

INVESTIGATION OF MALAYSIAN ESL STUDENTS' LEARNING EXPERIENCE OF THE SMARTPHONE APPLICATIONS FOR ENGLISH LANGUAGE LEARNING



 Nagaletchimee Annamalai¹

¹School of Distance Education, Universiti of Sains Malaysia, 11800 Penang, Malaysia.

 Mohd Elmagzoub Eltahir^{2*}

¹Email: naga@usm.my

²College of Humanities and Sciences, Ajman University, Ajman, UAE.

²Email: m.babiker@ajman.ac.ae

 Najeh Rajeh Al Salhi³

^{2*}Humanities and Social Sciences Research Centre, Ajman University, Ajman, UAE.

 Bilal Zakarneh⁴

^{3*}Nonlinear Dynamics Research Centre, Ajman University, Ajman, UAE.

⁴Email: n.alsalhi@ajman.ac.ae

 Samer H Zyoud⁵

⁵Email: s.zyoud@ajman.ac.ae

⁴Department of Foreign Languages, Ajman University, Ajman, UAE.

⁵Email: b.brahim@ajman.ac.ae



(+ Corresponding author)

ABSTRACT

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This qualitative study investigated the use of language learning smartphone applications (Apps) among Malaysian undergraduates to enhance their English language learning. Students' interviews were collected and analysed based on Braun and Clarke's thematic analysis. The emerging themes revealed that the participants were convinced that the language learning smartphone Apps were able to enhance their English language learning. Participants found that the Apps helped them to improve their vocabulary, listening, speaking, reading and writing skills. The study offers the trends and usage patterns of English language smartphone Apps among Malaysian ESL learners. Some of the features in these Apps that promote English language learning are gamification, repetition of certain language skills, extended learning space and interactivity. Meanwhile, students also highlighted their concerns related to limited knowledge offered by the Apps, distraction, application fee and the Internet connection. The findings of the study can assist researchers, practitioners and educators to facilitate and guide students on the use of language learning smartphone Apps in educational practices.

Contribution/ Originality: This study makes a significant contribution to the field of smartphone Apps and English language learning, enriching the body of knowledge related to English language teaching. It is one of the pioneer studies that facilitates students how to use language Apps in educational practices.

1. INTRODUCTION

English language proficiency is crucial in everyday situations and career opportunities in many countries. In Malaysia, students face many challenges in attaining English language proficiency (Annamalai, Tan, & Abdullah, 2016; Halim, Ariffin, & Darus, 2021). Some of the challenges are related to limited exposure to the English language, low motivation and mother tongue interference. Cognitively, students also struggle with the development of the content, sentence structure and banal word choice (Naim, Luqman, & Matmin, 2020). Another reason why Malaysian students are facing challenges in English language learning is due to the fact that the

teacher-centred approach is still dominant in most English language classrooms where the focus is on the teacher and students do not direct their learning (Annamalai et al., 2016). Even with the infusion of technology (blended learning approach), the online teacher-centeredness is still evident (Annamalai et al., 2016). In other words, teachers are in full control of teaching and learning activities. This has resulted in the increase in the number of unemployed graduates in Malaysia because they do not have sophisticated language skills to communicate ideas, opinions and thoughts effectively in English. Ignoring their English language problems will definitely have an impact on the development of the country. It is therefore imperative and timely to find innovative ways to provide a conducive environment for English language learning by extending language learning beyond the traditional classroom environment and provide more opportunities for more practice, accessing relevant materials and independent learning.

Lately, the trend in English language learning has been focusing on the application of mobile learning strategies specifically by using various smartphone Apps (Lai, 2020). According to Ghasemi, Hashemi, and Bardine (2011) Mobile Assisted Language Learning not only provides language learning opportunities, but also provides students with good practice in listening, speaking, and reading skills. Likewise, this is confirmed also in the study conducted by Hsu, Hwang, Chang, and Chang (2013) which referred that there is a positive impact of using devices like smartphones on English learning. Chiu (2015) pointed out that smartphones used to learn a second language have many benefits, including improving vocabulary, spelling, pronunciation, grammar, listening, and reading skills. Moreover, smartphones allowed English learners to take advantage of new opportunities and learn in various ways, such as through teacher-student relationships (Babiker, 2015; Oteir & Al- Otaibi, 2022). Furthermore, Tal and Gross (2014) stated that learners' learning processes were supported and motivated by smartphone technology.

