#### **CHAPTER I**

# **INTRODUCTION**

This chapter will discuss the introduction to the research. This chapter covers a number of significant topics. The study's background, problem formulation, objective, focus, importance, and operational definition are all covered in detail.

#### A. Background of Study

For undergraduate students, writing a thesis is a requirement that they must pass and finish. Because there are so many tasks to do, particularly in the data search and analysis part, and because there are other unavoidable difficulties, thesis writing is frequently challenging. The drafting of a research report or a research report that adheres to a predetermined format is known as thesis writing. According to Hardling (2004), a researcher writes a thesis to present the findings of his research in written form. The goal of creating a thesis, according to Budiharso (2009:136), is to perform research exams and practice expressing research findings in writing. This indicates that the purpose of writing a thesis is to undertake research and use writing as a medium to present the research findings. The preparation of a thesis is instructed during the course. There are frequently guidelines in these directions to prevent students from simply writing a thesis. For instance, the chosen layout, the typefaces used and their widths, the use of reputable reference sources, the greatest number of similarities, proper grammar, etc. In the thesis program at Universitas Ahmad Dahlan, there is an assessment aspect of grammar. It states that "Good in grammar; spelling and mechanics are accurate"

When asked to write, second language learners may find it challenging to gather and generate ideas for their essays, or to concentrate on a particular subject.

Thesis is one of the important things in higher education and it is not a simple one as it involves hard work and effort (Alsied and Ibrahim, 2017). Knowing this fact, it does not completely rule out the chance that students would run into obstacles or problems when writing their theses. Some students even find it challenging to produce a paragraph, which is the foundation for writing proficiency. When writing a thesis, there are unique considerations. Students typically choose their own approach and writing style when writing a thesis. One of the linguistic factors that prevents thesis writers from writing well is a lack of writing skills and a grasp of grammar. In the meantime, one of the sociocultural factors that students possess that might influence their thesis writing is whether students are unaware of the regulations for writing thesis papers in their degree or university. Students at Universitas Ahmad Dahlan encounter challenges when working on their theses. Universitas Ahmad Dahlan thesis writers encounter grammatical challenges when composing theses, including using appropriate grammar. This happens because most students are second-language learners. However, with the AI grammar checker, students are helped to minimize grammar errors in their thesis writing.

Modern technology developments have significantly changed the educational landscape. Digital technology has enabled cultural diffusion, enabling people to transcend temporal and spatial boundaries (J.-E. Jeon, 2021). The convenience that technological advancements provide to many studying and learning activities is one of the good effects. Artificial Intelligence (AI) is a component of human intelligence, just as media is an extension of the human body. As one of the most developed technologies at this stage, AI has also made many breakthroughs in the field of education. Simply put, AI simulates human intelligence science through computers. AI has rapidly advanced in recent years, revolutionizing various aspects of our lives, including language-related tasks. According to Dale and Viethen (2021), the greatest development that AI has brought to writing was the AIbased sentence and phrase autocompletion and alternative wording suggestion features. However, the integration of AI technologies like AIpowered grammar checkers introduces new possibilities for improving academic writing abilities such as supporting grammar learning.

An application to check grammar is one of the tools that can aid students' learning activities, particularly those of language learners. The term "grammar checkers" is frequently used to describe these programs. A grammar checker is a technology that detects mistakes in subject-verb agreement, articles, and punctuation and gives feedback. A grammar checker program can look at text to identify how words should be used in accordance with correct spelling, rectify word use errors, and other grammatical error-related factors. Users will be able to identify errors and the appropriate fixes thanks to this functionality (Pujiawati, 2018: 9). For students, AI-powered technology can help them in the form of AI-powered grammar checkers. AI-powered grammar checkers can help them reduce grammatical errors in writing academic texts, including thesis writing. Students have access to several kinds of online grammar checkers. Students can already use online grammar checkers like Quillbot, Grammarly, Trinka AI, and Sapling AI to determine whether a statement is grammatically correct or not.

The benefits of AI-powered grammar checker application in thesis writing offers a different approach to developing students' knowledge in crucial areas like appropriate language choice, explicit grammar, and sentence structure that enables students to write the same text at another time, thereby minimizing their struggles in learning writing skills. The students use a word processor on a computer to create their essays so that the computer may point out mistakes in things like capitalization, punctuation, and spelling. The students then checked their papers using a grammatical checker program. Here, technology is being used to assist pupils in editing their writing. Computer technology has created new avenues for pupils to analyze writing quality, just as it does with other language abilities. Therefore, before the article is submitted for grading and publication, students must use software technologies to find and fix any problems.

In light of the above explanation, the researcher is considering performing a study named "Students' Voice on The Use of AI-powered Grammar Checker in Writing Undergraduate Thesis". The researcher expects that by sharing new information on the application of artificial intelligence technology to thesis writing, students will learn something new. This research can serve as a starting point for readers who wish to undertake additional research on related themes. It is also helpful for readers who wish to conduct additional research on related topics.

#### **B.** Identification of the Problem

In light of the preceding background information. Writing an undergraduate thesis can provide some challenges. It can determine the issues based on information provided by the students. The following are the issues:

- 1. Students discover ambiguity in the outcomes, despite a grammar checker having verified them.
- 2. Making academic writing dependent on the usage of grammar checkers.
- 3. Since students are reliant on the simplicity of using technology, they lack the incentive to investigate words and acquire their meanings.
- 4. The validity of the grammar checker results is limited because of premium features.

5. Because of the limited features, the writing results are not valid and cannot be used to their fullest extent.

# C. Formulation of Problem

Based on the introduction above, the problems are formulated as follows:

- 1. How do students know about AI-powered grammar checkers?
- 2. What is the frequency of use of AI-powered grammar checker tools by students in writing undergraduate theses?
- 3. What is students' voice on using AI-powered grammar checkers in writing undergraduate thesis?

# **D.** Objective of Study

Based on the formulation of the problems, here are the objectives of the study:

- 1 To find out how students' knowledge about AI-powered grammar checker
- 2 To determine the frequency of use of AI-powered grammar checker tools by students in writing undergraduate thesis
- 3 To know students' voice on using ai-powered grammar checker in writing undergraduate thesis

# E. Focus of Study

To review the student's voice in using an AI grammar checker in writing an undergraduate thesis.

### F. Significance of Study

This study was anticipated to be beneficial for:

1. Student

This study was expected to help readers who were students by accumulating knowledge on the use of an AI grammar checker when writing undergraduate theses. Additionally, students may realize that using an AI-powered grammar checker is quite helpful while writing academic texts, including undergraduate theses.

2. Lecture

The Lecturers can find out about the use of AI grammar checkers used by students. Also, lecturers will be better able to distinguish between material that has been subjected to manual and AI-powered grammar checkers.

2. Next Researchers

The following researcher may find it helpful to utilize this work as a source as well as an example for students who are interested in exploring the topic of reading.