

English Foreign Language (EFL) Learners' Perceptions Toward the Use of Mobile-Assisted Language Learning Applications in Learning English Language Skills

 <https://doi.org/10.31004/jele.v11i3.2433>

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ABSTRACT

Technology plays an important role in supporting students' English skill development. This study aims to investigate EFL students' perceptions of Mobile-Assisted Language Learning (MALL) in improving English skills and to examine whether these perceptions differ by gender. Previous studies have widely explored EFL learners' attitudes toward technology-assisted English learning. However, many studies discuss learners' perceptions in general and pay limited attention to MALL or gender-based comparisons. Findings on gender differences also remain inconsistent. Some studies report differences in attitudes and technology use, while others find no significant variation. This inconsistency leaves gender's role in MALL perceptions unclear. Moreover, few mixed-methods studies combine quantitative and qualitative data to explain how gender may or may not influence students' perceptions of MALL. To address these gaps, this study employed an explanatory mixed-methods design. Quantitative data were collected from 72 students using Davis's (1993) technology integration questionnaire and analyzed descriptively. Qualitative data were obtained through semi-structured interviews with ten participants and examined using thematic analysis. The survey results showed that students had generally positive perceptions of MALL, especially in terms of usefulness and ease of use. The findings also indicated no significant differences between male and female students. Interview results supported these findings by showing that MALL helped students understand learning materials and develop their English skills. Overall, this study suggests that MALL can serve as a practical technology-based medium in English instruction. It also provides lecturers with useful insights for increasing student engagement and supporting effective English skill development.

Keywords: *English Foreign Language (EFL) Learners, Mobile Assisted Language Learning, English Language Skills*

Article History:

Received 23rd April 2026

Accepted 21st May 2026

Published 23rd May 2026



INTRODUCTION

Information and communication technology has become an important part of English language education. Its use gives teachers and students wider access to learning materials, interactive tasks, and flexible learning opportunities. In EFL contexts, technology helps students practice English beyond classroom time. This is important because English skill development requires regular exposure, repeated practice, and meaningful interaction. Recent developments in mobile technology have further changed how students access English learning resources. Smartphones, tablets, and learning applications now allow students to learn English anytime and anywhere.

One form of technology-based language learning that has gained attention is Mobile-Assisted Language Learning (MALL). MALL refers to language learning supported by mobile devices and applications. It enables students to practice vocabulary, grammar, pronunciation, listening, speaking, reading, and writing through portable digital tools. Recent studies show that MALL can support English learning in various ways. (Losi, 2022) found that students had positive perceptions of Altissia as a MALL platform because it improved listening skills, vocabulary knowledge, motivation, and interest in learning English. (Lei et al., 2022) also showed that MALL could improve EFL learners' vocabulary

learning attitudes and self-regulatory capacity. (Zhou et al., 2023), through a systematic review of empirical studies from 2014 to 2023, reported that mobile-assisted blended learning has become an important approach in EFL education. These findings show that MALL supports not only English skill development but also learner engagement and independent learning.

More recent studies also confirm the relevance of MALL in EFL learning. (Alluhaydan, 2024) found that Saudi EFL students had positive attitudes and perceptions toward English language learning mobile applications. The students valued these applications because they supported pronunciation, dictionary use, listening, vocabulary, flexibility, and ease of access. (Ferdiansah et al., 2025) also found that EFL students responded positively to MALL in vocabulary learning. Their findings showed that students perceived MALL as useful and convenient, and interview data indicated that MALL helped students understand and master vocabulary. In Indonesia, studies on MALL have also examined mobile tools such as Quizlet, webtoon-based media, and other English learning applications. However, many Indonesian studies still focus on specific skills or general perceptions rather than broader English skill development.

Students' acceptance of MALL can be understood through the Technology Acceptance Model. This model explains that users' acceptance of technology depends mainly on perceived usefulness and perceived ease of use. In the context of MALL, students are more likely to use mobile learning tools when they believe that the tools help them improve English and are easy to operate. (Hsu & Lin, 2022) extended the Technology Acceptance Model in college learners' MALL use by including psychological constructs, which shows that technology acceptance in language learning involves both practical and learner-related factors. Therefore, examining students' perceptions of MALL is important because perception can influence how students adopt and use mobile learning tools in English learning.