The results of the study conducted by Al-Qatawneh et al. (2022) also confirmed that there is a positive impact of smartphone use on students' achievement in language learning and their understanding of it. Furthermore, the smartphone technology played an important role in facilitating the process of learning and teaching English (Ta'amneh, 2021). Based on Fawareh and Jusoh (2017) belief, smartphone technology could be used to contextualize learning activities.

A smartphone is a portable device with all mobile features and has been frequently updated with new features to enhance its ability and usability, in addition the use of smartphones is gaining momentum and popularity for a number of its functionality and ability to install various applications (Buck, McInnis, & Randolph, 2013; Metruk, 2021). According to Nami (2020) recent years have witnessed exponential growth in the take-up of educational applications, specifically on smartphones for language learning. Furthermore, with the COVID-19 pandemic and the emergence of new variants, it is becoming clear that this pandemic will be around for an indefinite period. Therefore, many higher education institutions are on the cusp of a solely online learning environment. During this precarious situation, according to Iyengar et al. (2021) smartphones helped in avoiding face-to-face contact and maintain social distancing and transmission of the Coronavirus. However, integrating smartphone Apps into teaching and learning practices poses a challenge for most language educators (Metruk, 2021). As educators, they need to know how to integrate smartphone Apps into their teaching practices. Therefore, this paper is an effort aiming to understand how Malaysian undergraduate students learn English via smartphone Apps, particularly listening, speaking, reading, writing and vocabulary skills.

This line of research is valuable because the instructors can use the findings critically to evaluate the learning provision that is available when smartphone Apps are considered in language learning and to develop more appropriate learning opportunities. Educators should ensure that the designed pedagogical practices offer each learner the opportunity to engage in the manner that suits them best. Also, learners can be assisted in learning the English language effectively by the identification of their preferred learning style. Finally, a better understanding of smartphone Apps for language learning will assist researchers and practitioners in guiding future approaches when students are solely depending on the virtual.

The research questions for this study are:

- (1) What are the elements in the English language smartphone Apps that promote English language learning?
- (2) What are the barriers that restrict students to use smartphone Apps?

In the following section, the theoretical background and review of the related research has been introduced. This is followed by the methodology.

2. LITERATURE REVIEW

Krashen (1982) asserts that it is possible for language learners to be distracted by emotional factors which shift the focus of language learners and details the Affective Filter hypothesis into three categories: motivation, self-confidence and anxiety, each plays a crucial role in second language acquisition. It explains that when embarrassment, tension and fear are elevated, it becomes difficult to acquire the language. The affective filter is viewed as an imaginary wall that hinders or allows the inputs of language acquisition. The lower the affective filters, the greater the learners feel secure and safe, and language acquisition takes place more easily. At the same time, when the affective filter is high, it hinders learners from cognition input and thus blocks cognition. Some previous studies (Revere & Kovach, 2011; Sharif, Basri, & Yunus, 2018) refer that technology may foster confidence and joy in the learning environment.

Vazquez-Cano (2014) states that smartphone Apps can be a potential educational resource. Similarly, Wu (2015) found that Apps provide English as a Second language (ESL) learners with vocabulary learning. For example, Apps like Word Builder, English Vocabulary, Word Learning and Word Power. English learning is very often integrated with games, puzzles and tests that help learners to engage in learning. Gamified Apps also support learning with fun activities. According to Gangaiamaran and Pasupathi (2017) Apps have the potential to educate learners. The benefits of Apps include entertainment, effective use of leisure hours, fun, informal learning and alternative modes of learning. Apps also integrate animation, pictures, video and audio as to create multimedia instructional materials to create interest for learners. Apps are considered an excellent supplement for language learners and a good starting point for independent learners (Rosell-Aguilar, 2018) who are not attending formal classes and wish to keep practising their language skills (Rosell-Aguilar, 2017).

