CHAPTER I

INTRODUCTION

This chapter presents the background information of this study, research questions, purpose of the study, limitations of the study, and the significance of the study.

1.1 Background of the Study

In recent years, technology has played an increasingly significant role in education, transforming how students access information, collaborate, and complete academic tasks (UNESCO, 2023). One such technology is ChatGPT or Generative Pre-trained Transformer, a Natural Language Processing (NLP) model developed by OpenAI. ChatGPT's conversational abilities provide learners with rich language input, helping them expand vocabulary, improve grammar, and enhance writing and speaking skills (Xu et al., 2024). In our live, we live closely with technology and has been integrated deeply as proven by Shoufan (2023) that mentions technology continues to play an increasingly prominent role in various aspects of daily life, including in our education and Chatbots such as Chat GPT have long found their way to formal and informal education. With this advanced technology, we have a new way to improve our learning in a new or improved way with this tool.

Generative AI like ChatGPT can enhance problem-solving by offering varied representations, helpful information, and prototype solutions, prompting

educational institutions to rethink its role in higher education tasks (Youssef et al., 2024). An AI-driven bot like ChatGPT can enhance learning by creating interactive tutorials that respond to student questions in real-time and offering conversational coaching for complex concepts (Iqbal et al., 2022). ChatGPT provides personalized educational content and automated feedback, which can enhance learning efficiency and engagement (Kasneci et al., 2023). It can adapt explanations to student needs, analyze learning behavior, and support individualized learning experiences when used responsibly (Y. Zhou et al., 2025).

The use of ChatGPT in education is not just about providing answers. It involves guiding students through problem-solving processes, helping them develop critical thinking skills, and supporting them in their educational journey (Favero et al., 2024). Based on my own observations and informal use, I believe ChatGPT offers a unique balance between assistance and autonomy students can explore ideas independently while still receiving support which what Rasul et al. (2023) also explain that ChatGPT can assist students in generating ideas for their assessments, research, analysis, and writing tasks, potentially improving their learning experiences. In order to improve the quality of our educational system, using advanced technology such as AI like Chat GPT is something to be considered upon. ChatGPT, a search engine in the form of a dialogue, serves as an innovative tool for information search and scientific communication, significantly improving the quality of learning (Prananta et al., 2023).

ChatGPT significantly enhances learning efficiency and communication; however, it also raises concerns about its broader implications in education. From

the standpoint of long-term educational resilience, overreliance on AI chatbots may jeopardize students' development of critical thinking and problem-solving skills (Moore & Gerlich, 2025; Silva et al., 2023). It is also seen as a potential threat to interpersonal relationships (Yu, 2023), and some schools have even banned its access on campus due to fears of AI-assisted cheating (Lo, 2023). Educators, especially at the university level, worry that students may become too dependent on ChatGPT, compromising academic integrity and honest effort. This contradiction between its benefits and challenges places ChatGPT in a grey area. In addition, while ChatGPT is sometimes capable of correcting its own mistakes, it can also exhibit overconfidence in incorrect responses, and small variations in input can result in contradictory outputs (Azaria, 2022). Overreliance on ChatGPT has also been linked to diminished writing ability, creativity, and increased instances of plagiarism (Draxler et al., 2023). Furthermore, challenges remain in ensuring that both students and educators perceive ChatGPT as a complementary educational tool rather than a replacement for human interaction, especially when studies highlight risks such as vague responses, reduced language practice, misinterpretation due to lack of context, and academic dishonesty (Albayati, 2024; Almulla, 2024; Xu et al., 2024; Luthfiyyah et al., 2024). These ongoing issues underscore the importance of understanding students' perceptions to support responsible and effective integration of ChatGPT in educational settings.

Perception is the process of assigning meaning and value to sensory experiences by connecting them with relevant information over time, allowing for a clearer and more cohesive understanding of the environment (Albright, 2015). Students' perception refers to how students view or interpret something based on

their personal experiences, attitudes, and beliefs (Senler, 2022). Students' perceptions significantly impact their motivation, engagement, and overall academic performance, as positive perceptions boost involvement and achievement, while negative ones can lead to disengagement and lower success (Tossell et al., 2024). When it comes to ChatGPT, students' perceptions are critical as they influence the extent to which they accept and integrate it into their academic activities. For instance, if students perceive ChatGPT as a helpful tool for improving their writing, understanding complex topics, or assisting with research, they are more likely to use it regularly. Conversely, if they find it difficult to use or believe it cannot offer meaningful support, their perception may hinder its adoption. Thus, understanding students' perceptions of ChatGPT is essential to gauge its effectiveness and to ensure its successful integration into educational settings.

