

Using mobile devices to foster English reading motivation in early elementary education

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Abstract

In an era where mobile learning tools are increasingly shaping education, it is important to examine their role in supporting reading literacy skills. Motivation to read is one of the key factors in reading achievement and may no longer be sufficient with the traditional methods. For that reason, this mixed-methods case study involved 16 first-grade students who were introduced to tablets for the first time during their English lessons throughout a term of four months. Questionnaires and interviews were used to explore how tablets influenced their feelings and perceptions toward reading and whether it motivated them to engage more with reading overall. The findings show that not only did the devices enrich their reading experiences positively but also supported diverse learning styles and levels and contributed to increased confidence and persistence in more demanding reading activities. Students reported that the gamified features of certain applications further motivated them to read by increasing their focus on the tasks and rewarding them with a sense of accomplishment. These results offer valuable insights for teachers, parents and stakeholders seeking to enhance students' motivation and meaningful interactions with reading contents through mobile digital tools.

Keywords: Mobile learning; Primary education; Reading motivation

1. Introduction

Reading is considered a fundamental skill that supports the development of students' knowledge and contributes to effective literacy. However, many children struggle to develop strong reading skills, often due to lack of motivation. Since the formal beginnings of education, motivation has been viewed as the primary determinant of student reading achievement and long-term reading habits (Wigfield et al., 2004). This raises a key question: do students participate in learning activities because they genuinely enjoy them or because they are motivated by rewards, results and the educational value they expect to earn? (Conradi et al., 2014).

Motivation can come from inside the person, called intrinsic motivation. According to theories (Schunk et al., 2008), intrinsic motivation means reading simply because it feels enjoyable or satisfying, challenging, curious and involved. Several factors support this type: according to Schunk (1996), self-efficacy can interact reciprocally with motivation; high self-efficacy is associated with greater dedication and enthusiasm for reading, while low often results in avoidance. Features such as choice (Ciampa, 2016), interest (Oudeyer et al., 2016) and curiosity (Guthrie et al., 2006) have been widely recognized as a bridge to developing mature readers, supporting autonomy and self-regulation and improving reading skills with active exploration. It can also come from outside, such as reading to get good grades, earn a reward or receive praise composed of recognition, competition, social reasons and compliance, which is called extrinsic motivation (Guthrie & Wigfield, 2000). Harmer (1991) adds that while extrinsic motivation can increase short-term engagement, it may lead to low interest in learning if the external rewards are removed. However, both types of motivation play an important role in how often and how well people read.

Careful selection of effective teaching methodologies and strategies can expand children's opportunities for reading motivation (Cazco et al., 2024). Multimodal formats, including educational technology, mobile ICTs, gamification and applications are emerging as powerful tools in reading instruction, not only capturing students' attention but also supporting language

acquisition and transforming learning into a more enjoyable experience. This is particularly important for EFL or ESL learners, where integrating technology can play a key role. Because mobile devices are already central to students' daily lives, Voogt and McKenney (2017) emphasize that these tools should be integrated thoughtfully at a young age (McLean, 2013); rather than being seen as separate from traditional methods, they should serve as a complementary resource to support language growth and emergent reading skills (Tracey & Young, 2007). Exploring the literature on portable devices and English reading motivation, it is essential to uncover what works, what doesn't and where gaps remain to be addressed in the current research.

2. Literature Review

Across the studies reviewed and analyzed, reading motivation frequently emerges as a key focus, often examined alongside comprehension, fluency or vocabulary in EFL or ESL contexts. In primary education schools, researchers have explored these relationships using qualitative approaches or quantitative experimental designs, typically comparing screen reading with traditional print materials, highlighting just how promising mobile technology can be for inspiring young readers. Gamification was also commonly applied in language contexts, as it is believed to enhance children's motivation and improve overall reading performance.

