

## STUDENTS' PERCEPTIONS OF THE USE OF ARTIFICIAL INTELLIGENCE (AI) IN ENGLISH LANGUAGE LEARNING AT STIA LPPN PADANG

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### ABSTRAK

*Penelitian ini bertujuan untuk menganalisis persepsi mahasiswa terhadap penggunaan Artificial Intelligence (AI) dalam pembelajaran bahasa Inggris di Sekolah Tinggi Ilmu Administrasi (STIA) Lppn Padang. Secara khusus, penelitian ini berfokus pada aplikasi ChatGPT, chatbot berbasis AI yang dikembangkan oleh OpenAI, untuk membantu mahasiswa meningkatkan keterampilan menulis mereka. Mengingat tantangan yang dihadapi mahasiswa dalam menguasai bahasa Inggris, terutama dalam menulis, penelitian ini bertujuan untuk memahami efektivitas dan penerimaan alat AI dalam proses pembelajaran. Melalui survei dan wawancara, data dikumpulkan dari mahasiswa untuk mengevaluasi pengalaman dan persepsi mereka terhadap penggunaan ChatGPT. Temuan mengungkapkan bahwa banyak mahasiswa menghargai dukungan yang diberikan oleh AI dalam hal kemudahan akses informasi, peningkatan efisiensi menulis, dan pemahaman yang lebih baik. Namun, kekhawatiran tetap ada mengenai ketergantungan berlebihan pada teknologi dan dampaknya terhadap pembelajaran mandiri. Penelitian ini menyimpulkan bahwa alat AI seperti ChatGPT dapat menjadi bantuan berharga dalam pendidikan bahasa Inggris, asalkan digunakan secara bijaksana dan bersama dengan metode pembelajaran tradisional. Penelitian ini berkontribusi pada diskusi yang lebih luas tentang integrasi teknologi canggih ke dalam praktik pendidikan dan implikasinya terhadap lingkungan pembelajaran di masa depan.*

***Kata kunci: Artificial Intelligence, Pembelajaran Bahasa Inggris, Persepsi Mahasiswa, Teknologi Pendidikan***

### **ABSTRACT**

This study aims to analyze students' perceptions of the use of Artificial Intelligence (AI) in English language learning at Sekolah Tinggi Ilmu Administrasi (STIA) Lppn Padang. In particular, it focuses on the application of ChatGPT, an AI-based chatbot developed by OpenAI, to assist students in improving their writing skills. Through surveys and interviews, data were collected from students to evaluate their experiences and perceptions of using ChatGPT. The findings reveal that while many students appreciate the support provided by AI in terms of ease of access to information, improved writing efficiency, and enhanced understanding, concerns remain regarding over-reliance on technology and potential impacts on independent learning. This research contributes to the broader discussion on integrating advanced technology into educational practices and its implications for future learning environments.

***Keywords:*** students' perceptions, Artificial Intelligence (AI), English language education

## INTRODUCTION

Communication skills using English for students have many benefits, both related to academic development, socio-political communication, economic and cultural interactions, and even in daily life. Therefore, in higher education, English is a mandatory subject for all students across various fields of study. This underscores the importance of mastering English as a crucial tool for success in academics and the professional world (Megawati, 2016). However, in reality, there is a phenomenon of low proficiency in English among students, particularly in private universities. Individual interest in English varies, with some students openly expressing their dislike for the language. This low proficiency is also evident from consistently poor exam results from junior high school through to university, with no significant improvement (Megawati, 2016; Santosa, 2017; Hermayawati, 2010).

Therefore, the difficulties experienced by students in achieving effective English language learning targets remain a pressing issue that requires ongoing investigation to find

solutions. Both institutions, as the creators of academic regulations, and English lecturers must continually think about and seek appropriate solutions to address these challenges. The most suitable effort is to motivate students to maintain their enthusiasm for learning. Student motivation in learning English, which includes needs, drives, and goals, is crucial. Without understanding these three aspects, achieving success in their learning activities will be challenging (Yusroh, 2016).

