ICT Platforms for Indonesian EFL Students Viewed from Gender during the COVID-19 Pandemic

by Eka Apriani Et. Al

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Abstract

The aims of this study are to find out (1) ICT (Information and Communications Technology) platform used by male and female students from Islamic universities in Indonesia, (2) their perception of using ICT, and (3) their barriers to using ICT in English language learning during the COVID-19 pandemic. The data was collected from an online questionnaire (Google Form) from students majoring in English from seven Islamic universities in Indonesia. There were 30 male students and 30 female students from every university who participated in this research, making a total of 210 student respondents. The data were analyzed quantitatively by using the SPSS computer program. First of all, female students used more various types of ICT platforms compared to male

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students. Second, the female students viewed ICT use more positively than male students in language learning. And lastly, even though the females deemed ICT more optimistically compared to male students, nevertheless the females encountered more barriers in using the ICT platforms compared to the male students in this study. Again, even though male students were more skillful in ICT literacy than female students, female students constructively regarded ICT use in language learning as more beneficial to them in terms of skill, knowledge, and motivational improvement.

Keywords: Barriers, gender, ICT platforms, ICT types, perception.

1. INTRODUCTION

ICT (Information and Communications Technology) is an important medium for teaching and learning in today's world. ICT relies on all facets of our lives, such as education, economics, social life, etc. Because of the COVID-19 pandemic, the education system has moved from the non-digitalized mode technology to the digitalized mode. Accordingly, ICT is predisposed for all facets of education such as the lesson plan, methods, process, media, content, and assessment (Apriani et al., 2020). As a learning media, ICT will inspire and involve students to strengthen their active learning (Cabrera-Solano et al., 2020). The positive impact of technology is not only to improve students' achievement but also to construct the personality of a successful life (Apriani, 2016).

In using ICT at universities, lecturers need to know how effective and productive adult learners can practice in learning. Lecturers should teach, inspire, and train students individually to achieve their learning goals (Manangsa et al., 2020). One of the platforms for adult students to use in learning is ICT. Alkaromah et al. (2020) stated that ICT supports the life, exercise, and media learning tools of students and teachers. It has also been found to assist in developing students' language literacy (Gusmuliana et al., 2020). This communication device may be downloaded at any time and any place. In the context of school learning, this device, besides being a tool to teach students by teachers, also allows parental access to support the achievement of their children (i.e., students) at schools.

There are two sorts of ICT that can be employed in the teaching and learning process, they are both non-web-based and web-based instructional resources (Alkanel & Chouthaiwale, 2018). Non-web-based ICT can be accessed by using a non-internet connection. Web-based ICT can be accessed by using an internet connection. In the COVID-19 pandemic era, ICT web-based learning is used in the teaching and learning process especially in Islamic universities of Indonesia.

Since the pandemic, Islamic universities in Indonesia have implemented online learning for almost two years. English lecturers are enforced to use ICT platforms to teach. All teachers and students must be well-informed about the procedures to operate the ICT platforms. Many studies have found that ICT platforms give positive effects on learners. Sanjaya et al. (2020) asserted that students have a favorable view of weblogs based on five researcher-provided indicators: trust of students in writing, development of writing skills, experience and awareness use of information and

communication technology, critical thinking promotion, and accessibility. Furthermore, Iqbal and Bhatti (2015) discovered that M-learning, such as mobile/smartphones, iPods, MP3 players, and private digital assistants (PDAs), helps increase awareness and learning outside of the classroom and also helps to develop relationships amongst students and instructors (Ekanayake & Wishart, 2011).

Nevertheless, during online learning, students also face some barriers to learning. According to Octaberlina and Muslimin (2020), there are three obstacles namely e-learning unfamiliarity, poor internet access, and physical condition e.g., eye strain. Siddiquah and Salim (2017) added poor working state of computers, lack of Internet access, inaccessibility of vital apps, a lack of technical assistance, a virus threat, computer slowness, Internet signal issues, and load shedding to be other issues in online learning. Therefore, the beneficial impact of ICT cannot be maximized if students face impediments to adopting it.

Furthermore, differences between male and female students in ICT use have also been researched. Thus far, it has been found that male students offered more constructive answers to all things of importance and expense compared to female students (Buabeng-Andoh & Issufu, 2015). Consequently, teachers must understand these differences so that they can find out the best ICT platform to be used in teaching for both male and female students (Volman et al., 2005). The erroneous choice on ICT platforms may lead to demotivated male and female students in learning.