For instance, in one case study, two learners in fourth grade used an e-book app to read English texts with records demonstrating motivation beyond external incentives; participants read themselves numerous books at school and at home with the devices. They liked the interactive features, such as sound effects, read-to-me narration and the reward systems which encouraged intrinsic motivation through badges and collectible items and gave more willingness to read challenging texts (Fang et al., 2025). Apart from that, students showed increased self-efficacy, which has been similarly addressed to another study by Liman Kaban and Karadeniz (2021). The authors conducted an experimental approach and found out that gamified-based activities in a mobile reading environment allowed students to set personal goals, choose appropriate learning aids and interact more actively with the texts, which in turn fostered greater intrinsic motivation compared to traditional methods. In addition, Zahran (2025) investigated the impact of using a presentation app named Nearpod that incorporates interactive, visual and auditory features and reported similar findings. The study found that the application contributed to higher motivation and enthusiasm, greater classroom interaction, lower anxiety and overall, more positive attitudes toward reading (Zahran, 2025). Such outcomes have also been indicated in younger age learners; for example, Ghalebandi and Noorhidawati (2019) explored e-reading among bilingual first- and second-grade children and identified comparable results.

Furthermore, research shows (Ciampa, 2016) that giving students the freedom to select their reading materials enhances intrinsic motivation. Activities that stimulate curiosity and provide an appropriate level of challenge were also found to help sustain their attention and engagement. In this study, students aged six to seven demonstrated a clear preference for mobile applications. In addition, the importance of thoughtful content design is further underscored when instruction incorporates culturally relevant or culturally grounded stories, as content connected to learners' backgrounds and lived experiences can support active engagement, while storytelling that students perceive as meaningful may also strengthen motivation (Akcan, 2022; Jacob et al., 2024). Findings also suggest that when tablets are used effectively, they can encourage students to read more than when limited to traditional books, providing the freedom to select texts at their own level without worrying about peer judgment. Reading electronically is a more private way to read and minimizes these issues for students that struggle with difficult texts (Ahmed & Noor, 2022).

However, while some studies report that mobile learning can enhance students' motivation to read, others suggest that attitudes may remain unchanged (Kaman & Ertem, 2018). One contributing factor is that handheld devices can reduce focus, as students may be distracted by web browsing or other games (Richter & Courage, 2017). Additionally, the initial excitement of points or badges often fades, leading to a decline in motivation over time. Game- or mobile-based learning activities may also create frustration or a sense of failure when repeated losses occur or

difficulty is poorly matched to learners' readiness, and an excessive focus on points or rewards may shift students' attention away from learning goals toward winning-oriented performance (Hellberg, 2023; Yurtbakan et al., 2026). In addition to these issues, available curriculum materials are often limited (Sheppard, 2011) and many reading apps are not specifically designed for EFL/ESL learners, leaving questions about the long-term impact on the reading strategies that L2 learners develop (Klimova & Zamborova, 2020). Taken together, these results highlight the importance of thoughtful implementation of technology and classroom management, as issues such as device handling, content synchronization, app limitations and screen size can reduce the overall effectiveness of mobile learning (Flewitt et al., 2014).

3. Research Aim and Research Questions

Motivation is a key factor in reading achievement, which serves as a strong predictor of overall academic success. Based on this rationale, the primary aim of this research is to examine how touchscreen devices and more specifically tablets, can influence reading motivation among ethnically diverse first-grade elementary school students learning English. Over a period of four months, students engaged with various mobile applications, after which their levels of reading motivation were systematically examined. It is important to note that this article is based on data collected for the author's doctoral dissertation. An earlier publication from the same dataset by Derveni and Wildová (2025) thoroughly examined English reading fluency and comprehension after using tablets and this paper addresses a separate research question within the broader dissertation. Specifically, this study investigates the following research question:

RQ) Can mobile learning positively influence students' reading motivation in English, encouraging active engagement with reading materials and promoting a broader interest in reading activities overall in grade 1?

4. Methodology

4.1. Research Design

This study adopts a case study approach to explore a rich and detailed understanding of students' motivation to read in English with portable devices. In practice, a research question cannot always be fully addressed using only either a qualitative or quantitative approach. In response to this limitation, mixed-methods have emerged as an approach that combines the strengths of both methodologies within a single study or across a multi-phase program of inquiry (Creswell & Clark, 2017). This approach allows researchers to address complex problems while accommodating the perspectives and preferences of scholars from multidisciplinary fields (Tobi & Kampen, 2018). In the present study, mixed-methods approach aligns effectively with the case study research adopted.

