

FACTORS AND CHALLENGES IN UNDERSTANDING AL- QURAN USING TECHNOLOGY DURING PANDEMIC COVID-19 ^o

Syahida Mohtar¹, Nazean Jomhari², M.Y. Zulkifli Mohd Yusoff³,
Mumtaz Begum Mustafa⁴

ABSTRACT

Since the outbreak of Covid-19, Malaysians have experienced a new norm when the government introduced the Movement Control Ordinance (MCO) nationwide. As a result, all Malaysians must work from home and communicate using information technology. With plenty of free time at home, many have taken the opportunity to study the Qur'an to get closer to Allah s.w.t. The study of the Qur'an is compulsory for Muslims because the Qur'an is the book of guidance for human life. Since Arabic is the language of the Qur'an, it is important to learn Arabic. Understanding Arabic in prayer and while reciting the Qur'an can increase one's sense of khusyuk in worshipping Allah s.w.t. However, it is difficult for non-native Arabic speakers (N-NAS) to learn Arabic. Therefore, this study aims to understand the factors and challenges in learning Arabic through Al-Qur'an using technology among N-NAS specifically Malay people in Malaysia. The findings of this study will help software developers and policymakers to understand

(*) This article was submitted on: 30/10/2022 and accepted for publication on: 27/12/2022.

¹ Department of Software Engineering, Faculty of Information & Communication Technology, Universiti Teknikal Malaysia Melaka.

Email: msyahida@utem.edu.my

² Department of Software Engineering, Faculty of Computer Science and Information Technology, University of Malaya.

Email: nazean@um.edu.my

³ Department of Al-Quran and Al-Hadith, Academy of Islamic Studies, University of Malaya.

Email: zulkifly@um.edu.my

⁴ Department of Software Engineering, Faculty of Computer Science and Information Technology, University of Malaya.

Email: mumtaz@um.edu.my

better the needs of users in learning the Arabic language using technology to develop mobile learning applications in the future.

Keywords: *Mobile Learning, Middle-Aged Adults, Arabic Teaching Method*

1.0 INTRODUCTION

The Covid-19 pandemic has changed the way people work. Many can no longer go to work, and even students can no longer attend a physical classroom at school as usual. The new norm puts much strain on people to manage their daily lives. This is because many people have lost their jobs, and face difficulties in meeting and taking care of their family members, especially those who have parents who lived far away in a village, lost family members due to Covid-19, and many more. In these challenging circumstances, many need moral and spiritual support to calm the soul and mind. As a Muslim, the Qur'an is the best source to get peace of mind and closer to Allah s.w.t. This is because the Al-Qur'an is a book of guidance for all human beings.

Every Muslim is responsible for understanding the contents and comprehending the teachings of the Qur'an to become more pious and khusyuk in prayer. Understanding the Qur'an requires learning the Arabic language. Therefore, learning Arabic is crucial for Malaysian Muslims because they are not native Arabic speakers. Furthermore, learning Arabic will enable them to appreciate the meaning of the Qur'an and understand the Arabic word without having to refer to the word-by-word translation of the Qur'an.

During MCO by the Malaysian government in 2020, Al-Qur'an tadabbur programs such as QuranTime, which aired every day on the Al-Hijrah TV channel, were very well accepted by the Muslim community in Malaysia. This is because, previously, most working Muslims do not have time to attend lectures or classes such as tadabbur Al-Qur'an to learn the Qur'an diligently due to their busy daily affairs, or perhaps the tadabbur Al-Qur'an courses and classes are not easily accessible in their locality. Therefore, with the use of information and communication technology (ICT) many Malaysians are not only able to take care of their children themselves, but they also can informally learn to understand the verses of the Qur'an from home which they never had a chance before. This in turn gradually soothed their soul through the trials of life.

