

CHAPTER I

INTRODUCTION

This chapter presents the foundation of the study, including the background of the research, research questions, objectives, significance, and the definition of key terms. The focus of this study is to explore students' perceptions of using Duolingo as a digital tool for learning English, particularly among 10th-grade students at SMAN 1 Tabunganen.

A. Background of the Research

In the 21st century, technology has become a core element of modern life. It is deeply embedded in the way people communicate, conduct business, interact socially, and most importantly, how they access and engage with knowledge. What was once considered a luxury is now a necessity. The digital revolution has changed the dynamics of human behavior and decision-making. From smartphones to artificial intelligence, technological innovations have transformed almost every aspect of daily life. The field of education has been significantly shaped by technology. In the past, access to learning was limited to physical spaces such as classrooms and libraries. Today, technology allows students to learn from anywhere and at any time. Internet access enables learners to watch educational videos, attend virtual classes, read digital textbooks, and participate in online discussions. According to OECD (2019), digital technologies have the potential to improve learning outcomes, enhance student motivation, and promote equity in education by providing access to resources that may not be available in all schools or communities.

Technology also plays a crucial role in developing twenty first century skills. These include critical thinking, problem solving, collaboration, communication, and digital literacy. These skills are essential in preparing students for a fast-changing, technology-driven job market. Students who grow up with access to digital tools and online learning platforms tend to be more

adaptable, independent, and capable of seeking knowledge on their own. With the help of technology, education is no longer restricted to teacher-centered instruction; it becomes more student-driven, personalized, and interactive. Technology enables flexible and personalized learning. Every student has a different pace, style, and level of understanding. Technology offers multiple formats for presenting content, such as videos, animations, interactive quizzes, and audio materials. This diversity allows learners to choose the methods that suit them best. UNESCO (2021) states that educational technology not only increases engagement but also provides inclusive learning opportunities for students in remote or disadvantaged regions. Despite its benefits, the use of technology is not evenly distributed. The digital divide remains a serious concern, especially in developing countries like Indonesia. While urban areas tend to have better access to stable internet, modern devices, and trained teachers, many rural areas still struggle with poor infrastructure and low digital literacy. This disparity limits the potential impact of educational technology on national learning outcomes. Students in rural communities may have smartphones, but without proper internet access or guidance, they cannot benefit fully from online learning platforms. To address these issues, collaboration among governments, schools, and communities is essential. Investment in digital infrastructure, training for teachers, and support for students must be prioritized. Without these efforts, technology will only benefit a small segment of the population and may even deepen existing inequalities. Technology must be used as a tool of empowerment, not exclusion. However, its impact depends on how equitably and effectively it is implemented. As Indonesia continues to modernize its education system, the integration of educational technology should be seen not only as a strategy for innovation, but also as a commitment to equality, inclusion, and long-term national development.

Education is a fundamental right of every citizen and a crucial foundation for national development. In Indonesia, the significance of education is clearly stated in the 1945 Constitution, particularly Article 31 of the 1945 Constitution (UUD 1945), which guarantees the right to education for all and obliges the

government to provide and fund it. This constitutional mandate highlights the belief that education is not only a personal need but also a collective responsibility of the state in building a knowledgeable and competent society. The Indonesian government has implemented various policies and programs to promote equal access to education, including the “12-Year Compulsory Education” program, “Indonesia Pintar” scholarship, and the newly launched “Merdeka Curriculum,” which encourages more student-centered and flexible learning. These efforts aim to reduce inequality, support student potential, and prepare a generation that can compete globally while maintaining national values. Education plays a strategic role in shaping human resources. It provides individuals with the skills, knowledge, and mindset necessary to contribute positively to society. Especially in a country as diverse and geographically vast as Indonesia, education becomes a key unifying and empowering force. It helps bridge socioeconomic gaps and creates opportunities for social mobility, especially for those living in disadvantaged areas. According to Suryadarma and Jones (2013), equitable access to quality education in Indonesia is essential for reducing socioeconomic disparities and ensuring inclusive national development. Additionally, the World Bank (2020) emphasizes that education is a key driver of Indonesia’s human capital development, with direct implications for economic growth, poverty reduction, and long-term competitiveness. Despite its importance, challenges still persist. Many regions in Indonesia, particularly in rural and remote areas, face issues such as limited infrastructure, lack of qualified teachers, and low access to learning resources. These disparities hinder the quality and equity of education. Addressing them requires not only physical investment in schools but also innovation in teaching methods and learning tools. Education is not just an individual pursuit it is a national necessity. It holds the power to transform lives and strengthen the country’s future. For Indonesia to progress and compete in the global era, quality education must be accessible to all students, regardless of their socioeconomic status or geographic location. English is widely regarded as the global language of communication, playing a dominant role in international business, diplomacy, science, and technology. In