Previous studies have largely focused on the effect and barriers of ICT on students in general. However, this study intends to further investigate the (1) ICT platforms used by male and female students from Islamic universities in Indonesia, (2) their perception of using ICT, and (3) their barriers to using ICT. This research is expected to be of additional reference to improve the quality of online teaching and learning in Indonesia, especially in Islamic universities. Thus, the research questions of this study are:

1. What types of ICT platforms were used by male and female students in Islamic universities in Indonesia during the COVID-19 pandemic?
2. What are these students' perceptions toward using ICT?
3. What are these students' barriers to using ICT?

2.   LITERATURE REVIEW

2.1   ICT Platforms for EFL Students

Technology has provided extremely useful tools to aid schooling (Seliaman & Al-Turki, 2012). Innovations have revolutionized language education by making learning resources open online and usable at any time and place by using ICT (Pardede, 2020). ICT is described as "forms of information creation, display, storage, manipulation, and exchange technology" (Donnelly et al., 2011, p. 1470). Moreover, Asabere and Enguah (2012) described ICT as the tools, processes, and facilities that offer the physical infrastructure and services for the creation, transmission, processing, storage, and dissemination of all sorts of information, including speech, text, data, images, and video, to provide the necessary environment.

Çakici (2016) noted that ICT is a powerful method for teaching EFL students. Naturally, the exponential development of ICT has impacted every part of the method

of language teaching. They have been integrated into educational activities to improve and enhance foreign language acquisition (Alkanel & Chouthaiwale, 2018; Jayanthi & Kumar, 2016). ICT may be utilized as a teaching medium by teachers in the teaching and learning processes, particularly in English skills (Apriani, 2017).

According to Hartono (2012), ICT (computers and other supporting equipment) may also function as a 'teacher' or 'tutor'. Using special software, such as a multimedia program or language learning software, is to learn the lessons with advice, teaching, information, or extra explanation for certain terminology blended on the program. ICT platforms include innumerable apps and resources that make learning more dynamic and accessible so that students are not limited in their classroom interactions and learning processes (MacCallum et al, 2014). Using ICT as a learning tool enables students to quickly and effectively access digital content to assist in investigating issues, solving problems, and making decisions, to build novel ways to promote learning and build new understandings in areas of learning, to connect, share, and operate cooperatively in local and global contexts, and to acquire new thought and learning abilities (Adu & Olatundum, 2013). Soler (2002) further mentioned how these student engagements play a favorable impact on language acquisition. When students take the initiative to ask questions and seek assistance, such as through ICT, they are provided with real communicative possibilities.

Non-web-based and web-based learning ICT tools are divided into two categories (Alkanel & Chouthaiwale, 2018). Non-web-based learning is a type of ICT that can be accessed without an Internet connection by teachers and students. Meanwhile, web-based learning is a type of ICT that can be accessed by teachers and students through internet connections. Examples of ICT that can be used in learning English were the computer, LCD, television, speaker, radio, blog, email, YouTube, video, telephone, online databases, audio graphics, online library, audio and video conferencing, as well as computer conferencing. Popular ICT platforms used today to teach English, for instance, are Google Classroom, Zoom, Google Meet, WA, Facebook, YouTube, Instagram, Email, Skype, Kahoot, and others. Other modes that can be used in ICT to teach are such as audio recording, social media, e-learning, e-book, online discussion forum, interactive whiteboard games for learning, website resources, and online journals (Apriani & Hidayah, 2019).

2.2 Students' Perception of Using ICT

The perception of students using ICT in the classroom has largely been found to be positive, they are such as deep coverage of topics, easier to obtain information, quicker to obtain information, more accurate and provide more information on various subjects; these are particularly helpful when students need to complete assignments (Adesoji, 2011). Pardede (2020) further indicated several detailed perceptions of needs that arise in the learning process. They are to increase students' interest and motivation for learning, the constructive effect of ICT in English education, self-efficacy in the use of ICT for learning, its importance in education, and its benefits for a variety of high-intensity applications.