From initial observations, it was found that students face difficulties in learning English for several reasons, including: lack of understanding of pronunciation, inadequate vocabulary, limited comprehension of reading texts, and slow understanding of English pronunciation in listening materials. These difficulties result in challenges in writing sentences in English. Previous researchers have identified these challenges, citing various arguments, such as consistently low exam scores and the perception of English as a daunting subject (Megawati, 2016; Yusroh, 2016; Santosa, 2017; Suhaimi and

Mardatilla, 2018; Sahril and Munir, 2014).

In the current technological era, technological advancements are utilized to facilitate work and meet human needs. Technology is also leveraged in the educational sector, with the development of intelligent systems. Intelligent systems are control systems that possess human-like intelligence and involve artificial intelligence. Artificial intelligence (AI) is a technological advancement in robotics where decision-making capabilities resemble human thought processes. AI has three developed methods: Fuzzy Logic (FL), Evolutionary Computing (EC), and Machine Learning (ML).

The presence of advanced technology in the last decade has provided humans with many conveniences and comfort in their activities. In human life, technology has a positive impact on problem-solving, including the emergence of text-to-speech technology to address language issues. Text-to-speech theoretically is an AI technology that helps computers recognize and understand human language. According to Kristanto (2004), "artificial intelligence is a branch of

computer science specifically aimed at designing intelligent behavior automation in computer systems." Thus, intelligence is embedded in a computer system to perform tasks like humans or to simplify tasks that are difficult for humans to solve, requiring a long time and high intelligence.

In November 2022, an AI research lab called OpenAI in the United States released a chatbot application named ChatGPT (openai.com, 2022). This machine is a natural language processing (NLP) technology capable of responding to human questions in text form (called prompts) typed into the application. What amazed many was that the responses given by ChatGPT were well-structured, with coherent relationships between words or sentences, and relatively accurate, and it could remember previous conversations. With the proper prompt techniques, it can produce a scientific article or even a book in a much shorter time than conventional methods.

Several studies or experiments using the ChatGPT chatbot have been published in various journals and websites. In a journal

article, Zhai experimented by creating an article of approximately 5,830 words titled "Artificial Intelligence for Education." As an expert in artificial intelligence, Zhai assessed the machine-generated article as coherent, relatively accurate (in part), informative, and systematic. The chatbot's ability to provide needed information was also more efficient than that of the average human, and its writing capability was above that of the average student. The process Zhai needed to produce the article took only 2-3 hours, including minor editing and article reorganization (Zhai, 2023).

To better understand public perception, particularly in the education sector, regarding the use of ChatGPT, a leading online course provider, study.com, conducted a survey in January 2023 involving 100 teachers and 1,000 students over 18 years old on the use of ChatGPT in schools (Perception of ChatGPT in Schools). The results can be summarized as follows (study.com, 2023): Among college professors, 72% were concerned that their students might use ChatGPT to cheat, while only 58% of school teachers shared this concern. About 34% of all professors and teachers wanted to ban the

use of ChatGPT in colleges or schools, but more (66%) supported providing access to ChatGPT. Among college students, 72% supported banning access to ChatGPT on their campus networks. 89% of students admitted to using ChatGPT for completing assignments/homework. 48% used ChatGPT to complete tests or quizzes from home, 53% used it to produce written work (essays), and 22% used it to outline their writing.

Based on the explanation above, the use of the ChatGPT application in the learning process has become an unavoidable phenomenon. One such application is in developing students' writing skills. Students learning English at the Sekolah Tinggi Ilmu Administrasi (STIA) Lppn Padang also acknowledge that writing is one of the most challenging skills in English courses, and they often use Google Translate and ChatGPT to help them write. Therefore, this study aims to analyze students' perceptions of the use of the ChatGPT application in writing for students at STIA Lppn Padang.

## METHOD

This study was conducted at Sekolah Tinggi Ilmu

Administrasi (STIA) Lppn Padang, located in the Padang Selatan District, Padang City, West Sumatra Province. The research employs a qualitative approach with a descriptive method to illustrate and interpret students' perceptions of using the ChatGPT application in English language learning. The qualitative approach aims to understand the phenomena experienced by the subjects, including their behaviors, perceptions, and motivations, through descriptive words and language in a natural context.