Case study is an appropriate methodological choice for this research, as it facilitates a thorough exploration of students' attitudes about reading with mobile devices and examines motivation to read in English within their real classroom context. The aim is not solely to produce findings that are generalizable to a broader population, but instead it seeks to provide insights that readers can relate to their own contexts in educational settings. Each student's case in the paper provides valuable insights that, when viewed collectively, can highlight broader patterns and tendencies across the classroom that reflect both personal differences and shared experiences. To strengthen this analysis, pre- and post- intervention questionnaires were used that allow comparisons of students' motivation to read before and after the introduction of mobile learning activities and interviews in the post-test phase.

4.2. Participants

In total, the study consisted of 16 students in an EFL context in Grade 1 in a primary school in the Czech Republic. Table 1 provides a detailed overview of the demographic characteristics of each student, including all important information about the students; (a) gender, (b) country of origin,

Table 1
Demographic characteristics of participants

| Student | Gender | Country of origin | Years of English learning | English at home | English with friends | Owens mobile device | Primary use of the device | Read on device | Estimated weekly use |
|---------|--------|-------------------|---------------------------|-----------------|----------------------|---------------------|---------------------------|----------------|----------------------|
| S1 | girl | India | 2 | no | yes | no | - | - | - |
| S2 | boy | Slovakia | 1,5 | no | yes | no | - | - | - |
| S3 | boy | Slovakia | 2 | no | yes | yes | games | yes | some days |
| S4 | girl | Azerbaijan | 2 | no | yes | yes | games/video | yes | very little |
| S5 | girl | Colombia | 2 | no | yes | yes | games | no | very little |
| S6 | girl | California | native | yes | yes | yes | games/video | yes | some days |
| S7 | boy | Czechia | 2 | no | yes | yes | video/ minecraft | no | every day |
| S8 | boy | Egypt | 0,5 | no | yes | yes | video | yes | every day |
| S9 | boy | Russia | 2 | no | yes | yes | games/video | yes | every day |
| S10 | boy | Czechia | 2 | no | yes | yes | games/video | yes | very little |
| S11 | girl | Iran | 0,5 | no | yes | no | - | - | - |
| S12 | boy | Vietnam | 0,5 | no | yes | no | - | - | - |
| S13 | boy | India | 2 | no | yes | yes | games | no | very little |
| S14 | boy | Czechia | 0,5 | no | yes | yes | games/video | no | every day |
| S15 | girl | Czechia | 2 | no | yes | yes | games | no | some days |
| S16 | girl | India | 3 | no | yes | no | - | - | - |

(c) years of English learning, whether they speak (d) English at home or (e) with friends, (f) overview of each student's access to mobile devices, (g) their purposes for using them and (h) if they perform reading on them and lastly (i) the time used per week. To ensure confidentiality, students were identified using anonymized codes marked by the letter "S" and a corresponding number (e.g. S1, S2).

4.3. Instruments

The questionnaire consisted of three parts and served as a tool to gather information about the background of the children. The initial section focused on demographic characteristics. The second part consisted of seven questions aimed at collecting data about students' motivation to read. It was measured using a 7-item questionnaire, selected to capture key dimensions of reading motivation, including reading enjoyment and interest, reading self-efficacy and curiosity. The questionnaire included items such as "How much do you enjoy reading books in your free time?" and "How do you feel when you read something when the words are too difficult?" to reflect the dimensions of motivation. More specifically they were grouped into three subscales: reading interest (3 items), reading self-efficacy (2 items) and curiosity (2 items). Following the format of the Elementary Reading Attitude Survey [ERAS] (McKenna & Kear, 1990), each item was rated on a four-point scale. ERAS traditionally uses Garfield illustrations to represent each point on the scale. In this study, a similar child-friendly approach was adopted, represented with small emoticons/emojis.