Moreover, Houcine (2011) reported that the concept of the influence of ICT in foreign language teaching was that (1) ICT enables to respond to and utilize recent/daily news, (2) the capacity to combine/use alternatively (basic) abilities (text and images, audio and video clip, (3) become more exciting and less ordinary, which

improves student engagement, and finally, (4) ICT enables to concentrate on one specific feature of the foreign language teaching (pronunciation, vocabulary etc.). Additionally, Schoepp and Erogul (2001) featured the benefits of ICT in English language teaching and learning, which included motivation enhancement, independent learner, and skill improvement.

Jayanthi and Kumar (2016) categorized the beneficial effects of ICT for ELT (English Language Teaching) under the following broad headings: material availability, student attitudes, learner autonomy, authenticity, assisting instructors, student-centered, and self-assessment. Using ICT as a learning tool enables students to rapidly and effectively obtain digital information to aid with exploring issues, solving problems and making decisions, producing creative solutions to help to learn and develop new understandings in areas of learning, communicating, sharing, and working collaboratively in a local and global setting, developing new thinking and learning abilities that aid learning (Adu & Olatundum, 2013). Furthermore, according to Sanyal (2001), there are four ways in which ICT support basic education: (1) promoting school-based education, (2) offering non-formal education for out-of-school children and adults, (3) promoting pre-service distance learning for teachers and their in-service professional growth, and (4) improving school management.

2.3   Students' Barriers in Using ICT

Several barriers have been found in using ICT, especially in education. External hurdles include insufficient money, a lack of time, and a lack of technical help, meanwhile, internal hurdles include teachers' unfavorable attitudes and a lack of confidence (Bingimlas, 2009). In addition, Siddiquah and Salim (2017) specifically detailed Bangladeshi students' barriers in using ICT, and these include poor working state of computers, lack of Internet access, non-accessibility of the necessary applications, lack of technical help, virus danger, slow speed of computers, the signal issue on the Internet, and load shedding.

For EFL classrooms, Wachira and Keegwe (2011) and Kopcha (2012) stated that the use of ICT has been driven by two factors, external and internal variables. Hardware (computers, tablets, smartphones, and internet networks), apps (ICT systems or applications), and policy and leadership help are the external variables. Whereas the internal element relates to the behaviors, values, skills, and ICT abilities of teachers and students. Furthermore, Snoeyink and Ertmer (2001) demonstrated that in Bangladesh, there are two issues with the use of ICT in the classroom. The initial issues include a lack of resources, the unreliability of equipment, a lack of technical help, and other resource-related constraints. Second, all impacts at the school level include business culture and teacher-level elements such as teaching and technological ideals, as well as tolerance for change.

As for both teachers and students, Khan et al. (2011) put forward some issues faced in using ICT: (1) slow speed, (2) insufficient number of PCs. (3) a lack of time to use technological resources, poor internet connection, lack of printer access, loss of energy and a lack of service, lack of access, ineffective training, teachers' attitudes, students' attitudes, and time constraints.

In the same opinion, Snoeyink and Ertmer (2001) mentioned the first order hurdles that included a lack of equipment, equipment unreliability, a lack of technical assistance, and other resource-related concerns. Second-order impediments include

both school-level characteristics like organizational culture and teacher-level ones like teaching and technological views and receptivity to change. Barriers in using ICT consists of inadequate hardware and software upkeep, outage of power, inadequate finance, a lack of ICT integration, insufficient ICT infrastructure, insufficient connections, a scarcity of trained employees, insecurities, a lack of motivation, a lack of confidence, and a lack of understanding about the advantages of ICT (Apriani, et al. 2021).

In short, students' problems in using ICT in ELT classrooms are lack of equipment, lack of confidence, lack of motivation, lack of funding, and lack of ICT abilities. Lack of resources/equipment consists of lack of handphone, lack of computer, lack of speaker, lack of Wi-Fi, lack of a printer, incompatible device, sharing the device with other family members, low internet connection, and no electricity. Then, lack of funding consists of low-income families, internet costs, and buying laptops or handphones/ etc. Next, lack of ICT abilities consists of a lack of knowledge of use ICT, lack of technological competence, and lack of ICT training (Snoeyink & Ertmer 2001; Syafryadin et al., 2021).

