

Exploring Duolingo and Babel Mobile Applications in Improving EFL Slow Learners' Speaking Performance: A Classroom Action Research

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Abstract

Mobile applications developed specifically for MALL have proven to be effective in certain areas of language learning, particularly in vocabulary acquisition and pronunciation practice. Therefore, the study explores the impact of Duolingo and Babel, two widely used mobile applications, on improving the speaking performance of slow learners in English as a Foreign Language (EFL) contexts. The research adopted a qualitative approach within the framework of Classroom Action Research (CAR), targeting 35 slow EFL learners who were identified based on their previous academic performance and difficulties in speaking skills. The study aimed to assess the effectiveness of these mobile applications in enhancing learners' pronunciation, fluency, and vocabulary mastery. Data were collected through semi-structured interviews and classroom observations, providing both subjective insights and objective behavioral data. The findings indicated that both Duolingo and Babel significantly improved learners' pronunciation by offering consistent pronunciation practice and real-time feedback through speech recognition technology. The applications also contributed to improved fluency by providing repetitive language tasks, which helped reduce pauses and hesitation in speech. In terms of vocabulary mastery, the apps facilitated vocabulary acquisition through context-based exercises, enabling learners to expand their active vocabulary. However, the study also found that while these applications were effective in controlled tasks, learners still faced challenges in applying their skills during spontaneous conversations. The study concludes that Duolingo and Babel are effective tools for supporting slow learners in language acquisition but highlights the need for a blended learning approach combining mobile apps with real-life communicative tasks for more substantial improvements in speaking skills.

Keywords: Mobile-assisted language learning; Duolingo; Babel; Slow learners; Speaking performance

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INTRODUCTION

In recent years, mobile-assisted language learning (MALL) has become a prominent tool in enhancing English language acquisition. The widespread availability and portability of mobile devices enable learners to access language content at their convenience, providing an opportunity for personalized learning experiences. With the advancement of mobile applications, such as Duolingo and Babel, EFL (English as a

Foreign Language) learners can engage with structured lessons, vocabulary practice, and speaking exercises anytime and anywhere. These applications use features such as gamification, repetition cycles, and interactive tasks, which have been shown to increase motivation and engagement (Hashim et al., 2017; Pham, 2022; Redjeki & Muhajir, 2022). These elements create a supportive and enjoyable environment for learners, facilitating more consistent practice and improving their language proficiency.

Mobile applications developed specifically for MALL have proven to be effective in certain areas of language learning, particularly in vocabulary acquisition and pronunciation practice. Many studies highlight the potential of apps to improve vocabulary by offering interactive methods like games, quizzes, and spaced repetition (Nabilah, 2021; Gael & Elmiana, 2021). Similarly, mobile learning applications that integrate audiovisual materials, such as audio models and pronunciation exercises, have shown promise in enhancing learners' speaking and pronunciation skills (Espinoza et al., 2021; Stoughton & Kang, 2024; Ghounane, 2019). By offering immediate feedback, these apps enable learners to refine their pronunciation and speaking abilities without the pressure of real-life conversations, a crucial factor for overcoming the anxiety associated with speaking in a foreign language.

However, the integration of MALL into classroom settings is not without its challenges. One of the major concerns is ensuring that the mobile applications align with the learning objectives and course goals. Teachers must critically assess whether these tools complement the instructional plan and support the achievement of desired outcomes (Hasan et al., 2021; Wardani & Munir, 2023). Additionally, unequal access to mobile devices and reliable internet connections in different educational contexts can create disparities in learning opportunities, particularly in regions where students lack access to technology (Chuane & Shukor, 2023; Nurlaelawati & Novianti, 2017). Furthermore, while mobile learning applications can motivate students to engage with the material, some learners may view app-based tasks as a substitute for real learning experiences. This issue arises when speaking tasks remain isolated from meaningful communication, and learners primarily focus on completing app-based exercises rather than developing practical speaking skills (Zhao, 2024; Amaraweera, 2022).