today's interconnected world, the ability to understand and use English is no longer an advantage it is a necessity. For countries like Indonesia, where global engagement is increasingly important, English language proficiency opens the door to broader educational, economic, and professional opportunities. Recognizing this, the Indonesian government has long included English as a core subject in its national curriculum, taught from primary through secondary education. The objective is to equip students with basic communicative skills in English, enabling them to engage in academic settings, pursue higher education abroad, or enter a globalized workforce. English is also a prerequisite in many scholarship programs, international job markets, and standardized tests, such as TOEFL or IELTS. However, despite its inclusion in the curriculum, the mastery of English among Indonesian students remains uneven. A study by Widodo (2016) indicates that many students, particularly in rural and semi-urban areas, struggle to develop functional English skills. Several factors contribute to this problem: limited classroom hours, lack of qualified English teachers, outdated teaching materials, and a strong focus on grammar rather than communication. In many cases, students memorize vocabulary without understanding how to apply it in real-life situations. The classroom environment itself often discourages active language use. Many students are afraid of making mistakes or feel embarrassed when speaking English in front of their peers. This results in low confidence and limited practice, which further hinders language acquisition. Without authentic exposure and regular usage, it is difficult for learners to build fluency and comprehension (Ya-Hui Su, 2020; Puskás & Tóth, 2021). Access to English learning outside school is still limited for many students in Indonesia. While students in urban areas may attend private language courses or consume English-language media, those in rural areas may not have the same opportunities. This situation highlights the urgent need for accessible, engaging, and independent learning resources that can supplement classroom instruction and reach learners across different regions (Marzuki et al., 2021; Putri et al., 2023). learning English is a critical part of preparing Indonesian students for success in the modern world. It enhances not only their academic

and professional potential but also their ability to engage meaningfully with global content. Improving English education in Indonesia requires innovative solutions that address the limitations of traditional classrooms and promote more interactive, learner-centered experiences.

The integration of mobile technology in education has introduced new opportunities for language learners. One of the most widely used tools in this area is Duolingo, a free application that offers structured lessons in English and other languages. It is designed to make language learning simple, engaging, and accessible, particularly for students with limited formal resources. Duolingo supports individual learning by allowing users to study anytime and anywhere using their smartphones. A key strength of Duolingo is its gamified approach. The app includes features such as experience points, streaks, levels, and badges to reward user progress. These elements increase motivation and make the learning experience feel enjoyable. As noted by Ziegler (2019), gamification in language apps can enhance learner engagement and encourage regular practice, especially among young users. Duolingo's lessons are short and topic based, covering essential skills such as vocabulary, sentence building, translation, reading, and listening. Immediate feedback is given after each response, helping students correct errors and reinforce learning. According to Loewen and Isbell (2022), Duolingo helps improve vocabulary retention and builds learner autonomy through its repetitive and self-paced exercises. The app is also highly accessible. It is free to download, requires minimal data, and is available on both Android and iOS devices. This makes it especially useful in areas with limited infrastructure or unreliable internet. For students in rural schools, Duolingo can serve as a helpful support tool when formal English instruction is limited. However, Duolingo is not a complete substitute for classroom learning. It focuses on recognition and repetition rather than speaking fluency or writing skills. Without teacher interaction or real-world communication, learners may find it difficult to apply what they've learned. Therefore, Duolingo is most effective when used as a supplement to formal instruction. Duolingo provides a flexible and enjoyable way to support English learning. It is simple interface,

game-based rewards, and mobile accessibility make it an attractive option for students, particularly those in areas with limited access to quality English instruction.

