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Gender differences on the acceptance and barriers of ICT use in English language learning: Students' perspectives

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Abstract: Gender differences on the acceptance of ICT in English language learning is a vital component of the successful implementation of ICT in education. In this respect, the present study aims at exploring the gender differences on the acceptance and barriers of ICT use in English language learning from students' perspectives at Takhar University, Afghanistan. A quantitative research method was utilized and a total of 152 respondents answered the questionnaires. The findings of the study indicated that the participants held positive perceptions in terms of the use of ICT in learning the English language at Takhar University. In addition to that, the study revealed that the common barriers to the use of ICT are the inadequacies in many aspects including internet/Wi-Fi, electricity, technological devices, ICT infrastructures, time and confidence in using ICT, sufficient training and support. This study is useful for curriculum developers and policy makers to make decisions concerning the development and implementation of ICT in learning the English language, particularly from the perspectives of students which take gender differences into account.

Subjects: Internet & Multimedia - Computing & IT; Information & Communication Technology; ICT; Information Technology; Language & Gender; Language Teaching & Learning; English

ABOUT THE AUTHOR

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Aminuddin Hashemi is a senior lecturer in the English department of Takhar University, Afghanistan. He earned his Master's degree in TESL from Universiti Teknologi Malaysia (UTM). Mr. Hashemi has published many research papers and participated in various national and international conferences. He also supervised more than 50 bachelor's degree monographs in the department of the English language. His research interests are teaching and learning, Teaching English as a Foreign Language (TEFL), Technology Enhanced Language Learning (TELL), Computer Assisted Language Learning (CALL), Mobile Assisted Language Learning (MALL), Online Teaching and Learning, Learning Analytics (LA), Critical Discourse Analysis (CDA), etc. He is also interested in using various technological tools and applications in EFL classrooms.

PUBLIC INTEREST STATEMENT

The advancement of the technology in the age of digital revolution requires students to inventively employ and integrate Information and Communication Technology (ICT) in the learning process across the world. In this respect, the stakeholders' and students' perceptions on the use of ICT in learning the English language are the components vital to the success of ICT use in education. Thus, it is hoped that the result of the present study could be useful for the curriculum developers and policymakers in Ministry of Higher Education (MOHE) and at Takhar University to make decisions concerning the acceptance and procurement of ICT in learning the English language. The result of this study could also supplement the domain of research that works on enhancing ICT acceptance or ICT integration in English language learning and, generally, the education sector.

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1. Introduction

Information and Communication Technology (ICT), as a term pertaining to education, refers to the use of web-based and non-web-based learning that are incorporated into the daily instructional classroom sessions in the 21st century (Hatlevik & Arnseth, 2012). ICT is defined broadly as manifold technological instruments and properties used to create, communicate, store, diffuse, and wield information (Skryabin et al., 2015). It can enhance students' learning performance if implementing the proper intervention with the correct tools (Kew & Tasir, 2022). These tools include both web-based and non-web-based learning platforms such as Facebook, Google, internet webs, and broadcasting technologies that are capable of improving the effectiveness of English language learning (Noori et al., 2022). In addition to that, there are also other applications such as podcasts, television shows, and webinars that can be considered the applications of ICT in improving English language learning among learners in today's technological society (Burns, 2011).

Undoubtedly, the importance and the use of ICT in learning the English language have been studied widely across the world (Parvin & Salam, 2015). More specifically, gender influence in the application of ICT has been noticed and highlighted in educational research for the last two decades (Tsai & Tsai, 2010). The gender differences among all users in terms of having internet access, their attitudes towards the use of technological tools, and the frequency of Wi-Fi usage are the key factors contributing to the use of ICT (Hashemi & Kew, 2020).There is a gap in the literature whereby there are very limited studies that explored the perceptions of students, particularly from the perspectives of different gender, in the acceptance of ICT use in English language learning in Afghanistan context. In this regard, foreign language learners are often confused when it comes to the use of ICT in English language learning (Baha, 2010). This is because some learners are more interested to learn the English language in a more traditional way, as they prefer to focus more on deductive learning approaches rather than communicative approaches in which ICT use can provide more facilities (Samady, 2013). In order to fill this research gap, this paper seeks to identify the perceptions of students in the acceptance of using ICT to learn the English language at Takhar University and provide further discussions on how to motivate students to sharpen their academic skills in today's technological era.

English plays a vital role in the Afghan context; thus, the Ministry of Higher Education (MOHE) has taken different initiatives to enhance students' English language competency. In this aspect, ICT, which is an essential part of the contemporary world (Eriksen et al., 2010), has been greatly utilized by the government to improve the English language schema. This is because ICT has positively impacted learners' knowledge application in real-world situations (Neo et al., 2012). It is expected that learners will gain benefits from the use of ICT in their English language learning. However, in the Afghan context, most of the students possessed limited ICT knowledge, low motivation in using ICT as well as inadequate awareness to the benefits of ICT, resulting in the relatively low acceptance rate of ICT use (Noori, 2021a; Hamidullah et al., 2015, June). In terms of teaching aspect, teachers had more preference for traditional teaching methods in the English language (Babury & Hayward, 2013). This situation may cause English as Foreign Language (EFL) learners to not have accesses to ICT while learning the English language. Therefore, more studies should be carried out to understand their perceptions so that alternatives can be taken to assist them.

