

**INTERNATIONAL JOURNAL OF
EDUCATION, PSYCHOLOGY
AND COUNSELLING
(IJEPC)**www.ijeipc.com**LEARNERS' PERCEPTIONS ON MALL METHOD AND ITS
APPLICATION TO EFL LISTENING CLASS IN CHINA'S
CONTEXT**Guofang Xiong¹, Wendy Hiew^{2*}¹ Centre for the Promotion of Knowledge and Language Learning, Universiti Malaysia Sabah, Malaysia
Email: bettyxiong2008@sina.com² Centre for the Promotion of Knowledge and Language Learning, Universiti Malaysia Sabah, Malaysia
Email: wenhiew@ums.edu.my

* Corresponding Author

Article Info:**Article history:**

Received date: 30.04.2024

Revised date: 20.05.2024

Accepted date: 30.05.2024

Published date: 13.06.2024

To cite this document:

Guofang, X., & Hiew, W. (2024). Learners' Perceptions On Mall Method And Its Application To Efl Listening Class In China's Context. *International Journal of Education, Psychology and Counseling*, 9 (54), 251-270.

DOI: 10.35631/IJEPC.954019**This work is licensed under** [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Abstract:**

Mobile-assisted language learning (MALL) has received considerable attention from educators and researchers all over the world in recent years, especially in the field of English as a Foreign Language (EFL). Previous researches have indicated that MALL method was effective in EFL learning aspects like writing, reading and vocabulary learning, while few studies have focused on MALL method applied in EFL listening class although many Chinese students found that listening is difficult but important for their college English learning. This research aims to investigate Chinese EFL learners' perceptions of the usefulness and ease of the MALL method, and its application in EFL listening class according the TAM (Technology Acceptance Model), which is the foundation of further MALL investigation. Two sets of questionnaires were distributed to 22 students at the beginning of the study and after six weeks of applying the MALL method to their listening class. Then data of the questionnaires were collected and analyzed by SPSS tool. The results of the study indicated that learners perceived that MALL method is useful and easy to master in EFL listening practice, and the special features of mobile phone such as mobility and portability provided more chance for learners to conduct listening practice anywhere anytime and access wider scope of learning materials. This study intends to provide some references for further study of MALL method in EFL listening learning as well as find out effective ways to improve learners' listening ability.

Keywords:

Perceptions, Mobile-Assisted Language Learning (MALL), Technology Acceptance Model (TAM), English As A Foreign Language (EFL), Listening Skill

Introduction

English as a Foreign Language (EFL) education in China holds a significant position in the country's dynamic history and evolving global landscape. Over the past few decades, China's increasing internationalization has heightened the importance of English as a crucial language for global communication. As one of the four fundamental language skills of speaking, writing, listening, and reading in EFL learning, listening is regarded as the most significant ability since it is necessary for understanding the meaning of a foreign language. It is also critical to efficient communication and language acquisition. Although listening is the most crucial and frequently used language skill, it is also the most challenging for non-native speakers of English because of its intricate nature. Siegel (2015) supported this claim, stating that listening is an active, complex process in which the listener must distinguish between sounds, comprehend vocabulary and grammatical structures, interpret intonation and stress, retain the information gathered from all of the aforementioned, and interpret the information within the utterance's micro and macro sociocultural contexts. For most Chinese students, English is their foreign language, and listening part is important while the difficult one for their college language learning since in many English tests, such as in CET4 or CET 6 (College English Test, Band-4 or Band-6), TEM 4 or TEM 8 (Test for English Majors, Band 4 or Band 8), listening occupies almost 30-35% grades of the 100 points. The limited class room teaching time of 2 hours a week and traditional teacher-centered teaching method can not satisfy learners' need and innovative teaching methods are required to offer students a richer and more engaging learning experience, aligning with contemporary language teaching philosophies.

The development of technology has changed people's lives and the way of learning and teaching over the last decade. Especially the sudden outbreak of the COVID-19 pandemic, the traditional face-to-face lessons were rapidly and perforce replaced by lessons in the digital classroom environments. Teachers and students gathered in internet-supported virtual classrooms, and the education was sustained via online learning and distance education (Cui et al., 2023) since schools in all grades suspended education in more than 180 countries, and approximately 95% of the total student population worldwide was affected by school closures (Azevedo et al., 2021; Betthäuser et al., 2023), as was reported by World Bank data. Therefore, innovative online education and training methods and tools had emerged and were implemented in order to adapt to the new situation, such as the ChatGPT, AI (artificial intelligence)-based tools (Karakose, T. et al., 2023).

Compared with other high-technology required approaches, Mobile-Assisted Language Learning (MALL) method is one of the approaches that are the product of integrating modern technological devices into education. With the special features of mobile phone like mobility and portability, MALL method removed time and location restrictions, allowing students to conduct listening whenever and wherever they choose. In addition, due to the ubiquity of the internet and smartphones, MALL method supports outdoor, gamified, collaborative, and genuine learning models within the context of an authentic and contextual learning environment. Meanwhile, the special features of mobile phone like multi-function and flexibility allow students to select learning contents that interest them and set their own pace for learning so as to cultivate their learning autonomy. With these advantages, students can benefit from a more customized learning experience that combines their demands with a MALL device that best fits their learning preferences (Yuniarti, 2014; Martin & Ertzberger, 2016).

