AN ANALYSIS OF STUDENTS' PERCEPTION ON THE USE OF AI TECHNOLOGY IN WRITING UNDERGRADUATE THESIS

THESIS

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FACULTY OF TEACHER TRAINING AND EDUCATION

MUHAMMADIYAH UNIVERSITY OF BENGKULU

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Bengkulu, 8 Januari 2025

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v

PREFACE

Praise be to Allah S.W.T Almighty for His abundant mercy and grace, through which I was able to complete this thesis. This thesis was prepared as one of the requirements to obtain a Bachelor's degree in the English Education Study Program at the Faculty of Teacher Training and Education, University of Bengkulu. I recognizes that the process of preparing this thesis is inseparable from the support, guidance, and motivation provided by various parties. In this regard, I would like to express my deepest gratitude to my parents, Mr. Jodi Perbowo and Mrs. Eli Anggeraini, and my sister Zahratu Bilqhist, as well as my extended family, for their unwavering prayers, unconditional love, and unwavering support. Additionally, gratitude is extended to Mr. Yupika Maryansyah, M.Pd, the supervisor, for his invaluable guidance, contributions, and critiques during the preparation of this thesis. I would also like to express my profound gratitude to my friends, who have consistently offered encouragement and motivation throughout the process.

The researcher realize that this thesis is not perfect without flaws and invites constructive criticism and suggestions to enhance it further. Finally, it is hoped that this thesis will be of benefit to various parties, especially in the development of knowledge in the field of English education.

Bengkulu, 8 Januari 2025

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Praise be to Allah S.W.T Almighty for His abundant mercy and grace, through which I was able to complete this thesis, entitled: "AN ANALYSIS OF STUDENTS' PERCEPTION ON THE USE OF AI TECHNOLOGY IN WRITING UNDERGRADUATE THESIS"

The researcher would like to thank both of her parents and sister, who had given vigorous spiritual encouragement during his study at Universites Muhammadiyah Bengkulu. Finally, the researcher realized that this thesis is still far from being perfect. Therefore, any suggestions and constructive critics are always welcome.

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She was born in East Jakarta on October 14, 2000, as the first child of Mr. Jodi Perbowo and Mrs. Eli Anggeraini. She completed her primary education at SDI Al-Mukhlishin in Bogor in 2012, followed by secondary education at SMPN 10 North Bengkulu in 2015. She then continued her education at SMAN 4 North Bengkulu, graduating in 2018. In 2020, she enrolled as a student at the University of Bengkulu, pursuing a degree in English education, which she completed in 2025.

ABSTRACT

Salsabilla Ummu'qultsum, 2025. *An Analysis of Students' Perception on the Use of AI Technology in Writing Undergraduate Thesis.* Thesis English Education. Faculty of teacher training and education. Muhammadiyah University of Bengkulu. Supervisor: Yupika Maryansyah, M.Pd

This study analyzes the perceptions of English Education study program students at Universitas Muhamadiyah Bengkulu towards the use of artificial intelligence (AI) technology in thesis writing. The research used a descriptive qualitative method with a phenomenological approach. Data was collected through close-ended and open-ended questionnaires with ten final year students. The results indicated that the majority of students held a favorable view of AI technologies such as ChatGPT, QuillBot, Grammarly, Turnitin, and Mendeley, perceiving them as beneficial in the comprehension of complex theories, the enhancement of writing quality, and the management of references. However, concerns regarding the precision of information, plagiarism, and the potential decline in critical thinking skills were also expressed. This study underscores the significance of digital literacy and the ethical utilization of AI technologies in academic settings to ensure the optimal and responsible application of these technologies. The study underscores the necessity for training programs and institutional policies that address the integration of AI in academic settings, with the overarching objective being to bolster academic integrity and the quality of scientific work.

Keywords : *Artificial intelligence, thesis writing, student perception, AI technology*

ABSTRAK

Salsabilla Ummu'qultsum, 2025. *Analisis Persepsi Mahasiswa tentang Penggunaan Teknologi AI dalam Penulisan Skripsi*. Skripsi Pendidikan Bahasa Inggris. Fakultas Keguruan dan Ilmu Pendidikan. Universitas Muhammadiyah Bengkulu. Dosen Pembimbing: Yupika Maryansyah, M.Pd