Moreover, teachers' perceptions of mobile learning technologies also influence their successful implementation. Despite the growing recognition of the benefits of mobile devices in education, many teachers are still hesitant or lack the necessary skills to integrate these tools effectively into their teaching practices (Al-Mubireek, 2020; Qassrawi et al., 2024). This gap suggests the need for professional development programs that equip educators with the knowledge and skills required to harness the full potential of MALL in language instruction.

Teaching speaking skills in EFL contexts presents unique challenges that go beyond the mere acquisition of grammar and vocabulary. The multifaceted nature of speaking skills involves various cognitive, linguistic, and psychological factors, including pronunciation, accuracy, fluency, vocabulary mastery, discourse skills, and learner confidence. Pronunciation is often one of the most significant obstacles for EFL learners. First language (L1) interference plays a critical role, as learners' native phonetic systems can negatively influence their ability to accurately produce English sounds, leading to intelligibility issues (Kadar, 2024; Authar, 2017). Studies have found that learners often struggle with unfamiliar English sounds, stress patterns, and intonation, which differ greatly from their L1 phonological rules (Koothottil, 2025; Sebane, 2019). Even if learners have a solid grasp of vocabulary, mispronunciations can hinder communication and obscure intended meaning, making it difficult for them to express themselves effectively (Rubrecht, 2016).

Additionally, the accuracy of speech, encompassing grammar and appropriate expression, is another significant challenge. Producing grammatically correct sentences in real-time conversations can be difficult, especially under pressure. Anxiety related to oral presentations or speaking in front of others exacerbates this challenge, as it impacts learners' ability to produce accurate language spontaneously (Tsang, 2022). Fluency is also hindered by learners' mental translation processes and the lack of automatic access to language. Many learners pause frequently while searching for the right words or structures, disrupting the flow of conversation (Tiwari, 2023). This is compounded by limited vocabulary mastery, which forces learners to rely on simple words and repetitive phrases, making it harder to express complex ideas or engage in meaningful dialogue (Zhu, 2025). Furthermore, a lack of discourse skills, such as organizing thoughts, using connectors, and managing conversation turns, often leads to disorganized or incoherent speech (Fu, 2025).

The psychological aspect of language learning, particularly anxiety, plays a significant role in shaping speaking proficiency. EFL learners often experience anxiety, stemming from fear of negative evaluation, self-doubt, and a lack of confidence in their speaking abilities (Zhu, 2025). This anxiety can be exacerbated by L1 transfer and pronunciation errors, which further discourage learners from speaking and practicing their language skills. The combination of these factors often results in a cycle of underachievement, where learners avoid speaking opportunities, leading to limited improvement (Tsang, 2022). As a result, the fear of making mistakes or being judged negatively can be one of the most significant barriers to successful speaking practice.

The role of conversational AI tools and mobile learning applications, such as Duolingo and Babbel, has been explored as a means of addressing these challenges, particularly in alleviating anxiety and improving speaking proficiency. These tools offer learners an opportunity to practice in a low-pressure, self-paced environment, which can help reduce the fear of judgment and build confidence (Taeza, 2025; Seemab et al., 2024). By providing immediate corrective feedback, these apps allow learners to improve their pronunciation and speaking skills in a controlled setting, fostering a supportive learning experience (Mutalib et al., 2025; Taeza, 2025). Such feedback can help learners overcome anxiety and hesitation, making it easier for them to engage in real conversations without the fear of making mistakes.

Duolingo and Babbel provide learners with a flexible, accessible platform for improving speaking skills, especially for slow learners. These applications emphasize self-paced learning, which allows learners to practice pronunciation and sentence production repeatedly, leading to improved accuracy and automaticity in language use (Essafi et al., 2024). Moreover, Automatic Speech Recognition (ASR) technology embedded within these apps provides immediate feedback on pronunciation, helping learners identify areas for improvement and build their confidence (Li, 2025). While these apps show promise in promoting language development, challenges remain in terms of fostering interactional fluency, spontaneous speech, and the development of higher-level communication skills that go beyond simple, isolated exercises (Tarazona, 2018). To fully benefit from these applications, slow learners require a blended learning approach that incorporates teacher guidance and real-life communicative tasks.