The questionnaire was taken and slightly adjusted by the Students Like Reading scale from the Progress in International Reading Literacy Study (Mullis et al., 2017), which measures fourth grade students' enjoyment and attitudes towards reading. PIRLS 2016 reported a Cronbach's Alpha of .88, especially for the Czech Republic on the questionnaire, which indicated a high level of internal consistency. In other words, the items reliably measured reading motivation among primary students in Czech schools. This is relevant for the present study because the participants, although attending a bilingual school, are educated within the same Czech educational context and share similar cultural and curricular exposure to reading. Several items reflected similar constructs, such as reading enjoyment, interest and the perceived value of reading, but were adapted to align with the study's focus (Mullis et al., 2017). It was also influenced by the Young Reader Motivation Questionnaire [YRMQ], which focus was on students' self-reported motivation, including reading enjoyment, self-efficacy and response to challenging texts (Coddington & Guthrie, 2009).

Given frequent use of questionnaires, existing scales may not fully match the needs of early elementary and differences in format or limited psychometric data can reduce generalizability. These challenges justify adapting or creating a context-specific scale, as was done in the current study, in order to accurately capture the reading motivation of the target grade students and reflects the relevant constructs (Davis et al., 2018). Such adaptations are acceptable when clearly documented and when the limitations are acknowledged. Validity of the items on each subscale was determined by an expert in the field of motivation who served as an outside evaluator for this study. It was also served to connect quantitative and qualitative data within the methodological framework. Such questions do not need to function as fully validated psychometric instruments, but rather as tools that support and triangulate findings emerging from observations, interviews, classroom interactions and teacher's feedback (Adamson et al., 2004).

The questionnaire was administered again to assess whether there had been any changes in the students' attitudes toward reading. This repetition aimed to explore changes in their perceptions that may have developed as a result of their experiences during the intervention and could help gather more data through the interviews to gain deeper insight into the research project and to strengthen the research scheme. Semi-structured interviews were the primary method for collecting information, while the questionnaire helped guide the interviews, triangulate the data and provide an overall view of the results. Both the interview and questionnaire were designed around similar themes within the same learning context. Using both together allowed the study to reveal patterns in students' reading motivation that one method alone might have missed (Harris & Brown, 2010). Open-ended questions were chosen from the questionnaire to not only share

views regarding the predetermined questions but also flexibly add new thoughts. Interviews in the post-phase progressed from general questions to more specific ones about reading. For instance, students were asked in the beginning about their overall enjoyment of the intervention and whether they felt they had learned anything valuable from it. When answers were not sufficiently clear, follow-up clarifications were requested, without altering the semi-structured nature of the interview. The follow-up questions explored students' opinions on which apps they liked the most and least, etc. The entire process lasted no longer than 25 minutes for each child in order to have sufficient time to reflect on the questions and provide considered responses. The use of multiple data-collection tools enhances interpretive validity by acknowledging the limitations of relying on a single method (Robotham, 2004). A comparable methodological approach has been used in related studies by combining questionnaires, interviews, observations and student projects to obtain a more comprehensive understanding of elementary students' learning with technology (Hsu et al., 2019).

4.4. Data Analysis and Procedure

The study adopted a mixed-methods case study approach. Pre- and post-intervention questionnaires were analyzed using descriptive statistical methods to examine changes in students' reading motivation. The data is displayed using a 4-point Likert scale representing students' levels of agreement: "Not at all", "Neutral", "Slightly" and "Very much". For the age of the kids, it was translated as "I don't like it at all", "I don't really care", "It's okay, I like it a bit" and "I love it!". Given the small sample size, inferential statistical testing was not performed. Data obtained from semi-structured interviews were analyzed using thematic analysis. Responses were transcribed, coded and grouped into recurring themes. The analysis focused on identifying both individual case patterns and shared experiences across participants. The study began with a one-week observation period aimed at examining students' interactions with reading materials and their overall engagement during English literacy lessons. Following this initial phase, the questionnaire was administered individually in a quiet area of the classroom, typically during the morning literacy block. It's important to note that the questions matched the students' language level based on the observation data without complex vocabulary. Students were given as much time as necessary to answer each question. After the pre-test phase, a range of mobile applications was incorporated into the intervention, including Kahoot!, Blooket, English Comprehension, Wordwall, etc. All mobile applications used in this study were already extensively examined in the previous research (Derveni & Wildová, 2025) and were selected according to technical, contextual and pedagogical criteria to ensure age appropriateness, ease of use for young students and alignment with the literacy objectives of the intervention (Felicia, 2009). Activities included interactive quizzes, reading comprehension tasks, anagram exercises, sentence construction and fill-in-the-blank activities. Students also viewed short educational videos and responded to related questions using their tablets. They used the devices at least three times per week from February to June 2024. The study was conducted in accordance with ethical research principles, ensuring voluntary participation, informed consent from parents, participant anonymity and confidentiality of all collected data. At the conclusion of the intervention, the questionnaire was re-administered to assess changes in reading motivation. Semi-structured interviews were then conducted to provide deeper descriptive and explanatory insights into students' experiences.

