CHAPTER I

INTRODUCTION

1. 1 Background of Study

Intelligence technology development has experienced massive growth in use and has penetrated and impacted various sectors of life, including education (Luger & Stubblefield, 1993). Artificial intelligence has taken a role in learning activities at multiple levels (Mulianingsih et al., 2020). Artificial Intelligence technology can impact students' learning quality by adjusting several aspects of learning, such as personalized learning, adaptive evolution, and learning data analysis, and creating learning environments that are more effective, inclusive, and responsive to individual students' needs (Yusuf, 2024). Given these developments, it is critical that all education stakeholders work together to understand and harness the potential of AI to enhance learning, including educators, institutions, and technology developers. This includes addressing the evolving roles of teachers and students, navigating ethical and social considerations, and ensuring that technology is used to create equitable and meaningful educational experiences (Zhai et al., 2021). Therefore, to fully integrate AI technologies in a way that supports sustainable and impactful learning outcomes, the education sector must continue to innovate and adapt its practices, policies, and pedagogical approaches.

Artificial intelligence or commonly known as AI has shown great potential in transforming English language learning by offering personalized instruction, immediate feedback, and immersive practice environments, while reducing the teaching burden on teachers and improving the overall quality of teaching (Akbarani, 2024). With its advanced features, AI can support the development of core language skills, such as speaking, writing, listening, and reading through interactive and adaptive learning experiences (Crompton & Burke, 2023; Rusmiyanto et al., 2023). In addition to improving student engagement and performance, these technologies also help create more

efficient and student-centered learning environments. It is essential to keep teachers informed about new technology tools that enhance learning, to ensure that both students and educators are getting the full benefit of these innovations. This ongoing awareness allows educators to integrate AI effectively while remaining active participants in the ever-evolving digital learning ecosystem.

With the widespread use of AI in teaching practices, understanding teachers' perceptions and acceptance of its existence is also crucial for successfully implementing and enhancing the learning experience. According to Suharyat and Lusiana (2023), AI intelligence has been debated in the school world regarding opinions on using AI in the learning sector, whether as a positive or negative influence. Some teachers may respond enthusiastically to the presence of AI in the education sector and its potential. This is because AI can increase student interaction and involvement in learning. Meanwhile, there are also some teachers who feel worried and less confident in using this technology because it can cause problems of fairness in assessment.

For prospective English teachers, Artificial Intelligence creates two mixed attitudes in Turkey by pre-English service teachers (Yetkin & Altınkaya, 2024). This is also shown by teachers in Sweden, who can show harm and help simultaneously (Rukiqi, 2024). However, it is undeniable that many show a positive attitude of acceptance towards the existence of AI. This is demonstrated by 77.8% of teachers in Slovenia who show a positive attitude towards its existence (Bezjak, 2024). This is also supported by a literature review on five articles, which reveals that teachers have a positive attitude towards AI in English language teaching (Xuan & Yunus, 2023). This indicates that the study tends to show a positive attitude given by teachers to the presence of AI in learning.

Due to the benefits and convenience offered by AI, the number of publications cited in the literature review using the PRISMA method highlights a generally positive attitude towards AI (Ala'a, 2023). Meanwhile, this is observed across sectors. In the research conducted by Rahman et al. (2023) on AI adoption in the Malaysian banking sector, they specifically noted similar motivating factors such as efficiency and ease of use. Although their study

focused on finance, it highlighted a broader pattern of technology acceptance that is relevant across domains. In the context of education, specifically English language learning, a variety of different but related factors have been identified. A study applying the UTAUT2 framework found that performance benefits, positive user experience, social influence, facilitating conditions, evolving educational practices, and improved learning outcomes were the main motivators for AI adoption in educational settings (Xu et al., 2024). These findings suggest that learners and educators are more likely to accept AI when it significantly improves the quality and accessibility of the learning process. In addition, it is also influenced by personnel, technical, organizational structure, and environmental factors, leading to individual, managerial, and employment-related outcomes in terms of the workplace (Yu et al., 2022). However, only a few studies have specifically explored the factors influencing AI adoption in the context of English language education despite growing interest, especially from qualitative and context-specific perspectives.