The Technology Acceptance Model (TAM) was developed by Davies (1989) to study how individuals view the use of new technologies in their daily lives, such as email for work-related tasks. TAM consists of two main elements: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). PU refers to the extent to which individuals believe that using a specific technology will enhance their performance or quality of life. PEOU, on the other hand, reflects the degree to which individuals find the technology easy to understand and use. These two elements form the foundation of TAM, making it a widely used framework for assessing technological adoption. However, TAM's simplicity limits its applicability in analyzing modern, complex technologies, such as those involving artificial intelligence (AI).

To address the limitations of TAM, Venkatesh et al. (2003) developed the Unified Theory of Acceptance and Use of Technology (UTAUT), which expands the scope of analysis by introducing 4 key elements: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Conditions (FC). PE refers to the degree to which individuals expect the technology to improve their efficiency or fulfill their needs. EE reflects the level of ease and accessibility users perceive when interacting with the technology. SI examines how users are influenced by the beliefs and behaviors of others in their decision to adopt the technology. Finally, FC represents the infrastructure, support, and resources necessary for users to effectively utilize the technology. By incorporating these four constructs, UTAUT provides a more comprehensive framework for understanding and predicting the adoption of modern technologies.

The Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are vital to this study as they provide a robust theoretical framework for analyzing how students perceive and use ChatGPT to complete English assignments. These widely recognized models explore key factors in technology adoption, such as usability, ease of use, and the conditions that support its implementation. By applying these frameworks, the study can systematically examine the connections between students' attitudes, intentions, and actual engagement with ChatGPT. Their inclusion ensures a structured approach to understanding the factors shaping students' perspectives, making them essential for achieving the study's objectives and providing valuable insights into the integration of AI tools in education.

Previous research has investigated students' perceptions and acceptance of ChatGPT in educational settings, primarily using the Technology Acceptance Model (TAM) as a framework. Albayati (2024) explored undergraduate students' perceptions of ChatGPT as an assistance tool, finding a positive relationship between both Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) and students' willingness to use ChatGPT regularly. In other research however this is not true, while Albayati (2024) finds that students consider that ChatGPT is Useful and easy to use, Almulla (2024 has different results. Almulla (2024) examined factors influencing learning satisfaction with ChatGPT among university students, highlighting a positive relationship with PEOU but not with PU. Almulla suggested that while ChatGPT can be helpful, students might face challenges or lose interest over time. This already show contrast that while ChatGPT might show a positive relationship in one component but might be not on the others. Another research conducted the same research but this time with 2 types of subjects different from Albayati (2024) and Almulla (2024) who only use undergraduates, Xu et al (2024) use undergraduates and postgraduates. Xu et al. (2024) conducted a thematic analysis with both undergraduate and postgraduate students in China, revealing positive perceptions of PEOU among all students. However, while undergraduates viewed ChatGPT as fully applicable to their academic tasks, postgraduates expressed doubts about its usefulness for more complex tasks, limiting its perceived applicability. Although these three studies originate from an international context, similar research has also been conducted in Indonesia. Luthfiyyah et al. (2024) research is analyzing ChatGPT for undergraduates in Universitas Pendidikan Indonesia (UPI) and what they found is that students are aware of ChatGPT and commonly use it to assist with their assignments and ChatGPT offers convenience unfortunately some students express concerns that it may reduce their critical thinking skills and foster an overreliance on instant solutions, potentially leading to decreased motivation and a habit of excessive dependence.

Previous studies have highlighted both the benefits and drawbacks of using AI tools like ChatGPT in educational settings. While some research underscores the potential of ChatGPT to enhance productivity and accessibility, other studies raise concerns about its impact on students' critical thinking and independence. However, much of this research focuses on general perceptions or technical capabilities, with limited exploration of how students specifically use ChatGPT in their learning processes. This study addresses this gap by examining students' experiences with ChatGPT in relation to their English assignments, providing insights into the practical integration and implications of AI tools in education. While ChatGPT is widely seen as beneficial for enhancing students' learning experiences, its use in complex higher education tasks, particularly at UNJ remains under-researched, which this study aims to address by exploring students' perceptions and usage in English assignments. In doing so, it not only contributes to understanding the integration of AI technologies in UNJ's academic environment but also evaluates Chat GPT's potential to enhance student learning within the Indonesian context.