5. Results

5.1. Reading Motivation Outcomes

The following section presents the outcomes of the study, examining how tablets influenced first-grade students' motivation to read in English. Examples of the questions students replied before and after the intervention through the questionnaire and the interviews are presented in tables below, accompanied by explanations to illustrate key trends. Overall, the findings indicate that students experienced positive changes, encouraging active engagement and a broader interest in reading activities, although some challenges were noted.

5.1.1. Student enjoyment and engagement

Table 2 shows the students' responses about how much they enjoy reading books in their free time.

Table 2

Comparison of students' enjoyment of reading books in their free time; pre and post-test results

| <i>Response</i> | <i>Pre-test (%)</i> | <i>Post-test (%)</i> |
|-----------------|---------------------|----------------------|
| Not at all | 12.5% | 6.3% |
| Neutral | 18.8% | 6.3% |
| Slightly | 25% | 25% |
| Very much | 43.5% | 62.5% |

The percentage of students who answered "neutral" and those who reported "not at all" dropped to 6.3%, representing one student in the post-test. This decline in disinterest indicates that previously disengaged students began to be toward a more positive attitude about reading with an overall enjoyment and personal connection, core elements of intrinsic motivation. Students appeared to even change their opinions regarding using books and began to see reading not just as a school task, but as a personally enjoyable activity. Particularly, students started asking to borrow books from the school library to continue exploring fun stories, copying their experiences on tablets. This was especially evident among children who did not have access to similar technology at home (e.g. S1, S2, S16).

5.1.2. Exploration and curiosity in reading

Table 3 presents the students' responses about how they feel when they read about new things.

Table 3

Comparison of students' feelings of reading new things; pre and post-test results

| <i>Response</i> | <i>Pre-test (%)</i> | <i>Post-test (%)</i> |
|-----------------|---------------------|----------------------|
| Not at all | 12.5% | 0% |
| Neutral | 6.3% | 0% |
| Slightly | 31.3% | 12.5% |
| Very much | 50% | 87.5% |

Initially, many students showed hesitation and uncertainty when faced with unfamiliar reading material, especially for first graders who often have a limited English vocabulary, which can make approaching new topics intimidating. Tablets allow students to explore new topics through formats (audio, video, clickable texts or visual aids), which likely made the process of learning through reading more stimulating and rewarding. As a result, students who were previously indifferent or unmotivated became more actively engaged, associating reading with discovery and interest rather than difficulty or boredom. Many students expressed that using the devices made it easier to learn new words and concepts without the fear of misunderstanding or falling behind. The rise in "very much" responses, from 50% to 87.5%, suggests that tablets enhanced their desire to read in order to learn and explore.

5.1.3. Self-efficacy and persistence with difficult texts

Table 4 shows the students' responses about how they feel when they read something with difficult words.

Table 4

Comparison of students' feelings of reading when the words are too difficult; pre and post-test results

| <i>Response</i> | <i>Pre-test (%)</i> | <i>Post-test (%)</i> |
|-----------------|---------------------|----------------------|
| Not at all | 12.5% | 6.3% |
| Neutral | 31.3% | 6.3% |
| Slightly | 31.3% | 56.3% |
| Very much | 25% | 31.3% |

In the pre-test, nearly half of the group expressed negative or neutral feelings, showing a lack of engagement or confidence when encountering unfamiliar vocabulary. Instead of seeing challenging words as a barrier, students began to view them as manageable and even motivating. This reflects not only improved reading motivation but also emerging self-efficacy, a belief in their ability to cope with and learn from difficult reading situations. However, after the intervention, these negative responses decreased, changing toward more positive attitudes. Also, the gamification elements (e.g. Blooket app) incorporate repetitive and reward systems, progress tracking and adaptive difficulty levels, which encourages students to persist through difficult vocabulary rather than becoming discouraged.