There are several easy-access Apps for language learning. In fact, there are too many Apps for learners to choose from and there is a lack of recommendations on what Apps there are relevant for language learning (Liu & He, 2015). Several studies have documented the advantages of Apps for language learning (Klimova, 2018; Metruk, 2021) based on activities identified in Second Language Acquisition Theory (SLA) learning, such as interaction and collaboration, negotiation and hands-on (Doughty & Long, 2003).

Rosell-Aguilar (2016) researched distance learning students' learning the Spanish language and reported that Apps were used mainly to enhance their vocabulary, followed by translation and grammar practices. A study by Klimova (2018) was on a literature review search in Science Direct, Scopus and Web of Science databases to discover Apps that were used in foreign language learning. The findings indicated that many learners considered Apps for English language learning, particularly to enhance vocabulary learning and increasing learners' motivation. Recently, Annamalai, Mažeikienė, Tangiisuran, and Oleskeviciene (2021) investigated the use of smartphone Apps among Lithuanian students and reported that smartphone Apps promote students' interaction, collaboration and improved learning performance. The qualitative findings indicated three types of Apps that are commonly used for interactions by undergraduates in Lithuania, namely the educational, communication, and entertainment Apps. A study by Thedpitak and Somphong (2021) found that students' positive attitudes towards mobile applications support English language learning. The study further recommended that future studies to include qualitative analysis such as interviews to gain more comprehensive and in-depth findings related to the use of mobile applications.

Although researchers have recognized the importance of smartphone Apps and language learning, drawbacks have also been acknowledged. Kim and Kwon (2012) reported that Apps are more concerned with cognitive and receptive processes and do not engage learners with social cognitive activities. In the local context, Fook, Narasuman, Aziz, Mustafa, and Han (2021) suggested that Malaysian students were addicted to smartphones but did not use their smartphones for academic purposes. This study suggested a qualitative -method study to provide a more comprehensive study of the impact of smartphones. Therefore, the current study intends to bridge this gap by considering a qualitative -method approach to investigate the use of English language Apps among undergraduate students. Hence, more investigation of students' personal use of mobile Apps for language learning is required. It is anticipated that this study will fill the gap in research by providing information regarding Malaysian undergraduate students' use of smartphone Apps to enhance English language learning.

3. METHODOLOGY

This study employed a qualitative approach. The model allows the qualitative analysis and it gives a rich and detailed picture of the reality of the practical situation investigated.

3.1 Participants

A total of 30 students from the General English language course of the final semester of Year 2020 volunteered for this study. However, only 20 students were selected. The researchers came to the conclusion that the saturation threshold for the data from the 20 interviews had been achieved and more interviews would not add any new relevance to the study. The sample size is based on Marshall, Cardon, Poddar, and Fontenot (2013) recommendation that 20-30 participants will be appropriate for qualitative studies. Purposive sampling technique was employed for the interviews based on individuals or groups that can provide answers to the research study's questions. This sampling technique is important in this study as it helps the researchers to gather information about the phenomenon under investigation (Schutt, 2006). The ESL participants took a two -hour credit course on English language proficiency, which was a compulsory course for students who are doing their Bachelor's programme. Each student was assigned a pseudonym to maintain their anonymity. P1, P2, P3, P4... were pseudonyms given to the students.

3.2. Research Procedure and Instrument

Students were briefed on the nature of the study. They were instructed to use various smartphone Apps to enhance their listening, speaking, reading and writing skills for their English language proficiency course outside the classroom learning environment. The language learning Apps in this study refer to paid and free applications installed on a smartphone. Therefore, the students' selection was not restricted to certain Apps and they had the flexibility to choose any English language Apps. Language skills were tested in their summative assessment at the end of the semester, and semi-structured interviews were conducted with the participants after they had used various smartphone Apps. The interview questions were adapted from Iqbal and Bhatti (2020) included:

1. Do you think smartphone English language learning Apps enhance English language learning? Please explain with examples.
2. Please indicate a few limitations of the smartphone English language Apps that restrict learning language learning. Please detail your answers.