Although MALL method has a lot of special features that are suitable to facilitate EFL listening learning, how do students perceive this method? Do they think it is easy to use and it is useful? How do they perceive this method in their listening class? Given the aforementioned setting, the study put forward the following two research questions: 1) What are the students' perceptions of the usefulness and ease of using the MALL method? 2) What are the students' perceptions of using the MALL method in EFL listening outside class? The aim was to investigate the learners' perception of MALL method so as to provide some reference for effective listening teaching method.

Literature Review

In order to investigate the learners' perceptions of MALL method, in this part, some previous studies about MALL method applied in EFL language learning and listening class as well as in China's EFL learning context were reviewed, which aimed to find out the gap between previous studies and this one on MALL method.

MALL method Used in Language Learning in EFL Context

In the EFL language learning context, several benefits of MALL method have already been articulated such as remove restrictions and offering more opportunities to conduct dynamic learning, access to more broad, authentic learning materials, as was indicated in the definition of MALL. MALL—as a descendant of Computer-Assisted Language Learning (CALL) and a subclass of M-Learning—is considered a branch of electronic learning (E-learning), transforming learning or teaching from outmoded classroom to learning anywhere any time (Rohandi et al., 2017). Kukulska-Hulme (2015) defines MALL as the use of portable devices, including laptops, tablets, and smartphones to supplement sporadic and individual language learning methods. Utilizing portable electronics like computers, tablets, and even cell phones presents an opportunity for enhanced and simpler access to broad, real-world, and multi-context learning experiences (Kukulska-Hulme & Shields, 2008; Huang et al., 2012). Due to MALL's unique qualities, the results of earlier studies (Inggita et al., 2019; Nafa, 2020; Yunita & Ardi, 2022) indicated that MALL was a technological invention that assisted students in distinctly learning English. It enables more dynamic language acquisition by facilitating faster, more flexible communication between teachers and students both within and outside of the classroom (Kukulska-Hulme et al., 2007). In addition, mobile devices provide language learners with an array of features and applications that aid in the improvement of their language skills (Nariyati et al., 2020). These include having learning materials easily accessible, increasing students' motivation and interest in study, being portable and simple to use, giving students more practice opportunities, and having the capacity to get feedback or reinforcement quickly (Elfiona et al., 2019; Kim & Kimm, 2017).

In general, the distinctive characteristics of context sensitivity, portability, social interaction, connectivity and individuality that the mobile electronics owned have led to affordances for education (Klopfer et al., 2005), and MALL method proved to be beneficial for EFL learners' language learning. In specific, how was the MALL method applied in EFL listening class? In the following part, the author discussed the application of MALL in EFL listening class.

Application of the MALL Method in EFL Listening Class

Before mobile devices became widely used in classroom settings, CALL method had been proven to be an effective approach to enhancing students' motivation for their listening skills (Nachoua, 2012) compared with the ineffectiveness and inefficiency of the traditional listening

approach by using a tape recorder (Henning, 2013). In recent years, researchers gradually realized the importance of employing MALL to support EFL learners in developing their listening skills given that listening comprehension is considered the most challenging of the four core language skills (Siegel, 2015), the widespread usage of MALL offered students opportunities to access to additional practice and multimodal materials, and MALL's interactive and personalized components might encourage students to learn outside of traditional classroom boundaries (Li, 2021). Previous researchers and educators have conducted various studies on facets of the MALL method in EFL listening classes, including various applications, mobile devices, learning strategies, learners' motivation, and various learning contents (Li, 2023). The goal of these investigations has been to evaluate the effectiveness, advantages, disadvantages, and challenges of using MALL in the teaching and learning of listening comprehension skills. The significance of listening comprehension for EFL students in mobile app-based learning was highlighted by Read & Kukulska-Hulme (2015), and MALL offers a great learning experience on students' listening activities which can be facilitated by using different mobile applications (Sepyanda et al., 2023). Additionally, using social media, such as Facebook, and developing diverse listening content depending on students' interests boost learner motivation and that mobile phones, which are quite popular among young students as a kind of entertainment, could also be a useful tool for enhancing listening comprehension in ESL and EFL classes (Artyushina & Sheypak, 2018). Their findings showed that harnessing students' enthusiasm for technology and making effective use of the content in MALL-based learning can motivate students to learn outside of the classroom and even to start their own podcasts based on scientific research. Additionally, several researchers have chosen to teach listening using audiovisual news or video materials (Akufah, 2012; Kirana, 2016; Tasya & Priajana, 2018). They believed that using authentic video can provide rich contexts and pedagogically valuable sources of prospective language input for language learners at intermediate or advanced levels and that this technique is beneficial in enhancing students' listening abilities. This literature proved that MALL method was useful and beneficial for EFL learners' listening study in international scope. What are the situation of MALL method investigated in China's context and in EFL listening class? The following part discussed the specific studies on MALL method in EFL learning in China.

Specific Studies on MALL in China's EFL Learning and Listening Classes

MALL research in the setting of EFL learning in higher education (HE) has been conducted by numerous scholars in mainland China (He, 2019). The evaluations revealed that, consistent with findings about applied theoretical frameworks used in language instruction across the globe (Zain & Bowles, 2021), MALL in mainland China was often supported by sociocultural theory (Xu & Zhao, 2015). Rather than focusing on specific language abilities, the majority of Chinese MALL studies examined the impact of MALL on general language competency (Chen et al., 2020; Hu & Shen, 2014), such as, reading, writing, and vocabulary, and among them, vocabulary acquisition was the most frequently investigated language teaching area (Persson & Nouri, 2018; Su & Zou, 2020). In China (Wang & Cui, 2016) as well as abroad (Crompton & Burke, 2018; Kaliisa & Picard, 2017), mobile phones and smartphones have proven to be more effective than traditional MALL instruments. Social applications and software, particularly WeChat, were the most used tool in China (Li et al. 2022).