Moreover, despite the massive investment made by the Ministry of Higher Education of Afghanistan, many universities are still facing barriers and challenges in transforming the learning process of English learners with the implementation of ICT (Roehrs, 2014). Some of the barriers can hinder the ICT usage in learning the English language among students, including a lack of qualified ICT personnel, inadequate power supply, limited ICT usage in the curriculum of higher education, and inadequate ICT laboratories (Babury, & Hayward 2014). However, in the Afghan context, they

might face different barriers when implementing ICT in English language learning to enhance students' English level. Thus, it is crucial to examine the barriers perceived by Afghanistan students in using ICT to learn the English language, in which this study will shed light on.

In addition to that, the literature shows that there exists no study that explores the perceptions of Takhar University students in the acceptance and barriers of ICT in English language learning. Moreover, there is also a lack of studies concerning students' perceptions on the acceptance of ICT use in learning the English language in the neighbouring countries. The one and only study was conducted by Kareem (2017) from Iraq who looked into the importance and barriers of ICT. Nevertheless, he did not study the acceptance of students in using ICT in English language learning. Therefore, there is a need to carry out a study to investigate the perceptions of English language learners on the acceptance and barriers of using ICT in English language learning at Takhar University, with the hope that the findings can help to better develop students' language knowledge and skills through ICT.

Furthermore, the acceptance of using ICT is reported to be beneficial for the learners of English language; for instance, when they accept the use of ICT, they will become more motivated to access different learning resources and information to acquire the knowledge (Richard, 2005). Moreover, living in the era of technology requires students to accept the use of ICT in their learning process to double the outcome of their efforts (Hashemi 2021c; Nimruzi et al., 2018). That said, students' acceptance of using ICT in learning the English language is essential. In this respect, it is significant to examine students' perceptions on how effective and easy it is to integrate ICT in English language learning. Additionally, this paper intends to explore the common barriers to the use of ICT in learning the English language at Takhar University. Besides, this paper also seeks to figure out whether there is a significant difference in the perceived usefulness and perceived ease of ICT use in learning the English language at Takhar University across gender. With regard to this, the following research objectives are formulated to achieve the goal of the study.

(1) To understand the perceived usefulness of ICT use in learning the English language at Takhar University and find out whether there is any gender difference.
(2) To identify the perceived ease of ICT use in learning the English language at Takhar University and find out whether if there is any gender difference.
(3) To investigate the perceived barriers to using ICT in learning the English language at Takhar University.

2. Research questions
The following research questions are formulated to achieve the goal of the study.

1. What is the perceived usefulness of ICT use in learning the English language at Takhar University?

2. Is there any significant difference in the perceived usefulness of ICT use in learning the English language at Takhar University across gender?

3. What is the perceived ease of ICT use in learning English language at Takhar University?

4. Is there any significant difference in the perceived ease of ICT use in learning Englishlanguage at Takhar University across gender?

5. What are the perceived barriers to using ICT in learning English language at TakharUniversity?

3. Conceptual framework
The conceptual framework of the current study is adapted from the Technology Acceptance Model (TAM) in Figure 1 (Mohamad et al., 2019). The current theory is based on Davis' (1996) who first

Figure 1. Conceptual frameworks of the study.
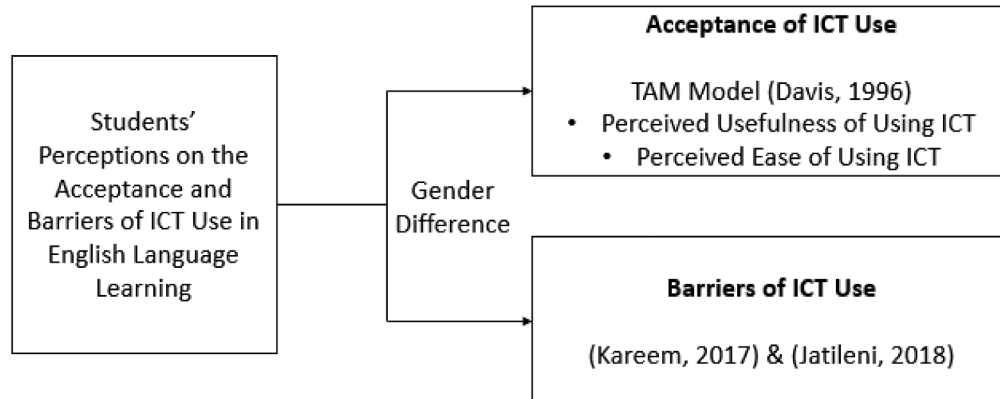
developed the theory of TAM. Which serves as a guidance in identifying the gender differences in the perceptions and acceptance of students towards the application of ICT in learning the English language at Takhar University. The two factors (perception of usefulness and perceived ease of use) impact students' attitude towards the acceptance of ICT use in learning the English language at Takhar University. This study also explore the barriers to using ICT.

4. Literature review

4.1. The importance of accepting and using ICT in *Afghanistan*

The role of ICT is significant in education as it can use to improve students' engagement (Kew & Tasir, 2021) and learning performance. In this regard, the acceptance of using ICT has recently been an interesting topic in education, specifically in learning the English language around the world (Caponetto et al., 2014). They have further found out that the acceptance of using ICT plays a key role to accelerate education processes and learning opportunities around the globe. ICT is considered a useful instrument and vital resource of all areas including education, social, political development, economic, business, government, and commerce (Graham, 2011). Grabe (2005) believed that accepting the use of ICT enables the learners to become autonomous and independent in choosing the content, identifying the objectives and purposes of materials, and the learning techniques and strategies in language learning.

