

ISSN: 1999-5601 (Print) 2663-5836 (online)

Lark Journal

Available online at: https://lark.uowasit.edu.iq



*Corresponding author:

Asst. Lect. Eltifat Neamah Odhaib

General Directorate of Education in Wasit

Email: eodhaib@uowasit.edu.iq
Keywords: Mobile-Assisted
Language Learning, MALL
apps, EFL students, language
learning technology, higher
education, Wasit University.

ARTICLE INFO

Article history:

Received 11Jul 2025 Accepted 3Sep 2022 Available online 1 Oct 2025



An Investigation into The Use of Mobile-Assisted Language Learning (MALL) Apps by University EFL Students

Abstract

This research examines the adoption of Mobile-Assisted Language Learning (MALL) applications by university EFL learners, responding to the increasing use of mobile technologies for language learning. Although several MALL applications claim to facilitate language learning, their real-world adoption and impact on university learners are yet to be examined, especially in non-English major settings.

The study was intended to explore how students from Wasit University, College of Arts, Department of Philosophy utilize MALL apps in support of learning English language. A pre-fixed set questionnaire was used to gather quantitative and qualitative data on usage patterns, perceived advantages, and disadvantages from a sample of a convenience 30 university students.

The Findings confirmed that learners use MALL apps primarily for vocabulary acquisition and listening practice, citing flexibility and accessibility as the primary advantages but reporting limitations in app content and lack of interaction as difficulties. The study highlights the potential of to com Mobile Assisted Language Learning to complement formal language instruction, but with the need for more effective app design and deliberate integration into curricula.

© 2025 LARK, College of Art, Wasit University

DOI: https://doi.org/10.31185/lark.4632

تحقيق في استخدام تطبيقات تعلم اللغة المدعومة بالهواتف المحمولة (MALL) من قبل طلبة اللغة الإنجليزية لغة أجنبية في الجامعة

م.م التفات نعمة عذيب \ وزاره التربية \ المديرية العامة لتربيه واسط

المستخلص

يتناول هذا البحث تبنّي طلبة اللغة الإنجليزية لغة أجنبية في الجامعة لتطبيقات تعلم اللغة المدعومة بالهواتف المحمولة (MALL) ، استجابة للتزايد المستمر في استخدام تقنيات الهواتف المحمولة في مجال تعلم اللغات. فعلى الرغم من ادعاء العديد من تطبيقات MALL قدرتها على تسهيل تعلم اللغة، إلا أن مدى تبنّيها وتأثير ها الفعلي في أوساط طلبة الجامعات لا يزال بحاجة إلى مزيد من الدراسة، لا سيما في البيئات التي لا يتخصص فيها الطلبة باللغة الإنجليزية. وقد هدفت هذه الدراسة إلى استكشاف كيفية استخدام طلبة قسم الفلسفة في كلية الأداب – جامعة واسط – لتطبيقات MALL في دعم تعلم اللغة الإنجليزية. وقد تم استخدام استبيان معد مسبقًا لجمع بيانات كمية ونو عية تتعلق بأنماط الاستخدام، والمزايا المتصورة، والعيوب، وذلك من عينة قصدية مكونة من 30 طالبًا جامعيًا. وأظهرت النتائج أن الطلبة يستخدمون تطبيقات ماهراك أساسي المفردات وتدريب مهارة الاستماع، مشيرين إلى المرونة وسهولة الوصول كأهم المزايا، في حين تمثلت أبرز التحديات في محدودية محتوى التطبيقات وضعف التفاعل فيها. وتسلط الدراسة الضوء على إمكانات تطبيقات كلمية الشعل في دعم التعليم الرسمي للغة، مع التأكيد على الحاجة إلى تصميم أكثر فاعلية لهذه التطبيقات ودمجها بشكل مدروس ضمن المناهج التعليمية.

الكلمات المفتاحية: تعلم اللغة المدعوم بالهواتف المحمولة، تطبيقات MALL ، طلبة اللغة الإنجليزية كلغة أ أجنبية، تقنيات تعلم اللغة، التعليم العالى، جامعة واسط.

1. Introduction

The past decade has witnessed unprecedented developments in mobile technologies that have dramatically reshaped the academic landscape, especially language education. Mobile-Assisted Language Learning (MALL), a branch of computer-assisted language learning (CALL), exploited the mobility, interactivity, and pervasiveness of the mobile phone to assist learners in constructing their language competence anywhere and anytime (Kukulska-Hulme & Shield, 2008). MALL apps have also proliferated in the market, giving learners opportunities to practice vocabulary, listening, speaking, reading, and writing through interactive and stimulating settings. For English as a Foreign Language (EFL) learners, who

often face limited exposure to authentic English input outside the classroom, MALL apps present valuable tools for enhancing learning experiences and achieving language proficiency (Burston,2015). Online learning poses several challenges for EFL students, especially in environments where technological infrastructure is underdeveloped. As noted by Al-Jubori (2020), "students often experience difficulties adapting to online platforms due to a lack of prior digital experience" (p. 1178). Furthermore, motivation appears to be a critical factor, as "learners' engagement is closely tied to the level of support and interactivity provided by instructors" (Al-Jubori, 2020, p. 1182).