Penelitian ini menganalisis persepsi mahasiswa program studi Pendidikan Bahasa Inggris di Universitas Muhamadiyah Bengkulu terhadap penggunaan teknologi kecerdasan buatan (AI) dalam penulisan skripsi. Penelitian ini menggunakan metode kualitatif deskriptif dengan pendekatan fenomenologi. Data dikumpulkan melalui kuesioner tertutup dan terbuka dengan sepuluh mahasiswa tingkat akhir. Hasil penelitian menunjukkan bahwa mayoritas mahasiswa memiliki pandangan yang baik terhadap teknologi AI seperti ChatGPT, QuillBot, Grammarly, Turnitin, dan Mendeley, karena dianggap bermanfaat dalam pemahaman teori yang kompleks, peningkatan kualitas tulisan, dan pengelolaan referensi. Namun, kekhawatiran mengenai ketepatan informasi, plagiarisme, dan potensi penurunan kemampuan berpikir kritis juga diungkapkan. Studi ini menggarisbawahi pentingnya literasi digital dan pemanfaatan teknologi AI secara etis dalam lingkungan akademis untuk memastikan penerapan teknologi ini secara optimal dan bertanggung jawab. Studi ini menggarisbawahi perlunya program pelatihan dan kebijakan institusional yang membahas integrasi AI dalam lingkungan akademis, dengan tujuan utama untuk meningkatkan integritas akademis dan kualitas karya ilmiah.

Kata kunci : Kecerdasan buatan, penulisan tesis, persepsi mahasiswa, teknologi AI

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CHAPTER I

INTRODUCTION

This chapter provides six sub-chapters which are supports the next chapter. Those are the background of the research, research question, objectives of the research, significances of the research, limitation of the research, and the definition of key terms.

1.1   Background of The Research

Artificial intelligence is a technology designed to allow computer systems to mimic human intelligence. Artificial intelligence allows computers to learn from experience, recognize patterns, make decisions, and complete complex tasks quickly Background and efficiently. Artificial intelligence systems can make daily life easier by sensing the surrounding environment, processing observed situations, solving difficulties, and taking action to help complete tasks. Duggal (2024) explained artificial intelligence emphasizes three cognitive skills: learning, reasoning, and self-correction. The human brain has these abilities in varying degrees. Artificial intelligence programs allow computers to perform complex tasks such as solving problems and learning from given data, planning methods for future tests, and using computers to interact with the world through sight, hearing, touch, and smell.

In recent years, AI technology has been used as an alternative tool to assist individuals in finding references, ideas, or just for entertainment. Because of the influential use of AI technology in the present, many kinds of AI are outstanding

so that they can be customized according to individual needs, Some examples are google assistant, search engine, m-banking, and so on (Primakara University, 2024). ChatGPT is an AI tool that is used as material for finding ideas and references, the way it works is by summarizing material or ideas related to individual questions, usually this tool summarizes it from journals, articles, and websites. While Character.ai is usually used as entertainment or a reference tool for certain individuals such as a fictional story writer, how it works is as a Character Generator that will create a fictional character with traits and appearance that can be determined according to individual wishes. Apart from these two AI tools, there are many more kinds of AI that we actually often use such as automatic translation tools, this tool is certainly very familiar to the general public, especially students for academic reasons.

According to Maryansyah & Danim (2024) as the internet has become a common interface for learners and educators, forcing educational institutions to take preventive measures such as remote or virtual evaluation. The utilization of artificial intelligence technology in academic activities has become a serious problem in the days of education digitalization. AI is utilized to assist students grasp ideas, finish tasks, and enhance their data analytic abilities. However, other students are concerned about the usage of AI, worrying that it may replace teachers and decrease essential social interactions. Some believe that AI makes individuals more reliant on technology and less able to think critically. Students' perceptions of AI in writing undergraduate thesis are highly different. Most people regard AI as a valuable tool for enhancing their abilities, while a few see it

as an issue to a balanced and successful writing process. This highlights a need to learn more about students' perspectives on the usage of AI in scholarly contexts. Numerous students at Muhammadiyah University of Bengkulu, including those who were enrolled in the English Education study program, believed that artificial intelligence may assist them comprehend the subject matter and enhance their writing skills. Others assume that AI threatens social interaction and critical thinking skills. As a result, a better understanding of students' perceptions on the usage of AI in writing undergraduate thesis is needed.

Thesis writing is an integral part of the academic process in higher education. For students, a thesis is not only a graduation obligation, but also an opportunity to use the varied information and abilities gained over the study term. However, the thesis writing process may be hard and time-consuming, both in terms of research, organization, and writing itself. This is where artificial intelligence (AI) becomes increasingly significant. It provides a number of tools and features that can help students prepare their thesis more swiftly and successfully. AI in thesis writing may take numerous forms. One of the most visible is AI-powered tools for research and data processing. Advanced AI-powered search engines can deliver literature recommendations related to the study topic, accelerating the reference collection process. On the other side, there are AI-powered programs that can swiftly and accurately assess research data, both qualitative and quantitative, allowing students to collect their results more easily and methodically.