Many studies have been done recently on the acceptance of using ICT in learning the English language indicating the usefulness and the acceptance of ICT in English language learning. Merç (2015) reported that accepting the use of ICT instruments in learning the English language is beneficial for both students and teachers. He further gave an example of how computer-based teaching helped students enhance their language skills. Similarly, Rajasekhar et al. (2012) and Al Asmari (2013) believed that computer-based learning can be of great potential for teachers to impart excellent teaching and learning materials to the learners. He also considers the internet as a great source of information to enrich the learners' knowledge or learning skills. Moreover, the integration of ICT in learning English as a Foreign Language (EFL) increases the amount of authentic English language input, in sociocultural context where EFL learners can improve their English language skills and fluency (Ngo, 2017). In addition to that, the acceptance of the use of ICT in learning the English language has become more popular worldwide as students incorporate ICT applications and instruments to the learning process where they can refer to hundreds of authentic resources to accomplish their task (Stephany, 2017).

4.2 Barriers to ICT acceptance in English language learning and gender issues

The concept of ICT is still developing day by day in today's educational system across the globe. However, it is also not surprising that the integration of ICT within the educational system suffers

from various challenges. In the meantime, Gebremedhin and Fenta (2015) likewise believed that the acceptance of ICT in education has numerous challenges. Furthermore, the lack of resources, shortage of technical support, ICT literacy, and lack of motivation for both teachers and students are all identified as the challenges of ICT. On the other hand, Ghavifekr et al. (2016) studied the problems concerning the use of ICT in teaching and learning. The findings of the research revealed that poor connection of network, accessibility, shortage of technical support, a lack of time, and a lack of skilful teachers are considered as the challenges of using ICT in teaching and learning.

With concern to Afghanistan educational environment, the challenges of ICT integration in some educational contexts are: ICT literacy among lecturers and learners, productive multimedia pre-sentations, ICT infrastructures, a lack of skillful individuals in ICT applications, insufficient time and training in ICT and a lack of teachers' confidence in ICT integration (Andrews & Andrews, 2018). Andrews (2018) further explained that the acceptance of using ICT is different from university to university, and from state to state. In short, the acceptance of using ICT depends on ICT literacy and competence, and is considered essential for well-educated and up-to-date university graduates.

In the last two decades, a barrier has been found on gender issues in technology usage and it is highlighted in computing and education science. According to previous studies, males showed more optimistic views on using ICTs and other technological tools than females did (Tsai & Tsai, 2010). Besides, researches also show that males use ICT a lot more often on recreation and independent studies as compared to females. (Hohlfeld et al., 2013; Jo Tondeur et al., 2016; Rashid, 2016; Siddiq & Scherer, 2019).

4.3 Related work: students' perceptions and barriers of the acceptance of using ICT in learning the English language

The term perception refers to attitudes, self-beliefs, and behaviors, or an individual's views towards ideas or phenomena (Boulton, 1997). Considering Boulton's description in this study, students' perceptions in the acceptance of using ICT can be explained as the behaviors, attitudes, and self-beliefs or points of view. Students' perceptions can shed light on the outcome of the study and help teachers and students understand the effectiveness and ease of ICT use, as well as the challenges of using ICT in teaching and learning the English language (Hutchison & Reinking, 2011). In this regard, Milon and Iqbal (2017) identified students' perceptions of technology in learning English as a foreign language. Their findings revealed that technological instruments, along with social networking platforms, directly affect students' academic performance and improve students' language skills, and this results in the students accepting ICT integration in the learning process.

Despite the aforementioned facts, the use of ICT in teaching and learning is considered very difficult because of the theoretical structure of programming and its competitiveness (Ankamah et al., 2018; Newmarch et al., 2000). Besides, Wilson and Avison (2007) reported that the students who perceive ICT as non-rewarding instruments tend to leave the technology path. Contributing to the ICTs has been identified as not thrilling, this has been considered to reinforce the perception that ICT is mind-numbing (Nielsen et al., 2001). Nevertheless, Kolog et al. (2018) perceived ICT as an instrument that can provide different facilities for teaching and learning the English language. Therefore, it is hoped that the acceptance of using ICT can foster a healthy competition among all the faculties for the enhancement of their knowledge at Takhar University.

5. Research methodology

5.1 Research method and participants

The present study employed a quantitative research design whereby a survey was distributed to examine the perceptions of students on the acceptance and barriers of using ICT in English language learning at Takhar University. This study was carried out in the North-eastern part of Afghanistan. The students studying in the English department of Takhar University were chosen to

be the respondents (Orfan et al., 2021). This study began in June 2020 and took five months to be completed. The respondents were selected through a simple random sampling technique. Johnson and Christensen (2004) indicated that the simple random sampling technique allows the respondents to think that they have an equivalent selection chance. The researcher employed simple random sampling to ensure all the respondents, including males and females, responded to the questionnaire accurately. A total of 152 respondents out of 289 participants who majored in English returned their survey questionnaires. The data was analyzed based on descriptive statistics to identify the percentages and frequencies of the items.

From Table 1, 94 male students, which is equivalent to 61.8% of the respondents, responded to the survey. On the other hand, the number of female students who gave feedbacks is 58, equalling 38.2 % of the respondent population. Besides that, out of 152 respondents, 99 (65.1%) are between 20–24 years old. Meanwhile, 36 respondents are of the age of 25–29, which occupies 23.7% of all and 17 respondents are above 30 years of age, which makes 11.2% of them in total. As of the year of university, the majority (47) of respondents are freshmen, accounting as high as 30.9%, 37 (24.3%) are sophomores, and 33 (21.7%) are from the junior class. There are also 35 senior students, representing 23% of the respondents in the study.

