


Student's Perception of Using ChatGPT Voice to Improve Their Self-Efficacy in Speaking

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ABSTRACT

Speaking self-efficacy plays a crucial role in EFL learners' oral performance, as it influences confidence, anxiety management, and willingness to communicate. Despite the growing integration of artificial intelligence in language learning, empirical studies exploring students' perceptions of AI voice-based tools, particularly ChatGPT Voice, remain limited in the Indonesian EFL context, especially among English major students. This study aims to investigate English Education students' perceptions of using ChatGPT Voice and examine how it contributes to their speaking self-efficacy. Employing a descriptive qualitative design, data were collected through preliminary observation interviews and in-depth semi-structured interviews with seventh-semester English Education students at Tadulako University. The findings reveal that ChatGPT Voice positively influences students' speaking self-efficacy by increasing confidence, reducing speaking anxiety, improving fluency and vocabulary, and enhancing motivation and enjoyment. Despite minor technical challenges, students generally perceived the tool as supportive and effective. This study concludes that ChatGPT Voice serves as a valuable supplementary tool for fostering speaking self-efficacy in EFL contexts.

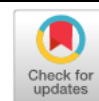
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INTRODUCTION

Speaking is widely recognized as a fundamental skill in English as a Foreign Language (EFL) learning, particularly in higher education where students are expected to actively participate in academic discussions, presentations, and classroom interaction. Effective speaking requires not only linguistic competence, such as grammar, vocabulary, and pronunciation, but also psychological readiness to communicate. Numerous studies indicate that many EFL learners continue to experience difficulties in speaking despite adequate language knowledge, suggesting that affective factors play a decisive role in oral performance. One of the most influential affective factors in speaking is self-efficacy. Learners' beliefs about their speaking capability strongly influence how they approach speaking tasks, manage anxiety, and persist in communication. In university EFL contexts, low speaking self-efficacy is frequently associated with fear of making mistakes, negative evaluation, and limited oral participation, even among English major students who are academically expected to demonstrate high proficiency.

Recent developments in artificial intelligence (AI) have introduced new possibilities for supporting EFL speaking practice. AI-based conversational tools allow learners to engage in interactive speaking activities beyond the classroom, offering flexible, autonomous, and low-pressure practice environments. ChatGPT, developed by OpenAI, has attracted attention in language education due to its ability to generate natural responses and facilitate interaction. Its voice feature enables real-time spoken communication, making it particularly relevant for EFL speaking practice. Although previous studies have reported positive effects of ChatGPT and AI-based tools on speaking-related outcomes, empirical research focusing on English major students' perceptions of ChatGPT Voice and its contribution to speaking self-efficacy in

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the Indonesian EFL context remains limited. Therefore, this study aims to explore students' perceptions of using ChatGPT Voice and examine how it contributes to their speaking self-efficacy. To achieve this aim, the study adopts a qualitative research design, focusing on in-depth exploration of students' experiences. Data are collected from English Education students through interviews to capture their perceptions and self-efficacy development when using ChatGPT Voice for speaking practice. This methodological approach allows for a comprehensive understanding of how AI-based voice interaction influences learners' psychological and speaking-related experiences.

Students' Perceptions in Language Learning

Students' perceptions refer to learners' beliefs, attitudes, and evaluative judgments toward learning experiences, instructional methods, or educational technologies. In language learning, perception plays a crucial role because it influences learners' motivation, engagement, and sustained use of learning tools. When students perceive a learning tool as useful, enjoyable, and supportive, they are more likely to actively engage and benefit from it. In technology-enhanced language learning, positive student perceptions have been linked to increased confidence and participation in speaking activities. According to Qiao & Zhao (2023), AI-powered speaking practice tools create immersive, judgment-free learning environments that reduce anxiety and encourage learners to practice oral skills with increased confidence and autonomy, supporting both motivation and learning autonomy. Zou et al. (2023) also observed improved fluency and accuracy among students using voice-enabled AI. These findings highlight the importance of examining students' perceptions when evaluating the effectiveness of AI-based speaking tools.