Tabunganen is a subdistrict located in Barito Kuala Regency, South Kalimantan, Indonesia. Like many rural areas in the country, Tabunganen faces several educational and technological limitations. Although national policies aim to promote equal access to education, geographical and infrastructural constraints continue to affect the quality and availability of learning in this region. Many schools in Tabunganen still lack access to digital resources, modern learning materials, and stable internet connectivity, which makes it difficult for students to engage with modern educational tools. While most students in Tabunganen do own smartphones, they often use them for entertainment or social media rather than education. The lack of digital literacy and proper guidance from teachers makes it difficult for students to take full advantage of educational technology. In some schools, the integration of technology is still in its early stages, with limited exposure to mobile-based learning platforms like Duolingo. Initial informal discussions with students and teachers at SMAN 1 Tabunganen revealed that some students had previously been introduced to the Duolingo application through internet access, recommendations from teachers, or from their own exploration via mobile devices. A few students reported that they had tried using Duolingo and found it both fun and helpful in practicing vocabulary. However, others expressed confusion or lack of motivation when using the app without clear guidance from a teacher. This variation in student experience suggests that although the app is accessible, its effectiveness depends heavily on learner autonomy and instructional support. In a rural setting like Tabunganen, where access to structured learning resources is often limited, it becomes important to explore how students perceive such tools, especially when used independently. Understanding how students in Tabunganen perceive and use Duolingo can help educators design better strategies for technology integration, especially in rural settings where access to conventional language learning support is often limited.

By exploring students' actual experiences both positive and negative teachers and policymakers can identify what types of digital tools are most engaging and which features require additional guidance or supervision.

The findings of this study can serve as a reference for English teachers who wish to incorporate mobile applications into their teaching, particularly in areas with limited resources. Furthermore, the study may offer practical insights for curriculum developers and education stakeholders in Indonesia to support the implementation of more inclusive, student-centered, and technology-enhanced language learning models that are responsive to the needs of rural learners. Despite the growing availability of mobile learning tools such as Duolingo, there is still a lack of research that specifically explores how students in rural Indonesian contexts perceive and interact with such technology. While numerous studies have examined the effectiveness of Duolingo in improving vocabulary, grammar, or overall English proficiency, most of these have been conducted in urban or well-resourced educational environments. Understanding student perceptions is important because it helps educators and policymakers identify what works and what does not in the implementation of educational technology. For this reason, the present study focuses on the perceptions of tenth-grade students at SMAN 1 Tabunganen regarding the use of Duolingo in their English learning process. Tenth-grade students were specifically chosen because this level marks the beginning of more structured and challenging English instruction in senior high school. At this stage, students are expected to develop stronger language skills across all domains reading, writing, listening, and speaking while simultaneously preparing for national exams and academic transitions. However, many of these students are still developing their learning habits, confidence, and self-regulated strategies. Exploring their perceptions offers insight into how digital learning tools are received by learners who are adjusting to more formal English education.

SMAN 1 Tabunganen, as a rural public school in Barito Kuala Regency, South Kalimantan, presents a relevant and realistic setting for this study. Compared to urban schools, students in this area have less access to enrichment

programs, private tutoring, or consistent exposure to English media. Internet connectivity is often unstable, and many students depend entirely on school facilities for any form of digital learning. This makes it essential to investigate how students from such backgrounds respond to a mobile-based learning application like Duolingo, which claims to support independent language learning in a flexible and engaging way. If students in rural schools like SMAN 1 Tabunganen can benefit from such tools, it could signal the potential of mobile-assisted language learning to reduce educational disparity between urban and rural learners. Furthermore, focusing on student perceptions allows the research to go beyond measuring academic outcomes or test scores. It highlights students' subjective experiences, emotional reactions, motivation, and engagement factors that are often overlooked in traditional assessments. Since Duolingo is designed for autonomous use and incorporates gamification features, it is important to understand whether students in a rural context find it accessible, enjoyable, and relevant to their needs. Their voices can provide valuable feedback for educators and policymakers seeking to integrate mobile learning tools more meaningfully into the Indonesian educational system, especially in regions where conventional resources are lacking. In language learning, especially when assisted by digital tools, student perception plays a pivotal role in determining the overall success of the instructional experience.

