#### **CHAPTER 1**

#### INTRODUCTION

This chapter presents a description of the research. In this chapter, the background of the research and the formulation of the problem will be reviewed to provide insight into the context and urgency of the problem being studied. After that, the operational definition, research objectives and their significance will be discussed, thus clarifying the research objectives and benefits obtained from this research.

## A. Background of the Study

Unquestionably, artificial intelligence (AI) technology such as generative AI will grow quickly in several fields, especially education. Artificial intelligence (AI) has advanced quickly and transformed a wide range of aspects of human life (Montenegro-Rueda et al., 2023). Of all the generative AI tools available to the general public, a notable and perhaps the first use case of such a generative AI tool for students is ChatGPT which raises the bar for accessibility to academic AI tools for students. Susnjak (2022) stated that ChatGPT is an incredible chatbot, also known as a chat Generative Pre-trained Transformer, and is among the modern talkative bots that utilize AI technology. Since its launch in November 2022, ChatGPT has attracted a lot of interest and revolutionized the field of artificial intelligence (AI) chatbots (Espartinez, 2024). According to Mondal and Mondal (2023), ChatGPT is an AI-powered generative language model that can generate human-like text based on user input. Advanced technologies such as GPT-4 and its ChatGPT application enable AI machines to provide coherent and well-structured written essays. Thus, it eases the burden on students in writing complex essays for academic purposes.

Academic writing is a way to share ideas and information clearly and systematically. This align with Mondal & Mondal (2023), academic writing is a way to express ideas and information clearly in an organized and engaging form for learning, research, and professional growth. Strong writing has traditionally been developed through a cyclical process, with feedback from colleagues and

instructors. However, these paradigms respectfully shift somewhat with the advent of AI technologies-especially ChatGPT. GenAI technologies, such as ChatGPT, can also be used as writing assistants (Chan & Hu, 2023). OpenAI introduced ChatGPT, one of the most prestigious research and academic writing tools to date. Because it gives answers almost identical to a human being's, comprehensive ones, and shrinks complex materials, it has become a desired tool among many academics and researchers in a variety of sectors. With ChatGPT, one can unravel enormous challenges in academic pursuits such as data analysis, literature reviews, and academics parts writing. Due to its effectiveness and adaptability, ChatGPT is a necessary tool for anyone looking to improve their academic work with AI-powered support. ChatGPT and other AI tools for academic writing are promising. They augment efficiency and understanding, and also increase student confidence in their writing. By giving them ideas and prompts, ChatGPT can help students get past a writer's block and let them concentrate more on the content than the actual writing process. Its ability to provide information that is really situational can assist students in making good and cohesive arguments.

Although ChatGPT has many advantages, stakeholders have ongoing discussions about the shortcomings of the platform (Baig & Yadegaridehkordi, 2024). For instance, Chaudhry et al. (2023) stated that the inconsistent and varying accuracy, reliability, and quality of ChatGPT content can be affected by possible data-driven trends. Additionally, generating appropriate questions is particularly difficult for second language learners because it requires a certain level of linguistic proficiency; moreover, relying too heavily on GenAI tools may undermine students' efforts to become professional writers (Warschauer et al., 2023). The use of ChatGPT in academic writing is still in a grey area due to the excessive use of ChatGPT. Some negative implications such as reduced originality in writing, possible violation of academic integrity, erosion of critical and analytical writing skills, and the risk of presenting biased or inaccurate information are some of the reasons why this is true.