Speaking Self-Efficacy in EFL Contexts

Self-efficacy is defined as individuals' beliefs in their capability to perform specific tasks successfully Albert Bandura (1997). In EFL speaking contexts, speaking self-efficacy influences learners' confidence, emotional responses, and persistence during oral communication. Learners with high speaking self-efficacy tend to participate more actively, take linguistic risks, and recover more effectively from errors, whereas those with low self-efficacy often avoid speaking situations.

Empirical studies consistently demonstrate a strong relationship between speaking self-efficacy, anxiety, and willingness to communicate. Yildiz (2024) found that increased speaking self-efficacy led to higher classroom participation and reduced anxiety among university EFL students. Xu et al. (2024) further showed that the use of ChatGPT positively influenced foreign language self-efficacy, with enjoyment mediating this relationship. These findings suggest that learning environments that reduce pressure and increase enjoyment are essential for fostering speaking self-efficacy.

ChatGPT Voice in EFL Speaking Practice

ChatGPT Voice is an AI-based conversational tool that enables learners to engage in real-time spoken interaction with an artificial interlocutor. Unlike traditional classroom speaking activities, ChatGPT Voice offers a non-judgmental environment where learners can practice speaking freely, repeat utterances, and explore various topics without fear of negative evaluation. These features make it particularly suitable for learners who experience speaking anxiety.

Recent studies have highlighted the pedagogical potential of ChatGPT Voice in EFL speaking practice. Pham et al. (2025) reported that ChatGPT Voice increased learners' willingness to communicate by providing a safe and flexible speaking partner. Said & Mahrooqi (2024) also found that AI-assisted speaking tools improved learners' fluency, confidence, and motivation. Despite these promising results, research focusing on English major students' perceptions of ChatGPT Voice and its contribution to speaking self-efficacy in Indonesian higher education remains limited, indicating the need for further investigation.

METHOD

This study employed a descriptive qualitative research design to explore English Education students' perceptions of using ChatGPT Voice and its contribution to their speaking



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self-efficacy. Qualitative research is appropriate for understanding meanings, experiences, and interpretations constructed by participants in social contexts, with the researcher serving as the main instrument (Sugiyono, 2019). Similarly, Creswell (2012) states that qualitative research aims to explore and understand the meanings individuals or groups assign to a social or human problem. In this study, the social phenomenon refers to how students perceive and make sense of their experiences using ChatGPT Voice for English speaking practice and how these experiences relate to their speaking self-efficacy.

Respondents

The respondents of this study consisted of seventh-semester students from Class C of the English Education Study Program at Tadulako University. Purposive sampling was used to select participants based on their relevance to the research objectives Creswell (2007). The study involved two stages of participant selection. In the preliminary stage, five students who were identified through classroom observation as frequent users of ChatGPT Voice participated in short informal interviews. From this group, three students who demonstrated the most frequent and consistent use of ChatGPT Voice were selected as the main participants for in-depth interviews. This number is considered adequate for qualitative inquiry, as data saturation can be achieved when no new themes emerge from additional participants (Speziale, 2003)

Instruments

The primary instrument of this study was a semi-structured interview guide. Preliminary observation interviews were used as an initial instrument to obtain general information regarding students' experiences, frequency of use, and basic attitudes toward ChatGPT Voice. These preliminary interviews were not intended to measure speaking self-efficacy in depth but to support the selection of main participants. The main semi-structured interview guide was developed based on Bandura's (1997) self-efficacy theory and the cognitive, affective, and behavioral (CAB) perception model proposed by Oskamp and Schultz. The interview questions explored students' confidence, anxiety, motivation, enjoyment, speaking behavior, and beliefs about the effectiveness of ChatGPT Voice.

Procedures

Data collection was conducted in two stages. The first stage involved preliminary observation interviews with five seventh-semester students to confirm their frequency of using ChatGPT Voice and to explore their general impressions. Each interview lasted approximately 10–15 minutes and was conducted informally. Based on the findings from this stage, three students were selected for the second stage. The second stage consisted of in-depth semi-structured interviews aimed at obtaining deeper insights into students' perceptions and speaking self-efficacy development. Each interview was conducted face-to-face at Tadulako University. All interviews were audio-recorded with participants' consent and transcribed verbatim.