A panel of experts comprising three researchers from the fields of education and technology were consulted for content validity and face validity of the interview questions. The research instrument was finalized after integrating the suggestions from the panel.

4. FINDINGS AND RESULTS

In order to analyse the semi-structured interviews that, a thematic analysis recommended by Braun and Clarke (2006) was utilized. This thematic analysis aimed at investigating a common theme or pattern that were prevalent in the interview responses of the participants, and to be able to reach a conclusion that can be generalized. The following sections illustrate the themes derived from the interview data, which were categorized into: English Language Learning, Interaction, Extended Learning Space, Gamification, Limited Knowledge Offers by Apps, Distracted by Advertisements, Application Fees, and Internet Connection.

4.1. Findings related to RQ1

The first four emerging themes provide answers to Research Question 1 formulated for this study, which is. *What are the elements in the English language smartphone Apps that promote English language learning?*

- *English Language Learning*

A number of participants highlighted the use of smartphones for English language learning. For example, a participant shared his experience (P14) *I have improved my grammar, where it provides me with a lot of grammar exercises such as auxiliaries and conjunctions. Also, I have improved my pronunciation and confidence enough to speak English. It is a stress-free environment anytime anywhere, and we can be more confident.* The regular updates have been viewed as an advantage in language learning; hence, P8 said that *"We are updated with BBC English Apps. There are three types of audio programmes"*. Participants found that various English language Apps had improved their vocabulary and their basic grammars. This idea was started by a participant: *"Hello English is a language app. We have 1,000 English words and voice recognition features that we can use to understand good pronunciation skills. It can also be accessed offline without the hustle of having limited balance data"* (P27). One of the participants emphasized that *"for most non-native English speakers, the audio articulation helps a lot in learning the language. There are thousands of audio files for listening, images to help with vocabulary and a recording feature for speaking practice"* (P20).

A translation App was available to help learners who tend to think and write in their first language. The following excerpt from the interview is evident of this: *"Google translate helps me a lot in improving my English language and I am using Google translate as my digital dictionary. Whenever I find any words or phrases that I do not understand, I can open the application and find the meaning of the words or phrases, I can revise from time to time"* (P9).

- *Interactions*

Students place a high value on the language app affordances for communication and negotiations in the target language. Learners indicate that they can interact with peers and collaborate effectively. One of the participants said: *With the Hello English Apps, students can interact with friends and family members through multiplayer games, quizzes and practice English with other learners across the globe. It has the advantage of allowing its users to do their training at home or anywhere wherever we are free.* (P9) *Frequent interaction is key to retaining and practising what you have already learned. The content interaction, such as announcements and messages received ideas has improved learners' language Skills. The following statements are typical comments from them: "Voice of America App consists of stories, lessons together with up to date news report, which is written with simple vocabulary and spoken at a slow speed to help learners to understand easily. Any words that we don't understand can be easily translated by selecting or highlighting the word and translating it instantly. A student who struggles with vocabulary gets step-to-step guidance. It reminds you to learn eight words per day to improve your English."* (P11).

The Apps require students to interact with the content and explore it in greater detail. One of the participant's quotation runs thus: *With Duolingo, you can set your weekly goals and complete the different modules. The new modules will only be activated once you complete the previous one. New vocabulary is often taught with grammar and images, and grammar points are taught in speech bubbles. There are also listening exercises where you need to type what you hear and speaking exercises where you say what you hear.* (P12)

Students expressed their satisfaction when their *“speaking and writing exercises are corrected by native speakers. This helps me to perfect my accent with English recognition exercises”* (P20).