The published discussion on Artificial Intelligence has grown significantly, with a 23% increase in related literature recorded in 2015 (Baruffaldi et al., 2020). Meanwhile, few capture the nuanced lived experiences of English language teachers, especially those who are hesitant or selective in adopting AI tools in their classrooms. This gap is particularly evident in the context of Indonesian secondary schools, where local insights into teacher perceptions remain underexplored. To address this, the current study aims to find out how English teachers perceive the use of Artificial Intelligence and what factors underlie the barriers to the use of AI in English education sector. Understanding teachers' perceptions of AI is essential, as it can reveal educators' concerns and misconceptions about integrating AI into learning practices and ultimately create effective learning strategies. The Technology Acceptance Model or known as TAM is also used in this study. This is because this model offers a suitable theoretical framework to examine how individuals accept and use new technologies, especially by focusing on two core constructs namely perceived usefulness and perceived ease of use (Granić & Marangunić, 2019). This model is particularly relevant to the current study, as it allows for

an in-depth understanding of English teachers' attitudes towards AI integration in the classroom. This study can effectively explore how teachers evaluate the practicality and usefulness of AI tools in supporting English language teaching by applying TAM, which is crucial in identifying drivers and barriers to adoption in the specific context of Indonesian secondary education (Szajna, 1996).

SMP Negeri 4 Singaraja is recognized as one of the leading secondary schools in Singaraja city, Bali. According to the Kementrian Pendidikan Dasar dan Menengah websites, the number of students in this secondary school is 1254, with 668 boys and 586 girls divided into 33 classes, making it one of the schools with the most students in Singaraja city. Class criteria are also determined by student achievement, which is divided into several classes, namely accomplishment classes and regular classes. The school employs a stratified class system predicated on academic performance, which is used to create groups of students with different levels of achievement and regular classes. Consequently, a broad spectrum of student academic backgrounds, access to learning resources, and learning outcomes is observed, including in the domain of English language acquisition. The integration of technology, including Artificial Intelligence (AI), has the potential to address these disparities by supporting differentiated instruction and enhancing learning effectiveness.

Given the students' diverse academic backgrounds and learning needs, English teachers at SMP Negeri 4 Singaraja have an important role to play in adapting appropriate teaching strategies that are responsive to dynamic learning situations. This is based on the significant differences in students' ability levels, both between classes and individuals within one class. This discrepancy can motivate educators to employ learning methodologies that are more adaptable, flexible, and responsive to students' needs, including the integration of educational technology such as Artificial Intelligence. Furthermore, it has been documented that the English teachers at the secondary school are comparatively youthful, with an average age of under 45 years, while the youngest teacher is 27 years old.

These conditions indirectly influence experiences in integrating technology, as well as perceptions of its use in educational contexts. Moreover, active school support for students' participation in English competitions can be indicative of a commitment to enhancing the quality of language learning. Consequently, the role of English teachers takes on a strategic aspect in the realization of these objectives. The combination of student, school, and commitment to academic excellence characteristics may render SMP Negeri 4 Singaraja a relevant and potential research context. Therefore, English teachers in this school are considered appropriate and representative participants to illustrate the acceptance of the use of AI in learning.

To harmonize, research on the acceptance of artificial intelligence in education has been done, and it has shown mixed results and tends to be positive. So, this research conducted to answer the question of acceptance in different research settings, such as in a favorite middle school with the most students in North Bali, an educational city in Bali. This will explain the phenomenon with the target educational level and settings that differ from previous studies. It is essential to add insight into the acceptance of Artificial Intelligence with a new phenomenon that exists in the school regarding the acceptance and use of Artificial Intelligence by teachers to support learning so that this research can provide a new view of Artificial Intelligence in the world of education, especially in the field of Language. Due to the diversity in student achievement and access to technology, English teachers at SMP Negeri 4 face varied pedagogical challenges. This makes it an ideal setting to explore their lived experiences and perceptions regarding the use of Artificial Intelligence in supporting language learning.

1. 2 Research Problem Identification

Globally, there has been a significant increase in the use and discussion of Artificial Intelligence or commonly known as AI in education. A lot of published studies state the massiveness of positive attitudes shown by teachers (Bezjak, 2024). Furthermore, this opinion is reinforced by a literature review

that shows that many journals state a positive attitude towards AI (Xuan & Yunus, 2023). A study was also conducted on college English teachers, and positive results were obtained on language learning applications (X. Yao & Huang, 2024). Many teachers view AI applications positively due to their ability to streamline education and provide innovative teaching methods. For example, AI tools like Quillionz are appreciated for grading reading comprehension quizzes effectively and enhancing student learning (Nguyen et al., 2024). However, this still gives different opinions for some teachers.

Despite the promise of personalized learning, instant feedback, and increased efficiency, there is still a gap in teachers' overall acceptance of AI in the learning process, especially in English language learning. Even though there are many existing research focuses on the benefits of AI, little captures the nuanced lived experiences of English teachers, especially those who are hesitant or selective about adopting AI tools in their classrooms. Also, while much research employs quantitative methods, qualitative research that captures teachers' lived experiences and contextual challenges is limited. Teachers feel that AI can be harmful and helpful for students, which causes teachers to have mixed responses (Rukiqi, 2024). This is also supported by another study by Yetkin & Altınkaya (2024) which emphasized teachers' positive and negative attitudes toward AI through an investigation. The mixed feelings of teachers from both studies raise a big question about what underlies it. To address this, the current study aims to investigate how English language teachers at SMP Negeri 4 Singaraja perceive the use of Artificial Intelligence and to identify underlying factors that contribute to barriers to its adoption in the English language education sector.