2.4   Gender Differences in English Learning

Gender gaps that involve language, information technology, science, and math, for example, have a significant impact in influencing students' learning preferences and outcomes, but the margin of gender disparities is shrinking as culture and times change (Macleod et al., 2002). In this case, when they try to use computer technology and its assisted language learning devices to improve their English language learning, there is a gender disparity among EFL students. While both male and female students have indicated that CALL programs are useful for improving their English abilities, male students had a more hopeful learning attitude and less learning anxiety about utilizing CALL programs for English learning than female students (Lai & Kuo, 2007).

In various motivational research on gender disparities in the sense of foreign language learning, it has been found that women are more inspired than boys to study foreign languages (Mori & Gobel, 2006). Javid et al. (2012) found that due to their gender, substantial variations occurred in the extrinsic motivational orientations of university-level students. Gender disparities manifestly effect the students' academic objectives, needs, and successes (Collins et al., 2000; Halpern, 1986; Swiatek & Lupkowski-Shoplik, 2000). The memory of female learners is slightly higher than that of male students studying foreign languages (i.e., this includes comprehension, mechanical memory, short-term memory, and long-term memory). In addition, the recollection of females is still much greater than that of males (Jia, 1996).

There is a gender discrepancy in the use of ICT in language education among male and female students. Volman et al. (2005) found that when working together on computing, the computer attitude of female students appears to be less optimistic than that of male students and they cope with ICT tasks differently. It is also reported that female instructors use less ICT in their classrooms than male teachers (Mahdi & Al-Dera, 2013). What is more, there is also a distinction between male and female languages, expressed in vocabulary, grammar, etc. (Ning et al., 2010). Logan and Johnston (2009) found that females had a greater grasp of reading, read more often, and had a more optimistic reading attitude compared to males. In learning, Speer (2002) found the tight relationship between gender differences and styles of learning

and discovered that males preferred the abstract conceptualization method of learning more than women.

3.   METHODS

This study employed a descriptive quantitative research design (Creswell, 2002). The data were obtained from an online questionnaire (i.e., Google Form). The subjects were 210 students majoring in English from seven Islamic universities in Indonesia. They are Institut Agama Islam Negeri (IAIN) Curup, IAIN Bengkulu, Universitas Islam Negeri (UIN) Raden Fatah, IAIN Salatiga, UIN Mataram, UIN Sulthan Thaha Saifudin, and IAIN Fattahul Muluk Papua. From every university, a number of 30 male students and 30 female students participated in this study (see Table 1).

The questionnaire in this study was divided into three parts, which inquired about: ICT type (11 items), perception (30 items), and problem (10 items) in ICT use during the COVID-19 pandemic. The questionnaire was validated by two English experts from the University of Sriwijaya and the University of Bengkulu. The researchers also conducted a try-out on the questionnaire to 30 students. The result showed that the mean validity is 0.635 >0.5 and reliability is 0.835, which means that it was reliable to be used in this research. The data from the questionnaire were analyzed by using quantitative analysis. The SPSS or excel program was used to calculate the data (Arkkelin, 2014).

Table 1. The subject of the research.

No	University	Students	
		F	**M**
1.	IAIN Curup	30	30
2.	IAIN Bengkulu	30	30
3.	UIN Raden Fatah Palembang	30	30
4.	IAIN Salatiga	30	30
5.	UIN Mataram	30	30
6.	UIN Sulthan Thaha Saifudin Jambi	30	30
7.	IAIN Fattahul Muluk Papua	30	30
	Total	210	210

4.   RESULTS

4.1   ICT Types Viewed from Gender

Based on the ICT type in the questionnaire, the researchers found that there were differences in the use of ICT in learning English skills between male and female students (i.e., reading, listening, writing, and speaking). They preferred different platforms to study these skills. The differences in preferences are shown in Table 2.

In English reading skills, there were differences in using ICT type viewed from gender (male and female). Male students used more of Google Classroom, Zoom, Google Meet, WhatsApp, Instagram, Email, and Kahoot in learning English with their teachers, friends and for independent learning. But female students used more of Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, YouTube, Instagram,

Email, and Kahoot. Male students did not use Facebook, YouTube, and Skype for learning at all, and female students did not use Skype.

In English listening skills, male students used more of Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, and YouTube. Whereas female students used more Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, Instagram, Email, and Kahoot. The male students did not prefer Instagram, Email, Skype, and Kahoot for learning, and the female did not prefer YouTube and Skype.