5.2 Research instruments

The present study adopted a survey questionnaire to identify the acceptance of Takhar University students from English department in applying ICT to learn the English language based on the usefulness and the ease of ICT use. The questionnaire also set out to explore the barriers of using ICT within the same setting. Takhar University is a public university located in the north eastern part of Afghanistan (Noori et al., 2020). The survey questionnaire was adapted from the works of Jatileni and Jatileni (2018) which focused on the perceptions of students and that of Kareem (2017) concerning the barriers of ICT use in English language learning. The instruments were administered through a Google Form typed in English language. To collect data, the Google Form was shared in social media platforms (such as Facebook, WhatsApp) and sent via email to participants. Respondent's privacy and confidentiality were assured as it was indicated in the questionnaire that the provided information could only be used for research and academic purposes. The respondents were given two weeks to complete and submit the survey. To ensure reliability, the researcher piloted the research questionnaire among 30 English department students from another public university with the same context of education and background before the actual day of conducting the study. The purpose of piloting the research instruments is to ensure and assess the clarity, relevance, confidentiality, and suitability of the survey questionnaire designed (Kothari et al., 2005; Noori, 2021b). In this regard, the Cronbach's Alpha value gained was 0.813, which was higher than 0.70. According to Kline (1999), the accepted value of Cronbach's

Table 1. Background of the respondents		Frequency	Percentage %
Gender	Male	94	61.8
	Female	58	38.2
Age	20–24	99	65.1
	25–29	36	23.7
	30 and above	17	11.2
Class	Freshmen	47	30.9
	Sophomore	37	24.3
	Junior	33	21.7
	Senior	35	23.0
Total		152	100.0

Alpha testing for reliability was greater than 0.70 Thus, the questionnaire was acceptable and could be used as a reliable data collecting tool in the study.

5.3 Research hypothesis

H_{01}: There is no significant difference in the perceived usefulness of ICT in English language learning at Takhar University across gender.

H_{02}: There is no significant difference in the perceived ease of ICT in English language learning at Takhar University across gender.

5.4 Data analysis

The data analysis process was accomplished through the Statistical Package of Social Science (SPSS) software. The descriptive analysis (mean, percentage, standard deviation, and frequency) was computed. The frequency and percentage were used to identify the number of respondents in each class in the demographic profile (Kolog, 2017). The means and standard deviations along with percentage and frequency were used to analyze and identify the number of variations of the data gathered on the respondents towards the effectiveness and perceived ease of ICT use in learning the English language at Takhar University. The qualitative data concerning the barriers of ICT use was quantified and analyzed through the theme coding approach, in which the main themes were detected and categorized in Microsoft Excel (Miller et al., 2014).

6. Findings

6.1 The usefulness of ICT in English language learning at Takhar university across gender

Table 2 illustrates the perceived usefulness of students at Takhar University in the acceptance of using ICT in learning the English language. These 10 items revolved around the usefulness of ICT. A five-point Likert scale ranging from strongly disagree to strongly agree was adopted.

From Table 2, the overall mean score of the 10 items is 4.66 on the perceived usefulness of ICT in English language learning at Takhar University. Hence, the mean scores for most items are above 4.74 except for the first item, which is 4.59. Therefore, it means that the majority of respondents felt positive towards the use of ICT in English language learning at Takhar University. In other words, most of the respondents perceived that using ICT is useful in their learning process. This reflects that they accepted the use of ICT in learning the English language. Meanwhile, the highest mean score of the perceived usefulness of ICT is 4.89 in Item 5, which states that using ICT helps students improve their vocabulary, and the lowest mean score of the perceived usefulness of ICT obtained is 4.59 in Item 1 which highlights that ICT can improve writing skills. In a nutshell, the majority of the respondents perceived that using ICT is beneficial in learning the English language.

Figure 2 illustrates the differences in the perceived usefulness of ICT in English language learning at Takhar University across gender. The majority of the male respondents agreed that using ICT instruments and applications can help them to improve their English language skills. On the other hand, female respondents did favour the idea that suggests that employing ICT can help enhance critical thinking in reading comprehension, but when compared to the male respondents, they showed less acceptance in general. Apart from that, most of the female respondents held a positive attitude towards the use of ICT. Additionally, the majority of male respondents perceived ICT use to be effective more than the female respondents did.

Table 3 illustrates the mean rank of perceived usefulness in ICT across gender, based on the Mann Whitney test. As one can identify from the table, the mean ranks of the perceived usefulness of ICT across gender are different. There are 94 male respondents with a mean rank of 81.96 and 58 female respondents with a mean rank of 67.65. In short, the female students have a lower

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Table 2. Overall perceived usefulness of ICT in English language learning

No	Items	Frequency and Percentage (%)						
	Perceived Usefulness of ICT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
1	Using ICT can improve my writing skills.	6 3.9%	2 1.3%	8 5.3%	16 10.5%	120 78.9%	4.59	0.95
2	Using ICT enhances my critical thinking in reading comprehension.	0	1 0.7%	6 3.9%	5 3.3%	140 92.1	4.86	0.48
3	Using ICT application improve my listening skills.	1 0.7%	6 3.9%	0	3 2.0%	142 93.4%	4.83	0.67
4	Using ICT instrument and application improves my ability in speaking.	1 0.7%	4 2.6%	6 3.9%	6 3.9%	135 88.8%	4.77	0.70
5	Using ICT help me to improve my vocabulary.	0	2 1.3%	1 0.7%	8 5.3%	141 92.8%	4.89	0.43
6	Using ICT help me to explore online resources and improve grammar.	4 2.6%	3 2.0%	3 2.0%	21 13.8%	121 79.6%	4.65	0.83
7	Using ICT applications and instruments help me to collaborate with peers to learn English.	0	7 4.6%	0	18 11.8%	127 83.6%	4.74	0.68

