

CHAPTER I

INTRODUCTION

1.1 Research Background

Speaking skills have an important role in communication and are most used in language learning (Azzahra et al., 2019). According to Jaya et al. (2022) speaking is one of the most preferred aspects to assess whether someone has mastered the language or not, alongside writing, reading, and listening skills that must be mastered to have good proficiency in language. Speaking is known as a way for people to deliver and share their thoughts verbally to others (Mega & Sugiarto, 2020). That is why speaking skills are important because in communication we need to convey information clearly and fluently so that it is easy to understand. Mastery of language skills especially speaking skills is not only a component of language proficiency, but also an important communication tool in cross-cultural interactions in both education and international business (Rao, 2019).

In this era there are still many people whose English-speaking skills are limited. English is a foreign language in Indonesia, so it is not widely applied in daily life and is considered less essential because it does not facilitate official communication such as in government to education (Lauder, 2008; Rahmi, 2015; Winnie et al., 2023). This resulted in many Indonesians being unfamiliar with the English language and facing challenges in understanding, reading and speaking English. This situation raises a serious problem, because English is important to learn especially in

speaking. However, there are still many Indonesian students who still lack proficiency in speaking English.

According to (Utami & Santosa, 2023), teaching speaking poses a challenge as it will encounter several problems during the learning process, including student nervousness and limited student engagement. Since speaking is the only way to actively participate in class, students must have good speaking skills and be able to express their ideas and thoughts clearly (Kusuma, 2021). In relation to mastering speaking skills, there are problems faced by students in Indonesia. English learning difficulties are still experienced by students at the middle school level, which can affect learning outcomes (Dayansyah et al., 2024). This is supported by data from EF Education on English proficiency, that English language ability in Indonesia occupies position 81 out of 111 countries researched (Wahyudi, 2025). Therefore, from this data we can see that English language skills in Indonesia are still considered low. The problems faced consider psychological factors such as nervousness, and fear of making mistakes. In addition, the lack of vocabulary and the learning environment that does not use English in class are also problems in developing English speaking skills (Shen & Chiu, 2019; Wahyudi, 2025). The most common problems experienced by students are poor confidence and anxiety, caused by a limited amount of English-speaking practice (Jaya et al., 2022). Based on the mentioned challenges, English speaking skills must be taught appropriately and using the appropriate media. Therefore, teachers must be careful in choosing suitable media in learning.

Nowadays, people are always in touch with technology such as the use of gadgets in their daily life from children to adults (Widyanti et al., 2019). As the

times evolved, technology began to dominate the world, shaping every aspect of human life including education (Kalyani, 2024). Learning in the 21st century emphasizes the integration of technology for the sustainability of education that must be introduced to all students (Akmal et al., 2023; Santosa et al., 2022). In the digital era, the use of technology is possible to be used as a medium for learning English (Mahartana et al., 2024). Integrating technology especially in language learning, provides a new learning environment and allows students to interact without time and space constraints with their teachers and groups (Santosa et al., 2022; Yosintha & Rekha, 2022). The integration of technology in education can be seen in the online language learning platforms, which offer interactive classes and self-learning to improve language skills according to their level (Risnazarovna, 2024).

One of the technologies that can be utilized in teaching is Artificial Intelligence (AI). Artificial intelligence refers to a computer program that imitates cognitive abilities associated with human personality, such as learning and critical thinking (Gerlich, 2025). According to Xu et al. (2021) AI refers to the simulation of human intelligence by systems or machines, which aims to develop machines that can think and behave like humans, including understanding, reasoning, planning, and predicting. The development process of AI includes cognitive intelligence, perceptual intelligence, and decision-making intelligence (Xu et al., 2021). The development of AI is getting rapidly, the use of AI in teaching is the right choice in support students' speaking skills. AI chatbots are effective in supporting the development of speaking skills, especially for EFL students (Han, 2020). AI is becoming an alternative tool in assisting in daily life (Santosa, 2023).

It can help individuals in various ways, such as being a virtual assistant in managing plans, providing recommendations, and is often used in education such as giving real-time feedback during process of learning. In addition, there is also research from Kusuma et al. (2024) that it is important to integrate AI-based technology to support the field of language education. AI technology was first discovered by John McCarthy in 1956, he said that AI is the science of making intelligence-based machines (Russell & Norvig, 2022). This technology is undeniable, AI can have positive and negative impacts depending on how we utilize it wisely (Mahartana et al., 2024).