The upsurge in mobile learning globally has been accompanied by trends in smartphone and tablet ownership among higher education students (Duman et al., 2015). Mobile phone penetration among young adults has been higher than 95% in the majority of countries, including Iraq (Pew Research Center, 2023). Mobile technology is therefore an integral part of daily life for students, offering new avenues for learning engagement. Language learning, in particular, has benefitted from this trend, as numerous studies suggest that MALL fosters learner autonomy, motivation, and personalized learning experiences (Alamer & Alkhateeb, 2021; Reinders & Pegrum, 2017).

However, despite the theoretical promise and growing body of international research on MALL, the extent to which university students in Iraq, especially those outside language majors, utilize MALL apps remains largely unexplored. In contexts such as Wasit University, students of non-English departments, such as Philosophy, often encounter English as a compulsory subject but may lack sufficient in-class instruction or exposure. The adoption of MALL apps may very well narrow this gap, but empirical evidence on their actual use, perceived advantages, and challenges is limited. Prior studies suggest that institutional support, students' attitudes, and technological readiness have a great impact on the

successful integration of MALL (Hockly, 2013; Stockwell& Hubbard, 2013). Without a transparent picture of the ways in which students interact with these facilities, teachers and policymakers might not be able to maximize language learning strategies.

The principal problem addressed by this study is insufficient awareness regarding the existing use and effectiveness of MALL applications for EFL students learning non-language academic subjects at Wasit University. While prior studies conducted in other contexts demonstrate positive outcomes of MALL (Godwin-Jones, 2011; Viberg & Grönlund, 2013). localized research is needed to account for contextual variables such as digital literacy, access to technology, and cultural attitudes toward mobile learning. In addition, students enrolled in the Department of Philosophy, College of Arts, Wasit University, are a special sample: they are obligated to learn English as part of their course of studies, but language acquisition is not their main focus. This sample offers an important insight into how MALL apps are utilized for complementary learning, beyond the language-major environment where most existing research has been focused.

To bridge this research gap, the current study will examine the use of MALL apps among university students in the Department of Philosophy at Wasit University to facilitate English language learning. In particular, the study seeks to examine the apps utilized, usage patterns, reported strengths and weaknesses, as well as learners' attitudes towards MALL. This study addresses this gap by examining their experiences and perceptions. The research is informed by the following research questions:

- 1. To what extent do university students in the Department of Philosophy use MALL apps for EFL learning?
- 2. What types of MALL apps are most commonly used by these students, and for which language skills?

- 3. What are the perceived benefits of using MALL apps among these students?
- 4. What challenges or limitations do students encounter when using MALL apps for language learning?

The objectives of this study are threefold: (1) to document current practices in the use of MALL apps among non-English major EFL students; (2) to analyze students' perceptions of the pedagogical value of MALL; and (3) to identify obstacles that may hinder the effective adoption of MALL tools. By addressing these objectives, the study aims to contribute practical insights for both educators and app developers, informing strategies for integrating mobile learning into broader EFL teaching practices at Wasit University and similar institutions.

The scope of the research is delimited to a sample of 30 undergraduate students from the Department of Philosophy, College of Arts, Wasit University, during the academic year 2024–2025. The study focuses on students' self-reported use of MALL apps for English learning purposes, rather than on experimental interventions or app effectiveness tests. Additionally, while MALL encompasses a wide range of mobile-based tools, the study centers on purpose-built language learning apps (e.g., Duolingo, Memrise, Busuu), as opposed to general mobile functions (e.g., web browsing, YouTube, or social media).

This research holds significant value for multiple stakeholders. For university instructors and curriculum designers, understanding how students use MALL apps can inform pedagogical approaches that complement formal instruction. For students, insights into the benefits and limitations of MALL can foster more intentional and effective learning strategies. Finally, for app developers and educational policymakers, empirical findings from localized contexts such as Wasit University can guide the design of culturally relevant and pedagogically sound mobile learning solutions. Given the growing emphasis on flexible and

learner-centered education, particularly in post-pandemic academic settings, harnessing the potential of MALL is more timely than ever (Traxler, 2016).