5.1.4. Attitudes toward learning to read

Finally, Table 5 shows the students' responses about how they feel about learning to read.

Table 5

Comparison of students' feelings of learning how to read; pre and post-test results

| Response | Pre-test (%) | Post-test (%) |
|------------|--------------|---------------|
| Not at all | 6.3% | 0% |
| Neutral | 0% | 0% |
| Slightly | 37.5% | 25% |
| Very much | 56.3% | 75% |

In the pre-test, while the overall outlook was already positive, 56.3% of students selected "very much" and 37.5% chose "slightly", there was still a portion (6.3%) who responded "not at all", indicating some discomfort with learning to read. However, the post-test results show an enhancement in student attitudes. The proportion of students who felt "very much" positive about learning to read increased to 75%, while the remaining 25% responded "slightly". Importantly, no students selected "not at all" in the post-test, which means that negative or indifferent attitudes were effectively eliminated after the intervention. Reading was already an integral part of students' learning experiences, but when combined with tablets, it transformed reading from a routine task into a stimulating activity they actively looked forward to.

5.2. Case Studies of Individual Progress

Understanding individual student experiences is crucial and this section presents selected case studies that show students' engagement, challenges and progress while using tablets in the classroom. Observations and student reflection interviews are the basis of this analysis.

Student 7 is a 7-year-old boy, whose first language is not English, although he has been working on improving his language skills for almost two years. This student had the most access to technology at home, particularly using tablets. He was highly skilled with the tablet and could quickly understand how to use it, often assisting other students. Student 7's case presents an insightful connection between English language reading development with mobile device usage. The student excelled in navigating through competitive, gamified tasks, which helped maintain focus and engage more in reading activities. Observations showed that prior to the intervention, he was less participative in reading, but motivation improved. In particular, the student demonstrated an improvement in intrinsic reading motivation over time, as reflected in the post-test responses; he reported enjoying reading more in their free time by the end of the experience and even appreciating books as gifts and his positive attitude toward learning to read remained consistently strong. He mentions: "I like reading on the tablet more because it feels like a game. When I see the points and the prizes, I want to try again and do better. If I make a mistake, I don't feel bad, I just press again and read it one more time.". Additionally, the willingness and enthusiasm for learning new things highlights a strong curiosity that could be further supported through digital reading tools.

Student 11 is a girl from Iran who has been learning English for only 6 months. She does not speak English at home, but she does use English with her friends. Prior to this reading initiative,

she had no experience using a tablet, making the project her first exposure to digital learning tools. The student has been identified as a struggling reader, characterized by slow reading fluency and comprehension and frequent errors in word recognition. Before the intervention, she struggled with basic reading tasks, often misinterpreting words or failing to construct meaningful sentences. The student's own reflection on the experience further reinforces this development. Initially hesitant and anxious about reading, Student 11 later expressed greater confidence and enthusiasm, stating, *"At first, I was nervous, but now I feel like I can do so much with the tablet!"*. She showed signs of growth in motivation, particularly in areas related to learning and engagement with challenging texts. While their intrinsic enjoyment of reading and comfort with reading aloud remained unchanged, she became more receptive to discussing books in group settings and expressed greater enthusiasm for learning new things. Additionally, her response to difficult vocabulary became more positive, suggesting increased confidence and perseverance. The use of tablets appeared to support the student's sense of curiosity, reduced intimidation when facing reading challenges and supported a more open attitude toward collaborative literacy experiences.

