

# CHAPTER I

## INTRODUCTION

The aim of the research is to explore learners' perception of using Duolingo in enhancing learners' speaking confidence. In this chapter will discuss about background of the research, research problem, research objective, operational definition, significance of research, and scope of the research about the learners' perception of using Duolingo in enhancing their speaking confidence.

### 1.1 Research Background

In recent years, education has undergone a rapid transformation in line with technological advancements. According to Astutik et al., (2024) there has been a significant shift from traditional lecture-based methods toward more innovative approaches through the integration of technology. This development not only enhances accessibility but also reshapes the way learning and evaluation take place, particularly in foreign language education.

English is one of the most important skills that high school learners face when dealing with the demands of globalization. From four language skills, speaking is considered the most complex because it requires an understanding of vocabulary, grammar, and pronunciation, as well as the confidence to communicate directly. However, there are several high school learners still struggle to speak English, mainly due to a lack of self-confidence. This is evident when learners remain silent, speak in Indonesian, or simply read the text without expression when asked to speak in front of the class.

This low self-confidence is closely related to the phenomenon of speaking anxiety. According to Cabrera et al. (2025), this is influenced by several main factors, including a lack of preparation and limited knowledge of language skills such as vocabulary, grammar and pronunciation, as well as a fear of receiving negative evaluation from teachers and classmates. These factors are exacerbated by competitive classroom conditions, peer-harrasement, past negative experiences. Consequently, even when the learners have an adequate understanding of the material, learners remain reluctant or passive when asked to speak in English. Therefore, speaking anxiety is not only a linguistic issue but also a psychological and social one that directly impacts self-confidence.

In the context of technological integration, Artificial Intelligence (AI) has emerged as a significant tool in supporting modern learning practices. AI-based applications play a crucial role in providing immediate feedback features that enhance learners' communication skills. This instant feedback enables learners to quickly identify areas for improvement, thereby promoting an adaptive learning environment responsive to individual needs (Akavova et al.,2023). Similarly, Noviyanti (2020) found that AI-facilitated conversational practices enhance immersion and engagement, leading to improved academic performance and greater speaking confidence.

One of the most widely recognized AI-powered applications in foreign language learning is Duolingo. The effectiveness of the platform has been examined in numerous studies, as well as the various features that contribute to learners' progress. According to Munday (2016), the accessibility of Duolingo on mobile

devices, the presence of gamification elements, and the variety of tasks available contribute to its user-friendliness and attractiveness. This finding is reaffirmed by Purwanto (2023), who explains that Duolingo incorporates the four fundamental language skills via interactive exercises such as listening to brief narratives, responding to comprehension questions, and practising pronunciation. Furthermore, Purwanto emphasises that Duolingo offers additional features, such as daily vocabulary lists, user discussions and immersion activities. Collectively, these features help learners to develop their language skills more quickly and effectively.

Within the Indonesian education curriculum, learners are expected to communicate effectively in English as the target language. However, Salsabil et al., (2023) has noted that a significant number of learners continue to grapple with an inferiority complex, which hinders their ability to articulate their ideas in English with confidence. A significant challenge for educators is the lack of confidence among learners when engaging in foreign language communication. Quavanch et al., (2024) as a case in point, learners who experience high levels of speaking anxiety frequently encounter difficulties in expressing themselves rationally, which often results in errors during speaking tasks. This can result in a loss of coherence in their ideas when addressing an audience. This finding remains relevant today, as more recent research continues to highlight confidence-related issues as major obstacles to effective communication. For example, Syarfryadin., (2020) found that the oral communication skills of pre-service English teachers were significantly impacted by their fear of making mistakes. The study showed that these fears

reduced learners' confidence and willingness to participate in oral activities, and triggered anxiety, mental blocks and avoidance strategies, particularly when peers and instructors were present. Together, these findings emphasize the ongoing impact of low confidence and speaking anxiety as emotional barriers in foreign language learning, highlighting the need to investigate supportive tools such as Duolingo in addressing these challenges.

In response to challenges of the ongoing impact of low confidence and speaking anxiety as emotional barriers in foreign language learning, motivation has been identified as a pivotal factor in maintaining learner engagement and facilitating learners' navigation of emotional challenges in language learning contexts, particularly when augmented by the use of gamified mobile application. Gragera (2024) conducted a quasi-experimental study, the results demonstrated that Duolingo users exhibited significantly higher motivation and vocabulary gains. By improved learners' overall proficiency on 12%, in comparison to the 6% improvement of control group. In similar context Suherman et. al., (2024) found that 85.7% of non-English majors experienced significant motivational boosts following six weeks of using Duolingo, attributing this effect to its game features, including levels and leaderboards.

Collectively, these findings underscore the pivotal role of gamification-driven motivation in enhancing learner engagement and confidence, thereby underscoring Duolingo's potential as a supportive tool for the enhancement of speaking skills in EFL context. For instance, Suryanto (2024) demonstrated that the incorporation of gamification elements, such as points, rewards, challenges, and leaderboards, into

learning applications significantly enhances student motivation, engagement, and active participation in the learning process. Taken together, these findings suggest that Duolingo's gamification-based design is not only appealing to users but also strategically effective in maintaining their motivation, which may ultimately support their confidence in practicing and improving their speaking skills.