Gender is another variable that needs attention in studies on MALL. Previous research has produced inconsistent findings. Some studies report no significant difference between male and female learners. (Puspitasari et al., 2024) found that gender did not cause differences in pre-service EFL teachers' perceptions of MALL during teaching practicum. A study published in *Premise* in 2025 also found that male and female EFL students had similar perceptions of MALL in vocabulary learning. These findings suggest that male and female students may have equal access, similar digital familiarity, and comparable learning needs when using mobile applications for English learning.

In contrast, other studies indicate that gender may influence students' attitudes and preferences toward mobile learning. (Alluhaydan, 2024) found gender differences in Saudi EFL learners' attitudes toward English language learning mobile applications. Female students showed stronger responses to pronunciation, dictionary, and listening applications, while male students gave higher responses to dictionary, listening, and vocabulary applications. The same study also found that female students had higher perceptions than male students, especially in relation to ease and flexibility. These contrasting findings show that gender may not always create significant differences in overall perceptions, but it may influence students' preferences for specific features, learning activities, or types of mobile applications.

Despite the growing number of studies on MALL, several research gaps remain. First, many studies discuss technology-assisted English learning in general, but fewer studies focus specifically on EFL students' perceptions of MALL for improving English skills. Second, findings on gender differences remain inconclusive. Some studies show no significant difference between male and female students, while others report gender-based differences in attitudes, preferences, and perceived usefulness. Third, many previous studies rely mainly on quantitative data and do not provide enough qualitative explanation of why gender may or may not influence students' perceptions. In the Indonesian EFL context, this issue still needs further investigation, especially among university students.

Therefore, this study aims to investigate EFL students' perceptions of using Mobile-Assisted Language Learning to improve English skills and to examine whether these perceptions differ by gender. This study is expected to provide empirical evidence on the role of MALL in English learning and clarify the extent to which gender influences students' perceptions of mobile-based language learning.

Review of literature

Mobile Learning

Mobile learning offers students the flexibility to learn anytime and anywhere, making education more accessible. Additionally, Learning Mobility serves as a motivating force, providing a simpler and more inspiring alternative to traditional learning methods. The flexibility of learning has given rise to new educational models, including personalized, learner-centered, contextual, collaborative, and continuous lifelong learning. Moreover, student mobility can be synchronized to achieve shared learning objectives while overcoming challenges related to time and location. (Kukulka-Hulme & Shield, 2008) notes that mobile technology can help identify a student's presence in a specific location or their interactions with people and objects around them, enabling the learning experience to be adapted to fit the context and support problem-based learning. With the aid of personal mobile devices, students can engage in more flexible, user-friendly, and tailored learning experiences, regardless of where they are. Mobile learning also enhances students' engagement and motivation for active learning, allowing them to participate in various social learning activities. Learners experience a sense of ownership over their education, gaining freedom and independence. Furthermore, mobile learning enhances the mobility and dynamism of the learning process, as well as the flow of information related to students' education. (Kukulka-Hulme, 2012) emphasized that the key characteristics of mobile learning are its personalized, localized, authentic, spontaneous, and routine nature.

Mobile-Assisted Language Learning (MALL)

MALL is an educational approach that utilizes tools to facilitate language learning. O'Malley (2012) defines it as any form of learning that takes place when the learner is not confined to a fixed, predetermined location, or when the learner capitalizes on learning opportunities offered by mobile technology. This contrasts with traditional methods of learning a foreign language in a rigid and formal classroom setting.

Burston, (2014) notes that most MALL studies have primarily focused on describing the implementation of projects. Integrating MALL into language learning offers numerous benefits for students, particularly in English, which is one of the essential skills to master today. BenMoussa (2003) highlights the advantages of mLearning, such as its accessibility, allowing students to learn anytime and anywhere. Another key benefit of MALL is its motivational impact, which enhances students' comprehension of the material being taught. Moreover, the collaborative nature of mLearning fosters group discussions and provides instant feedback, ultimately improving learning outcomes and memory retention. Alsied (2017) further emphasizes that students are highly engaged in both individual and group learning, allowing them to select their preferred learning styles.

English Learning Through MALL

This language learning approach is designed to help improve English skills, particularly for students learning English as a foreign language (EFL). Magno (2010) highlights that numerous studies have found a connection between language learning strategies and English proficiency, with the way these strategies are applied significantly influencing language improvement. (Magogwe & Oliver, 2007) suggest that learning a second language requires distinct cognitive strategies and activities. Research indicates that the more diverse methods a student employs, the higher their chances of enhancing their English skills. A practical solution for students is to leverage the tools they already have for learning. Additionally, every student should have access to a mobile phone, as it is an essential tool for education.