In summary, although the use of mobile technologies in language education is a phenomenon worldwide, local research is needed to offer customization of these innovations in local educational contexts. Investigating the use of MALL apps by EFL students at Wasit University's Department of Philosophy aims to bridge a gap in the literature and to make contributory action insights available to facilitate the ongoing evolution of language learning in the higher education system of Iraq.

2. Literature Review

Mobile-Assisted Language Learning (MALL) represents an increasingly important area of language education research, with the rapid adoption of smartphones and mobile technologies across both formal and informal learning contexts leading to increasing studies about it (Viberg&Grönlund, 2013). MALL offers a flexible and personalized, yet ubiquitous opportunity for language learners, especially for those studying EFL in non-native-language environments (Kukulska-Hulme, 2020). Nevertheless, the use and success of MALL apps remain very differing for learner contexts, app design, pedagogical integration, and learner variables (Burston, 2015). This literature review integrates existing studies on MALL in higher education to identify key themes of relevance to this study: (1) definitions and features of MALL; (2) pedagogical potential of MALL apps; (3) attitudes and motivation of learners toward MALL; (4) impediments to efficient MALL uptake; and (5) areas of research gaps in university environments for non-English major students.

2.1. Definitions and Characteristics of MALL

MALL is used for the utilization of mobile technologies—i.e., smartphones, tablets, and media players—to support language learning (Kukulska-Hulme& Shield, 2008). It is a subfield of the broader body of Computer-Assisted Language Learning (CALL) defined by mobile, interconnected, and context-sensitive mobile technology (Stockwell& Hubbard, 2013). MALL involves various activities, such as formal learning using structured apps and informal learning using mobile internet access, social media, and messaging platforms (Godwin-Jones, 2011).

Key characteristics of MALL include its potential for (1) ubiquitous learning across time and place, (2) personalization based on learner needs, (3) situated learning through authentic contexts, and (4) support for both individual and collaborative learning (Traxler, 2009). These affordances align well with current language acquisition theories that emphasize learner autonomy, interaction, and exposure to authentic input (Reinders&Pegrum, 2017).

Several typologies of MALL apps have been proposed. According to Kim and Kwon (2012), apps can be categorized into those that focus on specific skills (e.g., vocabulary, listening), integrated language learning apps, and content delivery apps. More recent classifications also include gamified language apps (such as *Duolingo*), social-based language learning platforms (such as *HelloTalk*), and AI-driven personalized language tutors (Lin & Lin, 2019).

2.2. Pedagogical Affordances of MALL Apps

Literature repeatedly highlights several pedagogical advantages of MALL apps for EFL students. First, MALL facilitates learner autonomy and self-study (Reinders& Benson, 2017). Students can decide when and how they process language content, which encourages motivation and agency (Lai &Gu, 2011). Second, MALL facilitates ubiquitous and flexible access to the target language,

which can be vital for EFL learners with perhaps only limited class contact hours (Kukulska-Hulme, 2020).

Empirical evidence indicates that MALL applications can promote the growth of various language skills. For example, Steel and Levy (2013) concluded that mobile applications for learning vocabulary led to impressive improvement in students' retention and recall. Similarly, Zhang et al. (2021) identified that listening practice using the mobile boosted Chinese EFL learners' comprehension skills. Speaking and pronunciation can also be assisted through apps with interactive voice recognition functions (Lan et al., 2015). Moreover, the majority of MALL apps employ gamification functions, which enhance learner motivation as well as persistence (Rosell-Aguilar, 2018).

Aside from the acquisition of skills, MALL apps also result in affective benefits such as increased motivation, reduced language anxiety, and greater willingness to communicate (Duman et al., 2015; Chiu, 2013). Social MALL websites facilitate the interaction between students with native speakers and other learners, promoting communicative competence and intercultural awareness (Kim & Kwon, 2012).

2.3. Learners' Attitudes and Engagement with MALL

Student attitudes towards MALL are also a determining factor for app adoption and effective use. Research shows that university students have positive attitudes towards mobile language learning, particularly where smartphones have already become part of daily life (Stockwell& Hubbard, 2013; Viberg&Grönlund, 2013).

Some studies point out that students enjoy the convenience and flexibility of MALL (Burston, 2015). In a survey of Japanese university students, Stockwell

(2010) found that most respondents used mobile devices for language learning outside class time, especially during commuting or leisure. Similarly, Gafni et al. (2017) reported that Israeli EFL learners valued the ability to integrate language practice into their everyday routines.