Compared with other three language skills reading, writing and speaking in EFL learning, there were fewer studies on the MALL method conducted on listening skills in the Chinese contexts. There were several studies on the application of MALL in EFL listening class, but most of the

previous studies focused on the contents of motivation or effectiveness of using certain software (applications) to improve learners' listening ability. Li (2023) examined how well the MALL approach affected the listening abilities of EFL students from the standpoint of an extensive meta-analysis of the total impact sizes of research. Liu and Chu (2010) believed that EFL learners' listening and speaking skills can be enhanced by incorporating popular MALL-based learning games like HELLO into an English-speaking and listening curriculum, and gaming-based group exhibited higher levels of motivation to learn compared to the non-gaming-based group. To examine the efficacy of the MALL method on an EFL speaking and listening course at a Chinese university, Xu (2020) used an action research approach and the Keke English-learning application as the intervention, findings of his research indicated that students listening ability improved by using this app while speaking did not improve significantly. Zhang (2016) conducted an empirical study to investigate the effect of using mobile learning applications on Chinese university EFL students' motivation for MALL and their ability to listen in English, the results showed that proper use applications was beneficial for learners' motivation and listening ability improvement.

In conclusion, the aforementioned reviews showed that current studies were mostly focused on effectiveness of MALL method in EFL listening class, research contents includes using certain applications, methods as well pedagogical theories of MALL method applied in EFL listening class. In regard to research methodology, empirical method, mixed research methods and meta-analysis review were commonly used, focused on the . However, there are few quantitative study to investigate learners' perceptions of the MALL method and its application in EFL listening classes in the Chinese context. Since Technology Acceptance Model (TAM) (Davis, 1989) believed that two primary factors influencing an individual's intention to use new technology: perceived usefulness (U) and perceived ease of use (E). TAM postulates that perceived ease of use and perceived usefulness can predict the usage of technology, that mobile usage is determined by behavioral intention to use (BI), and that BI was viewed as being determined by the person's attitude toward using the system (A), while A is jointly determined by perceived usefulness (U) and perceived ease of use (E), as depicted in Figure1. Therefore, this study aimed to explore students' perceptions of the usefulness and ease of the MALL method, as well as the students' perceptions of MALL method in EFL listening class by using the quantitative method in China's context. These perceptions lay the foundation for the research of effectiveness of MALL method application.

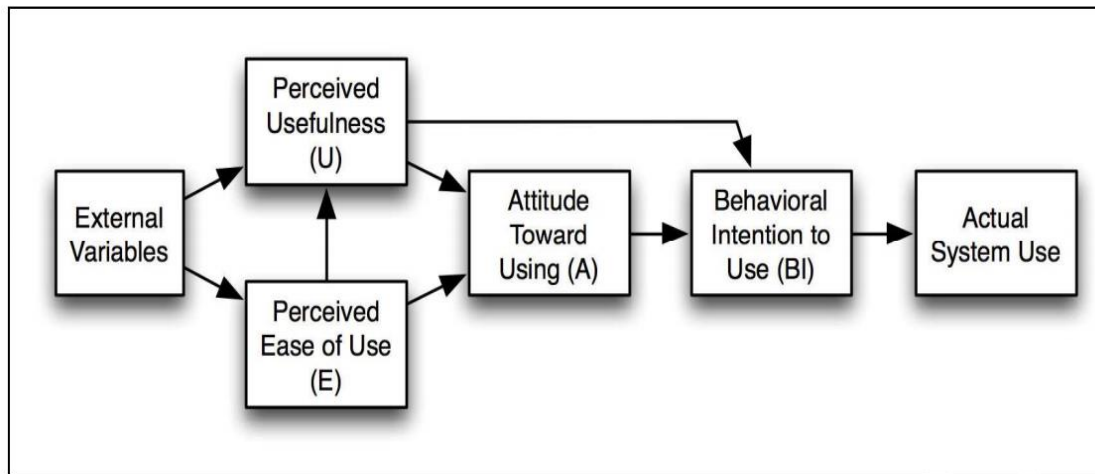


Figure 2.1: Technology Acceptance Model

Source: Davis, Bagozzi and Warshaw (1989)

Methodology

Research Design

The current study aimed to conduct a research process to investigate Chinese learners' perceptions of ease and usefulness of MALL method and its application in EFL listening class. In line with this purpose, two sets of questionnaires were adopted to collect data. At the beginning of the research, questionnaire A was delivered to the participants to investigate their perceptions of the ease and usefulness of MALL method. Then in the following six week, participants in the research group were instructed to finish the listening tasks after each listening class. They were advised to use the MALL method for their listening homework by listening to a piece of news or a passage that they were interested online by using their mobile phone and write down the main contents on the notebook each day, five days a week. In next week's class, three to four students were selected to retell or present the contents they heard last week with class in the form of a public speech. In total, there were six weeks of intervention. After six weeks, questionnaires B were distributed to survey the students' perceptions of MALL method in their listening class. Data for both questionnaires was collected and analyzed.

Research Setting

This research was carried out at Xi'an University, Shaanxi Province, China. The university is a comprehensive university of arts and science, which consists of 15 colleges and 50 majors offered at different schools. This study was carried out at the School of Foreign Studies, students are majoring in English Translation and Interpretation.

