66–81.

Jebur, M. S. (2020). The use of mobile–assisted language learning (MALL) by Iraqi EFL college students' and their attitudes towards it. *Journal of University of Babylon for Humanities*, *28*(2), 150-160.

Kompf, M. (2005). Information and communications technology (ICT) and the seduction of knowledge, teaching, and learning: What lies ahead for education. *Curriculum Inquiry, 35(2)*, 213-234.

Krasulia, A., & Saks, K. (2020). Students' perceptions towards mobile learning in an English as a foreign language class. *Proceedings of 2020 IEEE 20th International Conference on Advanced Learning Technologies (ICALT)* (pp. 238-240). IEEE.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, *20*(3), 271-289.

Kukulska-Hulme, Agnes (2009). Will mobile learning change language learning? *ReCALL, 21*(2), 157–165.

Leadbeater, C. (2004). *Learning about Personalisation: how can we put the learner at the heart of the education system*. London: UK Department for Education and Skills

Levy, M., & Kennedy, C. (2005). Learning Italian via mobile SMS. In A. Kukulska-Hulme & J. Traxler (Eds.), *Mobile learning: A handbook for educators and trainers* (pp. 76-83). London: Taylor and Francis.

Lin, X., & Su, S. (2020). Chinese college students' attitude and intention of adopting mobile learning. *International Journal of Education and Development using Information and Communication Technology*, *16*(2), 6-21.

Mashhadi, A., & Khazaie, S. (2018). Familiar or unfamiliar context? Application of m-games in the blended module of L2 learning. In M. Rahimi (Ed.), *Handbook of research on individual differences in computer-assisted language learning* (pp. 223-250). Hershey: IGI Publication

Mashhadi, A., Hayati, A., & Jalilifar, A. (2016). The impact of podcasts on English vocabulary development in a blended educational model. *Applied Research on English Language*, *5*(2), 145-172.

Masters, K. (2008). M-learning: How much of what has been diffused? A systematic literature. *Proceedings of the EDMEDIA 2008-World Conference on Educational Multimedia, Hypermedia & Telecommunications*, Vienna, Austria.

Monjezi, M., Mashhadi, A., & Maniati, M. (2021). COVID-19: Is it time you made the CALL?. *CALL-EJ*, *22(2)*, 56-72.

Mussa, I. H., Sazalli, N. A. H., & Hassan, Z. (2022). Mobile learning by English literature students: the role of user satisfaction. *Bulletin of Electrical Engineering and Informatics*, *11*(1), 550-557.

Neuman, S. B. (2005). Television as a learning environment: A theory of synergy. In J. Flood, S. B. Heath, & D. Lapp (Eds.), *Handbook of Research on Teaching Literacy through the Communicative and Visual Arts* (pp. 15-22). Mahwah, New Jersey, NJ: Lawrence Erlbaum Associates Publishers.

Parsons, D., & Ryu, H. (2006). A framework for assessing the quality of mobile learning. In R. Dawson, E. Georgiadou, P. Lincar, M. Ross & G. Staples (Eds.), *Learning and Teaching Issues in Software Quality, Proceedings of the 11th International Conference for Process Improvement, Research and Education* (17–27), Southampton, UK.

Rahman, M. M. U (2020). EFL learners' perceptions about the use of mobile learning during COVID-19. *Journal of Southwest Jiaotong University*, *55*(5), 1-7.

Sharples, M. (2006) *Big issues in mobile learning. Report of a workshop by the Kaleidoscope Network of Excellence Mobile Learning Initiative*, University of Nottingham, UK.

Shudong, W., & Higgins, M. (2005). Limitations of mobile phone learning. *Proceeding of International Workshop on Wireless and Mobile Technologies in Education*, (pp. 179-181), IEEE Press.

Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, *20*, 365-383.

Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning, *ReCALL 20*, 253-270.

Tabor, S. (2016). Making mobile learning work: Student perceptions and implementation factors. *Journal of Information Technology Education: Innovations in Practice, 15(1)*, 75-98.

Teo, T., Khazaie, S., & Derakhshan, A. (2022). Exploring teacher immediacy-(non) dependency in the tutored augmented reality game-assisted flipped classrooms of English for medical purposes comprehension among the Asian students. *Computers & Education*, *179*, 104406.

Thedpitak, A., & Somphong, M. (2021). Exploring Thai EFL learners' attitudes toward the use of mobile applications for language learning. *LEARN Journal: Language Education and Acquisition Research Network*, *14*(1), 370-398.

Thornton, P., & Houser, C. (2004). Using mobile phones in education. *Proceedings of the 2nd IEEE International Workshop on Wireless and Mobile Technologies in Education* (pp. 3-10), Jungli, Taiwan.

Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, *21*, 217-228.

Traxler, J. (2004). *Mobile Learning- The Ethical and Legal Challenges*. Rome: LSDA.

Van Loc, .. , Vu, N. N., & Linh, .. T. (2021, December). EFL students' attitudes towards the ease of use mobile technology to learn English at a university in Vietnam. *Proceedings of 18th International Conference of the Asia Association of Computer-Assisted Language Learning (AsiaCALL–2-2021)* (pp. 291-298). Atlantis Press.

Viberg, O., & Grönlund, Å. (2013). Cross-cultural analysis of users' attitudes toward the use of mobile devices in second and foreign language learning in higher education: A case from Sweden and China. *Computers & Education*, *69*, 169-180.

Winters, N. (2006). What is mobile learning? In M. Sharples (Ed.), *Big issues in mobile learning: Report of a workshop by the kaleidoscope network of excellence mobile learning initiative* (pp. 5–9). Nottingham: University of Nottingham.

Yang, S. H. (2012). Exploring college students' attitudes and self-efficacy of mobile learning. *Turkish Online Journal of Educational Technology-TOJET*, *11*(4), 148-154.

Yurdagül, C., & Öz, S. (2018). Attitude towards mobile learning in English language education. *Education Sciences*, *8(142)*, 1-14.

Zhonggen, Y., Ying, Z., Zhichun, Y., & Wentao, C. (2019). Student satisfaction, learning outcomes, and cognitive loads with a mobile learning platform. *Computer Assisted Language Learning*, *32*(4), 323-341.

Zou, B., & Yan, X. (2014). Chinese students' perceptions of using mobile devices for English learning. *International Journal of Computer-Assisted Language Learning and Teaching (IJCALLT)*, *4*(3), 20-33.