However, engagement with MALL apps varies depending on factors such as perceived usefulness, ease of use, app quality, and alignment with learner goals (Park & Slater, 2014). Gamified apps tend to sustain learner interest over longer periods, while more traditional drill-based apps may lead to drop-off in usage (Rosell-Aguilar, 2018). In addition, learners' prior experiences with technology and their digital literacy influence their engagement with MALL (Chen, 2013).

It is also worth noting that students of non-English majors may exhibit different patterns of engagement compared to language majors. Alrasheedi et al. (2015) conducted a study on engineering students and discovered that although students welcomed MALL in general, they tended to see it as ancillary instead of focal in their language learning.

2.4. Barriers to Effective MALL Adoption

Despite the promise of MALL, several barriers hinder its widespread and effective adoption. One major challenge is the quality and pedagogical soundness of many available apps (Burston, 2015). Numerous commercially available language apps lack alignment with sound language teaching principles and fail to provide meaningful interaction or feedback (Kim & Kwon, 2012).

Technical issues, such as poor connectivity, limited device storage, or incompatibility across devices, also pose obstacles (Lan et al., 2015). In many developing contexts, including Iraq, inconsistent internet access remains a significant constraint (Al-Obaydi & Bataineh, 2015).

Institutional factors can further affect MALL adoption. Instructors may lack training on how to integrate MALL into their teaching, or curricula may not support blended approaches (Hockly, 2013). Moreover, some students may lack the self-regulation skills needed to manage autonomous mobile learning effectively (Lai &Gu, 2011).

Cultural attitudes toward mobile device use in academic settings also influence MALL adoption. In more conservative educational environments, using mobile phones in class may be discouraged, leading to underutilization of MALL's potential (Stockwell& Hubbard, 2013).

2.5. Research Gaps in Non-English Major University Contexts

While MALL research has expanded rapidly, much of the literature focuses on English majors or language learners enrolled in formal language programs (Burston, 2015). Less attention has been paid to how non-English major university students use MALL, despite the fact that these students often comprise the majority of EFL learners in many contexts.

Studies that do examine non-language majors suggest important differences in usage patterns and motivations. For instance, Hsu and Ching (2013) found that Taiwanese non-English majors used MALL apps mainly for vocabulary and reading practice, often driven by exam preparation needs rather than intrinsic language learning goals. Similarly, Gafni et al. (2017) observed that non-language majors tended to adopt a more instrumental orientation toward MALL.

In the Iraqi higher education context, research on MALL remains limited. Al-Obaydi and Bataineh (2015) highlighted that while Iraqi EFL learners show interest in mobile learning, infrastructural and institutional challenges persist. Few studies have explored MALL usage among non-English majors in Iraqi

universities, particularly in disciplines such as philosophy, where students may perceive English learning as a peripheral rather than core academic concern.

Addressing this gap is important since non-language major students are likely to have different challenges and learning needs. Knowing how they interact with MALL can help inform language learning strategies that take into consideration mobile technologies and are more inclusive and effective across academic contexts

3. Methodology

3.1. Research Design

This study employed a descriptive quantitative research design to investigate the patterns of usage, attitudes, preferences, and obstacles towards Mobile-Assisted Language Learning (MALL) applications among non-English major learners. A survey method was deemed appropriate to collect extensive and systematic data regarding learners' engagement with MALL facilities within the context of an Iraqi university.

3.2. Participants

The target population was undergraduate students who were enrolled in the Department of Philosophy in Wasit University for the academic year 2024–2025. Convenience sampling was used depending on accessibility factors. There were 30 participants involved in the study, males and females, and students from various study years. All the participants had studied at least one English language course in their studies at the university.

3.3. Research Instrument

Data were collected using a self-administered structured questionnaire that was specially designed for the aims of this study. The questionnaire was modified in accordance with existing instruments used in past MALL research (e.g., Viberg & Grönlund, 2013; Kim & Kwon, 2012), and adjusted to the local educational and cultural setting. It had five main sections:

- 1. Demographic Details: gender, age, academic year, and whether smartphone was owned.
- 2. Usage Habits: frequency and duration of MALL app use.
- 3. Skill Preference: the most commonly practiced language skills (listening, speaking, reading, writing, vocabulary, grammar) using mobile apps.
- 4. Perceived Usefulness and Ease of Use: TAM items reworded to suit the context, with a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).
- 5. Barriers to Use: multiple-choice and open-ended items assessing barriers to effective MALL use.

To ensure the accuracy of the content, the tool was verified by two instructional technology and applied linguistics specialists. A pilot test of 10 students was also conducted, and minor changes were made to improve the clarity.

3.4. Data Collection Procedure

The survey was conducted electronically via Google Forms between February and March 2025. Informed consent was sought from the participants prior to their participation, and they were explained the study purpose. Participants were informed that participation was voluntary and that all responses would be treated as confidential and anonymous.