Participants

The participants were 22 undergraduate students majoring in English Translation and Interpretation at the School of Foreign Studies at Xi'an University, Shaanxi Province, China. All the students were sophomores in their first semester of the second year of college. They took an English listening course for two hours a week. The sample students were chosen

randomly in a tactic class, which was one of the classes that the researcher gave their EFL listening lecture.

Intervention Teaching Materials

Students can download listening resources or practice listening online by using a variety of applications. Numerous resources for learning English are available in these apps, covering vocabulary, speaking, listening, and writing. Additionally, the contents cover news, literature, science, technology, art, public speaking and among others. The apps and websites recommended for students are listed in Table 1:

Table 1: Apps and Websites Used in the Intervention Teaching Materials

Apps	Websites	Contents
1. Keke English	www.kekenet.com	1. Bilingual English listening materials 2. Program of oral English 3. English songs 4. Bilingual English articles and literature 5. English movies and TV programme 6. English tests materials
2. Everyday English Listening	http://dict.eudic.net/ting	A variety of listening materials
3. Bilibili	https://www.bilibili.com/	A social platform and full of short video clips with abundant learning materials
4. CGTN (China Global Television Network)	https://www.cgtn.com/	English channel to broadcast home and abroad news in China, comments and interview and among others
5. TED	http://www.ted.com/	Video speech including all kinds of topics

Research Instruments

The current study set out to find out how students felt about the MALL method and how it was used in EFL listening classes. The following two research questions served as a guide for the study: What are the students' perceptions of the usefulness and ease of using the MALL method? What are the students' perceptions of using the MALL method in EFL listening classes? The research instruments are listed in Table 2 below.

Table 2: List of Research Instruments

Research questions	Instruments	Analysis method
1. What are the students' perceptions of the usefulness and ease of using the MALL method?	Questionnaire A	Descriptive analysis
2. What are the students' perceptions of using the MALL method in EFL listening class?	Questionnaire B	Descriptive analysis

Questionnaire

This study adapted two questionnaires designed by Chen (2017) and Mulyadi et al. (2022) to survey two aspects of the MALL method. Items of both questionnaires were administered in the form of a Likert scale with five choices ranging from strongly disagree to strongly agree with the score from 1 to 5 in the present study. The reliability of the questionnaire results was tested according to Cronbach's alpha value number. The questions on the English-language surveys were using simple language that students could easily comprehend. With 18 question items, the first questionnaire (Questionnaire A) aims to gather information on respondents' opinions of the MALL method's utility and usability. To learn more about the students' opinions on the MALL methods in the EFL listening classes, Questionnaire B was distributed to the students, which consisted of 15 items. The means and standard deviations (SD) of each item are presented in Table 3 and Table 4.

Results and Findings

The results of Questionnaire A shown in the following Table 3 below.

Table 3: Students' Perceptions of Usefulness and Ease of Use of MALL Method

No.	Item	Scale					Mean	SD
		1	2	3	4	5		
1	Learning to use M-learning is easy.	1 (4.55%)	0 (0.00%)	8 (36.36%)	6 (27.27%)	7 (31.82%)	3.82	1.05
2	It is easy to become skillful at using M-learning.	0 (0.00%)	1 (4.55%)	3 (13.64%)	12 (54.55%)	6 (27.27%)	4.05	0.79
3	M-learning is easy to use.	1 (4.55%)	1 (4.55%)	4 (18.18%)	8 (36.36%)	8 (36.36%)	3.95	1.09
4	M-learning makes it possible to make choices on learning materials.	0 (0.00%)	2 (9.09%)	5 (22.73%)	9 (40.91%)	6 (27.27%)	3.86	0.94
5	M-learning offers control over the place, pace, and time at which I learn.	0 (0.00%)	0 (0.00%)	4 (18.18%)	10 (45.46%)	8 (36.36%)	4.18	0.73
6	M-learning provides immediacy for English learning.	0 (0.00%)	1 (4.55%)	7 (31.82%)	9 (40.91%)	5 (22.73%)	3.82	0.85
7	Mobile devices are difficult to use for English learning.	2 (9.09%)	3 (13.64%)	5 (22.73%)	6 (27.27%)	6 (27.27%)	3.50	1.30
8	I feel comfortable learning English by using a mobile phone.	0 (0.00%)	1 (4.55%)	2 (9.09%)	14 (63.64%)	5 (22.73%)	4.05	0.72
9	I am confident about using mobile devices for English learning.	0 (0.00%)	3 (13.64%)	3 (13.64%)	7 (31.82%)	9 (40.91%)	4.00	1.07
10	M-learning could be integrated seamlessly to support informal learning.	0 (0.00%)	0 (0.00%)	7 (31.82%)	8 (36.36%)	7 (31.82%)	4.00	0.82
11	I love to learn English using mobile devices out of class.	0 (0.00%)	1 (4.55%)	6 (27.27%)	8 (36.36%)	7 (31.82%)	3.95	0.90
12	M-learning will change the way I learn in the future.	0 (0.00%)	3 (13.64%)	6 (27.27%)	6 (27.27%)	7 (31.82%)	3.77	1.07