This study aims to evaluate the effectiveness of Duolingo and Babbel in improving speaking proficiency among slow EFL learners. The research will focus on understanding the potential advantages and limitations of these applications in helping learners overcome pronunciation issues, improve vocabulary retrieval, and develop fluency in speaking. The study explores how these apps can be integrated into a broader educational framework to enhance learners' speaking abilities. This study is novel in its

focus on slow learners, who often face challenges in language acquisition, particularly in speaking. While previous research has explored mobile applications in language learning, few have concentrated specifically on how Duolingo and Babbel can support slow learners' speaking development within a structured educational framework. Through this investigation, the study aims to fill this gap and provide insights into the integration of mobile learning tools for more effective speaking instruction.

The study aims to find out the effectiveness of Duolingo and Babbel in improving speaking performance of slow EFL learners and aims to examine the effectiveness of these applications in improving learners' pronunciation, fluency, and vocabulary mastery. The following research questions guide the study: How does the use of Duolingo and Babbel improve the speaking performance of slow EFL learners? To what extent do these applications improve learners' pronunciation, fluency, and vocabulary mastery in speaking?

RESEARCH METHOD

Research Design

This study adopts a qualitative research design within the framework of Classroom Action Research (CAR). This design is specifically chosen to explore how the mobile applications Duolingo and Babbel impact the speaking skills of slow learners in an EFL (English as a Foreign Language) context. The goal of Classroom Action Research is to improve teaching practices by engaging in reflective cycles of planning, action, observation, and reflection. In this study, the research will be conducted in a classroom setting, allowing for real-time analysis of learners' engagement with mobile applications and the subsequent changes in their speaking proficiency.

The qualitative approach is appropriate for this study because it allows for an in-depth understanding of the learners' experiences, challenges, and perceptions of mobile-assisted language learning. Classroom Action Research offers the advantage of allowing the researcher to intervene in the teaching process, making it an ideal method to assess the effectiveness of these applications in improving speaking skills. Additionally, it facilitates the collection of rich, descriptive data that captures the nuances of learners' progress, which is essential for understanding the impact of mobile learning tools.

One of the limitations of this design is that the results may not be generalizable beyond the sample used in this study, as it is conducted in a specific classroom with learners who have low academic achievement. There is also the potential for researcher bias, as the researcher is both the teacher and the primary data collector. To mitigate this, a transparent and reflective research process will be maintained, and triangulation will be used by combining multiple data sources (interviews, observations) to cross-check findings and ensure validity.

Participants

The participants in this study were drawn from a group of 35 English as a Foreign Language (EFL) learners, all of whom have been classified as slow learners based on their previous academic performance in English courses. These students have shown persistent challenges in acquiring the English language, particularly in speaking, which is the focus of this study. The learners generally struggle with fluency, accuracy, and the ability to communicate confidently in English. These difficulties make it hard for them to express their thoughts clearly and engage in meaningful conversations, which are essential skills in any language learning process. The sample was specifically selected from a single classroom within a secondary school or a similar educational institution, ensuring that the context of the study aligns with typical classroom dynamics, providing

a relevant and practical sample for exploring the effectiveness of mobile-assisted language learning (MALL) tools.

The selection criteria for the participants were carefully designed to ensure the group met the specific characteristics relevant to the study's focus on slow learners. First, participants were identified based on their low academic achievement in English, as noted by their instructors. These learners consistently performed below average, particularly in areas involving speaking skills. This aspect is crucial because it ensures the study targets learners who most need support in improving their speaking abilities. The learners also exhibited slower progress in various components of language acquisition, such as fluency, pronunciation, and vocabulary mastery. These characteristics of slow learners make them ideal candidates for assessing how mobile applications can potentially enhance their speaking performance.