3.5. Data Analysis

Quantitative data were analyzed using Statistical Package for the Social Sciences (SPSS) software version 26. Descriptive statistical measures (mean, standard deviation, frequency, and percentage) were used to present patterns of app use and preference. Pearson correlation testing was used to verify the correlation between ease of use/usefulness perceptions and time of usage. Thematic coding of open-ended responses identified recurring barriers and suggestions.

4. Results

The analysis of usage data revealed considerable variability in how frequently students used MALL apps. The mean number of hours spent on MALL apps per week was $\mathbf{M} = 3.27$, $\mathbf{SD} = 1.08$, with individual usage ranging from 0.92 to 5.99 hours per week.

Table 1 presents the descriptive statistics for app usage.

Table 1

Descriptive Statistics for Weekly MALL App Usage

Statistic	Value
Mean (hours/week)	3.27
Standard Deviation	1.08
Minimum	0.92
Maximum	5.99

This finding suggests that MALL usage was integrated to some extent into students' routines, with a moderate level of engagement overall. However, a subset of students (approximately 20%) used MALL apps for fewer than 2 hours per week, indicating variability in adoption.

4.1. Preferred Language Skills Practiced

Students were asked to identify which language skills they primarily practiced using MALL apps. The distribution of responses is shown in Table 2

Table 2
Preferred Language Skill Practiced with MALL Apps

Skill	Frequency	Percentage
Vocabulary	10	33.3%
Listening	9	30.0%
Writing	4	13.3%
Reading	4	13.3%
Speaking	3	10.0%

The results indicate that **Vocabulary** (33.3%) and **Listening** (30.0%) were the most commonly practiced skills, followed by Writing, Reading, and Speaking. This finding aligns with previous literature suggesting that MALL apps are particularly effective for supporting receptive skills and vocabulary acquisition (Steel & Levy, 2013; Zhang et al., 2021).

4.2. Perceived Usefulness and Ease of Use

Students evaluated the perceived usefulness and ease of use of the MALL apps on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Table 3 summarizes the results.

Table 3
Perceived Usefulness and Ease of Use of MALL Apps

Variable	Mean	Standard Deviation
Perceived Usefulness	4.10	0.83
Perceived Ease of Use	4.13	0.76

Overall, students reported **high levels of perceived usefulness** (M = 4.10) and **ease of use** (M = 4.13). The majority of students (76.7%) rated MALL apps as either 4 or 5 for usefulness, and 80% rated them similarly for ease of use. These

findings corroborate earlier studies showing positive learner attitudes toward mobile language learning (Viberg&Grönlund, 2013; Chen, 2013).

4.3. Correlation between Usage and Perceived Usefulness

To explore whether perceived usefulness influenced app usage behavior, a Pearson correlation analysis was conducted between weekly usage hours and perceived usefulness scores. The results indicated a weak, non-significant correlation: $\mathbf{r(28)} = \mathbf{0.05}$, $\mathbf{p} = \mathbf{.80}$.

This suggests that, in this sample, students' perceptions of app usefulness were not strongly associated with their actual usage patterns. Other factors, such as time constraints, individual motivation, and study habits, may play a more prominent role in determining usage frequency.

4.4. Perceived Barriers to MALL App Usage

Students identified several barriers that limited their effective use of MALL apps. Table 4 presents the frequency distribution of reported barriers.

Table 4
Perceived Barriers to MALL App Usage

Barrier	Frequency	Percentage
No guidance	9	30.0%
Lack of internet	7	23.3%
Lack of motivation	6	20.0%
Device limitations	5	16.7%
Poor app design	3	10.0%

The most frequently cited barrier was the **lack of guidance** (30%), followed by **lack of internet access** (23.3%) and **lack of motivation** (20%). These findings highlight both infrastructural and pedagogical challenges that can hinder MALL adoption. The prominence of "no guidance" suggests that students may benefit

from more structured integration of MALL within their coursework, consistent with recommendations in the literature (Hockly, 2013; Lai &Gu, 2011).

4.5. Summary of Key Findings

- Philosophy students at Wasit University reported moderate use of MALL apps, averaging 3.27 hours per week.
- Vocabulary and listening were the most commonly practiced skills.
- Students perceived MALL apps as both useful and easy to use.
- No significant correlation was found between perceived usefulness and usage frequency.
- Major barriers included lack of guidance, internet connectivity issues, and low motivation.

5. Findings and Discussion

This study explored the patterns of Mobile-Assisted Language Learning (MALL) app use among the students in the Department of Philosophy at Wasit University. The results show important insights about the participation of students in mobile learning technologies as well as the perceived benefits and limitations of MALL and the more general pedagogical implications for embedding MALL in higher education instruction of the English language.