- *Extended Learning Space*

With language Apps, students can uncover facts related to the English language and synthesize information. Once students are freed from their tasks, they tend to move to spaces that are appealing for their informal learning. *“We can learn while waiting in line at our favourite restaurant or even during our lunch breaks at the office. We do not need to be tied down at our desk anymore in order for us to learn English like in the old days”* (P1). The Apps have given rise to new informal learning, and students are able to control their learning in various spaces. For example, *“Apps allow us to access the tools while on the go and allow us to incorporate self-study into our busy lives and ensure better results”* (P3). With the language Apps, they tend to be more focused, motivated and inquisitive. Language Apps can be the easiest way to solve language problems. The Apps allow them to be self-directed motivated and inquisitive learners within their comfort zone. One of the students expressed, *“whether during lunch break- just whenever you are in the mood for it”* (P2). Language Apps allow them to experience bite size learning. Another student described *“ten minutes at the bus stop and half an hour at the café will lead to our learning time increasing”* (P23) Therefore, English language Apps are a convenient learning tool, that learners should be able to cram into even during the busiest schedule.

- *Gamification*

Language Apps provide entertainment environments. Tasks are gamified to engage and challenge students for more effective learning outcomes. Curiosity help students to move forward and enjoy more rewards. These rewards are in the form of points, leader boards and badges. The gamification aim is to give learners control and let them decide on the level that they would like to work. P1 expressed the following ideas: *“The Johnny Grammar App was designed in the form of a game to make English learning more enjoyable. The best part of this app is that it is like an actual mobile gaming system. You can also check your position in the leader board for the weekly basic or all times leader board. So you can compare your achievement with other people around the world.”*

The Apps allow the learners to experience each step or level smoothly, offering small rewards upon the completing of each chunk. In a way, students are motivated in their English language learning. *“Reward is given each time users achieve new lesson which will motivate them to keep improving their ability in the languages they learn”* (P19). One of the students expressed that *“most of the applications have gamification elements, where they are treated in the form of games with points, rewards, contests and others”* (P14) The limitations of using the language Apps have been discussed in the following section.

4.2 Findings Related to RQ2

The following section illustrates the emerging themes related to Research Question 2: *What are the barriers that restrict students to use smartphone Apps?*

- *Limited Knowledge Offers by Apps*

With regard to challenges, students confessed that some of the Apps provide limited knowledge related to language learning since there are based on artificial intelligence. At times, learners have different needs and preferences, and the Apps can only offer rigid information. Their dissatisfactions are illustrated as follows: *“The Apps will only teach what has been programmed when the Apps are created, unlike learning, from a lecturer. Learning with a teacher enables you to ask questions directly whenever you have doubts and uncertainty. The app does not explain mistakes. We cannot make Apps as our main reference and still need to refer to lectures and notes”* (P1). P15 also felt that the *“learn English Grammar app does not provide the necessary grammar information. Therefore, users of this application need to know some grammar or English vocabulary before answering the questions provided.”*

- *Distracted by Advertisements*

The serious limitation is the pop-up advertisement in the applications. The advertisements cripple some of the functionalities during learning. This obviously interrupts the flow while learning. One of the students explained

that “there are ads that can interfere with your focus while answering the quiz. It is similar to YouTube, where we hear people complaining the skip-ads button every time you want to watch any videos” (P21). Similarly, another participant highlighted “If we try the free version there are lots of advertisements. Not only the advertisements appear, the animation also interrupts” (P18).

- *Application Fee*

Students have lamented the application fee that is demanded by these Apps. The fee seems to be a disadvantage of using the language app. Participants' dissatisfactions are reflected in the following section.

P19: Many of the applications require us to sign up and pay a fee to use the full version of the application. This is because applications through app stores are associated with our bank cards, although we do not enter our credit card information or password. There is a small sum hidden and can be piled up.

- *Internet Connection*

Internet connection is needed for the use of Apps. Therefore, the weakness of not being able to use the Apps when there is no connection has been highlighted. For example, P10: “Duolingo cannot be used when there is no Internet connection. Without the Internet connection, the learners cannot access the applications”. (P17): “The Apps are not useful without the Internet connection. It consumes mobile data to work and requires a large space for storage. Moreover, one single title needs to be downloaded each time it wants to be used. Only then can learners can proceed to the next learning session, quizzes and so forth.”