Talkpal.AI is one part of AI based on natural language processing (NLP) in understanding, processing and responding with natural language. Talkpal.AI is a language teacher powered by GPT that is used to improve speaking, writing, listening and pronunciation skills (*Talkpal.Ai*, n.d.). Talkpal.AI offering various features such as personalized learning, immersive conversation, and real-time feedback. The type of Talkpal.AI used in this study is the website, as this version is more accessible than the application. In addition, this also makes it easier for teachers and students, as not all student devices have compatible storage. Students also can access Talkpal.AI because this AI can be used for free in chat mode, without having to subscribe to a premium. Due to its innovative features and easy access, Talkpal.AI can support language learning especially English speaking skills.

Researchers found several previous studies on the effect of AI technology in supporting education field, especially Talkpal.AI. Firstly, Hidayatullah (2024) have conducted research to investigate the effectiveness of Talkpal.AI for improving speaking skills on university students. Furthermore, (Dikaprio & Diem,

2024) also have conducted study to evaluate the effectiveness of Talkpal.AI in improving English speaking skills at public university in Indonesia. Torkhani (2025) have conducted research in Kuwait to see the effectiveness of Talkpal.AI on fluency, vocabulary, pronunciation, and grammar at pre-intermediate level English as EFL students in Kuwait. There is also research about the use of Google Voice Assistant on speaking skills at vocational high school students (Mahartana et al., 2024). Khalizah & Damanik (2024) determined the effect of using ELSA Speak AI to enhancing junior high school students' speaking skills. The study found that ELSA Speak is effective in improving students' English speaking skills across all five aspects of speaking, as well as in increasing student motivation. Although previous studies have examined the effect of AI technologies such as Talkpal.AI, Google Voice Assistant, and ELSA in speaking skills proven effective. These findings verify that Talkpal.AI has significant potential to support speaking skills in the current digital age.

Based on previous research and preliminary observation with English teacher at SMP Negeri 2 Singaraja, this study was conducted to see whether there is a positive significant effect of implementing Talkpal.AI on the speaking skills of eighth-grade students at SMP Negeri 2 Singaraja. Furthermore, the researchers also wanted to see the size of the effect on the use of Talkpal.AI. Because previous studies on the integration of Talkpal.AI into speaking skills have mostly reported positive effects, but there are still few studies that measure the size of the effect. In addition, SMP Negeri 2 Singaraja was chosen because it has appropriate facilities to support this experimental study, such as a policy that allows students to use gadgets during the learning process and the availability of Wi-Fi. Eighth grade was

selected as the research subject because students at this level generally have a more mature foundation in speaking skills. Furthermore, eighth grade students are at an ideal stage to observe the speaking skills, compared to ninth grade students who are already at an advanced stage in speaking skills. The incorporation of AI, especially Talkpal.AI into educational practices can be potentially supporting English speaking skill students. Several studies have shown that the use of Talkpal.AI is suitable as a learning medium in the field of English as a foreign language. Therefore, the researcher wants to conduct research experiments related to the use of AI technology, namely Talkpal.AI since the research about Talkpal.AI is still rarely conducted. There is still limited research that specifically examine the effectiveness of Talkpal.AI on students' speaking skills at junior high school students especially in junior high school in Bali context. The purpose of this study is to replicate and prove the claims of previous studies, with the same topic but different participants and settings. By conducting this research can increase the value and provide new knowledge about the research (Creswell, 2012). This is can be the novelty of research, because researchers will examine whether Talkpal.AI has significant and positive effect on students speaking skill of eighth grade junior high school students in Indonesian context especially in Bali. Therefore, research on the effects of Talkpal.AI on students' speaking skills is more relevant to be conducted at this level.