When all students have mobile phones, they can utilize them as time-efficient, cost-effective learning tools. The method used in mobile language learning is Mobile Assisted Language Learning (MALL), which simplifies the process of learning English and helps improve language skills. For example, the YouTube app provides videos for listening practice, a built-in browser offers free access to English novels for reading practice, and both the Play Store and App Store offer additional programs to support English learning. All of these resources can be accessed without the need for a fixed schedule or specific learning strategy.

In analyzing students' perceptions of the use of Mobile Assisted Language Learning (MALL) applications, this study adopts the Technology Acceptance Model (TAM) developed by (Davis, 1989) as its theoretical framework. This model emphasizes two main constructs: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). PU refers to the extent to which an individual believes that using a particular technology will enhance their performance, while PEOU refers to the degree to which a person believes that using the technology will be free of effort. These two constructs influence users' attitudes toward using the technology, which in turn contributes to their behavioral intention to use, and ultimately affects the actual use of the technology. In the context of MALL, TAM can help explain the extent to which students accept and are motivated to continue using mobile applications for language learning, as well as identify the factors that influence their decision to adopt the technology consistently.

METHOD

This study adopted an explanatory mixed-methods design, which involves two sequential phases: an initial quantitative phase followed by a qualitative phase (Ivankova et al., 2006). In the first stage, numerical data are collected and analyzed. The second stage then involves gathering and interpreting qualitative data to explain, clarify, or expand on the quantitative findings. This approach is intentionally structured so that the qualitative phase builds directly on the quantitative results, linking both phases at the midpoint of the research process. The purpose is to obtain a broad picture of the topic through quantitative evidence and then develop a deeper understanding by exploring participants' perspectives in greater detail. A major advantage of this design is its clarity and its capacity to provide richer explanations of statistical outcomes, especially when the quantitative findings produce unexpected results (Creswell et al., 2003).

Respondents

Sampling technique

This study used *total sampling* for the quantitative phase. All eligible students from the English Language Education Department were invited to participate because the population size was manageable. The final quantitative sample consisted of 72 students from the second, fourth, sixth, and eighth semesters consisted of 29 males and 43 females – aged 18 to 22 years. Eligibility was based on students' completion of English language skills courses in the first, third, fifth, and seventh semesters. This criterion ensured that participants had sufficient academic exposure to respond to the questionnaire.

For the qualitative phase, the study used *purposive sampling*. Fifteen students were selected for interviews because they represented different semesters and showed positive responses, namely "agree" or "strongly agree," across the two questionnaire constructs: perceived usefulness and perceived ease of use. To protect participants' privacy, all identities were kept confidential and pseudonyms were used (e.g., Oliver, Thompson, Isabella, Clark, Emily, Grace, Sophia, Mia, Davis, and Wilson). Participants were purposefully chosen to represent different semesters. The primary criterion for interview selection was that students indicated "agree" or "strongly agree" across all questionnaire items within both constructs: Usefulness (U) and Ease of Use (E).

Instruments*Questionnaire*

Quantitative data were collected using an adapted version of Davis's (1993) questionnaire. The instrument comprised two indicators. The first measured students' perceived usefulness of MALL (U) through 11 items (Items 1–11). The second assessed perceived ease of use of MALL (E) through 7 items (Items 12–18). These items were drawn from the User Acceptance of Information Technology (UAIIT) framework. To ensure clarity and accessibility, the questionnaire was carefully translated into Indonesian, the participants' first language.

Interview

To obtain more detailed and context-rich responses, the researchers developed a semi-structured interview guide based on the questionnaire themes. This allowed participants to elaborate on their experiences and perceptions beyond the fixed survey responses.

Reliability and Validity of the Questionnaire

The questionnaire was adapted from Davis's (1993) instrument and based on the User Acceptance of Information Technology framework. It consisted of two constructs: perceived usefulness of MALL, measured through 11 items, and perceived ease of use of MALL, measured through 7 items. To ensure content validity, the items were reviewed in relation to the research objectives and the theoretical constructs used in the study. The questionnaire was also translated into Indonesian to ensure that participants could understand each item clearly. The reliability of the questionnaire was tested using Cronbach's alpha for each construct. A Cronbach's alpha value of 0.73 or higher can be considered acceptable.

Procedures

An adapted version of Davis's (1993) questionnaire employed to collect quantitative data. The questionnaires are consisted of two main indicators. The first indicator assessed the perceived Usefulness of MALL (U), which 11 items (1-11). The second indicator focused on the perceived Ease of Use of MALL (E), consisting of 7 items (12-18). These items are derived from the User Acceptance of Information Technology (UAIIT) framework. The questionnaire is carefully translated into Indonesian, the native language of the participants.