2.0 TEACHING AND LEARNING CHALLENGES DURING PANDEMIC

Before the global Covid-19 pandemic, students would physically attend classes at learning centers. In this learning setting, students and teachers can interact face-to-face to fulfill learning objectives and outcomes. Face-to-face learning is critical because it can allow students and teachers to interact with each other to ensure that knowledge is delivered and received effectively. Furthermore, interaction among students is important for creating a healthy competitive atmosphere, as they can exchange ideas face-to-face. However, when the Covid-19 pandemic hit the world, almost all educational institutions that offer public classes had to change their approach to online learning, where students can meet face-to-face via Zoom, WebEx, and Google Meet apps.⁵

According to Misman et.al.,⁶ the situation is not the same as in the relationships and time spent between teachers and students in real classrooms. Traditionally, a conducive learning environment must consider the physical environment, the psychosocial environment, classroom rules and discipline, and classroom routines. In an online class, communication problems will occur between students and instructors or amongst students, as the number of students is high. Furthermore, learning techniques employed in online learning vary from traditional ways. For example, in an online class, students must turn off the microphone while the class is in progress. Otherwise, the learning atmosphere will be disturbed by unpleasant background noise. Students are also encouraged to switch on their webcams to enhance interaction. However, not all students prefer to do so and choose to hide behind a camera rather than be seen by teachers and classmates. Hence, this will make it difficult to monitor students' behavior, and eventually, the interaction in the learning environment could be disrupted.

Thus, it is critical to understand the limitations that students experience to sustain their engagement in an online classroom and how problems such as the inability to communicate with instructors and students, as well as amongst students, may be effectively handled. Therefore, the effectiveness of learning and teaching activities that include many students in an online class warrants further investigation. Thus, the objective of this research is to identify the difficulties that students experience when participating in online learning.

⁵ Yahaya, M., & Hayat Adnan, W. (2021). Cabaran pelajar melalui kaedah pembelajaran atas talian: kajian institusi pengajian tinggi awam Malaysia. *Journal of Media and Information Warfare (JMIW)*, 14, 11-20.

⁶ Misman, J., Md Sharipp, M. T., Suyurno, S. S., Nik Abdullah, N. N., & Shamsudin, C. M. (2021). Education during Covid19: Islamic perspectives on ethics for new media users for teachers and students. *Journal of Language and Linguistic Studies*, 17(1), [529]-541.

- Middle-Aged Adults and ICT

Adults are a professional group that is preoccupied with family and job. When a person matures, they will go through the aging process. Therefore, adult learning techniques cannot be the same as those used in schools to educate children. This is because as a person ages, they will become forgetful and need repetition methods in learning to enable them to remember. This is due to physical and cognitive decline. Thus, the learning difficulties encountered by middle-aged adults can be addressed via the use of technologies such as mobile devices. They can use these devices to manage their learning activities effectively based on their preferences and convenience. Furthermore, they can gain ease in obtaining knowledge regardless of time or location limitations. Therefore, one of the significant consequences of ICT is the growth of the Internet. The growth of the Internet in modern Muslim culture has created the practice of Islamic learning on the Internet. The number of Islamic materials and knowledge available on the Internet not only spurred new trends in Islamic education but also spurred the expansion of wider socio-cultural activities.

In the context of informal learning, students can engage themselves in online learning at any time and location. Nonetheless, there are certain restrictions and limitations that instructors and students encounter when online learning is employed. However, some learners have difficulty choosing the best strategies for a specific task. Sometimes learners have a limited variety of strategies in their repertoire and use the first strategy they have chosen even when it does not work⁷. Hence, they may lack confidence in their learning ability and lose motivation in the long run.

3.0 ARABIC LEARNING APPROACH

The goals pursued by a Muslim when learning Arabic fall into two categories: communication and understanding the Qur'an. Accordingly, the learning methods also vary. Learning Arabic for communication often focuses on the words used in everyday speech, while learning for the purpose of understanding the Qur'an is performed using words from the Qur'an's verses.

