CHAPTER I
INTRODUCTION

In this chapter, the researcher provides an introduction to the research by explaining the main points such as the research background, problem formulation, research objectives, research significance, and research limitations.

1.1 Background of the Research

In recent years, the rapid development of Artificial Intelligence (AI) has had a significant impact on various aspects of human life. AI has experienced exponential growth in both academic and technological fields. The impact of AI on various fields is undeniable, especially in education, including language learning. AI technology has revolutionized traditional learning environments by introducing adaptive learning platforms, intelligent tutoring systems, and customized feedback mechanisms, which assist students in their academic activities. As explained in [1], AI-powered systems provide personalized learning experiences tailored to students' needs, leading to higher academic achievement and increased class participation.

One of the most notable impacts of AI in education is the promotion of autonomous learning, which is the ability of students to take responsibility for their learning process. They set their own goals and maintain control over their learning habits. As mentioned in [2], technology-based approaches emphasize independent engagement with educational technology, which shows that AI-driven tools can give students more autonomy in their learning process. As more English language learners (ELLs) integrate AI tools into their learning routines, it is important to understand how they view this technology and its impact on learning autonomy.

However, many English learners face challenges in implementing independent learning strategies. Self-regulation is a key component of successful independent learning, but many students struggle to set learning goals and monitor
their progress independently, as emphasized in [3]. This inability to self-regulate can hinder the development of critical learning strategies, making it difficult for

students to engage in meaningful independent learning experiences. Additionally, a lack of confidence in their abilities often leads to hesitation in effectively

utilizing AI tools. As stated in [4], students' confidence in their abilities significantly influences their engagement in self-regulated learning practices. A lack of confidence often results in hesitation in efficiently utilizing AI tools, preventing students from fully leveraging AI-supported educational support.

In addition, some students become overly reliant on the feedback generated by AI, which can reduce their ability to think critically and solve language-related problems independently. This concern is in line with the argument in [5], that although AI tools can provide instant feedback, they can also encourage passive learning behavior if students become too reliant on them. Similarly, as emphasized in [6], Over-reliance on AI-generated answers can lower student involvement in critical thinking and deep learning, even while AI offers helpful feedback and advice. Students' capacity to solve issues and think creatively may be hampered if they rely too much on AI for feedback and direction. These difficulties underscore the necessity of examining how students see AI as a self-directed learning aid that enhances their capacity for autonomous learning.

Integrating AI in a way that actively encourages student autonomy is one possible strategy to overcome these obstacles. Numerous AI-powered tools currently in use, like ChatGPT, were created to encourage self-directed learning. Students can practice writing, get immediate feedback, and improve their language abilities at their own speed with ChatGPT's planned yet adaptable learning experiences. Applying the RACE framework (Role, Action, Context, Execute) is another potential strategy that makes use of AI capabilities. By leading them through a methodical process of prompt engineering, this structured approach improves students' interactions with AI and guarantees that AI-driven learning experiences are more efficient and pertinent. As found in [7], AI-guided individualized language learning has been shown to be effective for learners' language development, enabling students to take control of their learning process, which leads to more efficient language acquisition.

Furthermore, The RACE framework allows students to create well-structured texts with AI support while retaining creative control in English language learning, especially in writing instruction. When used in narrative writing assignments, for instance, students can explain how AI functions as a

brainstorming tool, create prompts that support their writing goals, provide context to guarantee narrative coherence, and write while critically analyzing AI-generated content. By incorporating the RACE framework, students can optimize AI's capabilities without becoming overly dependent on its output, ultimately strengthening their writing abilities and self-regulation skills.

The effectiveness of AI in promoting autonomous learning has been explored by several researchers. As examined in [8], AI-powered platforms enhanced students' ability to set learning goals, monitor progress, and adjust learning strategies. However, this study focused on AI in general educational settings and did not specifically examine its role in English language learning. Similarly [9], explores how AI personalizes learning experiences, enhances student engagement, and improves academic performance. The study emphasizes AI's role in providing individualized learning pathways through adaptive systems and intelligent tutoring, which can lead to better student outcomes.

While many previous studies have examined AI's impact on learning outcomes however research on AI in education has been dominated by general discussions, with limited studies focusing on specific areas such as autonomous learning. A bibliometric analysis and topic modeling of 304 AI-related publications from the Scopus database were conducted because they were related to the discussion of artificial intelligence in education. revealing a rapid increase in research interest, particularly in the last three years [10]. The current study addresses this gap by exploring English Language Learners' perceptions of AI as a tool for facilitating autonomous learning, specifically in higher education level. Using a qualitative research design with case study approach by examining students' perceptions with AI in language learning.

Based on the discussion above, this study aims to investigate English Language Learners' perceptions about AI in facilitating autonomous learning of eleventh grade Senior High School students at SMAN 1 Mojosari, Mojokerto. The researcher want to conduct this study with the tittle "Exploring English Language Learners' Perceptions of Autonomous Learning in Using Artificial Intellegence (AI)".