In this study, MALL referred to the use of mobile applications and digital platforms that supported English language learning. The applications included: Duolingo, Ellectronic Dictionary, Elsa Speak, YouTube, Quizlet, and BBC Learning English. These applications were used to support vocabulary learning, pronunciation practice, listening activities, reading comprehension, grammar practice, and communication-based learning tasks.

Besides, the participants had been exposed to MALL for approximately one semester, before completing the questionnaire. During this period, students used mobile-based learning applications both inside and outside the classroom to support English language learning activities. This duration was considered sufficient because participants had already completed relevant English language skills courses and had experience using mobile technology for academic purposes.

Thus, in order to opinion more thorough replies from the participants, the researchers devised a semi-structured interview to gather qualitative data, based on the topics covered in the questionnaire.

Data analysis

Quantitative data were analyzed using *descriptive and inferential statistics*. First, students' responses were coded using a five-point Likert scale ranging from 1 to 5. The data were organized in Microsoft Excel and then analyzed using SPSS version 20. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to describe students' perceptions of MALL. To examine gender-based differences in students' attitudes, the Mann-Whitney U test was used because the data were obtained from Likert-scale responses and involved two independent groups.

Qualitative data from the semi-structured interviews were analyzed using thematic analysis. The analysis followed several steps: reading the transcripts repeatedly, generating initial codes, identifying patterns, developing themes, reviewing themes, naming themes, and reporting the findings. Member checking was also used by allowing participants to review their interview transcripts.

FINDINGS AND DISCUSSION

Findings

Students' perception toward the usefulness of MALL in fostering English skill

This study examined respondents' perceptions of the usefulness of MALL for 11 items.

Table 1. Students' perception toward the usefulness of MALL (U)

No	Statements	Percentage (%)				
		1	2	3	4	5
1	The MALL can improve my English skill	0	0	9,72	54,17	36,11
2	The MALL makes it easier for me to master English skill	0	0	9,72	55,56	34,72
3	The MALL make it faster for me to do tasks related to English skill	0	0	6,94	50,00	43,06
4	The MALL can help improve my English comprehension skills.	0	0	8,33	59,72	30,56
5	The MALL can increasen efficiency in mastering english skill understanding.	0	0	19,44	51,39	29,17
6	I became more enthusiastic and active in learning English using the MALL.	0	0	29,17	55,56	15,28
7	By using The MALL on my mobile phone, I can improve my English skill	0	0	15,28	50,00	34,72
8	The MALL make it easier to understand things I didn't know before.	0	1,39	6,94	56,94	34,72
9	Using the MALL increases my confidence when learning languages.	0	1,39	22,22	52,78	23,61
10	The MALL increase my motivation to learn languages	0	2,78	13,89	51,39	31,94
11	I believe that the MALL have great benefits in improving my_English Skill.	0	0	11,11	50,00	38,89

Table 1 presents the percentage distribution of students' responses for each questionnaire item. Overall, Based on the data, students showed a positive perception of using MALL in learning English. Most respondents chose Agree and Strongly Agree for all statements. This means that MALL is considered useful for improving English skills, increasing comprehension, helping students complete English-related tasks faster, and making learning easier through mobile phones. The highest positive response appears in the statement that MALL helps students do English-related tasks faster, with 93.06% of respondents choosing Agree or Strongly Agree. Students also believed that MALL improves their English skills and makes it easier to understand new things. However, the statement about becoming more enthusiastic and active had a lower Strongly Agree percentage, which shows that MALL supports learning, but motivation and active participation may still depend on other factors. Overall, the results indicate that MALL has a strong positive role in supporting English language learning.

To enrich and validate the survey findings, follow-up semi-structured interviews were conducted. The qualitative data were used to confirm the quantitative patterns and to capture students' experiences in greater depth. In general, interview responses aligned with the descriptive statistics, reinforcing the view that MALL is an important support tool for developing English language skills. Students explained that electronic dictionaries help them learn more effectively by providing quick access to meanings, supporting their comprehension, and offering practical features that facilitate independent learning. For instance, Oliver noted that the electronic dictionary enabled fast access to synonyms and antonyms, which helped him express ideas more accurately and appropriately in English. Grace highlighted the usefulness of a "favorite words" feature that allows learners to save unfamiliar items for later review, strengthening long-term learning and recall. Similarly, Mia shared that she frequently relies on an electronic dictionary when reading English books or articles to quickly identify unknown words and improve overall understanding of the text.