In this study, the researchers investigated various Arabic language learning methods used by adult learners in Malaysia. These include the SEKEJAP method, the Fahman method, the ATTQ method, and Arabic Speech. These methods

⁷ Tabatabaei, E. (2018). Innovative, creative VARK learning styles improvement strategies. *Global Journal Of Foreign Language Teaching*, 8(3), 87-93.

were developed by teachers who specialize in teaching Arabic to help non-native speakers to learn the language. While several methods exist for learning Arabic, each emphasizes the ability to memorize Arabic words.

Arab Bicara is a method of learning the Arabic language using the Telegram application. In this application, students are asked to read Arabic words from a flash card attached by the teacher, and the voice is recorded using the microphone feature of Telegram. The reason for using the application is that this course guides learners to speak Arabic under the guidance of a dedicated teacher. This method can gain students' confidence in speaking simple daily conversations in Arabic.

SEKEJAP method is used at the Institute Al-Qur'an Studies (Selangor) to teach Arabic in a simple way to the public who do not have the basics of Arabic. The purpose is that the public can understand the Qur'an literally. This method was developed by Ustaz Ihsan in Indonesia. Students memorize the words arranged in the magic paper 1 (red pattern). This method introduces a memorization technique in the learning process in which frequently repeated Arabic words in the Qur'an are arranged to make it easier for students to memorize them with melodies. This method did not emphasize the complex rules in Arabic Learning because the objective of *SEKEJAP* Method learning is to assist students in remembering the translation of the Al-Qur'an and subsequently be able to translate the verses of the Al-Qur'an. To ensure students better understand the verses of the Qur'an, a tadabbur session is held before the class ends.

FAHMAN method is a method used as a translation approach in teaching N-NAS to learn Arabic words quickly and understand the Qur'an by introducing the basics of the Arabic language, namely, Isim (noun), Fi'il (verb) and Fa'il (doer) and 'Amar (command word). These methods also require memorization and remembering skills. These methods and techniques were developed by ustadz Wan Jamaluddin who has more than 10 years of experience teaching Arabic to students, adults, and the elderly. Texts, tables, and colorful pictures are provided as aids to support memorization and translation techniques in the classroom. The table includes word classification notes (Isim, Fi'il, Amar).

The *Arabic Through the Quran (ATTQ)* course offered by the International Islamic University of Malaysia aims to teach adults to learn Arabic through the Qur'an. The course uses translational, lexical, and linguistic approaches. The teaching materials used in this course are the Qur'an and a selected textbook. In this course, students learn to understand the Arabic language rules from the Al-Qur'an, while they are also taught with Tafseer.

The differences between the Arabic learning approach that is currently implemented during Covid-19 towards non-native Arabic adult in Malaysia is outlined in Table 1.

Table 1: Arabic Learning Course Comparison

#	ITEM	SEKEJAP METHOD	FAHMAN METHOD	ATTQ METHOD	ARAB BICARA
1.	Teaching and Learning approach	Al-Qur'an approach	Al-Qur'an approach	Al-Qur'an approach	Communication approach
2.	Learning Objective	Arabic Learning and Qur'an Understanding	Arabic Learning and Qur'an Understanding	Arabic learning, Sentence Construction, and Qur'an Understanding	Daily Communication
3.	Memorization	Yes	Yes	Yes	Yes
4.	Takrir	Yes	Yes	Yes	-
5.	Tadabbur	Yes	Yes	Yes	-
6.	Evaluation	Yes	-	-	Yes
7.	Learning platform	Online	Online	Online	Social Media
8.	Meeting application	Jitsi / Zoom	Zoom	Google meet / Microsoft Team	Telegram
9.	Communication medium used to distribute material, exercise & assignment	WhatsApp	WhatsApp	Telegram & Facebook	Telegram
10.	Assignment submission format	Audio, Video, Picture	-	Text	Audio, Video, Picture
11.	Assignment submission	WhatsApp	-	Telegram, Facebook, Google Meet Chat	Telegram
12.	Learning Material	a) Dictionary for blue pattern	a) FAHMAN method notes	a) Textbook by Alan Jones	a) e-Flash card b) Video c) Audio

		b) Dictionary for black pattern	b) Selected surah (printed on paper)	b) Recorded class session	
		c) KERTAS AJAIB (red pattern)	c) Recorded class session		
		d) Mushaf SEKEJAP			
		e) Sekejap method guideline			
		f) Recorded class session			
13.	Number of students per class session	50-100	20-40	20-40	10-20
14.	Fees	Yes	Yes	Yes	Yes
15.	Course Duration	20 Hours	64 Hours	48 Hours	3 Months