Student 1, a girl from India who has been learning English for 2 years, she was already having excellent achievements in reading in school as well as great progress in a general English literacy class. Her ability to read at an appropriate pace for the age while maintaining a high level of understanding made her one of the strongest readers in the group. During the intervention, Student 1 continued to excel, maintaining substantial results in educational games and interactive activities. She showed quick adaptability to digital reading tools, navigating the tablet efficiently. *"I like both books and the tablet. Books are nice too, but the tablet is fun because it has pictures and sounds."* However, one particularly interesting result emerged during the Kahoot! quiz activities. Despite her strong reading abilities, her performance on Kahoot! was lower than that of some struggling readers, which was unexpected given her usual academic standing. When reflecting on this experience, Student 1 mentioned the competitive nature of Kahoot! induced stress, sometimes making it difficult for her to organize their thoughts quickly enough to respond. As she stated, *"I know the answers, but when the timer is going fast, I feel anxious and I can't think properly."* Gamification can be highly engaging and motivating for many students, it may also introduce pressure and anxiety. Despite this challenge, Student 1 still viewed the tablet as an effective and beneficial learning tool, according to the positive responses to the reading motivation questionnaire, as well.

Student 12, a boy from Vietnam with no access to a mobile device at home, found reading on tablets helpful, particularly due to the engaging nature of games like Kahoot!, which allowed him to compete with classmates and earn points. He responded particularly well to the app Blooket, the most favorable, which combined reading practice with elements such as earning points, competing with classmates and fast-paced challenges. Indeed, he mentioned *"I am learning to read because I want to compete with my classmates, I can answer fast and get points to win."* The disadvantage that was mentioned was *"when games didn't load and the screen freezes because of the internet connection and I couldn't play against my friends."* The tablets offered him immediate feedback, a sense of achievement in the announcements of results and a playful learning environment, which helped him persist through difficult words and challenging texts, ultimately transforming his attitude toward reading from hesitant to highly motivated and engaged. Regarding free-time reading, student 12 initially fell into a middle category, he did not enjoy reading as much as the enthusiastic readers but was not in the lowest group either, indicating moderate intrinsic motivation. When encountering difficult words, he tends to rely on support from the tablet environment rather than showing complete intrinsic persistence, but the structured, interactive nature of tablet activities clearly scaffolds his confidence and enjoyment.

6. Discussion

The research question is aligned with the previous literature review (e.g. Ghalebandi & Noorhidawati, 2019; Fang et al., 2025). Across all questionnaire items, students' post-intervention responses were consistently more positive compared to the pre-test, a pattern that was further

reinforced by insights from the interviews. For students facing challenges in learning to read in English, mobile devices appeared to create engaging learning opportunities that stimulated curiosity and enjoyment. Features such as rewards and gamified elements further motivated learners, giving them a feeling of a personal achievement and encouraging careful attention to the content. These findings are in accordance with repeated evidence in the literature, which highlights the strong influence of motivation in the overall performance either in first language or English as a foreign or second one, suggesting the need for continued investigation and classroom application (e.g. Liman Kaban & Karadeniz, 2021). While some results showed minimal change, even small improvements may be meaningful given the sample size and age group. In more detail, gamification appeared to play a substantial role. As said, that “can’t understand” and “lack of motivation” are significant reasons why children don’t read. So, teachers can use mobile games in education because it not only contains what they are willing to teach but is also not boring, which can make all the students participate and have fun (Xu, 2023). In particular, games such as Kahoot! proved to be a strong motivator in the study. It provided the balance of competitive elements with opportunities for reading texts, for learning and collaboration (Licorish & Lötter, 2022). Students reported increased confidence in their own abilities, as they felt more capable of handling reading challenges. This growth in self-efficacy appeared to enhance their willingness to engage with reading tasks in the apps and persist through difficulties, which aligns with findings in the literature (Liman Kaban & Karadeniz, 2021).