13	M-learning has a positive impact on English learning.	0 (0.00%)	1 (4.55%)	4 (18.18%)	10 (45.46%)	7 (31.82%)	4.05	0.84
14	M-learning could bring enormous opportunities to further empower English learning.	0 (0.00%)	0 (0.00%)	6 (27.27%)	8 (36.36%)	8 (36.36%)	4.09	0.81
15	M-learning makes English learning more fun.	0 (0.00%)	0 (0.00%)	6 (27.27%)	9 (40.91%)	7 (31.82%)	4.05	0.76
16	M-learning can replace computer and other learning technologies.	2 (9.09%)	3 (13.64%)	5 (22.73%)	8 (36.36%)	4 (18.18%)	3.41	1.22
17	M-learning allows me to undertake more interesting and imaginative work.	0 (0.00%)	1 (4.55%)	7 (31.82%)	9 (40.91%)	5 (22.73%)	3.82	0.85
18	My acceptance of M-learning for English is high.	0 (0.00%)	2 (9.09%)	3 (13.64%)	9 (40.91%)	8 (36.36%)	4.05	0.95

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

According to the results of questionnaire A in Table 3, 86.37% of students agreed that using a mobile phone to learn English was comfortable for them (Item 8, $M=4.05$, $SD=0.72$); 81.82% of students agreed that using M-learning gives them control over the location, speed, and time at which they learn (Item 5, $M=4.18$, $SD=0.73$); and 81.82% of students agreed that using M-learning is simple to become proficient in (Item 2, $M=4.05$, $SD=0.79$). The mean score is higher than 4 (agree) indicating their perception of acceptance. For the above three items, the mean score is 4.05-4.18 which is above 4, meaning that they accepted these statements. For the value of standard deviations (SD), according to Creswell and Guetterman (2002), SD is “an indicator of the dispersion or spread of the score (p.186).” The SD of the above three items ranged from 0.72 to 0.79, which means the narrow spread of participants’ answers around the mean scores of each variable. Furthermore, 77.27% of students concurred that they have a high level of acceptance for mobile learning of English (Item 18); 72.72 % of students believe that mobile learning is simple to use (Item 3); 72.72 % of students were confident about utilizing mobile devices to learn English (Item 9); and 77.27% of students agreed that M-learning has a positive impact on English learning (Item 13).

Therefore, the first research question "What are the students' perceptions of the usefulness and ease of using the MALL method?" was addressed by these findings. In other words, the majority of students think that the MALL approach is practical and simple to utilize.

The results of Questionnaire B are shown in Table 4 below.

Table 4: Students' Perceptions of MALL Method in EFL Listening Class

No.	Item	Scale					Mean	SD
		1	2	3	4	5		
1	Interacting with MALL method helped me have more listening comprehension practice.	0 (0.00%)	1 (4.55%)	4 (18.18%)	10 (45.46%)	7 (31.82%)	4.05	0.85
2	Learning objectives of the listening course can be met by utilizing MALL method.	0 (0.00%)	1 (4.55%)	2 (9.09%)	10 (45.46%)	9 (40.91%)	4.23	0.81
3	The materials of the listening course using MALL method become accessible and flexible.	0 (0.00%)	0 (0.00%)	3 (13.64%)	12 (54.55%)	7 (31.82%)	4.18	0.66
4	MALL method is practical to master English listening comprehension independently.	0 (0.00%)	1 (4.55%)	4 (18.18%)	9 (40.91%)	8 (36.36%)	4.09	0.87
5	I enjoyed using MALL method to practice English listening skills.	0 (0.00%)	1 (4.55%)	6 (27.27%)	7 (31.82%)	8 (36.36%)	4.00	0.93

6	Utilizing MALL method fostered me to perform better from previous listening exercises.	0 (0.00%)	0 (0.00%)	6 (27.27%)	9 (40.91%)	7 (31.82%)	4.05	0.79
7	Utilizing MALL method encourages me to control my task effectively.	0 (0.00%)	1 (4.55%)	5 (22.73%)	9 (40.91%)	7 (31.82%)	4.00	0.87
8	I want this method to be implemented in future courses.	0 (0.00%)	2 (9.09%)	3 (13.64%)	6 (27.27%)	9 (40.91%)	4.00	1.02
9	Using MALL method makes me motivated to master listening skill in English.	0 (0.00%)	0 (0.00%)	4 (18.18%)	12 (54.55%)	6 (27.27%)	4.09	0.68
10	MALL method enables me to spend my time studying English more efficiently.	0 (0.00%)	1 (4.55%)	4 (18.18%)	11 (50.00%)	6 (27.27%)	4.00	0.82
11	MALL method helped me prepare for the CET-4 test of the listening course.	0 (0.00%)	0 (0.00%)	4 (18.18%)	13 (59.09%)	5 (22.73%)	4.05	0.65
12	Using MALL method to practice listening comprehension is fun and makes me less stressed.	0 (0.00%)	1 (4.55%)	7 (31.82%)	7 (31.82%)	7 (31.82%)	3.91	0.92

13	I feel more engaged in listening class through MALL method.	0 (0.00%)	0 (0.00%)	4 (18.18%)	13 (59.09%)	5 (22.73%)	4.05	0.65
14	I have become confident in mastering English through MALL method.	0 (0.00%)	1 (4.55%)	7 (31.82%)	7 (31.82%)	7 (31.82%)	3.91	0.92
15	MALL method enables me to accomplish listening tasks more quickly.	0 (0.00%)	0 (0.00%)	3 (13.64%)	11 (50.00%)	8 (36.36%)	4.23	0.69

Scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree

The results of questionnaire B in Table 4 revealed that 86.37% of the students agree that their learning objectives of the listening course can be met by utilizing MALL method (Item 2) ($M=4.23$, $SD=0.81$); and 86.36% of the students agreed that MALL method enables them to accomplish listening tasks more quickly (Item 15) ($M=4.23$, $SD=0.69$); and 86.37% of the students agreed that the materials of the listening course using MALL method became accessible and flexible (Item 3) ($M=4.18$, $SD=0.66$). The mean score is higher than 4 (agree) indicating their perception of acceptance. For the above three items, the mean score is 4.18-4.23 which is above 4 (agree), indicating their perception of acceptance. The SD of the above three items ranged from 0.66 to 0.81, which means the spread of participants' answers around the mean scores of each item is not too abroad. These are the three highest percentages of students' perception of the MALL method in listening class. In addition, 81.82% of students agreed that the MALL method helped promote their learning motivation in listening class (Item 9), and they felt more engaged in listening class through the MALL method (Item 13) as well as the MALL method helped them prepare for the CET-4 test of the listening course.

These results provided the answer to the second research question "What are the students' perceptions of using the MALL method in EFL listening class?". That is, most students believed that their learning objectives could be met and listening tasks can be accomplished more quickly by using MALL method in EFL listening class, in addition to the materials of the listening course becoming accessible and flexible. Furthermore, the MALL approach helps students feel more motivated to listen and prepare for their CET-4, and increases their level of engagement in the listening lesson.

For the reliability of the test results, the α of questionnaire A is 0.951, and for questionnaire B is 0.963. According to Nunnally (1978), Cronbach's alpha value greater than 0.90 indicates excellent internal consistency, and α greater than 0.80 represents good internal consistency (Lin et al., 2022).

Discussion

Students' Perceptions of the Usefulness and Ease of Using the MALL Method

The responses to Questionnaire A aligned with the perspectives of Mutiarasari & Kristina (2020), who thought that as most students own smartphones and are easily able to learn how to use them, smartphones are seen as more practical and accessible both within and outside of the classroom. Artificial intelligence has been added to mobile phones as a result of advancements in technology and the internet, making them easier to use.

Additionally, a QWERTY keyboard—which is unique to mobile phones—has keys arranged similarly to those on a computer keyboard, making it simple for pupils to transfer their computer abilities to using smartphones. Furthermore, as mentioned by Klopfer et al. (2005), other features of smartphones, like mobility, social engagement, context sensitivity, connectivity, and individuality, ensure that students will actively participate in the learning process and have faster access to learning resources (Abdullah et al., 2019). According to Pachler et al. (2012), smartphones' compact, common, and useful features make them appealing and simple for students to use, as well as creating sociocultural learning possibilities.

The aforementioned results were in line with Zhang's (2016) investigation into the teaching and learning of listening skills in EFL classrooms through the use of mobile technologies.

Specifically, Zhang focused on the effectiveness of the MALL method in improving students' listening skills and increasing their motivation to use mobile-based activities in China. The result of the study indicated that the MALL method indeed motivated students to learn English and to do more practice.

Students' Perceptions of Using the MALL Method in EFL Listening Class

The responses to Questionnaire B included the views of Elfiona (2019) and Kim & Kimm (2017), who felt that certain characteristics of mobile phones, like readily available educational resources and portability, gave students more chances to practice and reinforce their drills.

Furthermore, learners believed that the MALL approach may help them achieve the listening course's learning goals. As stated in China's National College English Curriculum Requirements (2020 version), the goal of the advanced undergraduate listening course is for students to be able to understand radio and TV shows produced in English-speaking countries and to pick up on the main ideas and points. Through the use of the MALL approach, students can fast enhance their EFL listening abilities by practicing listening to real audio or video programs. The study by Read and Kukulska-Hulme (2015) provided evidence in favor of this notion, showing that MALL-based activities eventually inspired students to practice listening with real-world resources like radio or television news broadcasts.

The outcomes also supported the conclusion reached by earlier studies, which was that using MALL in language classes gives students access to a variety of useful resources and encourages them to do a variety of activities to master the language (Wan Azli et al., 2018). It was easy to access learning materials and search for topics that attracted students with great efficiency because to the availability of WIFI and the internet. According to Kukulska-Hulme et al. (2007), MALL enables teachers and students to connect more swiftly and flexibly both within and outside of the classroom, therefore it has the feature that contributes to more dynamic language acquisition. The features of mobility and portability also ensure high task completion efficiency.

Conclusion

This study aims to investigate the perceptions of MALL method among Chinese EFL learners, especially ease and usefulness of MALL method and its application to EFL listening class. The findings of the exploratory test show that Chinese EFL learners positively accepted MALL at a rather high level. The results of the study also prove the predictive ability of TAM to explain the intention to use mobile technology with perceived usefulness and perceived ease of use among a sample of EFL learners, and learners agree that their learning objectives of the listening course can be met, and MALL method enables them to accomplish listening tasks more quickly and learning materials of the listening course became accessible and flexible by MALL method.

This study has two implications: 1) Chinese EFL learners need to improve their technological literacy for better use of MALL in their EFL learning, not just use mobile phone for their entertainment; 2) given that most participants perceived MALL to be useful and easy to use, teachers also need to take part in the technology training to better guide learners to use the MALL method effectively; 3) the challenges and barriers of using MALL method can be further examined in future studies.