Beyond meaning and comprehension support, some students emphasized features that contribute to broader English language skill development, especially pronunciation and speaking accuracy. Davis, for example, explained that the audio pronunciation function helped him understand both the meaning of new words and how to pronounce them correctly. This suggests that MALL is not only perceived as useful for expanding lexical knowledge, but also for strengthening multiple English skills by providing immediate pronunciation models and reinforcing accurate language use.

These findings indicate that students' positive attitudes toward MALL are closely connected to their motivation and willingness to engage with English learning resources. The strong agreement rates across items suggest that learners generally view MALL as practical, accessible, and supportive of English language skills improvement. The interview data further clarify why students value MALL: they benefit from speed and convenience (quick meaning lookup), deeper learning support (synonyms/antonyms and usage), organization and review (saved word lists), and skill-specific assistance (audio pronunciation and accent options). At the same time, the relatively higher neutral responses in Item 6 point to an important pedagogical implication: technology alone may not automatically increase enthusiasm. Students may become more active when MALL is paired with structured classroom tasks—such as guided reading activities, pronunciation practice, speaking drills, reflective learning logs, or collaborative exercises—so that the tool is used purposefully rather than passively. Overall, both the quantitative and qualitative results strengthen the conclusion that MALL, particularly electronic dictionaries, can effectively support English language skills development when integrated into meaningful learning activities.

Then, bellow present the diagram of Students' perception toward the usefulness of MALL in fostering English skill.

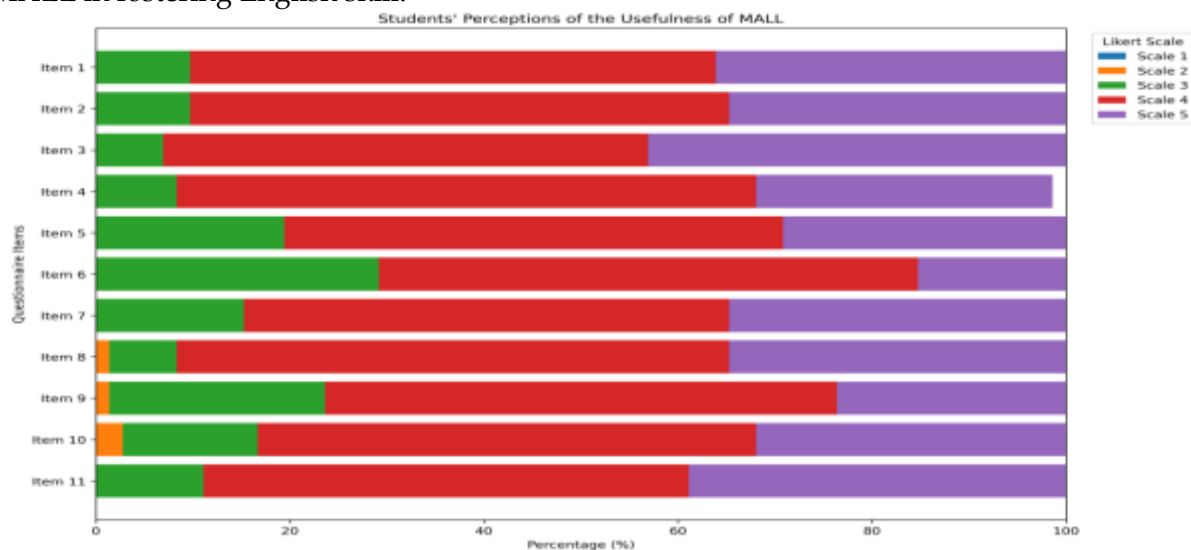


Diagram 1 Students' perception toward the usefulness of MALL in fostering English skill.

The diagram shows students' perceptions of the usefulness of MALL (Mobile-Assisted Language Learning) across 11 questionnaire items using a 1–5 Likert scale. Overall, most responses fall into scales 4 and 5 (indicated by red and purple), meaning that the majority of students consider MALL to be useful and effective. Only a small number of responses appear in the lower scales (1–2), while scale 3 appears in moderate proportions in some items. Items such as 6 and 9 have the highest dominance of high-scale responses, indicating very strong agreement. Overall, the diagram suggests that students have a positive perception of the use of MALL in learning.

Students' perceptions toward the ease of use of MALL in fostering English Skills.