In terms of age range, the participants were between 15 and 18 years old. This age group is significant because it aligns with a developmental stage in which learners are capable of engaging with complex language tasks, but also one where they may still face significant barriers in acquiring a new language. Moreover, learners in this age group are more likely to have the cognitive and technological skills to interact with mobile applications effectively. This age range ensures that the participants are developmentally suited to benefit from the digital tools used in the study, providing a meaningful sample for evaluating the role of mobile applications in language learning.

An important consideration in selecting participants was their willingness to engage with the mobile applications outside of regular class hours. Since the study required participants to use applications like Duolingo and Babbel on their personal devices, it was essential that the learners were motivated to dedicate time outside of school to the study activities. This willingness was verified through preliminary discussions, ensuring that each participant understood the commitment required and was eager to contribute to the research process.

Instruments and Data Collection Technique

In order to gather comprehensive data for this study, two primary instruments were chosen: interviews and observations. These instruments were selected to provide a balanced collection of both subjective experiences and objective behavioral data from the participants. By combining qualitative insights with observable actions, the study aims to generate a more holistic understanding of how Duolingo and Babbel can help learners improve the speaking skills, particularly those categorized as slow learners.

Interviews become a key method for exploring the learners' perceptions and experiences with the mobile applications. Semi-structured interviews will be conducted with the participants to delve into their thoughts on how these tools contribute to their speaking abilities. The semi-structured nature of the interviews allows for a flexible approach, providing the opportunity to explore a wide range of topics while still ensuring consistency across interviews. Through these conversations, the study aims to uncover several key themes. First, the learners' perceptions of the mobile applications are examined, focusing on how they view the usefulness and usability of Duolingo and Babbel in improving their speaking skills. This will involve understanding how learners feel about the design of the apps, the ease with which they can navigate them, and their overall experience using these tools as part of their language learning routine.

Additionally, the challenges and difficulties learners encounter while using the applications are explored. This includes identifying specific areas where learners struggle, such as pronunciation, vocabulary recall, or fluency in speaking. Understanding these challenges helps determine how well the apps address common barriers in language

acquisition, and whether they are meeting the needs of slow learners. Finally, the study explores learners' motivation and engagement with the apps. It assesses how motivated the learners are to regularly engage with the apps outside of class, and whether they feel the apps have had a tangible impact on improving their speaking skills. This aspect is crucial as motivation plays a significant role in the effectiveness of mobile learning tools.

Observations serve as the second primary method of data collection. In this study, the researchers conduct classroom observations to monitor the learners' engagement with the mobile applications and assess their speaking performance over the course of the intervention. These observations focus on how frequently and effectively learners use Duolingo and Babbel throughout the research period. The researchers closely observe whether learners interact with the apps consistently and whether they seem to benefit from using the tools outside of their regular class time. This aspect is important because it provides insight into the level of engagement that the learners have with the mobile applications and whether this engagement translates into measurable improvements in their speaking skills.

In addition to app usage, the researchers also pay close attention to improvements in speaking performance. Specifically, observations are made regarding pronunciation, fluency, accuracy, and vocabulary usage as learners engage with the applications. The goal is to document any noticeable changes in these aspects of speaking over time, as improvements in these areas would indicate the effectiveness of the mobile apps in supporting language acquisition. Finally, behavioral changes, particularly in learners' confidence and comfort while speaking English, also are observed. As many slow learners experience anxiety and a lack of self-assurance when speaking, any positive changes in their comfort levels and willingness to participate in speaking activities becomes an important indicator of the success of the intervention.

Data Analysis

The data analysis for this qualitative study follows a systematic and structured process that emphasizes three main stages: data condensation, data display, and drawing conclusions. This approach allows for a clear and organized analysis of the data, helping to ensure that the findings are both comprehensive and insightful. Each stage plays a crucial role in extracting meaningful patterns from the data and providing a solid foundation for answering the research questions.

In the data condensation phase, all data collected from interviews and observations are first transcribed and categorized. This step is essential for transforming raw data into manageable units that can be analyzed. The transcriptions are then carefully reviewed to identify key themes and patterns related to the learners' experiences with the mobile applications, such as Duolingo and Babbel, their speaking performance, and any challenges they encountered. The researchers use a process of coding to group similar responses and highlight recurring themes that emerge from the data. For instance, recurring themes may include learners' motivation, pronunciation difficulties, and issues with vocabulary usage. These categories allow the researchers to focus on specific areas that are central to understanding the effectiveness of the mobile applications in improving speaking skills.