Undoubtedly, it is difficult to master Arabic quickly for someone whose native language is not Arabic and who has no experience of learning the language. This is because learning a new language takes a long time. Consequently, there are several training techniques for adults that may help them learn Arabic without feeling overwhelmed. Furthermore, many short-term or long-term Arabic courses do not include official exams, instead opting for informal quizzes to keep adult students engaged. Adult students, after all, do not have much free time, even during a pandemic since they must work from home while simultaneously caring for family members.

4.0 METHODOLOGY

To achieve the aim of this study, a survey was conducted. A questionnaire was used to collect data from adult respondents. This questionnaire was created using Google Forms and distributed to participants via WhatsApp. To secure more respondents, the members of each selected WhatsApp group were asked to forward the questionnaire to their other friends. The survey was answered by 53 respondents, of which 53.8% were males, and 64.2% were females. The questionnaire was divided into five (5) sections: demographic data, respondents' background in learning Arabic, encouragement to learn Arabic, factors behind the interest in online learning, and challenges of online learning.

The form consisted of three types of questions: objective questions, fill-in-the-blank questions with short answers, and a Likert scale. The Likert scale contained the following range: Strongly Disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly Agree=5.

5.0 DATA ANALYSIS

To determine the challenges of online learning faced by adults, the process began by collecting the following data:

i) Demographics

The participants were categorized into those ages 15 to 19 years, 23 to 29 years, 30 to 39 years, 43 to 49 years, 50 to 99 years, and 60 years and above. Among the respondents who participated in this survey, 30.2% worked in the public sector, 35.8% were private-sector employees, 15.1% were self-employed, 13.2% were unemployed, and the remainder were students.

Table 2: Crosstabulation between Respondents' Gender and Respondents' age.

Respondents' Age	Respondents' Gender		Total
	Male	Female	
15 - 19	0	2	2
20 - 29	3	2	5
30 - 39	2	8	10
40 - 49	4	20	24
50 - 59	6	1	7
>60	4	2	6
Total	19	35	54

ii) Background of Respondents in Learning Arabic

Arabic is an important language for every Muslim to master if they want to understand and appreciate the verses of the Qur'an while reciting the Qur'an, praying, and reciting dhikr. Therefore, learning the basics of Arabic is important.

However, because the Arabic language has complex rules and grammar, people who do not have an Arabic background will take the easy way by relying on word-by-word translation from Arabic to Malay. This also causes many who do not understand the meaning of the verses of the Qur'an recited during prayer. Learning shortcuts to the basics of Arabic only using per-word translation in Al-Qur'an does not leave long-term effects as adults are easily forgetful due to factors of cognitive decline as well as health problems.

Regardless of the respondents' background, this study found that the adults' reasons for learning Arabic were more likely to reflect religious factors, as listed in Table 3.

Table 3: Arabic Learning Factors.

The factor of Learning Arabic	Percentage (%)
1. Qur'an Understanding	89
2. Spiritual (More Khusyu in prayer)	89
3. Hadith Understanding	87
4. Easy Qur'an Memorization	86
5. Communication	77
6. Haji Umrah	77
7. Job Requirement	55

iii) Challenges

Based on the survey, it was found that 69.8% of the respondents had studied Arabic at school or university, while 30.2% had no background in studying Arabic at school or university. However, the majority of the respondents had difficulty in memorizing the meaning of Arabic words even though they had read the Qur'an using per-word translations. Moreover, they also expressed difficulty in remembering words that had been translated into Bahasa Malaysia. This is because they found Arabic difficult to learn and required a long time to master its grammar. However, many hoped to understand the words in the Qur'an without having to look at their translations. Therefore, they expressed interest in taking a short Arabic language course for the purpose of understanding the Qur'an.