Although most of the participants in this study were new to using Duolingo as part of their formal English learning at SMAN 1 Tabunganen, there were two students who already had prior experience with the application before the current academic year. Their experiences offer valuable insights into how familiarity with digital learning tools can influence students' engagement and perceptions. Ahmad Zainal, for instance, stated during the interview that he had been using Duolingo frequently since August 2023, usually in the afternoon at home. His consistent exposure to the app before it was officially introduced in school gave him an advantage in navigating its features and understanding the tasks without significant confusion. Similarly, Aisyila Syifa reported even longer experience, mentioning that she often used Duolingo not only in the morning, afternoon, and

evening, but also had been actively engaging with the app since her time in junior high school (Madrasah Tsanawiyah), which amounted to approximately one year of prior use. This extended familiarity allowed her to integrate Duolingo naturally into her daily routine, perceiving it as both a learning tool and a form of enjoyable activity. The presence of these students with prior exposure to Duolingo is significant because it aligns with Kukulska-Hulme (2020), who emphasized that learners with previous experience in mobile-assisted language learning (MALL) are more likely to engage deeply and adapt quickly to digital learning environments. Their cases illustrate how individual differences in prior usage can shape the way students perceive and benefit from technology integration in the classroom. Moreover, having students with different levels of familiarity within the same learning environment can create opportunities for peer learning, where experienced users can informally support and motivate their classmates. This aspect enriches the current study, as it captures not only the perceptions of first-time users but also those of students who have already developed digital learning habits before the formal implementation of Duolingo in school. Perception refers not only to how students evaluate the usefulness of a learning tool, but also to how they emotionally respond to it, how they engage with its features, and how they internalize its role within their learning journey. As Putra and Hadi (2022) explain, students' perceptions act as both a filter and a motivator shaping how they approach learning tasks, how much effort they invest, and how they evaluate their own progress. Unlike traditional instruction, which is heavily guided by the teacher, mobile-assisted language learning (MALL) applications such as Duolingo rely on students' willingness to engage voluntarily. This makes perception even more crucial. If students perceive the app as boring, irrelevant, or too difficult, they are likely to disengage regardless of its actual instructional quality. On the other hand, if they see it as fun, flexible, and aligned with their needs, they are more likely to persist and practice regularly. As noted by Alhammad and Moreno-Marcos (2022) in their systematic review of gamified education tools, learners' enjoyment and motivation are closely linked to how they perceive the value of gamification and

personalization. Furthermore, the perception of usefulness and ease of use two key constructs from the Technology Acceptance Model (TAM) are particularly relevant in understanding why students adopt or reject educational technologies. Duolingo, with its game-like format, may be viewed differently by different students depending on their prior experiences, digital literacy, and learning preferences. For some, its immediate feedback and interactive exercises may foster a sense of achievement and autonomy. For others, the absence of teacher presence or structured progression may lead to confusion or anxiety. According to Ningsih et al. (2023), student satisfaction in digital learning is not determined by the tool itself, but by the intersection between student readiness, platform design, and contextual support.

capturing student perception goes beyond simply asking whether a tool is “good” or “bad.” It involves exploring their personal narratives how they experience the tool in their daily learning routine, what motivates or frustrates them, and how they feel it supports or hinders their progress. These insights provide a deeper layer of understanding that cannot be measured by test scores alone. As highlighted by Loewen and Isbell (2022), perception-based studies help identify the nuanced ways in which learners engage with mobile learning apps, offering a window into their internal cognitive and emotional landscapes. Ultimately, investigating student perception allows educators and researchers to make informed decisions about technology integration. Instead of assuming that a tool will work equally for all students, perception-focused research respects the diversity of learners and places their voice at the center of innovation. For this reason, the present study adopts a qualitative approach to listen closely to students' lived experiences using Duolingo believing that their perceptions will not only reveal the app's pedagogical potential but also uncover the real conditions needed to make digital learning truly effective.

B. Identification of the Problem

In the context of English language education in Indonesia, especially in rural areas, several challenges remain evident. Although English is part of the national curriculum and increasingly recognized as an essential global skill, many students still struggle to master it due to limited exposure, lack of motivation, and inadequate teaching resources. This issue is even more pronounced in rural regions where internet access, educational technology, and qualified English teachers may be limited. At the same time, the use of mobile technology in education has become more common, even among students in remote areas. Applications like Duolingo offer a potential solution by providing free, accessible, and engaging English practice through smartphones. However, not all students experience the app in the same way. Their perceptions both positive and negative can influence how effectively the app supports their language learning.