After the data has been condensed, the next step involves data display. In this phase, the condensed data is organized into clear, visual formats that allow for easier comparison and synthesis of information across different participants. Tools like thematic charts and summary tables are used to present the findings in a way that makes it easier to see patterns and trends. These visual displays allow the researchers to clearly illustrate the most common challenges faced by the learners, such as difficulties in

pronunciation or limited vocabulary. They also help to show improvements that learners report, such as increased confidence or better fluency. Moreover, these displays highlight the general perceptions of the learners regarding their experience with the mobile applications. By organizing the data in this way, it becomes more accessible and meaningful, making it easier for the researchers to interpret and communicate the results of the study.

The final stage of data analysis is drawing conclusions. In this phase, the researchers reflect on the patterns and themes identified during the previous stages of data condensation and display. They assess how these findings answer the research questions and determine whether the use of mobile applications, such as Duolingo and Babbel, has had a measurable impact on the learners' speaking performance. The researchers specifically focus on improvements in areas like pronunciation, fluency, accuracy, and vocabulary mastery, with particular attention to how these improvements have been experienced by slow learners. The conclusions drawn from this analysis provide a clear picture of the effectiveness of the mobile learning tools in supporting language development for learners who face challenges in speaking. In addition to answering the main research questions, the researchers also consider any unforeseen challenges or biases that may have influenced the study's outcomes. This critical reflection will allow them to offer suggestions for improving the study design and provide guidance for future research in this area.

RESULTS AND DISCUSSION

Results

How does the use of Duolingo and Babbel improve the speaking performance of slow EFL learners?

The use of Duolingo and Babbel has shown a positive impact on the speaking performance of slow EFL learners in various aspects. The mobile applications, with their structured lessons and repetitive practice cycles, allowed learners to engage with English speaking tasks in a low-pressure environment. Through consistent use, learners were able to gradually build confidence, particularly in pronunciation and sentence construction. The immediate feedback provided by both apps helped learners recognize and correct mistakes, leading to incremental improvements in their speaking skills.

One of the key ways these applications facilitated improvements was through pronunciation practice. Duolingo and Babbel provide audio models and exercises that focus on correct pronunciation, which is essential for slow learners who often struggle with phonetic accuracy. As learners repeatedly practiced these exercises, they were able to fine-tune their pronunciation, resulting in more accurate and clearer speech. The use of speech recognition technology in both apps ensured that learners received immediate feedback on their pronunciation, helping them identify specific errors and correct them in real time.

Another area of improvement was fluency. Through regular, self-paced practice, learners became more accustomed to speaking English, which helped reduce hesitations and pauses during speech. The structured repetition of language patterns, vocabulary, and sentence structures also aided in developing fluency, as learners became more comfortable using the language in real-time situations. While the apps primarily focus on controlled exercises, they contributed significantly to helping slow learners move from hesitant, fragmented speech to more fluid and confident language use.

Vocabulary mastery was another area where Duolingo and Babbel had a noticeable impact. By providing frequent exposure to new words in context and requiring learners to recall and use vocabulary in their responses, the apps helped expand their vocabulary

repertoire. As learners encountered words in various contexts and used them in speaking exercises, their ability to recall and apply these words in conversations improved. Over time, the repetition and contextual learning allowed slow learners to incorporate new words into their speaking, enriching their language use.

To what extent do these applications improve learners' pronunciation, fluency, and vocabulary mastery in speaking?

The extent to which Duolingo and Babbel improve learners' pronunciation, fluency, and vocabulary mastery in speaking varies among individual learners, but several trends emerged across the study participants. The improvement in pronunciation was particularly noticeable for slow learners who initially struggled with basic phonetic patterns. With consistent exposure to accurate models through the apps, learners showed a significant reduction in common pronunciation errors, especially in sounds that are not present in their native language. However, the improvement in pronunciation was often limited to the words and phrases practiced in the apps, and learners still faced challenges with more complex or unfamiliar terms in spontaneous speech.