Students sometimes struggle with writing a thesis as one of their last requirements for a Bachelor's degree. The writing process consists of several steps, including literature search, data analysis, and report production, all of which demand precision and time. This is where AI can make a significant impact. With the advent of AI technology, procedures that used to take a long time and effort, such as grammar checking, literature mapping, and data analysis, may now be completed more effectively. Analyzing the use of AI technology in undergraduate thesis writing seeks to understand not only how this technology benefits students, but also how it affects the quality and originality of scientific work. Furthermore, ethical limits must be considered while using AI to ensure that the student's position as a researcher is preserved. This introduction will discuss the possibilities, benefits, and problems of using AI in undergraduate thesis writing, as well as an outlook on the technology's future in academia.

Based on the explanation above, the researcher are interested in making a study about the perceptions of students of the English Education study program at Muhammadiyah University of Bengkulu towards AI technology. From the various kinds and functions of AI technology, the researcher will find out the AI technology they know, which they often use, and the benefits they receive from using AI technology for writing undergraduate thesis. Therefore, researchers will examine more deeply in the thesis entitled "An Analysis Students' Perception on The Use of AI Technology in Writing Undergraduate Thesis".

1.2   Research Questions

Based on the background above, question in this research were:

1. How are students' perceptions on the use of AI technology in writing undergraduate thesis?

2. What kind of AI technology that is mostly used by students in writing undergraduate thesis?

1.3   Research Objectives

The objectives of this research were:

1. Students' perceptions on the use of AI technology in undergraduate thesis writing.

2. Kind of AI technology that is used by students in writing undergraduate thesis.

1.4   Limitation of The Research

The following are the limitations in this study, as the author may have some restrictions on the things below:

1. Limitations of research subjects; this study only included students from Muhammadiyah University of Bengkulu, thus the findings may not be

representative of students at other schools with varied academic settings and regulations. This restricts the generalizability of the findings to a larger student group.

2. Scope of AI technology; this research examined attitudes about the usage of AI technology in general, without discriminating between different types of AI tools (for example, machine learning-based AI or natural language processing). Students' perspectives may shift if more particular forms of AI technology are deployed.

3. Time limitations for the study; the study was done over a short period of time, therefore it was unable to capture changes in views that may occur as students' understanding and experience with employing AI in the thesis writing process grows.

4. The influence of respondents' tendencies; personal preferences, individual experiences, and understanding of AI technology may all have an impact on the students' impressions in this study. This might result in replies that are biased and do not accurately reflect objective opinions of AI technology.

1.5   Significance of the Research

Research on examining students' perspectives of using AI technology in writing theses has numerous crucial implications, both academically and practically:

1. Understanding acceptance of AI technology; this study will look at how students, as end users, adopt AI technology in an academic setting.

Understanding students' attitudes, views, and possible obstacles while employing AI for thesis writing will offer a better picture of the amount of preparation for this technology's use in higher education.

2. Impact on the learning process and skill development; the employment of AI in thesis writing may alter how students learn and improve academic writing abilities. This study will assist determine the beneficial and negative effects of employing AI, such as how it influences students' critical thinking, analytical ability, and written communication skills. It is critical to evaluate how AI influences the entire learning process.

3. Guidance for academic policy development; the findings of this study may be used to build educational institution policy on the use of artificial intelligence in scientific writing. For example, whether the use of AI should be controlled or restricted, and how to use it ethically and successfully in an educational setting.

1.6   The Definition of key Term

The definition of key terms is an explanation that provides a clear understanding of a related subject in a scientific work. In this section, the rese archer defines the subject matter of this research. Specifically, the researcher aims to define terms:

1. Students' perceptions; refers to students' perspectives, understandings, or interpretations of a certain phenomena or issue. In this context, student perceptions refer to how students perceive, feel, and evaluate the usage of AI

technology in the thesis writing process, taking into account advantages, limits, and the influence on writing quality and effectiveness.

2. AI (artificial intelligence) technology; refers to systems or software that automate processes that would normally need human intelligence, such as data analysis, pattern recognition, and natural language processing. In the context of thesis writing, AI technology can refer to a variety of tools and apps, including virtual assistants, text processing software, and platforms that help with research, writing, and editing papers.

3. Thesis writing; is the process by which students complete a scientific work as part of their college graduation requirements. This process is divided into stages, beginning with the formulation of a topic, followed by the development of a theoretical framework, data collection and analysis, and finally the writing and editing of the final product. with this regard, AI technology may aid with several phases of writing, including literature search, data analysis, and proofreading.