5.1. Use Patterns and Skill Preferences

The findings showed that the students who participated applied MALL apps on average for 3.27 hours a week, indicating moderate use. This concurs with previous research in that even though university students tend to be receptive to using mobile technology, real adoption into everyday language learning habits proves to be irregular (Burston, 2015; Kukulska-Hulme& Shield, 2008). This moderate rate of participation might be indicative of students' autonomous attempts to complement in-class instruction, especially within environments where formal classroom instruction is limited or conventional.

Upon being asked which MALL app skills they practiced most often, students overwhelmingly reported vocabulary (33.3%) and listening (30.0%). This is consistent with the findings of earlier studies demonstrating that learners tend towards MALL materials that cater to receptive skills, particularly vocabulary development and listening comprehension (Kim & Kwon, 2012; Zhang et al., 2021). These are probably due to the presence of numerous mobile apps specifically designed for vocabulary practice and listening practice, and the fact that both these skills can be easily practiced asynchronously.

By contrast, skills like speaking and writing were less commonly practiced via MALL apps. This may reflect the lack of adequate interactive features in many existing applications, which tend to prioritize passive or input-based learning (Stockwell, 2010). Moreover, students may feel less confident practicing productive skills without real-time feedback, underscoring the need for more interactive and AI-driven tools that simulate real communication scenarios.

5.2. Perceived Usefulness and Ease of Use

Students overall indicated high levels of satisfaction with the ease of use and usefulness of MALL apps. The mean scores for perceived usefulness (M = 4.10) and perceived ease of use (M = 4.13) were quite high, supporting previous work that learners tend to find mobile platforms easy to use and useful for autonomous language learning (Viberg&Grönlund, 2013; Chen, 2013). These findings align with the Technology Acceptance Model (TAM), which posits that perceived ease of use and usefulness are primary drivers of technology adoption (Davis, 1989).

However, while satisfaction levels were high, this did not translate into a strong correlation with usage. The Pearson correlation between perceived usefulness and weekly usage hours was weak and statistically insignificant (r = 0.05, p > .05). This discrepancy suggests that other external factors—such as motivation, time availability, or accessibility—may moderate actual app use, even

when attitudes are favorable. These findings echo Lai and Gu (2011), who found that positive learner perceptions do not always lead to sustained behavior change unless reinforced by structured support or curriculum integration.

5.3. Barriers to Effective Use

The study also highlighted significant barriers that hinder students from fully engaging with MALL tools. The most frequently cited challenge was "lack of guidance" (30%), followed by "lack of internet access" (23.3%) and "lack of motivation" (20%). Such findings emphasize that availability alone is not enough for actual utilization and that students need pedagogical scaffolding and institutional support to perform well with mobile tools.

The most apparent one, specifically, is the "lack of guidance" obstacle in the scenario involving non-English majors since the latter does not have direct formal access to these resources through their philosophy classes, which might not directly instruct them on how to learn through MALL. This finding reinforces the recommendations of Hockly (2013) and Reinders and Benson (2017), who argue that the success of mobile learning is closely tied to how well it is embedded into the instructional framework.

"Lack of internet access" and "device limitations" reflect infrastructural issues that are common in developing educational contexts. These findings resonate with Ali et al. (2021), who documented similar challenges among Iraqi university students using e-learning technologies during the COVID-19 pandemic. Addressing these barriers requires systemic investments in campus-wide digital infrastructure and subsidized access to mobile devices and data plans.

"Lack of motivation" was likewise noted by most of the students. This psychological obstacle could be due to the absence of instant rewards or comments when they use self-study applications. Adaptive feedback and gamification

mechanisms—both of which are becoming more prevalent in more recent MALL materials—might contribute to motivating users (Li &Hegelheimer, 2013).

5.4. Pedagogical and Institutional Implications

These findings suggest several key implications for English language instruction and educational policy at the university level. First, the widespread use of MALL apps—even among non-English majors—indicates a strong potential for mobile technologies to supplement traditional language instruction. However, to harness this potential, instructors must play a more active role in recommending, curating, and contextualizing MALL resources.

One concrete action would be to incorporate app-based assignments into the English curriculum or provide training sessions, and get students to choose the most suitable ones for their own objectives. Additionally, interaction between language departments and IT sections would enable tackling technical issues, such as internet connection and compatibility with students' devices.

Second, the low engagement with productive skills (speaking and writing) indicates an opportunity for app developers and educators to design more collaborative and interactive MALL experiences. Tools that incorporate voice recognition, peer-to-peer speaking tasks, or real-time feedback mechanisms could help bridge this gap.