1.2 Formulation of the Problem

Based on the explanation of the research background above, the research question in this study as follows: "How do English Language Learners perceive the use of Artificial Intelligence (AI) in facilitating their autonomous learning?"

1.3 The Purpose of the Research

The purpose of this research is to explore the perceptions of English Language Learners regarding the use of Artificial Intelligence (AI) as a tool in facilitating their autonomous learning.

1.4 The Significances of the Research

This research holds both theoretical and practical significance as follows:

1. Theoretical Significance

   This study contributes to the growing body of knowledge on autonomous learning and AI integration in higher education. By exploring English Language Learners' perceptions, it provides valuable insights into how AI tools influence self-directed learning behaviors, motivation, and critical thinking skills in language acquisition. In the context of AI-assisted education, the study reinforces the theoretical underpinnings of autonomous learning in the digital age. Future studies on AI-driven adaptive learning, personalized education, and the relationship between AI and self-regulated learning frameworks may also draw from these findings.

2. Practical Significance

   a. For Students

      Students now have a better understanding of how AI tools can help them with their independent learning habits thanks to this research. Students can improve their academic achievement, time management, and self-directed learning experiences by identifying efficient AI-based learning methodologies. Students may be better equipped to use these technologies critically and successfully if they are more aware of the difficulties and constraints associated with AI in education.

b. For Teachers

Teachers can improve their teaching strategies and more successfully incorporate AI into their lesson plans by using the study's recommendations. Teachers may create student-centered learning experiences that encourage autonomy, engagement, and self-reflection by knowing how students view AI-assisted learning. Additionally, by integrating AI into a structured approach like the RACE framework, teachers can create a more dynamic and individualized learning environment, which may motivate them to embrace novel teaching methods.

c. For Further Research

For further research on AI-enabled autonomous learning in English language instruction, this work provides a point of reference. The effectiveness of structured AI-based learning frameworks and the long-term effects of AI on student autonomy are two important topics that need more research. These results can be used by researchers to create more thorough studies that discuss how AI is changing education and what that means for lifelong learning.

1.5 Scope and Limitations of the Research

This study, which is being conducted at SMAN 1 Mojosari, Mojokerto, with eleventh-grade students as participants, aims to investigate how English language learners perceive artificial intelligence (AI) in supporting autonomous learning. Specifically, it looks at how AI tools such as ChatGPT can affect students' capacity to control their own learning, set goals, and participate in self-directed English language learning activities. The study has several limitations, including the fact that it primarily uses qualitative data derived from students' subjective experiences and perceptions, which may not accurately reflect the true impact of AI on autonomous learning outcomes. Furthermore, the study focuses primarily on popular apps like ChatGPT and does not cover all AI-assisted learning tools. Because AI technology is developing so quickly, new tools and features can appear after the study is finished, which could have an impact on subsequent results.

Another drawback relates to outside variables that could influence students' use of AI, such as their degree of digital literacy, availability of AI-powered resources, and past experiences with technology-enhanced instruction. Additionally, students' perceptions may be influenced by their cultural and educational backgrounds, which would limit the results' applicability in different learning contexts. In light of these limitations, additional study using a larger and more varied sample is advised in order to confirm and build upon the results.

1.6 Definition of Key Terms

To help readers clearly understand the main ideas used in this research, the following terms are defined below:

1. English Language Learners (ELLs)

   English language learners are students who are studying English as a foreign or second language. In this research, the term specifically refers to eleventh-grade students at SMAN 1 Mojosari who are using AI to improve their English skills, particularly in writing.

2. Perception

   Perceptions in this research refer to how students understand, interpret, and respond to the experience of using AI, such as ChatGPT, for their self-directed learning. These perceptions encompass their thoughts, feelings, and attitudes about how AI as a tool that can support their learning process.

3. Autonomous Learning

   Autonomous learning means students take responsibility for their own learning process. This includes setting learning goals, selecting the most appropriate strategies, monitoring their progress, and adjusting when necessary. In this research, autonomous learning focuses on how students use AI tools like ChatGPT to learn English independently without always relying on the teacher.

4. Artificial Intelligence (AI)

   Artificial intelligence, or AI, in this research refers to computer-based systems that can perform tasks typically requiring human

intelligence such as understanding language, providing feedback, and helping students learn on their own. In the context of this research, AI is used to support English language learning, primarily by providing tools that can guide and assist students in independent learning.

5. RACE Framework (Role–Action–Context–Execute)

The RACE framework is a structured approach that helps students create effective prompting when using AI tools like ChatGPT.

a. Role refers to assigning a function to the AI (e.g., as a tutor or assistant).
b. Action refers to deciding what the student wants from the AI (e.g., providing feedback or suggesting ideas).
c. Context refers to providing background information to ensure the AI's response is accurate and relevant.
d. Execution involves using the response, reflecting on it, and deciding what to do next.

In this research, the RACE framework helped guide students in using AI more responsibly and effectively in their english writing tasks.