Currently, as technology becomes more important across the globe, ChatGPT is one of the tools that more and more students are using for academic writing

purposes. As technology advances in education, ChatGPT has become a popular choice. A national survey conducted by Populix in 2023, involving 1,014 respondents aged 17 to 35 from across Indonesia, shows that ChatGPT is the most widely used AI-based application in the country, with 52% of respondents using it mainly to improve work efficiency (Populix, 2023). This growing trend is also seen among students in the English Education Department of a university in Tasikmalaya. Many of them use ChatGPT as a tool to help them with their assignments, especially academic writing, including essays, research articles, and reports. ChatGPT was commonly used by the students for generating ideas, organizing arguments, checking grammar and writing errors, and correcting writing patterns. However, the students' also face some issues while using ChatGPT such as prompting skills and output validity and reliability. Those phenomena make this issue interesting to be investigated further by investigating students' perceptions of the use ChatGPT as an academic writing aid. According to Hassan (2024), AI is growing rapidly in the field of education due to its potential to completely transform several administrative, teaching, learning, and research procedures. However, opinions about how to use it still differ. Therefore, this study aims to explore students' perceptions of ChatGPT as an academic writing aid in higher education to better understand their experiences and the role of this tool in their academic practices.

Many studies have been conducted on the use of ChatGPT for academic writing. Villarreal (2023) examined the use of ChatGPT in higher education, emphasizing the need for a general understanding of its educational implications. This study emphasized the role of generative AI in building teaching and learning processes. Nathania et al. (2023) also studied user experiences with ChatGPT in higher education, thereby demonstrating the usefulness and efficacy of ChatGPT while also providing further examination of its advantages and disadvantages as a writing aid for students' academic assignments. However, further research is needed on students' perceptions of the usefulness and ease of use of ChatGPT as an aid in academic writing, especially in the Indonesian context. In this case students' perceptions determine how they utilize technology for learning, educators can learn

from their experiences with ChatGPT on how to maximize its integration into writing activities. In order to fill the gap in research, this study focuses on students' perceptions regarding the use of ChatGPT as an aid in academic writing. This study explores students' perceptions on the use of ChatGPT in higher education writing activities, especially in terms of its usefulness and ease of use.

#### **B.** Formulation of the Problem

What are the students' perceptions of the use ChatGPT as an academic writing aid?

## C. Operational Definitions

To avoid misinterpretation of this study, here are the operational definitions of each keyword:

# 1. ChatGPT

One type of generative AI created by OpenAI is called ChatGPT. The term "Generative Pre-trained Transformer" (GPT) describes how this instrument interprets and generates natural language. In the context of academic writing, ChatGPT was commonly used by the students for generating ideas, organizing arguments, checking grammar and writing errors, and correcting writing patterns.

## 2. Academic Writing

Academic writing is a form of writing that is formal and employed in universities and scholarly. Academic writing refers specifically to student-written assignments such as essays, research articles, and academic reports. It involves the act of researching, analyzing, and consolidating ideas into a strong, evidence-based argument, but its primary goal is to investigate or discuss a particular question or topic of inquiry in a systematic and logical-critical manner.

# 3. Students' Perceptions

Students' perceptions refer to their views and understanding of using ChatGPT as an academic writing aid.

## **D.** Aim of the Study

This research aims to explore students' perceptions of using ChatGPT as an academic writing aid in higher education.

## E. Significances of the Study

## 1. Theoretical Significance

. This study adds to the theoretical understanding of students' perceptions of using ChatGPT as an academic writing aid in higher education. This study extends existing theories on the general Technology Acceptance Model: perceived usefulness and perceived ease of use. Furthermore, this study opens up opportunities for further discussion on this artificial intelligence technology in educational contexts.

## 2. Practical Significance

This study contributes to educators, related institution, and policy maker in developing strategies for integrating ChatGPT in educational contexts, especially in academic writing. The result of this study can help improve students' writing processes and academic efficiency while setting standards that remain relevant to the ethics of scientific writing. Educational stakeholders can use this study to formulate the policies related to the integration of AI in academic setting, while maintaining ethics in its use.

## 3. Empirical Significance

This study contributes empirical knowledge about Indonesian students' attitudes and experiences towards ChatGPT as an aid in academic writing. This fill the gap for existing research as it offers evidence that can be used as a reference for further study in the other learning setting. This study also lays the foundation fo further research on the impact of ChatGPT on students' learning outcomes and learning processes.