Hence, a further aim of this study was to determine whether gender-based differences could be identified in the challenges of learning Arabic. Therefore, the null hypothesis (H_0) was that there was no significant difference in Arabic learning challenges based on gender. To answer this research question, an independent t-test was performed using the Statistical Package for the Social Sciences (SPSS) to analyze the collected data.

Cronbach's alpha, α (or coefficient alpha), developed by Cronbach⁸, measures reliability, or internal consistency. Therefore, in this study, Cronbach's alpha tests were used to see if multiple-question Likert scale surveys are reliable. According to Pallant⁹, to justify the reliability test, Cronbach's Alpha values must be greater than 0.7.

Table 4: Alpha Cronbach instrument of Arabic Learning Challenges

Variable (DV)	Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach Alpha for all domain
Challenges	Memorization	10.26	7.554	0.676	0.691	0.787
	Remembering	10.33	6.981	0.766	0.640	
	Language Complexity	9.89	7.648	0.665	0.698	
	Learning Method	10.02	9.717	0.309	0.864	

As Table 4 shows, each item used in the instrument representing the challenges of Arabic language learning has a reliable index value, with Cronbach's Alpha values between 0.640 and 0.864. The overall Cronbach's alpha value is 0.787. The correlation value of the corrected item with the total score was greater than 0.3. Thus, all the items were accepted and remained as items in the actual study. A Kolmogorov-Smirnov analysis was conducted on the gender demographics related to the intention to learn Arabic because the number of samples was large, at more than 50. The results of this analysis are shown in Table 5.

⁸ Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.

⁹ Pallant, J. (2002). *SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS (7th ed.)*. Routledge.

Table 5: Tests of Normality of Arabic Learning Challenges item based on gender

Gender	Kolmogorov-Smirnova			Statistic	
	Statistic	df	Sig.	Skewness	Kurtosis
Male	0.154	19	0.200*	0.325	-1.04
Female	0.152	35	0.039	-0.41	0.527

Based on the result, the challenges of learning Arabic scores for males and females were normally distributed. Thus, parametric testing using the t-test analysis was conducted.

Table 6: t-Test Analysis of Arabic Learning Challenges item based on gender

Gender	N	Mean	Std. Deviation	t	df	Sig.
Male	19	3.30	0.94	-0.427	52	0.589
Female	35	3.41	0.91			

In Table 6, the result showed no significant difference in Arabic language learning challenges between males and females because $p > 0.05$ with a value of 0.589. In terms of mean, the results showed that males ($M = 3.30$) experienced fewer Arabic learning challenges than females ($M = 3.41$). This indicates that the null hypothesis (H_0) was not rejected.

iv) *Encouragement in Learning Arabic Online*

The survey revealed that the reasons for learning Arabic by N-NAS are varied. Although learning a language is a complex, time-consuming task that requires dedication, perseverance, and hard work, many Muslims were determined to learn Arabic to understand the Qur'an and hadiths, to be khusyuk during prayer, to communicate due to work, or Umrah or Hajj. However, the primary goal of studying Arabic is to comprehend the Qur'an, followed by a dedication to prayer and comprehension of Hadith.

The advent of information technology has given students more benefits to students in language learning. For example, social media (SocMed) is an online technology platform that has provided many advantages in facilitating daily communication between people including in the learning area. In the past,

SocMed applications such as YouTube, Telegram, WhatsApp, Facebook, Twitter, and Instagram were used for the purpose of socializing online. The medium was broadly employed for sharing information related to hobbies, interesting tourist spots, and getting to know new acquaintances. In recent years this platform has provided advantages for students to learn new ways¹⁰ and benefited educators in disseminating information effectively to the learners.