In this part, the ease-of-use MALL responses for seven items were examined. Their impressions of ease-of-use were acquired utilizing a Likert scale with five points with the options "strongly disagree," "disagree," "neutral," "agree," and "strongly agree."

Table 2. Students' perceptions toward the ease of use of MALL (U)

No	Statements	Percentage (%)				
		1	2	3	4	5
1	Learning to operate the MALL is easy.	0	1.39	13.89	40.28	43.06
2	The MALL can help solve English problems that I do not know.	1.39	1.39	11.11	44.44	43.06
3	The MALL have great potential to help improve my English Skills.	0	1.39	9.72	50.00	38.89
4	It is easy for me to master English Skills using the MALL.	0	1.39	16.67	51.39	30.56
5	The MALL provides many opportunities for me to improve my English skills.	0	1.39	11.11	52.78	34.72
6	The MALL provides text features that are easier to understand.	0	2.78	13.89	45.83	37.50
7	The MALL system is easy to use to improve English skills.	0	1.39	12.50	41.67	44.44

Table 2 indicated that almost all participants agreed or strongly agreed with each item on the questionnaire. The third item earned the majority of positive answers (88%). This demonstrates that most students believe MALL is simple for learning English. Meanwhile, the sixth item showed that 2.78% of students selected to disagree or strongly disagree. It demonstrates that just a few students believe MALL is challenging to use. Based on the average accumulation above, more than 85% of students agree and strongly agree that MALL is easy to use to mastery English skills.

Besides, the diagram bellow shows the expalnation of Students' perceptions toward the ease of use of MALL (U).

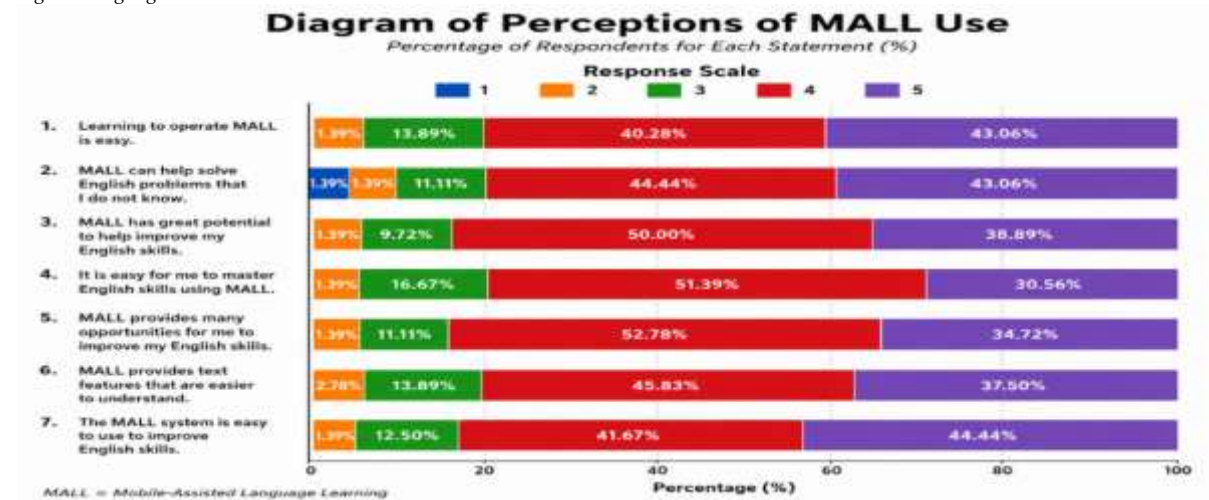


Diagram 2 Students' perception toward the usefulness of MALL in fostering English skill.

The diagram shows students' perceptions of using MALL in learning English. Overall, the responses are highly positive. Most students selected Agree and Strongly Agree for all statements. The highest positive response appears in the statement "The MALL system is easy to use to improve English skills," with 86.11% of students choosing Agree or Strongly Agree. Students also agreed that MALL is easy to operate, helps solve English problems, improves English skills, and provides useful text features. Only a small number of students selected negative responses. This indicates that MALL is generally perceived as useful, easy to use, and effective for supporting English language learning.

To confirm the results of the questionnaires, interviews were conducted with each selected participant. In the interviews, most respondents stated that MALL is easy to use because of several features.

I like using an electronic dictionary because I can look up words by typing just a few letters, and the results appear immediately (Thompson). The quick search feature of the electronic dictionary makes it easy for me to find the meaning of words and see example sentences, so my vocabulary expands easily (Isabella).