This study has several limitations as follows: 1) Since it is an exploratory study conducted on a small group of only 22 respondents, the generalizability of the data is limited. Conclusions drawn based on some of the findings may be misleading because of the small sample size. A survey involving a larger sample size should be conducted for a more comprehensive picture of the phenomenon. 2) The data analysis was solely dependent on quantitative data from the survey. Qualitative data (such as interviews and observation) should be included to explore further the factors influencing the use of MALL as well as its benefits and challenges.

Acknowledgement

The authors wishes to thank Centre for the Promotion of Knowledge and Language Learning, Universiti Malaysia Sabah for providing learning platform and opportunity as well as the guidance from the advisors.

References

- Abdullah, N. A. C., Tajuddin, A. J. A., & Soon, G. Y. (2019). Mandarin students' perceptions of smartphone applications in mandarin learning. *Universal Journal of Educational Research*, 7(9A), 61-70.
- Akufah, A. (2012). The effectiveness of teaching listening on news item text using video. *Unpublished undergraduate thesis*). Institut Agama Islam Negeri Walisongo, Semarang.
- Artyushina, G., & Sheypak, O. (2018) Mobile phones help develop listening skills. *Informatics*, 5(32), 1-7.
- Azevedo, J.P.; Hasan, A.; Goldemberg, D.; Geven, K.; Iqbal, S.A. (2021) Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes: A Set of Global Estimates. *The World Bank Research Observer*, 36(1), 1-40, <https://doi.org/10.1093/wbro/lkab003>
- Bethhäuser, B. A., Bach-Mortensen, A. M., & Engzell, P. (2023). A systematic review and metaanalysis of the evidence on learning during the COVID-19 pandemic. *Nature Human Behaviour*, 7(3), 375-385. <https://doi.org/10.17605/osh.io/u8gaz>
- Chen, Z. Z., Chen, W. C., Jia, J. Y., & An, H. L. (2020). The effects of using mobile devices on language learning: A meta-analysis. *Educational Technology Research and Development*, 68(4), 1769-1789.
- Creswell J. and Guetterman T. (2002). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 4th Edition, Prentice Hall Upper Saddle River, NJ
- Crompton, H., & Burke, D. (2018). The use of mobile learning in higher education: A systematic review. *Computers & Education*, 123, 53–64.
- Cui, Y., Ma, Z., Wang, L., Yang, A., Liu, Q., Kong, S., & Wang, H. (2023). A survey on big data-enabled innovative online education systems during the COVID-19 pandemic. *Journal of Innovation & Knowledge*, 8(1), <https://doi.org/10.1016/j.jik.2022.100295>
- Davis, F. D., Bagozzi, Richard R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003. <https://doi.org/http://dx.doi.org/10.1287/mnsc.35.8.982>
- Elfiona, E., & Zaim, M. (2019, November). Mobile-Based Media as the Solution in Teaching and Learning Listening Skill. *Journal of Physics: Conference Series* (Vol. 1387, No. 1, p. 012024). IOP Publishing.

- Henning, P. H. (2013). Technology in the service of foreign language learning: The case of the language laboratory. *The Handbook of Research for Educational Communications and Technology*, 526–544.
- Hu, C. J., & Shen, C. L. (2014). A bibliometric study on mobile English learning literature in China (2004-2014). *Distance Education in China*, 10, 15–20.
- Huang, Y. M., Huang, S. H., & Lin, Y. T. (2012). A ubiquitous English vocabulary learning system: Evidence of active/passive attitudes vs. usefulness/ease-of-use. *Computers & Education*, 58(1), 273-282.
- Inggita, N. D., Ivone, F. M., & Saukah, A. (2019). How is Mobile-Assisted Language Learning (MALL) implemented by senior high school English teachers? *Jurnal Pendidikan Humaniora*, 7(3), 85–94.
- Karakose, T., Demirkol, M., Aslan, N., Köse, H., & Yirci, R. (2023). A Conversation with ChatGPT about the Impact of the COVID-19 Pandemic on Education: Comparative Review Based on Human–AI Collaboration. *Educational Process: International Journal*, 12(3): 7-25.
- Kaliisa, R., & Picard, M. (2017). A systematic review on mobile-learning in higher education: The African perspective. *The Turkish Online Journal of Educational Technology*, 16(1), 1–13.
- Kirana, M. (2016). The use of audio visual to improve listening. *English Education Journal*, 7(2), 233-245.
- Kim, J., & Kimm, C. (2017). Functional technology for individuals with intellectual disabilities: Meta-analysis of mobile device-based interventions. *The Journal of Special Education Apprenticeship*, (6)1, 1-23.
- Klopfer, E., Yoon, S., & Perry, J. (2005). Using palm technology in participatory simulations of complex systems: A new take on ubiquitous and accessible mobile computing. *Journal of Science Education and Technology*, 14, 285-297.
- Kukulska-Hulme, A. (2015). *Mobile-assisted language learning*. In C. Chapelle (Ed.).
- Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning. *ReCALL*, 20(3), 271–289.
- Kukulska-Hulme, A., Traxler, J., & Pettit, J. (2007). Designed and user-generated activity in the mobile age. *Journal of Learning Design*, 2(1), 52-65.
- Li, F., Fan, S., & Wang, Y. (2022). Mobile-assisted language learning in Chinese higher education context: A systematic review from the perspective of the situated learning theory. *Education and Information Technologies*, 27(7), 9665-9688.
- Li, R. (2021). Does game-based vocabulary learning app influence Chinese EFL learners' vocabulary achievement, motivation and self-confidence? *SAGE Open*, 11(1), 1–12.
- Li, R. (2023). Effects of mobile-assisted language learning on EFL learners' listening skill development. *Educational Technology & Society*, 26(2), 36-49.
- Lin, Z., Abdullah, A. N., & Samad, A. A. (2022). Exploring Chinese EFL Teachers' Acceptance of Mobile-Assisted Language Learning (MALL). *International Journal of Information and Education Technology*, 12(11), 1172-1178.
- Liu, T.-Y., & Chu, Y.-L. (2010). Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation. *Computers & Education*, 55(2), 630–643.
- Martin, F., & Ertzberger, J. (2016). Effects of reflection type in the here and now mobile learning environment. *British Journal of Educational Technology*, 47(5), 932-944.