This research was conducted at SMP Negeri 2 Singaraja which has specific characteristics in regards to students, curriculum, and learning environment. Considering these specific needs and contexts, research on The Effect of Talkpal.AI on Eighth Grade Students' Speaking Skills is relevant to examine the potential of

AI in supporting students' speaking skills. Therefore, the use of Talkpal.AI is expected to have a significant positive effect on speaking skills because this technology-based media can be accessed anywhere, allowing students to be more flexible in learning. Based on the above explanation, this study examines “The Effect of Talkpal.AI on Eighth Grade Students' Speaking Skills at SMP Negeri 2 Singaraja.”

1.2 Problem Identification

Based on the explanation of research background, Artificial intelligence (AI) is currently widely used in education and is seen as a way to help students learn better. Therefore, further research is needed on the use of AI in the field of education, particularly the use of AI-based speaking tools such as Talkpal.AI. Previous studies have shown Talkpal.AI can support student learning, especially in English speaking skills. Talkpal.AI can provide real-time feedback that can help students improve their speaking skills compared to conventional learning. However, there is still lack research about the implementation of Talkpal.AI for speaking English skill. Therefore, there has been no research conducted in a middle school setting, particularly at junior high school in Bali context. One of the junior high schools in Bali, SMP Negeri 2 Singaraja, was chosen as the research site because this school supports the implementation of Talkpal.AI in the speaking skills of eighth grade students, with appropriate facilities such as Wi-Fi and a policy allowing students to use gadgets during the learning process. In addition, the school also shows support for English speaking learning, which is one of the learning focuses in eighth grade. Therefore, the use of Talkpal.AI technology is expected to be relevant in assisting this process.

This study aims to address the research gap by examining the effect of Talkpal.AI on eighth students' speaking skill at SMP Negeri 2 Singaraja. This study will be conducted to prove the claims of previous studies, where it is stated that Talkpal.AI has a positive effect on students' speaking skills. In addition, this research also examines the size of effect on the implementation of Talkpal.AI, to provide a clearer explanation of whether the implementation of Talkpal.AI have the potential to affect significantly and positively students' speaking skills especially of eighth grade students at SMP Negeri 2 Singaraja.

1.3 Limitation of the Study

Based on the problem identification, the limitations of this research need to be determined so that the research can focus on the main purpose of conducting experimental research. This research is focused on the effect of Talkpal.AI on eighth grade students' speaking skills at SMP Negeri 2 Singaraja, where this research is only including aspects of speaking such as pronunciation, grammar, vocabulary, fluency, and comprehension. Moreover, this study also aims to examine the extent of the effect of implementing Talkpal.AI on students' speaking skills.

1.4 Research Questions

Based on the explanation of research background above, research questions can be formulated as follows:

1. Is there a significant positive effect of using Talkpal.AI on eighth grade students speaking skills at SMP Negeri 2 Singaraja?
2. How is the effect size of using Talkpal.AI on eighth grade students speaking skills at SMP Negeri 2 Singaraja?

1.5 Research Objectives

Based on the research questions above, research objectives can be formulated as follows:

1. To investigate whether there is a significant positive effect of using Talkpal.AI on eighth grade students' speaking skills at SMP Negeri 2 Singaraja.
2. To investigate the size of effect of using Talkpal.AI on the eighth grade students speaking skills at SMP Negeri 2 Singaraja.

1.6 Significance of Research

Based on the explanation above, the results of this study are expected to be as follows:

1. Theoretical Significance

Theoretically, this study can provide an understanding of artificial intelligence (AI) in language learning by analyzing its effect on students' speaking skills. These findings can provide insights into how AI-based tools, such as Talkpal.AI, can influence aspects of speaking, including pronunciation, grammar, vocabulary, fluency, and comprehension. This research can also provide a theoretical understanding of the role of AI in practicing English speaking skills, in the context of learning English as a foreign language (EFL).

2. Practical Significance

- For the English Teacher

To broaden teachers' insights into the use of AI in English language teaching. And can be an alternative media for teaching so that it can

create a pleasant atmosphere and improve teacher professionalism in teaching.

- For the Students

Through the application of Talkpal.AI can give a positive effect on student which can improve their speaking skill through Talkpal.AI tools.

- For the Researcher

The researcher is expected this study could give contributions to the other researchers who has same interest in conducting research of the effect of Artificial Intelligence, especially Talkpal.AI on students' speaking skills. The study may also use for doing research as references, who want to conduct the similar research.