Data analysis

The interview data were analyzed using thematic analysis following the procedures proposed by Braun & Clarke (2006). The analysis involved familiarization with the data through repeated reading of transcripts, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. The identified themes were interpreted within the framework of Bandura's self-efficacy theory and the CAB perception model. Preliminary interview data were analyzed descriptively to support participant selection and contextual understanding.

FINDINGS AND DISCUSSION

This section presents and discusses the findings of the study concerning English major students' perceptions of using ChatGPT Voice to improve their speaking self-efficacy. The discussion is based on data obtained from semi-structured interviews with three seventh-semester students of the English Education Study Program at Tadulako University who had prior experience using ChatGPT Voice for speaking practice. The findings are organized according to the research questions and interpreted using Bandura's (1997) self-efficacy theory

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and the Cognitive–Affective–Behavioral (CAB) model of perception. Relevant empirical studies are also incorporated to situate the findings within current research on AI-assisted EFL speaking.

How do English major students perceive the use of ChatGPT Voice in speaking practice?

The findings indicate that English major students at Tadulako University perceive ChatGPT Voice as a positive, supportive, and flexible tool for speaking practice. Across the interviews, all participants described their experiences with ChatGPT Voice as psychologically safe and emotionally comfortable, allowing them to practice English without fear of negative evaluation. This perception is particularly significant in EFL contexts, where anxiety and fear of making mistakes often inhibit oral participation.

Participants consistently emphasized that ChatGPT Voice created a non-judgmental environment. P1 and P2 highlighted that, unlike classroom interactions, the AI did not correct them harshly or evaluate their performance publicly. P3 further described the interaction as resembling a real conversational partner due to the tool's responsiveness and empathetic tone. This sense of safety encouraged repeated speaking practice and reduced hesitation, confirming that students perceived ChatGPT Voice not merely as a technological tool but as a supportive speaking companion.

Enjoyment and convenience were also central to students' perceptions. All participants reported that ChatGPT Voice was easy to access and could be used anytime and anywhere, which increased their willingness to practice during free time. This aligns with Zhang et al. (2024), who found that AI-mediated speaking tools enhance foreign language enjoyment by providing flexible and low-pressure interaction. The participants' perceptions suggest that enjoyment functions as an affective gateway, enabling sustained engagement in speaking practice.

Motivational aspects further shaped students' perceptions. Participants reported feeling encouraged by the AI's immediate and supportive responses, which motivated them to continue speaking. This finding is consistent with Tram et al. (2024), who argue that learners' positive perceptions of AI tools are strongly influenced by responsiveness and personalization. Overall, students perceived ChatGPT Voice as an enjoyable, motivating, and psychologically safe platform that supports regular speaking practice.

How does the use of ChatGPT Voice contribute to students' speaking self-efficacy?

The findings demonstrate that ChatGPT Voice contributes meaningfully to students' speaking self-efficacy by enhancing confidence, reducing anxiety, and supporting linguistic development. All participants reported increased confidence after regularly practicing with ChatGPT Voice. P1 explained that she felt more confident presenting in class despite making grammatical errors, indicating that confidence stemmed from communicative experience rather than linguistic perfection. This reflects Bandura's (1997) concept of mastery experiences, where successful task engagement strengthens self-efficacy beliefs.

Reduced speaking anxiety emerged as another key contribution. Participants described a gradual decrease in fear and nervousness when speaking English, particularly in academic or public contexts. P2 stated that her anxiety was "almost eliminated" after frequent AI-based practice, while P3 reported feeling more prepared to answer questions during presentations. According to Bandura (1997), emotional and physiological states are critical sources of self-efficacy; the relaxed interaction provided by ChatGPT Voice appears to lower affective barriers and increase readiness to communicate. This finding aligns with Wang et al. (2024), who reported decreased speaking anxiety and increased willingness to communicate among learners using AI chatbots.