(Continued)

Table 2. (Continued)

No	Items	Frequency and Percentage (%)						
	Perceived Usefulness of ICT	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Mean**	**S.D**
8	I prefer to learn the English language in ICT-based environment.	2 1.3%	1 0.7%	3 2.0%	17 11.2%	129 84.9%	4.77	0.64
9	I have a positive attitude towards the use of ICT in learning the English language.	0	1 0.7%	2 1.3%	14 9.2%	135 88.8%	4.86	0.43
10	Our instructors recommend us using online resources for effective monograph writing.	0	2 1.3%	5 3.3%	23 15.1%	122 80.3%	4.74	0.43
Overall Mean							4.66	

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Figure 2. Gender differences in perceived usefulness of ICT in English language learning.

Gender differences in perceived usefulness of ICT in English language learning
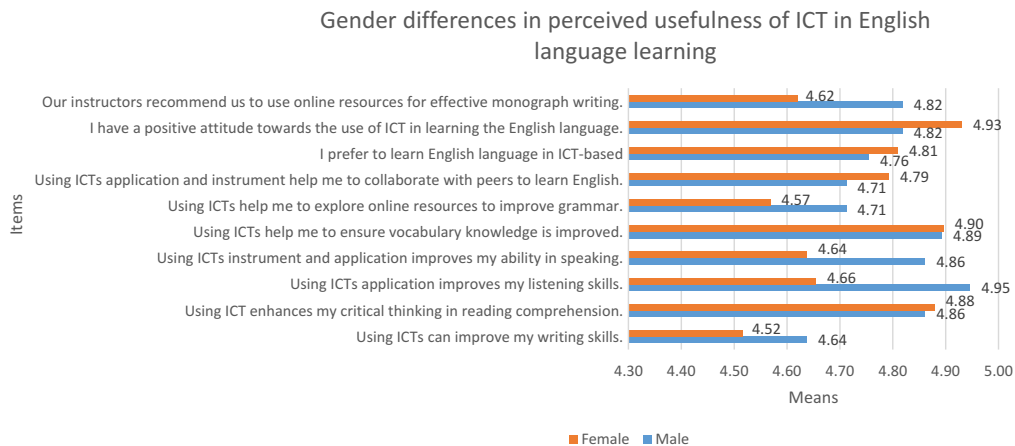
Table 3. The average perceived usefulness of ICT				
Mean Ranks				
	Gender	**N**	**Mean Rank**	**Sum of Ranks**
Average of Perceived Usefulness	Male	94	81.96	7704.50
	Female	58	67.65	3923.50
	Total	152		

Table 4. The output of statistical test based on Mann-Whitney U	
Test Statistics	
	Average Perceived Usefulness
Mann-Whitney U	2212.500
Wilcoxon W	3923.500
Z	−2.314
Asymp. Sig. (2-tailed)	.021
a. Grouping Variable: Gender	

mean rank than the male students. Therefore, it can be concluded that the perceived usefulness of ICT differs between males and females.

From the data obtained in Table 4, there is a significant difference in the mean rank of perceived usefulness between genders, as the p-value is greater than 0.05. Hence, the alternative hypothesis has failed to be accepted. Hence, we can conclude that there is a significant difference in the mean rank of perceived ease of ICT use across gender at Takhar University.

6.2 Perceived ease of ICT in English language learning at Takhar university across gender
Table 5 illustrates how the respondents responded to the perceived ease of ICT use in English language learning at Takhar University, ranging from strongly disagree to strongly agree.

From Table 5 which displays the perceived ease of using ICT, most of the respondents agreed that it is easy to use ICT in learning the English language. It is observed that the mean score of the

No	Items	Frequency and Percentage (%)						
	Perceived Ease of ICT	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Mean**	**S.D**
1	I can easily download and save English learning content on my ICTs instrument.	1 0.7%	0	3 2.0%	18 11.8%	131 86.2%	4.84	0.41
2	I can easily use ICT to improve my English language anytime.	1 0.7%	2 1.3%	1 0.7%	23 15.1%	125 82.1%	4.76	0.59
3	I can easily access English language content through ICT.	2 1.3%	1 0.7%	5 3.3%	24 15.8%	121 79.6%	4.73	0.61
4	The use of ICT helps to save time easily in learning the English language.	1 0.7%	0	4 2.6%	25 16.4%	121 79.6	4.73	0.64
5	I can easily find English resources through ICTs application.	1 0.7%	1 0.%	2 1.%	24 15.%	124 81%	4.76	0.56
6	I can easily use the Word processing applications of ICT to enhance my English knowledge.	1 0.7%	0	0	18 11.8%	133 87.5%	4.85	0.45
7	It is easy to use ICT resources to learn the English language more naturally.	2 1.3%	0	2 1.3%	18 11.8%	131 86.2%	4.82	0.49
8	It is easy to use ICTs application and resources to write my monograph.	4 2.6%	1 0.7%	3 2.0%	18 11.8%	131 86.2%	4.80	0.49
9	It is easy to use ICTs to improve our interpersonal skills in the English language.	0	1 0.7%	0	18 11.8%	129 84.9%	4.75	0.73

(Continued)

Table 5. (Continued)

No	Items	Frequency and Percentage (%)						
	Perceived Ease of ICT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
10	We can easily access the internet and Wi-Fi facilities at the university to learn the English language effectively.		0	1 0.7%	24 15.8%	127 83.6%	4.82	0.39
Overall Mean							**4.83**	

items is 4.83. Thus, it shows that the majority of the respondents have a positive feeling towards the use of ICT in learning the English language, which in turn indicates that the majority of them accept the use of ICT in learning the English language as the highest mean score is 4.85 in Item 6.