It is also notable that the variety of materials, particularly those that correspond to students’ personal interests, such as animals, further enhanced engagement. This finding is consistent with prior research (Ciampa, 2016; Fang et al., 2025), suggesting that incorporating content relevant to students’ preferences can amplify the benefits of mobile learning tools. When students can pick what they want to read, they are more likely to enjoy it and want to read more. It is also about how strongly students feel, either positively or negatively (Hairul et al., 2012). The biggest advantage of tablets is that many apps allow for personalized learning, where students can progress at their own pace and receive immediate feedback. Consequently, students felt less anxious and more accomplished when they completed or repeated a game and performed better, in line with prior research (Erlangga, 2025). Furthermore, when textbooks were used, each unit included a relatively limited number of reading tasks. However, the integration of tablet increased students’ motivation to engage with a greater number of tasks, particularly on topics that interested them. This increased engagement may have contributed to improvements in both reading skills and motivation, as students had more opportunities for continuous practice. Similar findings have been reported in other studies (e.g. Abusa’aleek & Baniabdelrahman, 2020). Lastly, mobile devices were perceived as easy to use, which likely facilitated their integration. Existing research also indicates that when students find digital tools useful and user-friendly, their motivation increases, whereas perceived difficulty can reduce engagement (Aldayana & Andriyanti, 2025; Hsiao & Chen, 2015; Li et al., 2022). For this reason, mobile applications for young children, such as the first-grade example, should be introduced gradually, using simple and accessible formats that do not present unnecessary barriers.

However, it is important to acknowledge that competitive and fast-paced gamified activities sometimes elicited feelings of anxiety, even among stronger students. Previous research suggests that gamified learning environments may not benefit all learners equally; in particular, higher-achieving students may benefit more than lower-achieving students, while competitive conditions can also shape learners’ positive and negative emotional experiences (Cao et al., 2023; Sanchez et al., 2020). Moreover, technical difficulties, mainly slow or unstable internet connections (Ebadi & Ashrafabadi, 2022) often caused frustration and disappointment during these tasks (Suparmi & Susanto, 2025). Furthermore, on a few occasions, students became distracted after completing the tasks they were supposed to and became involved in unrelated games, which has been observed in the literature (O’Toole & Kannass, 2018), but these moments were quickly addressed. Many students enjoyed both books and tablets, seeing books as familiar tools, suggesting that tablets complement rather than replace traditional reading. Although research on the field is expanding,

there remains a need for focused studies in primary classrooms. While these technologies have the potential to enrich reading and literacy instruction, they are sometimes implemented in ways that mirror conventional practice—such as digitizing existing routines and materials—rather than fully exploiting their interactive and transformative pedagogical affordances (Gonzalez & Mohamad, 2022; Kaplan et al., 2026; Mnguni, 2023).

7. Conclusion

In conclusion, this study reinforces the academic literature on how important it is to use innovative approaches in the learning process that can motivate students to further read, with portable devices representing one potential tool to facilitate this process. The aim of this study was to examine how tablets may influence first-grade students' motivation to read in English over a four-month period. Overall, students expressed positive attitudes toward tablet activities due to their interactive and enjoyable nature, with the findings suggesting that mobile devices can foster greater intrinsic motivation and engagement, particularly among learners who previously struggled with reading. Although minor technical challenges and occasional frustration were observed, these did not appear to diminish students' overall enthusiasm. Importantly, the experience also encouraged students to view reading more positively beyond digital contexts. Taken together, the findings highlight the potential of handheld devices to support reading motivation in early EFL primary classrooms and to further enrich the existing research in this area.

There are several limitations that need to be considered when interpreting the results of this study. First, the relatively small sample size limits the generalizability of the findings. Future research could involve larger and more diverse samples, considering variations in age, socio-economic background, language proficiency and prior exposure to digital tools. Second, as the case study conducted within a specific educational context, the findings reflect the experiences of this particular group and may not fully represent other educational settings. The absence of a control group makes it difficult to attribute changes in reading motivation solely to the use of mobile applications. However, it was conducted as an intervention-based case study within an authentic learning environment, where separating students into experimental and control groups was not feasible without disrupting normal instructional practices. Third, while the study highlights the promise of specific applications, the range of tools was relatively narrow. For example, the use of more complex or differently structured applications might have produced different results and in some cases, could have reduced students' motivation. Exploring a broader variety of applications could provide a bigger picture. Finally, a limitation that extends beyond the study itself is the issue of teacher preparation. Without adequate preparation, tablets risk being treated as entertainment devices rather than as learning tools. This underlines the importance of professional development for teachers, not only in technical skills but also in pedagogical strategies for using digital devices to enhance reading motivation.

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