5. DISCUSSION

This study was conducted to examine the students' experiences of using smartphone Apps to enhance their English language learning. The findings show that the students use grammar-related Apps the most, followed by speaking and vocabulary-related Apps. Writing-related Apps are the least used. The emerging themes from the interviews point to the fact that students are positive about the use of English language learning Apps to develop their speaking, reading, listening and writing skills. Some of the Apps are also updated with various notes, news and academic articles that are considered worthwhile in enhancing their English language learning. The results are in line with empirical studies showing that most language Apps help students become more proficient in vocabulary, listening, speaking, reading, and writing skills (Klimova, 2018; Liu & He, 2015). Language learning happens in formal as well as in informal situations. In other words, language learning can happen whenever the user finds it convenient. Byte size learning allows for effective time management. According to studies from other contexts, language Apps have given students the ease and flexibility to personalise their learning (Steel, 2012; Zou & Li, 2015) and moving towards the needs of 21st-century learning skills to be successful in the information age society. Smartphone Apps can be a platform that provides learners with more options to explore various English language materials without learning being exclusively confined to specific textbooks or materials.

The gamification element in language Apps has indirectly encouraged students to form their personalized learning. Students were motivated to improve their English language skills to gain extrinsic rewards such as points, badges and positions in leader boards. Gamification has been identified as a highly potential tool to motivate students for effective learning outcomes (Gangaiamaran & Pasupathi, 2017; Hamari, Koivisto, & Sarsa, 2014). The encouraging findings reinforce the assertion of Sharpies, Taylor, and Vavoula (2007) that some aspects of mobile phones deserve consideration in higher education institutions.

6. IMPLICATIONS AND CONCLUSION

This study has revealed that language Apps can assist students in enhancing their English learning experiences. The themes from the interviews provide a framework of reference for educators to consider the English language Apps to guide students to improve their English language learning. Krashen (1982) postulated that language learners can be affected by emotional factors when they are learning. In this study, it is evident that

positive experiences (interaction, extended space, gamification) have provided meaningful learning to take place. These positive values should be considered in preparing teaching and learning activities and should be brought to the students' attention. While the learners have the flexibility to choose the language Apps, guidance from the teacher or extending student learning beyond the classroom will be a worthwhile attempt. Language Apps can never replace traditional classroom teaching, but they should be used wisely to enhance learning.

Shadiev, Liu, and Hwang (2020) suggest that educators should recommend Apps that are worthwhile and effective in English language learning. At the same time, the true value of English language Apps is also being debated. Students tend to moan about distraction, limited knowledge offered by the Apps, and Wi-Fi connections. These are some of the flaws that can be fixed with proper planning. The human factor cannot be neglected in teaching and learning practices. Educators can address such worries by advising students on the type of Apps that should be utilized in their learning activities. Students can also use a number of free Apps and Apps that do not require a Wi-Fi connection.

Overall, the positive findings of smartphones use in language learning should be a stepping stone for educators to integrate into their teaching and learning practices. Educators can integrate the use of English language Apps in to task-based learning, project-based learning, scenario-based learning and project work related to English language learning. The use of English language Apps can be a guide for personalized learning and improve learners' engagement during tragic or emergency situations when distance learning is widely adopted and learners cannot have face-to-face classroom teaching. It can also be a supplemental learning assignment or pre-simulation activity.

Furthermore, the COVID-19 pandemic has taught a valuable lesson to ensure quality in teaching practices during upheavals and tragic situations. Smartphone Apps related to language learning may assist educators in planning and facilitating students in effective utilization of smartphones for proactive and meaningful language learning during this pandemic and beyond. Murgatroyd (2020) has cautioned that: "there will be so many challenges that it will be difficult to find a pathway forward. What is certain is that a return to the pre-COVID-19 state will be very difficult to achieve. What is needed is a 'plan ahead team' whose task is to think beyond the immediate return and to focus on the next 3–5 years." (p. 312-313). Though rich learning evidence has been collected from the participants, the study involved a small number of participants. With such a nature of study generalization to other settings is difficult. Therefore, future studies should focus on large-scale surveys to test the current findings. Despite the limitations, this study contributes to a better understanding of the use of English language Apps by students in a Malaysian higher institution.

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