Therefore, today's communication and information technologies undoubtedly offer many advantages in the education field. In Malaysia, the use of social media applications has been widespread in many areas, including language learning. Table 7 shows the respondents' learning medium preferences when learning Arabic.

Table 7: Preferred Online Learning Medium

Medium	Percentage (%)
1. Applications downloaded from Google Play / AppStore	73.6
2. YouTube channel	71.1
3. Short courses that require registration and payment on the website	50.9
4. WhatsApp apps	45.3
5. Facebook apps	32.1
6. Telegram apps	30.2
7. Instagram apps	24.5

v) *Factors of Interest in Online Learning*

Although online learning is not a new concept, the transition from conventional to modern methods has, to some extent, affected the learning and engagement of students in the learning process, even more so when adult students are involved.

¹⁰ Mardiana, D., & Supriyatno, T. (2021, April). The Effectiveness of Pedagogical Innovation of Islamic Education Learning (PAI) During Covid-19. *In International Conference on Engineering, Technology and Social Science (ICONETOS 2020)* (pp. 477-482). Atlantis Press.

Based on the surveys, the factors that may have drawn the respondents to engage with online learning are listed in Table 8.

Table 8: Factors of Interest in Online Learning

Factors	Percentage (%)
1. Learning information like reference materials that are easy to access from a smartphone/tablet.	86.8
2. Interesting application/learning software interface, clear and easy to understand by students.	83.0
3. Students can follow the learning through video recording at their own pace	71.7
4. Short video recording time for online learning using video.	64.2
5. The teacher calls the student's name during the learning session through video conferencing.	28.3
6. A short-duration learning session using video conferencing (VC)	58.5
7. Teachers are good at using interesting sentences and making learning proactively	1.9

vi) *Challenges of Online Learning*

Since 2020, for nearly two years, Malaysians have been adjusting to a new way of life during the Covid-19 pandemic. As a result, the public has gradually become accustomed to using communication technologies such as laptops, mobile phones, and tablets for online business, online banking, attending conferences, and online academic learning. Therefore, in addition to understanding the challenges of adults in learning Arabic for the purpose of understanding the Qur'an, this study has also listed the challenges faced by respondents in online learning as listed in Table 9.

Table 9: Challenges in Online Learning

Challenges	Percentage (%)
------------	----------------

1. Incapable of utilizing a computer or a telephone for educational reasons	62.3
2. Inadequate telecommunications infrastructure, network, or lack of Internet access	86.8
3. Teachers find it difficult to keep students focused during learning sessions	52.8
4. Feeling sleepy if the learning time is too lengthy	47.2
5. Students tend not to attend learning sessions as planned	47.2
6. Students or instructors are delayed for online courses	45.3
7. The computer or telephone hardware used has low specifications.	43.4
8. Do not have a webcam	24.5
9. Other distractions while learning at home especially among married adults	3.8
10. Inadequate knowledge of video conferencing applications	1.9

6.0 CONCLUSION AND FUTURE WORKS

Muslims over the age of 40 are more likely to engage in religious learning to get closer to Allah. Consequently, learning Arabic is often their goal so they can better understand the meaning of Arabic words in the Qur'an, be *khusyuk* in prayers and duas, and improve their understanding of Quranic verses through *tafseer* study. With the current information technology advancements, online learning can be undertaken at anytime and anywhere. Hence, the transition from traditional to modern methods has an impact on student learning and engagement in the learning process, especially for adult students engaged in Quranic learning. However, users still face learning challenges. From the learner's perspective, these can relate to the classroom environment, a lack of concentration, a stressful environment, difficulties understanding concepts, an inability to discuss freely, an inability to see the instructor and classmates, a poor internet connection, the availability of a computer or smartphone, the need to share a device with family members, and increased screen time.