In English writing skills, males used more of Google Classroom, Zoom, Google Meet, WhatsApp, Instagram, and Email. While female students used Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, YouTube, Instagram, Emore of mail, and Kahoot. Male students did not use Facebook, YouTube, Skype, and Kahoot for learning writing, and the female students did not use Skype to learn this skill.

In English speaking skills, ICT used by male students were Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, YouTube. The ICT used by female students to learn this skill were Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, YouTube, Instagram, Email, and Kahoot. The male students did not favor Instagram, Email, Skype, and Kahoot to learn this skill, and the female students did not favor the Skype platform.

Table 2. ICT types used by students in learning English skills.

No	Types of ICT	Reading		Listening		Writing		Speaking	
		M	F	M	F	M	F	M	F
1.	Google Classroom	√	√	√	√	√	√	√	√
2.	Zoom	√	√	√	√	√	√	√	√
3.	Google Meet	√	√	√	√	√	√	√	√
4.	WhatsApp	√	√	√	√	√	√	√	√
5.	Facebook	-	√	√	√	-	√	√	√
6.	YouTube	-	√	√	-	-	√	√	√
7.	Instagram	√	√	-	√	√	√	-	√
8.	Email	√	√	-	√	√	√	-	√
9.	Skype	-	-	-	-	-	-	-	-
10.	Kahoot	√	√	-	√	-	√	-	√
11.	Other ICT Platforms	-	-	-	-	-	-	-	-

From these findings, the ICT platforms mostly used by the male and female students in learning the four language skills are Google Classroom, Zoom, Google Meet, and WhatsApp. Both male n female students did not use Skype in learning. The male students used similar ICT platforms for listening and speaking skills, which were Google Classroom, Zoom, Google Meet, and WhatsApp. In the meantime, the female students used similar ICT platforms to learn reading, writing, and speaking, which were Google Classroom, Zoom, Google Meet, WhatsApp, Facebook, YouTube, and Instagram. This shows that female students used more forms of ICT to improve their English skills than male students.

4.2 Students' Perception of Using ICT Viewed from Gender

The results showed that there were some differences in students' perception in using ICT viewed from gender. The results are displayed in Table 3.

Table 3. Students' perception of using ICT.

No	Statement	Male (percentage)				Female (Percentage)			
		SA	A	D	SD	SA	A	D	SD
1.	ICT Platforms can access material anytime and anywhere in COVIDCOVID-19 Pandemic Era;	85	15	0	0	78.20	21.8	0	0
2.	ICT Platforms can help search relevant information or material of my course easier in COVIDCOVID-19 Pandemic Era;	90.47	9.52	0	0	95.2	4.76	0	0
3.	ICT Platforms can help improve my English skills in COVIDCOVID-19 Pandemic Era;	0	14.2	85.7	0	80.95	19.04	0	0
4.	ICT Platforms can help improve my knowledge in COVIDCOVID-19 Pandemic Era;	0	0	78.57	21.42	92.8	7.1	0	0
5.	ICT Platforms can help me to submit task/assignment in COVIDCOVID-19 Pandemic Era;	86.6	13.3	0	0	80.95	19.04	0	0
6.	ICT Platforms can help me to recover my study gap in COVIDCOVID-19 Pandemic Era;	0	0	71.4	28.57	91.9	8.09	0	0
7.	ICT Platforms can enhance my motivation to finish my studies on time in COVIDCOVID-19 Pandemic Era;	0	0	80.47	19.52	92.8	7.1	0	0
8.	ICT Platforms can help me to solve my study problem in COVIDCOVID-19 Pandemic Era;	0	0	61.90	38.09	96.1	3.8	0	0
9.	ICT Platforms is a faster way to get lecturers' feedback in COVIDCOVID-19 Pandemic Era;	0	0	47.61	52.38	0	0	64.3	35.7
10.	ICT Platforms can enhance interaction between student and teachers in COVIDCOVID-19 Pandemic Era;	0	0	80.47	19.52	0	0	59.52	40.04
	Mean scores	**26.20**	5.20	50.59	17.95	**70.89**	9.07	12.38	7.57

Based on Table 3, we can see distinctions between the male and female students, where the female students provided a more positive perception about using ICT in learning language compared to males. The female students provided positive responses to eight items on the use of ICT in language learning, which are (1) ICT platforms can access the material anytime and anywhere, (2) ICT platforms can help search relevant information or material of my course easier, (3) ICT platforms can help improve my English skills, (4) ICT platforms can help improve my knowledge, (5) ICT platforms can help me to submit task/assignment, (6) ICT platforms can aid me to recover from my study gap, (7) ICT Platforms can boost my enthusiasm to complete my studies on time, and (8) ICT Platforms can assist me in resolving my study difficulty. Meanwhile, the male students provided positive responses to three items (i.e., items 1, 2, and 3).