Besides, 7 out of 10 students believe that the MALL's ease of use makes it easier to see essential words at any time.

The word-saving feature on the e-dictionary is very useful. I can save new words that I learn and review them anytime (Sophia).

Based on the interview results, most respondents stated that using MALL was considered easy because of the features offered. The quick search feature on the electronic dictionary is recognized as making it easier for users to find the meaning of words quickly, as expressed by Thompson and Isabella. They appreciated the speed and ease of searching for words by simply typing a few letters, which immediately displayed the search results. It helps them understand the meaning of words and enriches their vocabulary. In addition, the word storage feature on the electronic dictionary is considered very useful by users such as Sophia because it makes it easy for them to save and review learned words.

Thus, from the 10 students interviewed, seven emphasized that the ease of use of MALL allows them to access essential words at any time. In conclusion, key features such as quick search and word storage make MALL more practical and effective in helping the language learning process.

Differences in perception of MALL in fostering vocabulary mastery concerning Gender.

Table 3. Mann-Whitney U test for Usefulness of MALL Based on Gender

Usefulness	Gender	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
	Male	29	37.34	1083.00	
	Female	43	35.93	1545.00	0.765
	Total	72			

Table 3 shows Asymp. Sig. (2-tailed) = 0.765 > 0.05 means no significant difference between males and females on the usefulness indicator. Even though males have a slightly higher mean rank than females, the difference is not statistically significant. It can be concluded that gender does not have a significant effect on perceptions of MALL usefulness in this sample.

Table 4. Mann-Whitney U test for Ease of Use of MALL based on Gender

Ease of Use	Gender	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
	Male	29	36.16	1048.50	0.821
	Female	43	36.73	1579.50	
	Total	72			

Table 4 showed no significant difference between males and females on the ease of use indicator. Asymp indicates this. Sig. (2-tailed) = 0.821 > 0.05. Therefore, based on the quantitative and qualitative results, students indicated that MALL is practical and easy to use to improve vocabulary mastery. This is shown by more than 85% of students agreeing and strongly agreeing with the usefulness indicator and more than 85% agreeing that MALL is easy to use. This is reinforced by the interview findings, which revealed that students felt MALL was very useful for improving their vocabulary. Moreover, the researcher also found no significant difference based on gender in both research indicators. This is explained in the Independent Sample t-test and Mann-Whitney U test results.

The absence of significant gender differences suggests that both male and female students share similar perceptions toward the use of MALL in vocabulary learning. This indicates that gender is not a determining factor in shaping students' acceptance of mobile-based language learning in this context. Instead, both groups tend to evaluate MALL based on its perceived usefulness and ease of use rather than gender-related characteristics.

From the perspective of the Technology Acceptance Model (TAM), this finding implies that the two main constructs – perceived usefulness and perceived ease of use – are more influential than demographic variables such as gender. Since both male and female students reported high levels of agreement on these aspects, it can be inferred that their acceptance of MALL is driven by similar cognitive evaluations of the technology rather than by gender-based differences in learning behavior or preferences.

This result may also be explained by the equal access to mobile technology among students in the current digital era. Both male and female learners are generally exposed to smartphones and mobile applications in similar ways, both for academic and daily communication purposes. This equal exposure reduces the possibility of gender gaps in familiarity, confidence, or engagement with MALL tools, leading to comparable attitudes across groups.

Furthermore, the design of MALL applications themselves may contribute to this consistency. Most MALL tools, such as vocabulary apps, quizzes, and flashcard systems, are designed to be user-friendly, interactive, and neutral in terms of user characteristics. As a result, these applications do not inherently favor one gender over another, allowing both male and female students to benefit equally in terms of learning experience and perceived effectiveness.

Discussion

The findings of this study show that students had positive perceptions of Mobile-Assisted Language Learning (MALL), especially electronic dictionaries, in terms of usefulness and ease of use. This result supports the Technology Acceptance Model (TAM), which explains that users tend to accept a technology when they perceive it as useful and easy to operate. In this study, students viewed MALL as useful because it helped them find word meanings quickly, understand unfamiliar vocabulary, check pronunciation, and complete English-related tasks more efficiently. This finding is consistent with previous MALL studies which found that mobile technology can support language learning by providing flexible, accessible, and learner-centered learning resources.

The present findings also align with (Rahimi & Miri, 2014), who reported that learners using mobile dictionaries performed better than those using printed dictionaries. This supports the result of the current study because students also perceived electronic dictionaries as practical tools for improving English skills. Similarly, the findings are in line with (Sung et al., 2015), who found that mobile-assisted language instruction had a positive effect on language learning outcomes. These similarities indicate that students' positive perceptions of MALL are not only based on preference, but also on the actual learning support provided by mobile applications.