The challenges of online learning, therefore, require a high level of initiative from the teachers and students to make the continuity of learning more interesting and ensure that students are motivated to continue learning, especially when learning to understand the Qur'an. Best practices for online course delivery should consider interactive classes involving learners and the instructor, recorded video lectures, short sessions, group activities, sufficient documentation or self-study materials, case studies, and the use of free or open-source software. If the online environment does not satisfy students, they will readily give up learning Arabic, and their desire to understand the recitation of the Qur'an will decrease.

The difficulty of learning Arabic should not be determined by the grammatical complexity of the language. When learning Arabic, for example, one must acquire grammar, morphology, and a large vocabulary. Apart from that, among adult learners, much depends on the will and perseverance of the learner. Middle-aged adults may have difficulty memorizing Arabic translations into Malay. However, this is because they require more time and resources, as well as learning materials that are suitable for them.

In conclusion, the researcher's findings indicate that transitioning from conventional to modern methods can result in different experiences for all parties. For example, some feel lost because they have difficulty reading text on a computer screen. Others feel free because they can learn anywhere and at any time, while some need less time to learn because they do not need books or printed materials. The current results also reveal that most adult students who participated in this study were satisfied with online learning and found it convenient. The challenges of online learning among adult learners relate to elements that can be divided into internal, external, and program-related factors¹¹.

Various techniques are currently being used to teach Arabic to non-native speakers, especially middle-aged adult learners who want to comprehend the Qur'an. For future work, it is important to understand how such learners can benefit from these techniques, which use mobile learning approaches, such as mobile learning apps, to understand the Qur'an. Therefore, investigating the effectiveness of mobile learning among adult learners should be a priority in future research. It is expected that the use of technology can maintain middle-aged learners' interest and engagement in achieving their learning goals. To

¹¹ Kara, M., Erdoğan, F., Kokoç, M., & Cagiltay, K. (2019). Challenges faced by adult learners in online distance education: A literature review. *Open Praxis, 11*(1), 5-22.

maintain motivation and engagement in learning, it is suggested that game-like elements be included in mobile learning applications. For example, a drag-and-drop guessing game, or a flashcard might stimulate interest in learning and increase motivation to learn Arabic. Markers or dots saved in a mobile app are also important to help students to track their learning progress.

FUNDING

The corresponding author is sponsoring by Universiti Teknikal Malaysia Melaka (UTeM) numbered UTeM.02.13.04/500-4/12/16/1/2(91) to pursue her Ph.D. degree in these studies.

ACKNOWLEDGMENTS

We would like to thank to Universiti Teknikal Malaysia Melaka (UTeM) for sponsoring the corresponding author in this research numbered UTeM.02.13.04/500-4/12/16/1/2(91)

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

REFERENCES:

- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Kara, M., Erdoğan, F., Kokoç, M., & Çağiltay, K. (2019). Challenges faced by adult learners in online distance education: A literature review. *Open Praxis*, 11(1), 5-22.
- Mardiana, D., & Supriyatno, T. (2021, April). The Effectiveness of Pedagogical Innovation of Islamic Education Learning (PAI) During Covid-19. In International Conference on Engineering, Technology and Social Science (ICONETOS 2020) (pp. 477-482). Atlantis Press.
- Misman, J., Sharipp, M. T. M., Suyurno, S. S., Abdullah, N. N. N., & Shamsudin, C. M. (2021). Education during Covid19: Islamic perspectives on ethics for new media users for teachers and students. *Journal of Language and Linguistic Studies*, 17(1).
- Pallant, J. (2002). SPSS Survival Manual: A step by step guide to data analysis using IBM SPSS (7th ed.). Routledge.
- Tabatabaei, E. (2018). Innovative, creative VARK learning styles improvement strategies. *Global Journal Of Foreign Language Teaching*, 8(3), 87-93.

Yahaya, M., & Hayat Adnan, W. (2021). Cabaran pelajar melalui kaedah pembelajaran atas talian: kajian institusi pengajian tinggi awam Malaysia. *Journal of Media and Information Warfare (JMIW)*, 14, 11-20.