From the studies above, it can be concluded that the presence of AI in English language learning shows positive results. However, there is still a tendency for different opinions regarding the fear of use to cause mixed feelings. According to previous research, teachers have a favourable view of AI. Moreover, limited studies discuss the attitude of English teachers towards AI. Research conducted by X. Yao and Huang (2024). shows a relationship

between factors influencing users' adoption of AI, specifically perception usefulness and perceived ease of usefulness.

However, the refusal of teachers to use Artificial Intelligence certainly has driving factors. Based on a study conducted in Ukraine through descriptive research shows that teachers have concerns about the use of Artificial Intelligence that can reduce the interaction between teachers and students and the assessment system that will be given (Nykonenko, 2023). In addition, a literature review study conducted by Adiguzel et al. (2023) shows other reasons that can influence teachers not to use AI, including personal support and facilities, lack of interaction in education, creating dependence on technology, and doubts about the answers given.

In the other hand, the ease of use and the benefits of applications in performing, along with other contributing factors such as experience, social, facilities, and educational trends, contribute to the adoption of AI in education (Xu et al., 2024). In addition, Yu et al. (2022) also argue that adopting AI can be based on individual, organizational, and surrounding factors. However, AI is believed to be adopted because perceived usefulness, ease of use, and intention are the key (Momani, 2020).

These opinion finds that facilities and social, are also the key in adopting AI. Inadequate support and other opinions from teachers can also be reasons for the underutilization of Artificial Intelligence in education. Similarities regarding other factors perceived ease of use and usefulness are the most fundamental reasons for using AI. Therefore, understanding Indonesian English teachers' perceptions of AI is essential, as it can reveal educators' concerns and misconceptions about integrating AI into learning practices and ultimately create effective learning strategies. However, there is still a lack of research on the opinions of teachers in Indonesia regarding its use and reasons that directly involve teachers as the main source of information.

Learning in schools must be done optimally to support student learning so that learning gets good with the results. Utilizing existing technology should make students more interested and improve their language learning. Based on an interview conducted on October 28, 2024, it was found that English teachers

at SMP Negeri 4 still do not use AI to the fullest. Teachers only use some AI to support inspiration in finding teaching materials, then develop their own, such as looking for photos or audio. Due to the diversity access to technology, English teachers at SMP Negeri 4 face varied pedagogical challenges. This makes it an ideal setting to explore their lived experiences and perceptions regarding the use of Artificial Intelligence in supporting language learning.

1. 3 Research Question

Based on the introduction and problem identification previously described the research questions to be addressed in this study are as follows:

1.3.1 How do English teachers at SMP Negeri 4 Singaraja experience and perceive the use of Artificial Intelligence?

1. 4 Research Objective

With the questions as mentioned above, this study aims to:

1.4.1 Find out why teachers have not maximized the utilization of Artificial Intelligence in English learning.

1. 5 Scope of The Study

The study focused on describing English teachers' reasons for using artificial intelligence in English Language teaching. It is included about what factors make teachers not often use Artificial Intelligence and what would encourage teachers to use AI in English language learning. The subject of this research will be English Language Teachers in SMP Negeri 4 Singaraja.

1. 6 Research Significance

1.6.1 Theoretical Significances

This research aims to support the gap between technological advancement and the silver lining in the learning process to foster an environment for teachers to embrace and work with AI with the teacher's role as a facilitator in learning. By exploring the challenges and opportunities that AI can provide, this research will offer a comprehensive framework for considering the ethics of creating an inclusive learning environment. By collaborating between educators and the environment, this research can generate actionable strategies to be implemented in the education sector to improve learning effectiveness and student engagement in the digital age.

1.6.2 Practical Significance

This research is expected to provide practical insights for various stakeholders:
1. For Teachers:

The findings from this study can help teachers better understand the use of Artificial Intelligence. Teachers can use this information to experiment with technology that can support classroom teaching and complete school administrative.

2. For schools and Educational Institutions

It is hoped that this research can make schools support the existence of AI in education and encourage the use and utilization of AI in teaching, especially in English learning at school.

3. For Researchers

       Hopefully, this research can be an additional reference for further research on the same topic. Researchers can use this study to investigate deeper reason and factors on teachers' acceptance towards Artificial Intelligence.