Data collection was carried out using a questionnaire distributed via Google Forms, designed based on four indicators from the Technology Acceptance Model (TAM): 1) PEOU (Perceived Ease of Use), 2) PU (Perceived Usefulness), 3) ATU (Attitude Toward Use), and 4) BI (Intention to Use). The questionnaire items were rated using a Likert scale. Additionally, online interviews were conducted with 45 students from STIA Lppn Padang who were enrolled in the English for Correspondence course. The questionnaire was distributed through Google Forms and sent to respondents via WhatsApp.

The data analysis technique used is descriptive analysis, which involves several stages: First, **data reduction**, which is the process of selecting and simplifying data that occurs throughout the research and continues until the final report is completed. Second, **data presentation**, which involves organizing information in a way that facilitates drawing conclusions. Third, **conclusion drawing**, where the organized data is analyzed and compared to draw relevant conclusions related to the research questions. This methodology aims to provide a clear picture of how STIA Lppn Padang students utilize ChatGPT in English language learning and the effectiveness of this tool in improving their writing skills.

## RESULTS OF DATA ANALYSIS

The data analysis from the questionnaire reveals several insights into students' perceptions of using ChatGPT in their English language courses at STIA Lppn Padang:

1. **Perceived Ease of Use (PEOU):** The average score for PEOU is 4.15, indicating that students find ChatGPT easy and practical to use for personal development in the



era of Education 4.0. With an average score of 4.24, students believe that ChatGPT can be used conveniently at any time. However, an average score of 3.67 suggests that some students encounter difficulties when accessing ChatGPT.

2. **Perceived Usefulness**

**(PU):** Students rated the potential of ChatGPT to enhance their quality as learners in the Education 4.0 era with an average score of 3.87. An average score of 3.72 indicates that students believe ChatGPT can boost their creativity. Additionally, students feel that ChatGPT facilitates their work and enhances their knowledge and skills, with an average score of 3.96. The average score of 4.17 reflects that students believe using ChatGPT speeds up task completion. Despite these benefits, students rated the increase in learning productivity through ChatGPT at an average of 3.74.

3. **Attitude Toward Use**

**(ATU):** Students feel that learning with ChatGPT is easier and more enjoyable, with an average score of 3.96. They also believe that learning from ChatGPT makes them more creative and innovative in completing their tasks, with an average score of 3.83. The average score of 3.98 shows that

students feel satisfied and pleased with using the ChatGPT application. Furthermore, students appreciate ChatGPT's user-friendly features, reflected in an average score of 4.17.

4. **Intention to Use (BI):**

Students expressed their intention to use ChatGPT for professional development with an average score of 3.78. They also plan to frequently use ChatGPT for personal growth as learners, with an average score of 3.78. Additionally, students have a high motivation to continue using ChatGPT, indicated by an average score of 3.78. However, an average score of 3.52 suggests that students are less motivated to encourage their peers to use ChatGPT.

Overall, the descriptive statistics provide a comprehensive view of how students perceive the ease of use, benefits, attitudes, and intentions related to using ChatGPT in English language learning at STIA Lppn Padang. The results highlight that while students find ChatGPT generally beneficial and user-friendly, there are areas where they encounter challenges and have varied levels of motivation to promote its use among peers.

## CONCLUSION

Based on the research conducted, it can be concluded that students have a positive perception of using ChatGPT as a learning tool in the era of Education 4.0. Generally, students find ChatGPT easy and practical to use (PEOU). They believe that ChatGPT offers benefits in enhancing their quality, creativity, knowledge, and skills as learners (PU). Additionally, students hold a positive attitude towards ChatGPT, considering it to be easier, more enjoyable, and satisfying (ATU). They also show an intention to use ChatGPT for both professional development and personal growth as students (BI).

However, some students face difficulties when accessing ChatGPT and exhibit lower motivation to encourage their peers to use it. These conclusions are based on the results of descriptive statistics, which provide an overview of students' perceptions regarding ease of use (PEOU), benefits (PU), attitudes (ATU), and intentions (BI) related to using ChatGPT as a learning tool in English language courses at STIA LPPN Padang.

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