The interview findings further explain why students perceived MALL positively. Students appreciated features such as quick word search, saved-word lists, and audio pronunciation. These features helped them learn vocabulary, understand texts, and improve pronunciation. This finding is consistent with (Hojatpanah & Dashtestani, 2020), who found that students and teachers viewed electronic dictionaries positively as tools for English vocabulary learning. It also supports (Zhang & Pérez-Paredes, 2024), who showed that learners used mobile dictionaries to access definitions, word classes, and pronunciation information while reading English texts. Therefore, the current study strengthens previous evidence that electronic dictionaries can support vocabulary development, reading comprehension, and accurate language use.

The study also found no significant difference between male and female students in their perceptions of MALL. The Mann-Whitney U test showed that the p-value for usefulness was 0.765, while the p-value for ease of use was 0.821. Both values were higher than 0.05, which means that gender did not significantly influence students' perceptions of MALL. This result suggests that male and female students evaluated MALL in a similar way. They focused more on the usefulness, practicality, and ease of the applications than on gender-related learning preferences.

There are several possible reasons why this study found no gender difference. First, both male and female students had similar access to smartphones and mobile learning applications. Since mobile devices are commonly used in daily life, both groups were already familiar with digital tools. Second, the MALL tools used in this study, especially electronic dictionaries, were simple and functional. They provided direct support for vocabulary, pronunciation, and comprehension, so students from both gender groups could use them without major difficulty. Third, the learning context was similar for all participants. Male and female students studied in the same department, followed similar English courses, and used similar learning resources. These conditions may reduce gender-based differences in technology acceptance.

This finding is consistent with (Hilao & Wichadee, 2017), who found no significant difference between male and female students in their use, attitudes, and performance related to mobile phones for language learning. Both studies suggest that gender may not be a strong factor in MALL acceptance when learners have equal access, similar digital experience, and comparable academic needs. In this context, students' acceptance of MALL appears to be shaped more by perceived usefulness and perceived ease of use than by gender.

However, this finding may contradict some previous technology acceptance studies which reported gender differences in users' attitudes toward technology. In several contexts, male and female learners may differ in confidence, frequency of use, or perceived ease of use. The difference between those studies and the present study may be caused by the type of technology used. Electronic dictionaries and mobile learning applications are now familiar, simple, and widely accessible. As a result, gender differences may become less visible because both male and female students have already developed similar digital habits.

Overall, the findings of this study support previous research showing that MALL is useful and easy to use for English learning. The absence of gender differences indicates that MALL can support both male and female students equally when the applications are accessible, practical, and relevant to learning needs. Therefore, teachers should not focus only on gender when integrating MALL into English learning. Instead, they should design structured activities, such as vocabulary logs, pronunciation practice, guided reading, listening tasks, and writing exercises, so that MALL can function as an active learning tool rather than only as a passive reference tool.

CONCLUSIONS

This study concludes that students demonstrate positive attitudes toward the use of Mobile-Assisted Language Learning (MALL) in English learning, perceiving it as useful, accessible, and relevant to their learning needs. Based on the Technology Acceptance Model (TAM), students' acceptance of MALL is influenced by perceived usefulness and ease of use, as mobile applications help them access materials, complete tasks, and improve language skills more flexibly. The findings suggest that MALL creates a supportive learning environment that encourages independent and continuous learning. However, its effectiveness depends on proper guidance, purposeful integration, and institutional support. Therefore, teachers should integrate mobile applications systematically into classroom activities, while curriculum designers and policymakers should support MALL implementation through appropriate infrastructure, training, and curriculum alignment. Although this study focuses on students' perceptions rather than direct language achievement, it highlights the strong potential of MALL as part of a broader strategy connecting technology, pedagogy, and learner development in English education.

ACKNOWLEDGEMENTS

The authors would like to express the sincere gratitude to all those who have contributed to the success of this study. First and foremost, the authors are deeply grateful to the students who generously participated in this research, offering valuable insights and experiences through their responses and interviews. Besides, wish to extend heartfelt thanks to the academic staff and lecturers who provided guidance, feedback, and support throughout the research process. Without their suggestion, this study would not have come to fruition as it has. Finally, the authors would like to thank to the colleagues and friends for their moral and practical support during the course of this research. Their assistance has been invaluable and has greatly motivated me to complete this study successfully.

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