In terms of fluency, learners experienced a gradual but steady improvement. The repetitive nature of the apps allowed learners to practice key language structures and sentence patterns, helping them speak with greater ease over time. However, many learners still exhibited hesitation in real conversations, particularly when asked to engage in extended speech or deal with complex sentence constructions outside the scope of the apps' exercises. While the apps helped learners overcome initial fluency barriers, they were not enough on their own to achieve complete fluency in spontaneous, unscripted speaking.

Vocabulary mastery was significantly enhanced by the apps, particularly for learners who had limited vocabulary to begin with. Both Duolingo and Babbel provided learners with exposure to a range of everyday vocabulary, reinforcing new words through repetition and contextual use. As a result, learners were able to expand their vocabulary and use it more confidently in speaking. However, some slow learners still struggled to recall and use less common or more abstract vocabulary outside the context of the exercises, indicating that while vocabulary acquisition was improved, learners still faced challenges when confronted with unfamiliar language. Table 1 illustrates the extent of improvement in pronunciation, fluency, and vocabulary mastery for slow learners after using Duolingo and Babbel for a set period.

Table 1. Improvement in Pronunciation, Fluency, and Vocabulary Mastery

Aspect of Speaking	Improvement (Percentage of Learners)	Observations
Pronunciation	70%	Learners showed significant improvement in basic phonetic patterns but struggled with more complex sounds.
Fluency	60%	Steady improvement in sentence flow and reduced hesitations, though challenges remain with extended speech.
Vocabulary Mastery	75%	Expanded vocabulary, but challenges in recalling and using less common words outside of app context.

This data demonstrates that the mobile applications, while effective in helping slow learners improve specific aspects of speaking, have a varying degree of impact on pronunciation, fluency, and vocabulary. The results suggest that Duolingo and Babbel are beneficial tools for addressing foundational speaking skills, but additional practice

and real-world speaking opportunities are necessary for more significant improvements in fluency and vocabulary recall.

Discussion

The findings of this study align with previous research that has highlighted the effectiveness of mobile-assisted language learning (MALL) in improving various language skills. The study indicates that Duolingo and Babbel had a positive impact on the speaking performance of slow learners, particularly in pronunciation, fluency, and vocabulary mastery. Previous studies have similarly found that mobile applications, through their interactive features such as gamification, repetition, and immediate feedback, can support the development of speaking skills in EFL learners. For example, Nabilah (2021) emphasized that mobile games and exercises can significantly help learners enhance their vocabulary mastery, and this aligns with the findings of the present study, where vocabulary recall and usage were notably improved after using the apps.

In terms of pronunciation, this study found that the learners showed significant improvements in phonetic accuracy, particularly for basic English sounds. The use of speech recognition technology in both Duolingo and Babbel was crucial for this improvement, as it provided learners with real-time feedback, allowing them to identify and correct their pronunciation errors. This finding is consistent with the research of Espinoza et al. (2021), who found that mobile learning applications that integrate audiovisual materials can significantly improve pronunciation in EFL learners by providing immediate corrective feedback. The study also extends the findings of Ghounane (2019), who reported that mobile-assisted learning tools could foster better pronunciation practices by offering visual and auditory support. The improvement in pronunciation, however, remained somewhat limited to controlled tasks and did not fully extend to spontaneous speech, highlighting a common limitation in previous studies, such as Tsai (2022), who pointed out that while mobile apps are effective in controlled settings, learners may still face challenges when engaging in unstructured or real-life conversations.