Despite Duolingo's popularity, few studies have focused on how rural students in Indonesia perceive this tool. There is limited understanding of how students interact with the app, what challenges they face, what motivates them to use it, and whether they find it helpful in their learning process. Therefore, this research was conducted to identify and explore the core problem: the gap in understanding students' perceptions of using Duolingo for English learning in a rural educational context, specifically at SMAN 1 Tabunganen.

C. Limitation of the Problem

This research is limited to exploring the perceptions of students regarding their use of the Duolingo application in learning English. The study does not examine the overall effectiveness of the application in improving language proficiency from a quantitative perspective, nor does it compare Duolingo to other language learning platforms.

The scope of this study is restricted to tenth-grade students at SMAN 1 Tabunganen, located in a rural area of Barito Kuala, South Kalimantan. As such, the findings may not be generalizable to students in urban areas or different

educational levels. The research focuses on students' individual experiences, opinions, and attitudes, as gathered through interviews and observations.

Additionally, this study only investigates Duolingo in the context of general English learning, not specific language components such as grammar, pronunciation, or writing. The data collected reflect students' self-reported experiences and observed behaviors, which may vary depending on their motivation, learning environment, and frequency of app usage.

D. Research Questions

In this study, the research question is designed to explore students' perceptions regarding the use of Duolingo in their English language learning process. Specifically, this research seeks to answer the following question:

1. How do 10 th-grade students at SMAN 1 Tabunganen perceive the use of Duolingo in learning English?
2. What are the students' experiences and engagement levels while using Duolingo?
3. What challenges and benefits do students encounter when using Duolingo as part of their English learning process?

E. Research Objectives

Research objectives explain the specific goals that the researcher aims to achieve through the study. They provide clarity about what the study intends to explore, describe, or understand.

The primary objective of this study is to explore how students perceive the use of Duolingo in their English learning process. This includes investigating their levels of interest, motivation, challenges faced, and overall impressions when engaging with the Duolingo application.

More specifically, this research aims to:

1. To describe the perceptions of 10th-grade students at SMAN 1 Tabunganen on using Duolingo for learning English.
2. To explore students' experiences, engagement, and attitudes toward using

Duolingo.

3. To identify the obstacles and advantages of implementing Duolingo in their English learning process.

F. Research Significances

The significance of a research study refers to the value and contribution that the research offers to the academic community, practitioners, or society at large. In qualitative studies, significance often lies in the depth of understanding gained from participants' perspectives and in the insights it provides into real-world practices and challenges. This study holds both theoretical and practical significance. Theoretically, it contributes to the growing body of literature on mobile-assisted language learning (MALL), particularly in the Indonesian context. While numerous studies have examined the effectiveness of language learning applications like Duolingo, most of them are based in urban or well-resourced educational environments. By focusing on students in a rural area such as Tabunganen, this research provides new perspectives that are often underrepresented in existing studies. Practically, the findings of this study are expected to benefit English teachers, school administrators, and education policymakers. Understanding students' perceptions of Duolingo can help educators make informed decisions about how to integrate mobile applications into language teaching effectively. It can also guide schools in supporting students through the use of technology-based tools, especially in areas with limited access to traditional learning resources.

In addition, this research may serve as a reference for future studies interested in examining students' experiences with digital learning platforms in similar rural or underserved contexts. It opens opportunities for further exploration of how educational technology can be adapted to meet the needs of diverse learners across Indonesia. This section describes the academic, practical, and contextual value of the research and highlights its contribution to language education and mobile learning development in rural areas.

1. For Students:

This research introduces alternative learning tools that may make English more enjoyable and accessible. It can also help students become more independent in their language learning.

2. For Teachers:

The findings can help teachers understand how students respond to mobile learning applications and consider integrating them into classroom instruction.

3. For Educational Research:

This study adds to the existing literature on educational technology and student-centered learning, especially in the context of mobile-assisted English learning in Indonesian high schools.

G. Definition of Key Terms

To ensure clarity and avoid misunderstanding, it is important to define the key terms used throughout this study. These definitions provide the context in which the terms are applied and help the reader understand their specific meaning within the scope of the research.