1.2 Research Questions

Based on the background of the study and the problems stated, this study aims to answer the following questions:

- 1. What are English language education students' perceptions of using ChatGPT to assist with academic assignments?
- 2. How do students utilize ChatGPT to assist with academic assignments?

1.3 Purpose of the Study

This study explores English language education students' perceptions of using ChatGPT to assist with academic assignments and examines how they utilize the tool in their learning process. By identifying usage patterns and perceived benefits or drawbacks, the research aims to assess ChatGPT's effectiveness in supporting academic work. The findings are intended to inform educators, policymakers, and developers on how AI tools like ChatGPT can be better integrated into educational contexts and provide a basis for future research on AI-assisted learning.

1.4 Scope of the Study

This study focuses primarily on student perspectives regarding the use of ChatGPT for English assignments, including tasks such as writing essays, summaries, and comprehension-based activities. As a result, it does not include viewpoints from educators or users in other academic disciplines, which may involve different uses and expectations of the technology. The study's scope is also shaped by its reliance on qualitative data and a specific student sample, making it

less reflective of broader trends or diverse populations. Furthermore, perspectives from non-English-speaking contexts are not represented, narrowing the study's relevance across linguistic and cultural boundaries. The application of UTAUT constructs also varies across research questions—while Research Question 1 engages all four constructs, Research Question 2 centers only on Performance Expectancy (PE) and Effort Expectancy (EE), as these are more directly aligned with user experience and practical engagement with the tool. Future research is encouraged to adopt a wider lens, including cross-cultural and multilingual contexts, educators' perspectives, and varied methodological approaches to ensure more comprehensive and inclusive findings.

1.5 Significance of the Study

The significance of this study is expected to give a useful contribution theoretically and practically.

1.5.1 Theoretical Significance

The theoretical significance of this study lies in its specific contribution to understanding how ChatGPT can support English assignment completion within the framework of student-centered learning approaches. By examining students' perceptions, this research identifies practical ways in which ChatGPT can enhance language learning by fostering engagement, improving access to personalized feedback, and supporting independent learning. Furthermore, the study sheds light on challenges such as over-reliance on AI and ethical concerns, providing actionable insights for educators and policymakers on how to effectively integrate AI tools into English education.

These findings contribute to the growing body of knowledge on aligning AI technologies with pedagogical goals in language education.

1.5.2 Practical Significance

1. Significance for Students

This study provides insights into how students perceive the use of ChatGPT in enhancing their English assignments, which directly addresses students' engagement and motivation in completing academic tasks. By understanding how students integrate ChatGPT into their learning processes, this research explores the tool's potential to improve their academic performance and personalize their learning experience. Moreover, it highlights the challenges students may encounter, helping identify areas where ChatGPT can better support students' academic needs and contribute to preparing them for future challenges.

2. Significance for Teachers

For educators, this study sheds light on how students perceive and use ChatGPT for completing English assignments, offering insights into how AI tools can be integrated into teaching practices without diminishing the importance of critical thinking. By understanding students' experiences, teachers can identify ways to support students in using ChatGPT as a tool to enhance their learning rather than a replacement for their cognitive effort. This research helps teachers recognize potential pitfalls, such as over-reliance on AI, and equips them to guide students toward critically engaging with AI-generated content, ensuring that

assignments promote both technological proficiency and independent thought. Institutions can use these findings to develop policies and resources that balance AI integration with the cultivation of critical thinking skills in English education.

3. Significance for Researchers

This study contributes to the growing body of research on the intersection of artificial intelligence and education by examining student perceptions of ChatGPT. By focusing on how students integrate the tool into their academic tasks and the challenges they face, this research helps advance understanding of AI's role in the learning process. The findings offer valuable perspectives for future studies on AI-driven learning tools, paving the way for further research on enhancing AI's effectiveness in academic settings and addressing the unique needs of students.