On the other hand, the male students provided more negative perception on the use of ICT for language learning, which included items 1, 2, 3, 4, 5, 6, and 7 on improving English skills, improving knowledge, recovering study gap, enhancing motivation, solving study problems, much in receiving the lecturers' feedback, and enhancing student-teacher interaction. This is assumed that while using those platforms in learning during this pandemic, they could not achieve maximum interactions with their lecturers and peers. And this is different if the class was conducted offline, where face-to-face interactions happen and communication is deemed much smoother.

In this aspect, the similar positive perceptions that were obtained from both male and female students are from items 1, 2, and 3 which are related to easy access, help search relevant information or materials for their course and help them submit their task/assignment. Meanwhile, the similar negative perception from both was on items 1 and 2, about not receiving speedier lecturers' feedback and cannot enhance interactions between students and lecturers.
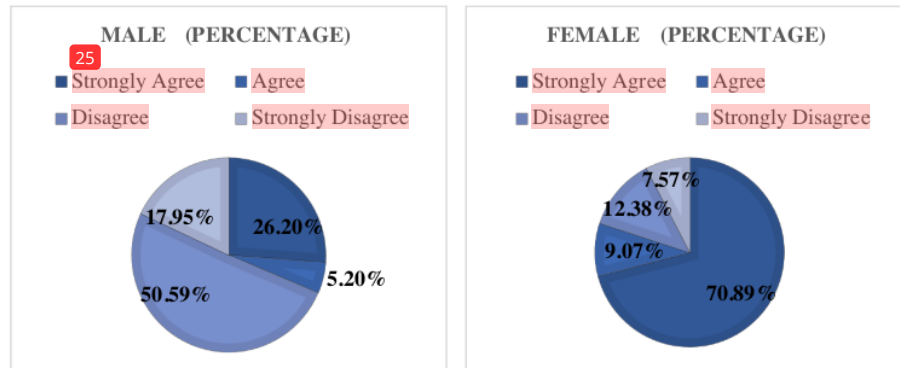

Figure 1. Students' perception of using ICT (male vs. female).

To sum up, from Figure 1, male students gave a more negative perception of using ICT in learning English skills than female students. This is also shown by the mean scores. In this case, male students chose 50.59% of disagree and 17.95% of strongly disagree of all items. It means that ICT did not give a crucial effect on the male students in learning English during the COVID-19 Pandemic Era. Meanwhile, female students gave a positive perception of using ICT in learning English skills, with

70.89% strongly agree and 9.07% agree for all items. This denotes ICT gives a more crucial effect to female students in learning English during the COVID-19 pandemic compared to male students.

4.3   Students Barriers in Using ICT Viewed from Gender

The result showed that there were some differences in barriers to using ICT in language learning between male and female students, as shown in Table 4.

Table 4. Students' barriers in using ICT.

No	Students' Problems	Male	Female
	Lack of resources/equipment		
1.	Lack of handphone/Computer/Laptop/Speaker/Printer	-	-
2.	Do not have electricity.	-	√
3.	Incompatible device	-	√
4.	Sharing device with others family	√	√
5.	Lack of Wi-Fi/Low internet connection	√	√
	Lack of funding		
6.	Low-income families	√	√
7.	Internet cost	√	√
8.	Equipment Cost (Buying laptop or handphone/ etc.)	-	-
	Lack of ICT abilities		
9.	Lack of Knowledge and Skills of use ICT	-	√
10.	Lack of ICT Platform Training	-	√