1. **Perception:** In this study, perception refers to the students' personal thoughts, feelings, attitudes, and interpretations regarding their experiences using Duolingo for learning English. It includes both positive and negative views as expressed by the students themselves.
2. **Duolingo:** Duolingo is a mobile-based language learning application that offers gamified lessons across various languages. In this study, Duolingo specifically refers to the English learning features of the app, as used by students at SMAN 1 Tabunganen.
3. **English Learning:** English learning refers to the process by which students acquire knowledge and skills in the English language, including vocabulary, grammar, reading, listening, and basic communication. This study focuses on English learning as supported by the Duolingo application.
4. **Rural Area:** A rural area refers to a geographic region that is located outside major urban centers, often characterized by limited infrastructure, including

access to education and technology. In this study, it specifically refers to Tabunganen, Barito Kuala, South Kalimantan, Indonesia.

5. **Mobile-Assisted Language Learning (MALL):** MALL refers to the use of mobile technology, such as smartphones and tablets, to support and enhance language learning. This study considers Duolingo as a form of MALL.

H. Scope of the Research

This study is limited to exploring the perceptions of tenth-grade students at SMAN 1 Tabunganen, a public high school located in a rural area of Barito Kuala Regency, South Kalimantan, Indonesia. The research specifically focuses on how students perceive the use of the Duolingo application in the context of learning English. It aims to understand their views, feelings, experiences, and attitudes related to using the application, including perceived benefits, difficulties encountered, engagement levels, and motivational effects. The scope of this research does not include measuring the actual improvement of students' English language proficiency, nor does it compare Duolingo to other language learning platforms. Instead, the emphasis is on collecting and analyzing qualitative data that reflect the students' lived experiences and subjective interpretations of using Duolingo as a supplementary learning tool. The application is studied not in terms of its technical performance or linguistic accuracy, but rather from the perspective of how it is received and perceived by rural students who may have limited access to formal or private English learning opportunities.

Furthermore, the research is conducted during the 2025 academic year, and data collection is limited to tenth-grade students only, as they are in the early phase of senior high school where foundational English skills are being strengthened. This age group is considered suitable due to their transition from basic to more academic English learning. The research does not involve students from other grades or schools and does not assess teacher perceptions or institutional policy. It also assumes that participants have at least basic access to smartphones or digital devices needed to operate the Duolingo app. By

narrowing the focus to a specific group, location, and context, this study seeks to produce meaningful insights about mobile-assisted language learning in rural Indonesian settings, without generalizing the findings to all schools or regions.

CHAPTER V

CONCLUSION AND SUGGESTIONS

This chapter presents the conclusion and suggestions derived from the research findings discussed in the previous chapter. The conclusion provides a summary of the key results related to students' perceptions of using Duolingo in learning English at SMAN 1 Tabungnen. It highlights the major contributions and challenges identified during the study. Meanwhile, the suggestions are directed toward teachers, students, and future researchers as considerations for improving the use of mobile-assisted learning applications, particularly Duolingo, in English language teaching and learning.

A. Conclusion

This research explored the perceptions of tenth-grade students at SMAN 1 Tabungnen regarding their use of the Duolingo application as a tool for learning English. Using a qualitative descriptive approach, the researcher collected data through classroom observations and semi-structured interviews with 15 selected students out of a total of 29 participants. The findings revealed a diverse range of student experiences, emotional responses, and attitudes toward the application. However, several major themes emerged that contribute to a broader understanding of how students in rural areas engage with digital learning platforms like Duolingo. Firstly, the majority of the students expressed positive initial perceptions of Duolingo. They described the application as fun, easy to use, and engaging due to its game-based interface. Features such as XP rewards, badges, streak tracking, and short, interactive lessons fostered a sense of achievement and enjoyment. For many students, these elements contributed to a feeling of comfort and motivation when compared to traditional textbook-based or teacher-centered instruction. These findings support previous studies such as those by Bustam et al. (2023) and Aprilia & Nugroho (2022), who noted that gamified learning platforms significantly enhance learner engagement and autonomy in language acquisition. Secondly, students identified a range of benefits from using Duolingo. These included improvements in vocabulary

acquisition, pronunciation, listening comprehension, and grammar awareness. Students appreciated that Duolingo allowed them to study English at their own pace, without the pressure of classroom competition or fear of making mistakes in front of peers. Several participants stated that they felt more confident trying English words on their own and enjoyed learning through images, sounds, and instant feedback provided by the app. This reflects what Widodo et al. (2020) emphasized about digital tools offering differentiated learning paths that cater to individual needs and styles.