- Mulyadi, D., Aimah, S., Arifani, Y., & Singh, C. (2022). Boosting EFL learners' listening comprehension through a developed mobile learning application: Effectiveness and practicality. *Applied Research on English Language*, 11(3), 37-56.
- Mutiarasari, M. I., & Kristina, D. (2020). Indonesian learners' perception on the usage of mobile applications in writing skill. *Leksika*, 14(1), 36-42.
- Nafa, A. N. H. (2020). Use Of Mobile Assisted Language Learning in English Learning of Fouth Semester English Department Student at IAIN Samarinda. *Jurnal Tarbiyah & Ilmu Keguruan (JTIK) Borneo*, 2(1), 23-34.
- Nachoua, H. (2012). Computer-assisted language learning for improving students' listening skill. *Procedia-Social and Behavioral Sciences*, 69, 1150-1159.
- Nuraeni, C., Carolina, I., Supriyatna, A., Widiati, W., & Bahri, S. (2020). Mobile Assisted Language Learning (MALL): Students' Perception and Problems towards Mobile Learning in English Language. *Journal of Physics: Conference Series*, (Vol. 1641, 012027). IOP Publishing, 1-6.
- Nunnaly J. (1978). *Psychometric Theory*, New York: McGraw-Hill.
- Persson, V., & Nouri, J. (2018). A systematic review of second language learning with mobile technologies. *International Journal of Emerging Technologies in Learning*, 13(2), 188-211.
- Read, T., & Kukulska-Hulme, A. (2015). The role of a mobile app for listening comprehension training in distance learning to sustain student motivation. *Journal of Universal Computer Science*, 21(10), 1327-1338.
- Rohandi, M., Husain, N., & Bay, I. W. (2017). Mobile-Assisted Language Learning Application for English Intensive Course. *1st International Conference on Technology and Vocational Teachers*, 102, 57-61.
- Sepyanda, M., Deswarni, D., & Ardi, H. (2023). Mobile Assisted Language Learning (MALL): Exploring the Students' Experience on Listening Activities. *Lectura: Jurnal Pendidikan*, 14(1), 60-71.
- Su, F., & Zou, D. (2020). Technology-enhanced collaborative language learning: Theoretical foundations, technologies, and implications. *Computer Assisted Language Learning*, 28(1), 1-35.
- Siegel, J. (2015). *Exploring Listening Strategy Instruction Through Action Research*. New York. Palgrave Macmillan.
- Sung, Y.-T., Chang, K.-E., & Yang, J.-M. (2015). How effective are mobile devices for language learning? A meta-analysis. *Educational Research Review*, 16, 68-84.
- Tasya, M. B., & Priajana, N. (2018). The Effectiveness of Voa News Video As The Teaching Media In Increasing The Listening Skill. *ELT-Echo*, 2 (2): 159-168.
- Xu, Q. (2020). Applying MALL to an EFL Listening and Speaking Course: An Action Research Approach. *Turkish Online Journal of Educational Technology*, 19(4), 24-34.
- Xu, H. B., & Zhao, H. (2015). Current trends and problems of MALL studies in China: From the perspectives of theoretical frameworks, research designs, and research subjects. *Journal of Yangtze University (Social Sciences)*, 38(10), 56-59.
- Yuniarti, W. D. (2014). Utilizing learning platform for paperless classroom. *Vision: Journal for Language and Foreign Language Learning*, 3(2), 105-124.
- Yunita, W., & Ardi, H. (2022). Implementing Open Educational Resource to Strengthen English Speaking Skills. *Jurnal Paedagogy: Jurnal Penelitian dan Pengembangan Pendidikan*, 9(3), 441-448.

- Wan Azli, W. U. A., Shah, P. M., & Mohamad, M. (2018). Perception on the usage of Mobile Assisted Language Learning (MALL) in English as a Second Language (ESL) learning among vocational college students. *Journal of Creative Education*, 9(1), 84–98.
- Wang, Z., & Cui, Y. (2016). *Mobile-assisted language learning in China's college English education: The reality and research*. Springer, 335–349.
- Klopfer, E., Yoon, S., & Perry, J. (2005). Using palm technology in participatory simulations of complex systems: A new take on ubiquitous and accessible mobile computing. *Journal of Science Education and Technology*, 14, 285-297.
- Zain, D. S. M., & Bowles, F. A (2021). Mobile-assisted language learning (MALL) for higher education instructional practices EFL/ESL contexts: A recent review of literature. *Computer-Assisted Language Learning Electronic Journal*, 22(1), 282-307.
- Zhang, Y. (2016). The Impact of Mobile Learning on ESL Listening Comprehension. 3rd *International Conference on Advanced Education and Management (ICAEM 2016)*. DOI: 10.12783/dtssehs/icaem2016/4290