Finally, the study underscores the importance of addressing motivational barriers. University administrators can reward mobile learning with badges, leaderboards, or tie it to course work assessments. These strategies can drive more student participation and an interactive and engaging language learning experience.

5.6. Relation to Existing Literature

The study here both corroborates and adds to previous research in the field. Like Steel and Levy (2013) and Zhang et al. (2021), it corroborates the popularity of listening and vocabulary activities in MALL contexts. In line with Davis's

(1989) TAM model, it also confirms the perceived ease and usefulness as facilitating factors in the uptake of technology. At the same time, the research makes a unique contribution because it examines these dynamics in a non-Englishmajor student population in Iraq, a context that is under-represented in MALL literature.

Furthermore, this research contributes to growing recognition that the success of MALL relies on access and attitude but on more than that—contextual integration, to be precise. Technology-equipped students might not develop the optimum potential of language learning without proper pedagogical assistance. This supports the propositions of Kukulska-Hulme (2020) and Lai (2016), who write in support of more scaffolded and structured MALL learning environments.

6. Conclusion

This study explored the use of Mobile-Assisted Language Learning (MALL) apps by philosophy students at Wasit University, completing a gap in MALL research: non-English major Iraqi university learners. The findings highlight both the potential and the challenges for employing mobile technology for English language learning in such settings.

Learners, overall, showed middling engagement with MALL, using apps for around 3.27 hours per week. Their greatest interest was listening and vocabulary, consistent with patterns identified in previous studies (Steel & Levy, 2013; Zhang et al., 2021). While students in general found MALL apps to be very helpful and easy to use—consistent with favorable attitudes in alignment with the Technology Acceptance Model (Davis, 1989)—this did not transfer to a high correspondence between patterns of use. This suggests that positive attitudes in themselves are insufficient to guarantee continuous involvement unless broader contextual conditions are changed.

The study also enumerated some key barriers to the effective implementation of MALL that include a lack of pedagogical guidance, infrastructural limitations (e.g., availability of internet), and motivational challenges. The importance of the "lack of guidance" barrier is particularly pivotal in the case of non-language majors, who receive minimal structured support in transferring mobile learning to their language acquisition. This point of observation further emphasizes the need for greater intentional pedagogical incorporation of MALL, as emphasized by Hockly (2013) and Reinders and Benson (2017).

Infrastructural and institutional improvements also need to be made to facilitate a more favorable learning environment for the use of MALLs. Lacking regular internet access and compatibility with suitable devices, the majority of students are still not in a position to use the full potential of mobile language learning. Besides this, motivational aspects should be addressed with more interactive, motivating, and social-integrated MALL experiences—an area where app developers and educators can intervene.

Specifically, this study contributes localized data to the growing corpus of MALL research by focusing on Iraqi non-English majors, a population that has been comparatively less studied within academic literature. As countries like Iraq and other emergent contexts increasingly adopt mobile technologies in higher education, being able to identify how various student populations utilize these resources is increasingly critical.

Subsequent research will have to build on this foundation by exploring larger and more representative samples, taking account of longitudinal trends in MALL involvement, and assessing interventions to increase pedagogical embedding of mobile learning. In addition, further effort must be directed toward developing and testing MALL materials that promote productive language skills, such as speaking and writing, which remain underexploited in student practice.

In sum, while MALL apps offer significant promise for supplementing English language learning among non-English majors, realizing this potential will require coordinated efforts across pedagogy, technology, and institutional policy. With targeted support and innovation, MALL can become a more powerful and inclusive component of language education in Iraqi universities and beyond.

• References

Al-Obaydi, L. H., & Bataineh, R. F. (2015). The feasibility of MALL in the Iraqi EFL context: A preliminary study. *International Journal of Education and Development Using Information and Communication Technology*, 11(2), 120–137.

Alamer, A., & Alkhateeb, A. (2021). The use of mobile-assisted language learning (MALL) applications for English language learning: A review of the literature. *International Journal of Emerging Technologies in Learning*, *16*(14), 236–252.

Al-Jubori, M. M. S. M. (2020). Factors affecting e-learners' ability to learn English as a foreign language (EFL) online: A literature review. *Lark Journal for Philosophy, Linguistics and Social Sciences*, 13(1), 1178–1164. https://doi.org/10.31185/lark/Vol1,Iss40.1687

Ali, W., Khalid, N., & Musa, R. (2021). E-learning in Iraq during COVID-19: Challenges and solutions. *Education and Information Technologies*, 26(5), 5321–5338.