According to Figure 3, the majority of female respondents agreed that using ICT in English language learning is easy while the male respondents disagreed with it. They believed that employing ICT towards learning the English language is not easy and is in fact, a challenging issue when learning a second or foreign language. The majority of the respondents asserted that it is easy to access the internet, Wi-Fi and ICT resources for English language learning.

The inferential statistical analysis was conducted to identify if there is any significant difference in the perceived ease of ICT use at Takhar University between genders. Table 6 shows the average perceived ease of ICT use in English language learning based on the Mann-Whitney U test. Table 6 shows that 94 male respondents achieve a mean rank of 76.13, and the female respondents obtain the mean rank of 77.10. It indicates that there is a slight difference across gender.

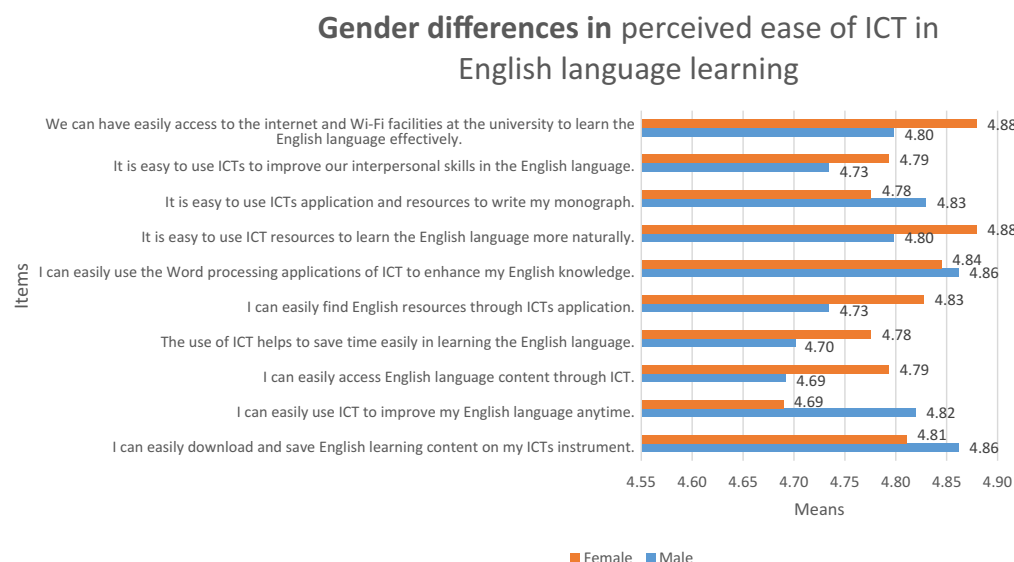**Figure 3. Gender differences in perceived ease of ICT in English language learning.**

Gender differences in perceived ease of ICT in English language learning

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Table 6. The average perceived ease of ICT based on the Mann Whitney test

Mean Ranks

	Gender	N	Mean Rank	Sum of Ranks
Average Perceived ease of ICT	Male	94	76.13	7156.00
	Female	58	77.10	4472.00
	Total	152		

Table 7. The output of a statistical test on the perceived ease of ICT

Test Statistics

	Average Perceived ease of ICT
Mann-Whitney U	2691.000
Wilcoxon W	7156.000
Z	−.173
Asymp. Sig. (2-tailed)	.863
a. Grouping Variable: Gender	

From the data obtained in Table 7 based on the Mann-Whitney U test, it is displayed that there is no significant difference in the mean rank of perceived ease between genders, as the p-value is greater than 0.05. Hence, the alternative hypothesis has failed to be accepted. In summary, we can conclude that there is no significant difference in the mean rank of perceived ease of ICT use across gender at Takhar University.

6.3 Perceived barriers to using ICT in learning English language at Takhar university across gender

This section mainly focuses on the perceived barriers in English language learning at Takhar University. 152 respondents were requested to elaborate more on the barriers of ICT use they perceived.

The result in Table 8 shows that 97 respondents, which is 64%, considered a lack of internet as a common barrier towards the use of ICT in English language learning. The respondents agreed that the lack of internet and Wi-Fi is also one of the big challenges that hinder the use of ICT in English language learning. On the other hand, electricity is also considered the barrier of ICT use in this study, as 17 respondents (11%) stated that the lack of electricity is discouraging ICT use in English language learning. Likewise, 13 respondents (9%) reported that the lack of technological devices like computers, LCDs, and projectors also contribute to the barriers of using ICT in English language learning.

There are also differences in the views of males and females concerning the barriers of ICT use in English language learning at Takhar University. Most of the female respondents perceived the lack of internet and Wi-Fi as common barriers to ICT use while only a few male respondents agreed with the same statement. On the other hand, the majority of the male respondents agreed that the lack of electricity or power is a common barrier to the use of ICT. Moreover, the majority of female respondents believed that the lack of technological devices can become a common barrier. Most of the female respondents also indicated that the lack of ICT infrastructures and confidence are the common barriers of ICT in learning the English language. Based on the overall outcome of Figure 4, there are differences in the perceived barriers of ICT use in English language learning across gender.