Previous studies have thoroughly examined the use of Duolingo in the context of learning English as a foreign language (EFL), with a primary focus on linguistic and cognitive outcomes. Herminingsih (2021) examined prospective teachers' perceptions of using Duolingo in teaching vocabulary to young learners, while Apoko et al. (2023) examined college learners' perceptions of using Duolingo to improve vocabulary acquisition. Previous studies, such as that by Ahmed et al. (2022) examined the impact of Duolingo and WhatsApp on the accuracy and fluency of EFL learners' speaking through a quasi-experimental approach. Thus, although these previous studies provide valuable insights into vocabulary development and speaking performance, they emphasize measurable linguistic outcomes rather than learners' affective responses. therefore, the researcher identified that the aspect of confidence in speaking English, as an affective and psychological construct are remains under-explored, especially from the perspective of Indonesian EFL learners in senior high school. Therefore, this study addresses the existing research gap by specifically examining Indonesian EFL learners' perceptions of Duolingo in improving their confidence in speaking English, offering a new contribution by highlighting learners' subjective

experiences and the development of confidence in speaking rather than focusing on linguistic proficiency.

As highlighted in the introduction, this research is of significant importance in order to address this gap in the literature. The present study has been designed to explore the perceptions of XII grade high school learners with regard to the use of Duolingo in increasing English-speaking confidence.

## **1.2 Research Problem**

This study focusses on research question about “what are EFL student’ perceptions of using Duolingo as a tool in improving their speaking confidence?”.

## **1.3 Research Objective**

The objective of this study is to explore learners’ perceptions of using Duolingo as a tool in improving their confidence in speaking English.

## **1.4 Operational Definition**

### **1.4.1 Duolingo:**

In this study, Duolingo is operationally defined as a Mobile-Assisted Language Learning (MALL) application whose use is measured through Learners’ perceptions of its perceived contribution to the development of their English-speaking confidence. The operationalization focuses on how learners experience and evaluate its features in relation to the dimensions of Affective Confidence, Performance Confidence, Task-Specific Confidence, and Feature-Based

Perception as measured in the research instrument. With using specific features such as the speaking exercise feature, which requires the use of a microphone, is operationalized as a practice environment for direct oral language production, and its contribution is measured through learners perceived increase in confidence when pronouncing English words, phrases, and sentences. The instant feedback feature, which provides AI-based pronunciation evaluation, is operationalized as an immediate self-correction mechanism whose contribution is reflected in Learners perceived confidence in recognizing and improving their speaking performance after receiving real-time feedback. Furthermore, the progress tracking and adaptive learning features are operationalized as visual indicators of learning development, and their role in this study is limited to how Learners perceive these features as strengthening their confidence in their own speaking improvement. The interactive reminders and widgets are also positioned within this perceptual framework, as their contribution is measured through Learners perceived confidence in engaging in regular and self-directed speaking practice.

#### **1.4.2 Speaking Confidence:**

Speaking confidence refers to learners' perceived comfort and willingness to use English orally in communication contexts. Speaking confidence is operationally defined through two related affective aspects, there are self-efficacy and speaking anxiety, as perceived by Indonesian EFL Learners when using Duolingo. Self-efficacy in this study is defined as learners' belief in their capability to perform English-speaking tasks, particularly after engaging with Duolingo activities. Speaking anxiety is defined as learners' feelings of tension,

nerveousness, and fear when required to speak English, which include fear of making mistakes, fear of negative evaluation, and lack of psychological control during speaking tasks. In this study it been viewed as an affective barrier that potentially reduces learners' speaking confidence.

### **1.4.3 Student perception**

In this research, learners' perceptions are defined in operational terms as their personal evaluations, attitudes, and beliefs regarding the effectiveness of Duolingo in boosting their speaking confidence. It encompasses how learners interpret, evaluate, and react to their experiences with Duolingo as a language acquisition tool, especially concerning its practicality, user-friendliness, motivational impact, and its role in enhancing their self-assurance in speaking English. The perception indicators examined in this study consist of (1) perceived affective confidence, (2) perceived performance confidence, (3) perceived task-specific confidence, (4) featured-based confidence in speaking confidence.

### **1.5 Significance of the Research**

This research highlights the transformative role of artificial intelligence in enhancing learners' confidence in speaking English. By utilizing AI-powered applications like Duolingo, the study demonstrates how quick, personalized feedback can address confidence challenges, enabling learners to practice independently while receiving precise corrections. For educators, AI tools offer an effective way to complement traditional teaching methods, allowing for more individualized learning experiences. At the same time, learners benefit from

gamified, low-pressure speaking exercises that foster both skill improvement and confidence building. This dual impact underscores the potential of AI to create more adaptive and inclusive language learning environments, ultimately improving communication abilities and readiness for real-world interactions.

### **1.6 Scope of the Research**

This research includes several main variables and sub-variables that support the research objectives where the independent variable in this study is Duolingo and learners' perception is the dependent variable. The focus of this study is learners' perception in using Duolingo as tool for language learning in context learners' confidence in speaking English. For research Location The research will be conducted at Senior high school in jember, the research will also involve a hybrid to facilitate the student in giving their perception in using Duolingo as tool that enhance learners' speaking confidence.