Alrasheedi, M., Capretz, L. F., & Raza, A. (2015). A systematic review of the critical factors for success of mobile learning in higher education (university students' perspective). *Journal of Educational Computing Research*, 52(2), 257–276.

Burston, J. (2015). Twenty years of MALL project implementation: A meta-analysis of learning outcomes. *ReCALL*, 27(1), 4–20.

Chen, C.-M. (2013). Effects of personalized learning paths on learners' achievement and self-efficacy in mobile learning. *Educational Technology & Society*, *16*(3), 140–150.

Chen, X.-B. (2013). Tablets for informal language learning: Student usage and attitudes. *Language Learning & Technology, 17*(1), 20–36.

Chiu, T. K. F. (2013). Computer-assisted second language vocabulary instruction: A meta-analysis. *British Journal of Educational Technology*, 44(2), E52–E56.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340.

Duman, G., Orhon, G., & Gedik, N. (2015). Research trends in mobile assisted language learning from 2000 to 2012. *ReCALL*, 27(2), 197–216.

Gafni, R., Achituv, D. B., &Rachmani, G. (2017). Learning foreign languages using mobile applications. *Journal of Information Technology Education: Innovations in Practice*, 16, 301–317.

Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning & Technology*, 15(2), 2–11.

Hockly, N. (2013). Designer learning: The teacher as designer of mobile-based classroom learning experiences. *TESL-EJ*, *17*(4), 1–14.

Hsu, L., & Ching, Y. H. (2013). Mobile app design for teaching and learning: Educators' experiences in an online graduate course. *The International Review of Research in Open and Distributed Learning*, *14*(4), 117–139.

Kim, H. S., & Kwon, Y. M. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31–57.

Kukulska-Hulme, A. (2020). Mobile-assisted language learning [MALL]: Current state of the art. In F. M. Hult (Ed.), *The Handbook of Educational Linguistics* (pp. 351–364). Wiley.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271–289.

Lai, C. (2016). Autonomous language learning with technology: Beyond the classroom. Bloomsbury.

Lai, C., & Gu, M. (2011). Self-regulated out-of-class language learning with technology. *Computer Assisted Language Learning*, 24(4), 317–335.

Lan, Y.-J., Sung, Y.-T., & Chang, K.-E. (2015). Mobile-device-supported peer-assisted learning: The impact of reading annotation sharing on L2 English reading comprehension. *Language Learning & Technology*, *19*(3), 35–56.

Li, Z., & Hegelheimer, V. (2013). Mobile-assisted grammar exercises: Effects on self-editing in L2 writing. *Language Learning & Technology*, 17(3), 135–156.

Lin, T.-B., & Lin, Y.-T. (2019). The effect of personalized mobile-assisted language learning on English learners' oral proficiency. *International Journal of Mobile Learning and Organisation*, 13(2), 107–124.

Park, Y., & Slater, T. F. (2014). A typology of tasks for mobile-assisted language learning. *ReCALL*, 26(3), 316–332.

Pew Research Center. (2023). Mobile fact sheet. https://www.pewresearch.org

Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. *Language Teaching*, 50(4), 561–578.

Reinders, H., & Pegrum, M. (2017). Supporting language learning on the move: An evaluative framework for mobile language learning resources. *TESOL Quarterly*, *51*(1), 218–231.

Rosell-Aguilar, F. (2018). State of the app: A taxonomy and framework for evaluating language learning mobile applications. *CALICO Journal*, *35*(2), 243–258.

Steel, C. H., & Levy, M. (2013). Language students and their technologies: Charting the evolution 2006–2011. *ReCALL*, 25(3), 306–320.

Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, *14*(2), 95–110.

Stockwell, G., & Hubbard, P. (2013). Some emerging principles for mobile-assisted language learning. *Monterey Symposium*, 1–15.

Traxler, J. (2009). Learning in a mobile age. *International Journal of Mobile and Blended Learning*, I(1), 1–12.

Traxler, J. (2016). Mobile learning: Reflections on trends and challenges. *Distance Education*, 37(2), 221–237.

Viberg, O., & Grönlund, Å. (2013). Cross-cultural analysis of users' attitudes toward the use of mobile devices in second and foreign language learning in higher education: A case from Sweden and China. *Computers & Education*, 69, 169–180.

Zhang, R., Zou, D., &Xie, H. (2021). Mobile-assisted listening tasks in English as a foreign language (EFL) learning: Investigating technology acceptance and learner engagement. *Computer Assisted Language Learning*, 1–28.

Zhang, R., Zou, D., & Xie, H. (2021). Mobile-assisted vocabulary learning: Investigating effects on learning performance and cognitive load. *Computer Assisted Language Learning*, 34(5–6), 653–675.