Despite the female students viewed the use of ICT in language learning more positively compared to male students, nevertheless, these female students faced more barriers in using them compared to males. The females reported problems in items (1) lack of resources/equipment (do not have electricity, incompatible device, sharing the device with others family, lack of wi-fi/low internet connection), (2) lack of funding (low-income families and internet cost), and (3) lack of ICT abilities (lack of knowledge and skills of use ICT, lack of ICT training). While the male students faced fewer barriers, in which they only reported problems in two items, they are (1) lack of resources/equipment (sharing device with others family and lack of wi-fi/low internet connection) and (2) lack of funding (low-income families and internet cost). Hence, sharing devices with other family members, lack of wi-fi/low internet connection, low-income families, and internet cost were the barriers that both male and female students faced in using various ICT platforms. It can be said that the male student participants in this study were more skillful in ICT literacy compared to the female students.

5.   DISCUSSION

Based on the findings, there are three key findings in this study. First, based on the types of ICT used, both male and female students used Google Classroom, Zoom, Google Meet, and WhatsApp in language learning. These platforms are considered easier to operate. The platform that both did not use to learn was Skype. Hence, female students prefer more various types of ICT in learning English skills than male students. Similarly, Jia (1996) also found that the memory of female learners is slightly higher than that of male students in studying foreign languages (including understanding,

mechanical memory, short-term memory, and long-term memory) in using ICT, and the recollection of females is much greater than that of male students. However, this finding differed with Mahdi and Al-Dera (2013) who reported that females use less ICT in their classrooms than males. But their work focused on instructors, meanwhile this study focused on students, and perhaps this caused the dissimilarity.

Second, on the perception of using ICT in English language learning, the male students gave more negative responses compared to the female students. These negative perceptions were that ICT platforms did not provide quicker lecturers' feedback and they did not enhance the interactions between students and teachers. Meanwhile, the female students view ICT use in language learning more positively. They found ICT platforms were easily accessible, assisted them in searching relevant information or materials for their studies, helped improve their English skills and knowledge, helped them in completing their task/assignments, helped them recover their study gap, enhanced their motivation to finish their studies on time, and helped them solve their study problems. In the same vein, Dörnyei et al. (2006) and Mori and Gobel (2006) reported that females are more inspired than males to study foreign languages, and are more optimistic in learning with ICT platforms compared to males (Lai & Kuo, 2007).

Finally, on the last aspect of barriers, although female students responded more positively to ICT use in English language learning compared to males, thus females encountered more problems in using it compared to male students. The setback reported by the female students were lack of resources/equipment, lack of funding, and lack of ICT abilities. Lack of resources/equipment means that they did not have sufficient electricity, they shared the device with other family members, they had incompatible devices, and lack of Wi-Fi or a slow internet connection. Lack of funding referred to low-income families and internet costs. Lack of ICT abilities signified the lack of knowledge and skills of use ICT and lack of ICT platform training. In the meantime, male students faced setbacks in lack of resources/equipment and lack of funding. It can be said that the male students in this study were more are more adept in ICT literacy compared to the female students. These challenges are also among those faced by other students around the world, where e-learning unacquaintedness, poor internet access, and physical condition (e.g., eye strain) hinders the use of ICT (Octaberlina & Muslimin, 2020). Likewise, Siddiquah and Salim (2017) these issues were common in online learning. Therefore, the beneficial impact of ICT cannot be maximized if students face impediments to adopting it.

6. CONCLUSION

Based on the findings of this study, there are differences in types, perceptions, and barriers in using ICT in learning English by male and female students at the seven Islamic universities in Indonesia. First of all, female students used more various types of ICT platforms compared to male students. Second, the female students viewed ICT use more positively than male students in language learning. And lastly, even though the females deemed ICT more optimistically compared to male students, nevertheless the females encountered more barriers in using the ICT platforms compared to the male students in this study. Again, even though male students were more skillful in ICT literacy than female students, female students constructively regarded ICT use in

language learning as more beneficial to them in terms of skill, knowledge, and motivational improvement.

The present study has answered the research questions under exploration. But then again, every research has its limitation. The distinguished drawback from this present study is that it employed only a questionnaire to answer the research questions, and the participants were limited to only seven Islamic universities in Indonesia. Therefore, future related research is expected to cover more universities to gain more respondents so that the findings can be generalized to the Indonesian context. Furthermore, the use of qualitative approach, such as observations and interviews, is also encouraged to obtain more insights on the use of ICT in English language learning.

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