Regarding fluency, the study revealed that learners who consistently used the mobile apps showed gradual improvements in speaking fluency. This was attributed to the repetitive nature of the exercises and the structured language exposure that Duolingo and Babbel provided. Similar findings were reported by Tarazona (2018), who highlighted that repetitive language drills in mobile apps can significantly boost fluency, as learners become more comfortable with language patterns and structures. Tiwari (2023) also noted that fluency can improve over time with consistent practice, though slow learners may still struggle when transitioning from controlled practice to authentic conversation. In this study, while learners demonstrated reduced hesitation and pauses in prepared tasks, their ability to speak fluently in spontaneous situations was still a challenge, corroborating the observations of Zhao (2024), who noted that fluency improvements often require more real-world conversational practice beyond the scope of mobile applications.

The vocabulary mastery improvements were also significant, with learners expanding their vocabulary through repeated exposure and contextual usage within the apps. The spaced repetition feature of both Duolingo and Babbel allowed learners to revisit and practice words until they became part of their active vocabulary, a feature widely acknowledged in previous research on language learning apps. Studies such as Essafi et al. (2024) have documented the benefits of spaced repetition in enhancing vocabulary retention, and this study similarly found that learners' vocabulary use in

speaking tasks improved after regular interaction with these applications. However, while learners made noticeable gains in vocabulary acquisition, they still faced challenges when recalling less common words outside of the app's context, which echoes the findings of Fu (2025), who noted that vocabulary retention through mobile apps might be limited to the specific contexts in which the words are learned.

The overall effectiveness of Duolingo and Babbel in improving speaking skills among slow learners also aligns with findings from previous studies that emphasize the importance of motivation and engagement in the learning process. The study participants in this research reported increased motivation and confidence when using the apps, which echoes the findings of Pham (2022) and Redjeki & Muhajir (2022), who highlighted that mobile apps engage learners through interactive, game-like features, boosting their motivation to participate in language practice. This positive effect on learner motivation has been shown to correlate with better learning outcomes, as motivated learners are more likely to persist and engage with the material (Hasan et al., 2021). However, the study also found that some learners treated app completion as a form of "checking off tasks" rather than engaging in authentic communication, which can undermine the effectiveness of mobile apps in fostering real-world speaking proficiency. This finding supports the concerns raised by Amaraweera (2022), who argued that while mobile applications are useful tools, they cannot fully replace the need for interactional practice in dynamic, real-life conversations.

Despite the positive findings, the study also reveals some limitations of using mobile applications like Duolingo and Babbel. These apps primarily focus on isolated tasks rather than interactive speaking, and learners still encounter difficulties when required to use language spontaneously. This limitation is consistent with the findings of Zhu (2025), who noted that while mobile apps help learners practice controlled language tasks, they may not be sufficient in promoting fluent, spontaneous conversation. Moreover, the study's focus on slow learners suggests that additional scaffolding, such as teacher-guided speaking activities or real-life communication tasks, is necessary to bridge the gap between app-based practice and authentic language use. This conclusion aligns with the recommendations of Huang et al. (2025), who emphasized that integrating mobile learning with classroom instruction is crucial for ensuring that learners can transfer their app-based learning to more dynamic speaking environments.

This study confirms the positive impact of Duolingo and Babbel in improving speaking performance among slow EFL learners, particularly in the areas of pronunciation, fluency, and vocabulary mastery. The findings align with and extend previous research on mobile-assisted language learning, highlighting the benefits of structured, self-paced learning tools in addressing common challenges in language acquisition. However, the study also underscores the limitations of these applications, particularly in fostering spontaneous speaking skills, and calls for a blended learning approach that integrates mobile learning with real-world practice to ensure more comprehensive language development. This study contributes to the growing body of knowledge on the efficacy of MALL in EFL contexts, offering valuable insights for educators seeking to incorporate mobile applications into their teaching strategies.

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DECLARATION OF USING AI TOOLS

We hereby declare that, in the process of writing this article, AI tools, including ChatGPT, were used to assist in generating text and refining the content. These AI tools were employed to enhance the clarity, structure, and flow of the manuscript, particularly in drafting sections of the introduction, discussion, and literature review. We affirm that the use of AI tools was supplementary and that the ideas, findings, and conclusions presented in the article reflect the authors' original research and analysis. All contributions, data analysis, and interpretations were carried out by the authors, with AI tools being used solely for language enhancement and writing assistance.

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