Despite the strengths, the research also uncovered challenges and limitations that affected students' experience. Some students encountered difficulty understanding instructions in the app due to limited English proficiency. Others mentioned that they needed more explanations about grammar or vocabulary usage, which were not always available within the app. Additionally, students with unstable internet connections or limited access to devices faced barriers to using the app regularly. A few participants expressed feelings of boredom or confusion when using Duolingo for extended periods without teacher guidance. These challenges highlight the reality that, while mobile learning tools are promising, they cannot fully replace structured classroom teaching—especially in under-resourced areas. Furthermore, the research explored students' motivation and engagement, both emotionally and behaviorally. The findings suggest that the interactive nature of Duolingo fostered positive emotional responses such as happiness, curiosity, and pride in achieving milestones. Most students demonstrated increased motivation to practice English independently, even outside of class. This aligns with the work of Nuraini & Salsabila (2022), who found that mobile-assisted language learning enhances intrinsic motivation by creating a more personalized and autonomous learning experience. However, a few students still preferred traditional methods, stating that face-to-face interaction with a teacher gave them more clarity and direction. An important dimension of the study was examining students' preferences between Duolingo and traditional methods. While many participants favored Duolingo for its practicality and engaging content, some felt that the

traditional classroom environment provided more direct support, especially in explaining grammar rules and ensuring comprehension. This suggests that a blended learning model—combining Duolingo with teacher-facilitated instruction—might be the most effective strategy in rural contexts such as Tabunganen. Overall, this study contributes to the growing body of literature on mobile learning in English education, particularly in rural and low-resource settings. It emphasizes the importance of listening to student voices when implementing technology in the classroom. Understanding learners’ emotional responses, technological challenges, and preferences is crucial for creating effective and equitable digital learning environments.

In conclusion, while Duolingo has shown to be a useful and enjoyable supplementary tool for English learning, its success largely depends on teacher support, access to stable internet, and student digital literacy. The findings of this study reinforce the need for contextualized implementation of educational technology, taking into account the social, infrastructural, and pedagogical realities of the learning environment.

B. Suggestions

Based on the conclusions drawn from this study, the researcher offers the following suggestions for stakeholders involved in English language education in rural Indonesia:

1. For English Teachers

Teachers should view Duolingo as a complementary tool rather than a replacement for classroom instruction. Integrating Duolingo into lesson plans can provide variety and boost student motivation. However, teacher scaffolding is essential especially to help students understand the grammar, vocabulary, and sentence structure introduced in the app. Teachers can also assign specific Duolingo activities and monitor student progress through the classroom feature. By facilitating reflection and discussion based on app-based exercises, teachers can deepen students’ learning.

2. For Students

Students are encouraged to explore Duolingo consistently as a means of self-study. They should make use of the application's strengths its short lessons, instant feedback, and gamified structure to supplement their formal education. Students should also take initiative to ask for help when needed, either from peers or teachers, especially when they encounter concepts they do not understand. Regular use of Duolingo can strengthen vocabulary, build fluency, and foster greater confidence in using English in both written and spoken contexts.

3. For School Administrators

School leaders should support the adoption of educational technology by ensuring students have access to the necessary infrastructure such as internet, devices, and digital literacy training. Schools in rural areas can also collaborate with local governments or NGOs to provide digital resources. Additionally, administrators can organize teacher development programs to train educators in how to effectively integrate digital tools like Duolingo into their instruction.

4. For Curriculum Developers

Curriculum planners should consider incorporating mobile applications like Duolingo into the official curriculum or extracurricular programs. By aligning the content of Duolingo with national English learning standards, developers can create pathways for blended and flexible learning that cater to diverse learner needs across urban and rural contexts.

5. For Future Researchers

This study opens avenues for future inquiry. Researchers are encouraged to:

- Conduct longitudinal studies to examine the sustained impact of Duolingo on students' English proficiency.
- Explore comparative studies between Duolingo and other language learning apps.
- Investigate teacher perceptions of Duolingo and how their involvement influences student outcomes.

- Examine the socioeconomic factors affecting mobile learning adoption in more depth.

By focusing more closely on these areas, future studies can continue to expand our understanding of how digital tools affect language education across different populations and contexts.

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