Table 8. Perceived common barriers towards the use of ICT			
Number	**Challenges or Barriers**	**Frequency**	**Percentage**
1	Lack of internet/Wi-Fi	97	64%
2	Lack of electricity	17	11%
3	Lack of technological devices	13	9%
4	Lacking ICT infrastructures	8	5%
5	Lack of time	5	3%
6	Lacking confidence in using ICT	5	3%
7	Lacking pedagogical training in ICT	4	3%
8	Lack of institutional support	3	2%
Total		**152**	**100%**

Figure 4. Perceived common barriers towards the use of ICT across gender.
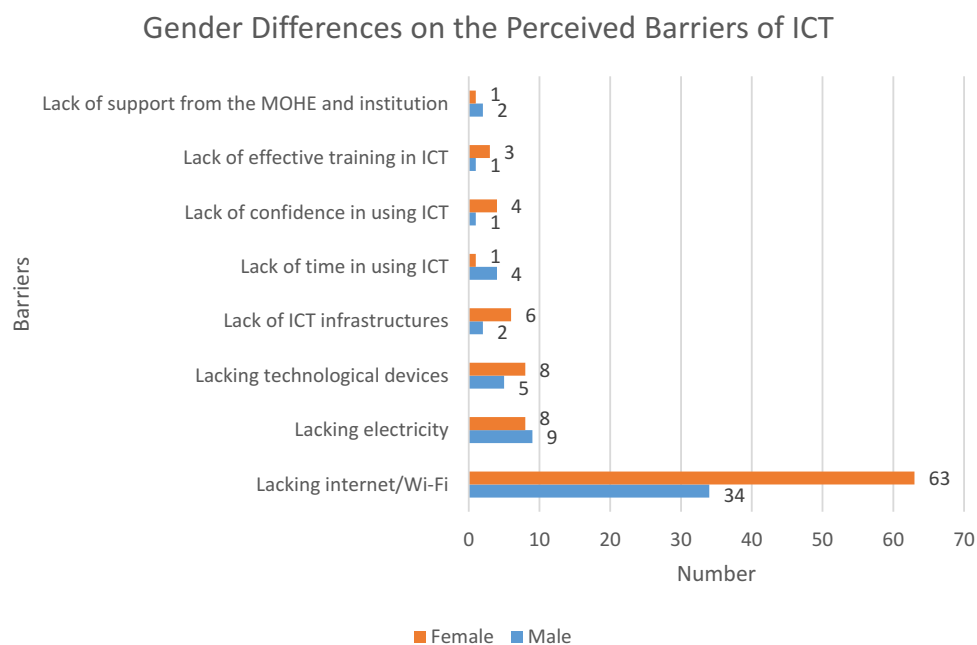
7 Discussions and conclusion

Concerning the first research objective on the perceived usefulness of ICT in English language learning at Takhar University and its significant difference across gender as one part of the ICT acceptance, the overall findings suggest that the students perceived ICT as something effective and useful in learning the English language at Takhar University, with the overall mean score of 4.66. Thus, it is believed that they accept the use of ICT and acknowledge that it can help to improve English knowledge, as the majority of the respondents agreed that the use of ICT is beneficial in helping them improve the English language. The findings of the study indicated that ICT can make more occasions available to enhance the four main skills, which are writing, speaking, reading, and listening. This finding is consistent with the previous researches conducted by Nicol and Coen (2003), Vurdien (2013), Şevik (2012) and Ajzen (2002). They reported that the use of ICT can improve English language skills.

As for the gender differences in the perceived usefulness of ICT in English language learning at Takhar University, male respondents were found to possess a higher level of perceived usefulness of ICT in English language learning as compared to their female counterpart. Hence, the findings show that there are significant differences in the perceived usefulness of ICT in English language learning at Takhar University across gender. Most of the male respondents agreed that employing ICT in learning the English language is useful, whereas the female respondents opined otherwise. The findings of this study are in line with the studies carried out by Hohlfeld et al. (2013), Tondeur et al. (2016), Liu (2009), Rashid (2016), Siddiq and Scherer (2019), Tsai and Tsai (2010), and Alshahri (2015). Moreover, many studies have confirmed the differences in the perceived usefulness and the use of ICT across gender. For instance, Cheung et al. (2013) reported gender differences in the use of ICT for reading comprehension. Similarly, Bebetsos and Antoniou (2009) proved that there were gender differences in the perceived usefulness of ICT, whereby the male respondents had a higher mean score than the female respondents.

The overall result also illustrates that Takhar University students in the English department hold positive perceptions and accept the use of ICT in learning the English language. This is mainly because of the positive role played by ICT in 21st-century teaching and learning. Despite the overall finding, the instructors' motivation and recommendation in using ICT for the enhancement of their students" English language skills can be considered as the foremost reason behind the positive perceptions toward the use of ICT in English language learning at Takhar University. Besides that, the positive perception on the application of ICT in English language learning is by virtue of a non-threatening productive and conducive environment where each student feels autonomous and engages themselves in different parts of the session actively. A similar research that supports the findings of this paper was done by Pidduck (2011) To put it succinctly, the positive perception of the students in the acceptance of the use of ICT in English language learning at Takhar University is related to their intention to accept the use of ICT for the enhancement of their English knowledge.