In addition to psychological effects, participants experienced improvements in fluency and vocabulary. ChatGPT Voice functioned as both a conversational partner and a source of linguistic input. Participants reported acquiring new expressions and slang, such as idiomatic phrases, and practicing pronunciation through repetition. These improvements contributed to smoother speech and greater expressive range, reinforcing learners' belief in their speaking ability. Empirical studies by Fathi et al. (2024) and Pituxcoosuvann et al. (2025) similarly

demonstrate that AI-mediated speaking interaction enhances fluency, lexical range, and communicative confidence.

Motivation played a reinforcing role in self-efficacy development. Participants described feeling increasingly motivated to practice speaking because interactions with ChatGPT Voice were engaging and emotionally rewarding. This finding supports Bandura's (1997) assertion that higher self-efficacy leads to greater persistence and motivation. As students experienced successful communication with the AI, their belief in their speaking ability strengthened, which in turn encouraged more frequent practice. Thus, ChatGPT Voice contributed to speaking self-efficacy through an interconnected cycle of confidence, reduced anxiety, linguistic improvement, and sustained motivation.

What challenges do students experience when using ChatGPT Voice for speaking practice?

Despite the predominantly positive findings, participants also reported several challenges associated with using ChatGPT Voice. These challenges were mainly practical and technological rather than psychological or pedagogical. The most frequently mentioned issue was unstable internet connectivity, which occasionally disrupted voice interactions and reduced conversational flow. Such disruptions can affect learners' perceptions of ease of use, particularly in contexts with limited technological infrastructure.

Participants also noted occasional inaccuracies or inconsistencies in AI responses. At times, ChatGPT Voice misunderstood questions or provided answers that were less relevant, causing brief confusion. Similar concerns are reported by Yan et al. (2023), who argue that inconsistent AI output may reduce learners' trust in the tool. From a self-efficacy perspective, Bandura (1997) notes that unclear feedback weakens verbal persuasion, potentially limiting confidence development.

Another challenge involved time constraints. Participants' frequency of using ChatGPT Voice fluctuated depending on academic workload and extracurricular activities. While motivation remained high, limited time reduced opportunities for consistent practice. These challenges, however, did not significantly diminish the perceived benefits of ChatGPT Voice. Participants continued to view the tool as helpful and relevant, suggesting that its advantages outweighed its limitations.

Overall, the challenges identified function as contextual considerations rather than barriers. Addressing issues related to technological stability and feedback clarity may further enhance the effectiveness of ChatGPT Voice in supporting speaking self-efficacy.

CONCLUSIONS

This study examined English Education students' perceptions of using ChatGPT Voice as a tool to enhance speaking self-efficacy in an EFL context. The findings indicate that ChatGPT Voice contributes positively to both psychological and linguistic aspects of students' speaking development. Participants reported increased speaking confidence, reduced anxiety, and greater motivation to engage in oral practice. These outcomes are consistent with Bandura's (1997) self-efficacy theory, particularly the roles of mastery experiences, verbal persuasion, and affective states in shaping learners' beliefs about their speaking ability. From a linguistic perspective, students perceived improvements in fluency, vocabulary use, and pronunciation through repeated interaction with ChatGPT Voice. The availability of instant responses, opportunities for imitation, and continuous exposure to spoken English supported learners' communicative competence, which in turn reinforced their confidence in performing speaking tasks. The interactive and low-pressure nature of AI-mediated practice also encouraged students to experiment with language use without fear of negative evaluation. Despite these benefits, several challenges were identified, including occasional speech misrecognition, rapid or less natural AI responses, limited feedback specificity, and technical connectivity issues. These limitations indicate that ChatGPT Voice cannot fully replace human interaction in speaking instruction. Nevertheless, as a supplementary tool, it offers meaningful pedagogical value. Overall, this study concludes that ChatGPT Voice provides a

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psychologically safe, motivating, and linguistically supportive environment that can effectively enhance EFL learners' speaking self-efficacy.

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