

# CHAPTER I

## INTRODUCTION

### **A. Background of Study**

Artificial Intelligence (AI) chatbots is a technological advancement that helps everyone in the learning process. (Zumstein & Hundertmark, 2017) State one of the emerging AIs is Chatbot, a computer system program that simulates or provides services that refer to "human language with text-based assistance dialogue system" using native language processing. Chatbots, often referred to as "conversational agents", this technology naturally process interactions carried out by humans with computer systems, for example are google, duolingo, Grammarly, cambly, etc. So that there is rational proficiency between chatbots and native human language (Fryer et al., 2019). Technological advancements have revolutionized educational practices, particularly in language learning contexts. Among these innovations, chatbots have emerged as a promising tool due to their ability to provide personalized and interactive learning experiences. Chatbots, defined as artificial intelligence programs designed to simulate conversation with users, offer learners the opportunity to engage in real-time language practice and receive immediate feedback, potentially enhancing motivation and learning outcomes.

Motivation is a critical factor in language learning, influencing learners' engagement, persistence, and overall success. Traditional classroom methods often struggle to sustain learners' interest and motivation over time. In contrast,

integrating chatbots into language learning environments may offer a solution by providing learners with engaging and dynamic interactions that are accessible outside of traditional classroom hours. Dr. Emily Johnson, an expert in educational technology and language acquisition at Stanford University, notes, "Chatbots have the potential to transform language learning by offering personalized learning experiences that cater to individual learner needs. By simulating real-life conversations and providing immediate feedback, chatbots can motivate learners to practice English more consistently and independently."

Artificial Intelligence (AI) technology develops along with the development of human thought where at this stage the use of language becomes important in its development, in learning English students need motivation for their interest in technology, it cannot be denied that technology makes students more advanced in understanding every new thing that can be obtained without the need to move. English in its role in the world of education has become an international language that is in demand and is studied compulsorily in schools. This chatbot technology, where computer systems can directly read messages sent by humans, can make learning more fun and prioritize instant learning accurately and precisely. In English learning activities chatbots can be used to access many things ranging from learning videos, materials, free websites, and conversations that can help students develop their English skills.

In the process of learning English, the attachment of relationships between AI chatbots that accept the native language of their users will form an attachment of understanding and comfort for users so that students who want

to develop their English will feel inspired to use chatbots to add insight or seek more development in learning English. Hutajulu and Herman (2019:29) state that language is a communication tool that has an important part in communicating. Therefore, language is the primary human and non-instinctive method of communicating ideas, emotions, and desires through a system of voluntarily produced symbols (Herman, 2014).

From previous research, it was found that there is a lack of knowledge on how chatbot interactions should be designed to enable active learning and good learning outcomes. Understanding how students perceive chatbots and how these perceptions affect their motivation in learning English is crucial in today's educational landscape. Along with the development of technology, chatbots have emerged as a potential tool to enhance the language learning experience. Previous research has explored various aspects of technology in education and motivational theories relevant to language acquisition. However, there is still a gap in understanding specifically how chatbots are perceived by students and how these perceptions impact their motivation in the context of learning English.

So this study aims to collect data on how students perceive chatbots as a tool in English language learning. This includes how they perceive the usefulness, quality, and effectiveness of the chatbot in supporting learning, then whether the chatbot can also measure the level of student learning motivation when the use of chatbot takes place in English learning. From here

it will be known how students' interest, perseverance, and enthusiasm in learning English using AI chatbot technology.

### **B. Research Problem**

Based on the statement of the background of the study above, the problem of this study is formulated as follows :

1. What are students' perceptions of chatbots toward students' motivation?
2. What are the reasons for their motivation when using chatbots in learning English?

From the problems of those factors, the researcher is interested in investigating the student perception of chatbots on their motivation in learning English.

### **C. Assumption**

The researcher has an assumption of the study that the students' perception of chatbots on their motivation in learning English to know how the students' perception of chatbots on their motivation students in English learning process.

### **D. Scope and Limitation of Study**

The scope of this research is to find and explain how students perceive the use of chatbots to motivate English learning. The problem limitation of this research is that it focuses on college English and general education students, and students from Kampung Inggris Pare, the students need more intense English learning media and tools to practice language skills and deeper knowledge of English, based on the research limitations, the research formulation in this thesis is as follows: " What are

students' perceptions of chatbots toward students' motivation? And What are the reasons for their motivation when using chatbots in learning English?".

## **E. Objective and Significance of the Research**

### **1. Objective of Study**

The purpose of this study is to find out students' perceptions of the use of chatbots in stimulating students' interest and how and whether their motivation can increase after the chatbot's media as an English learning tool.

### **2. Significance of Study**

This research has several benefits for researchers, readers, students, and lecturers. The researcher hopes that this research can be useful for:

#### **1. Lecturers**

The results of this study will help lecturers on how students assess and utilize technological developments, especially chatbots in English language learning.

#### **2. Students**

The results of this study can be used by students to understand the form of perception and how the benefits of using chatbots as an English learning tool that increases their interest in learning.

#### **3. Further Research**

Finally, the findings of this study can be used by other parties interested in English to obtain useful information.

## **F. The Definition of Key Term**

### **1. Artificial Intelligence (AI)**

This a computer program designed to mimic human intelligence, including decision-making skills, logic, and other intelligence characteristics associated with the human development process. (Schildt,1987) states that artificial intelligence will provide problems and answers that are similar to humans. (Charnaik and McDermott, 1985) state that the learning process of an artificial intelligence uses a computational approach. Artificial intelligence will use a computational approach. Based on the above information, artificial technology is not only limited by human abilities, but also on tools or systems, thus artificial intelligence is the ability of a tool or system that is similar to humans. Artificial intelligence is an ability in the form of a tool or system that is able to adjust to get a goal in an environment that can affect system behavior.

### **2. Chatbots**

A chatbot is a system of programs in the form of computer conversational text that can receive messages from the native language of its users and deliver any form of current information with the ability to connect naturally in language and deliver messages quickly, as well as complete information. According to (S. Sannikova, 2018) A chatbot is a program that simulates human conversation using machines. Chatbots will interact like humans by replying to messages to answer

questions that users type through the keyboard in the chatbots application.

### 3. Perception

Perception according to (Pride and Ferrel in Fadila and Lestari, 2013), perception is a process of selecting, organizing and interpreting information, sensations given through sight, feeling, hearing, smell and touch to produce meaning to produce a meaning or meaning. Meanwhile according to (Boyd, Walker and Larreche in Fadila and Lestari, 2013), perception is the process by which a person chooses, organizes and interprets information selects, organizes and interprets information. From (Kotler, 2013), stating that perception is where we as humans create a real atmosphere in responding to a particular thing. So it can be concluded from the definition of perception above that perception is a process of using or accepting a thing or opinion so that each individual can select, organize and translate information to create a picture and translate information to create a meaningful picture of the world a meaningful picture of the world.

### 4. Motivation

According to (Wardan, 2020) "Motivation is an activity or effort of a person to increase the ability to do something". Motivation is something that arises from a person to want to achieve something, motivation is the result of a number of processes that are internal or external to an individual internal or external to an individual or human

person, which causes the emergence of enthusiasm and persistence  
enthusiasm and persistence in carrying out certain activities.