Moreover, the majority of the respondents with an overall mean of 4.83 perceived that it is easy to use ICT in learning the English language at Takhar University. This implies the positive perceptions of ICT use in English language learning, whereby students believed that employing ICT makes their English learning process much more comfortable. By using ICT instruments and applications, it would be much easier to download relevant English language content and to provide resources to ease the learning process the result of this study is in line with the literature of the research. For instance, Tri and Nguyen (2014) believed that ICT instruments and applications, like smartphones and podcasts, are easily used and downloaded for the enhancement of English knowledge. Therefore, the respondents of the study perceived that it is easy to apply ICT in learning the English language at Takhar University. Hence, it is indicated that the majority of them accept the use of ICT in learning the English language.

Other than that, the result shows that there are no significant differences in the perceived ease of ICT between males and females. The findings of this study are different from that of a survey conducted by Venkatesh et al, (2016), in which he reported that the use of ICT and the attitudes towards the ease of ICT use are significantly different across gender. This could shed light on the simplicity of ICT use in English language learning at Takhar University, where there is no statistically significant difference in the perceived ease of ICT across gender (Hashemi 2021b). All in all, there is a significant difference in the perceived usefulness of ICT between males and females while there is no significant difference in the perceived ease of ICT use in learning the English language between the same respondents. Hence, it can be safely concluded that both males and females equally agreed and shared more or less the same perception towards the ease of ICT integration and application in learning the English language at Takhar University.

The practical and effective implementation of ICT in learning the English language remains a daunting task that requires many factors to be taken into consideration. The application of ICT in

learning and teaching always turns into either an interesting point and or a disappointing condition for the users. While it turns to the exciting moments there is no record of any obstacles towards ICT application.Nonetheless, if it turns to a disappointing daunting task, there is a list of barriers and challenges of applying ICT in the learning process, as it is evident that most of the respondents in this study commented and figured out some common barriers such as the lack of internet/Wi-Fi, electricity, technological devices, infrastructures, time, and confidence in using ICT. The lack of institutional support and operative training also hinder the users from using ICT in learning the English language. The result of this study is in line with a study carried out by Hashemi (2021a) and Hashemi and Kew (2021) who found the same barriers to online teaching during the COVID-19 pandemic. Correspondingly, Ghavifekr et al. (2016) studied the problems concerning the use of ICT in learning and teaching. The findings of the research reveal that poor connection of network, accessibility, shortage of technical support, lack of time, and lack of skillful teachers are the challenges of using ICT in learning and teaching. Furthermore, the findings of the current study show that there are differences perceived by males and females concerning the barriers to ICT use.

In conclusion, the outcome of this study suggests that the students hold positive perceptions of acceptance and listed out some barriers of ICT application in learning the English language at Takhar University. Besides, male students were found to perceive the usefulness of ICT in learning the English language at Takhar University more than the female students. However, there are no significant differences between male and female students in terms of the perceived ease of using ICT. Lastly, this part of the study presents a discussion for each of the research questions. Many reasons could be involved in this outcome of acceptance in using ICT to learn the English language. Initially, the usefulness of using ICT in the 21st century could be remarkable, and the students perceived the usefulness of ICT use in the learning process of the English language. Besides, the ease of ICT use can have a key impact on the acceptance of ICT use in learning the English language. In general, the students accept ICT use in learning the English language at Takhar University with regard to the perceived usefulness and ease of using ICT, and there is a need to overcome the challenges in using ICT in their English language learning.

This study is significant for teachers, EFL students, Takhar University stakeholders, and the Ministry of Higher Education of Afghanistan to take a step forward in using ICT for language learning purposes. Furthermore, this study can serve as a reference for policymakers to enhance and restructure the syllabus and the policy framework by tackling the barriers of using ICT. Not only that, this study will also benefit researchers who are interested in the perceptions of students' acceptance of ICT in English language learning in the Afghan context. The findings of this study will help traditional teachers to better understand the perceptions of students in using ICT to learn English in terms of the effectiveness and the ease of using ICT at Takhar University. This information can prepare teachers to design more effective teaching materials integrated with ICT tools in the future, according to the perceptions of students who hope they can be provided better facilities and fruitful lectures. Finally, the result of this study will also be shared with the employees of the ICT center at Takhar University so they can ponder upon it and provide adequate and suitable ICT facilities for students and teachers.

8. Limitations and recommendations

In terms of limitations, the current study was restricted to students in the English department of Takhar University, Afghanistan. Hence, the findings of this study cannot be generalized as the scope of the data collection merely involved one university. Therefore, there is a need for similar researches to be conducted in other parts of the country or the world. To obtain a more generalized picture on the gender differences in the perceptions of students towards the use of ICT in English language learning. Yet, the findings of this study alone is still significant and relevant for stakeholders to implement effective ICT adoption. Moreover, this research study was limited to the perceptions of students in the acceptance of using ICT in learning the English language. It is suggested that the future researches can consider exploring teachers' perceptions, besides, the outcome of the study could be empowered through the data collection in pre-test and post-test.

Interviews can also be held to enable in-depth discussions concerning students' perceptions on the acceptance and barriers of ICT use.

Lastly, in order to enhance the capability for students to adopt ICT applications and instruments effectively, some recommendations and guidelines need to be taken into consideration. The contributing issues of students' negative perception towards the use of ICT, which include the lack of internet, electricity and technical devices, need to be addressed properly. Thus, it is recommended that the Afghan government provides and equips students with technological instruments and applications. To lessen these challenges, the researcher also recommends that the involved organizations supply reliable internet facilities and electricity for students to guarantee the quality of 21st-century education. Besides that, it is also recommended for the university administration, teachers, and students to request for fund in equipping themselves with ICT instruments and devices; and to provide solar power if applicable. Furthermore, more effective training programs regarding the use of ICT in learning the English language at any level among all the students, regardless of gender, are strongly needed by students at Takhar University.

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