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The Influence Of Students' Perceptions Of Chatgpt-Based Learning On English Paragraph Writing Skills Among Students Of The English Education Study Program At UIN Mataram

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Abstract

This study aims to examine the influence of students' perceptions of ChatGPT-based learning on English paragraph writing skills among students of the English Education Study Program at UIN Mataram. The research employed a quantitative approach using a non-experimental survey design. The population consisted of all students enrolled in the English Education Study Program at UIN Mataram, while the sample comprised 32 students selected through purposive sampling. Data were collected using questionnaires consisting of 20 items for each variable and measured using a five-point Likert scale. The collected data were analyzed through descriptive statistics and Simple Linear Regression Analysis after fulfilling the assumptions of normality and linearity. The findings revealed that students generally had positive perceptions of ChatGPT-based learning and favorable perceptions of their English paragraph writing skills. However, the regression analysis indicated that students' perceptions of ChatGPT-based learning did not significantly influence their English paragraph writing skills, as evidenced by a significance value of 0.564 (> 0.05). Consequently, the alternative hypothesis was rejected, and the null hypothesis was accepted. These findings imply that positive perceptions of educational technology alone are insufficient to improve writing skills.

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Therefore, the effective integration of ChatGPT into English language learning should be accompanied by appropriate pedagogical strategies, continuous writing practice, and critical engagement to enhance students' writing competence.

Keywords: Students' Perceptions of ChatGPT-Based Learning; English Paragraph Writing Skills.

INTRODUCTION

The rapid advancement of information and communication technology has fundamentally transformed the landscape of contemporary education. The emergence of artificial intelligence (AI) has accelerated educational innovation by providing learners with broader access to knowledge, personalized learning experiences, and interactive learning environments (Tan, S., 2023). Within the framework of twenty-first-century education, technology is no longer viewed merely as a supplementary tool but rather as an integral component of pedagogical practices that facilitate the development of critical thinking, creativity, communication, and collaboration skills (Hashim, S., et al., 2022; Tapalova, O., & Zhiyenbayeva, N., 2022). Consequently, educational institutions are required to adapt to technological developments in order to remain relevant to the demands of the digital era and to prepare students for increasingly complex global challenges.

The integration of digital technology into educational processes is also supported by national educational policies. Law Number 20 of 2003 concerning the National Education System emphasizes that education functions to develop learners' potential so that they become knowledgeable, creative, independent, and responsible citizens. In line with this mandate, higher education institutions are encouraged to utilize technological innovations to improve learning quality and strengthen students' competencies. Therefore, the incorporation of artificial intelligence into educational activities can be viewed as a strategic effort to support the achievement of national educational goals while simultaneously enhancing students' readiness to participate in a technology-driven society.

One of the most significant developments in artificial intelligence is the emergence of ChatGPT, a generative AI platform capable of producing human-like responses and assisting users in various academic activities. Since its introduction, ChatGPT has attracted substantial attention from students due to its ability to provide immediate assistance in generating ideas, correcting grammatical errors, improving vocabulary usage, and revising written texts (Kyambade, M., et al., 2025; Ayeni, O. O., et al., 2024). In the context of English language learning, particularly writing

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instruction, ChatGPT has increasingly become a learning companion that offers instant support throughout the writing process.

Ideally, the utilization of ChatGPT in educational settings should contribute positively to students' academic development, foster autonomous learning, and improve the quality of written output (Wang, D., & Huang, X. et al., 2025). However, the increasing dependence of students on AI-generated content has generated considerable debate among educators and researchers. While some students perceive ChatGPT as an effective learning aid, others express concerns regarding academic integrity, overreliance on technology, and the potential decline of independent critical thinking (Cui, Y., & Zhang, H, 2025). This condition indicates a discrepancy between the ideal function of educational technology as a facilitator of learning and the reality of its implementation among students.

The issue becomes particularly relevant in English paragraph writing, which remains one of the most challenging skills for learners of English as a Foreign Language (EFL). Effective paragraph writing requires students to master multiple linguistic and cognitive competencies simultaneously, including grammatical accuracy, vocabulary selection, sentence coherence, logical organization, and idea development. These requirements often create difficulties for students, especially when they receive limited individualized feedback and guidance throughout the writing process (Daniswara, L. D., 2025; Li, J., et al., 2026).

Furthermore, paragraph writing is not merely a linguistic activity but also a complex cognitive process involving planning, drafting, revising, and evaluating written texts. Students are expected to organize ideas coherently and communicate messages effectively while adhering to academic writing conventions. Nevertheless, many students continue to encounter difficulties in transforming abstract ideas into coherent and well-structured paragraphs. Such challenges frequently lead to decreased confidence, reduced motivation, and lower writing performance.

The increasing use of ChatGPT introduces a new dimension to the writing process by enabling students to access immediate feedback and personalized support. Through its interactive features, the platform can assist students in overcoming linguistic difficulties and generating writing ideas more efficiently. However, the educational effectiveness of ChatGPT depends not only on its technological capabilities but also on how students perceive and utilize the platform. Students' perceptions play a crucial role in determining their willingness to adopt technological innovations and their ability to use them productively within academic contexts (Labajová, L. 2023; Uzun, L., 2023).

Considering these circumstances, examining students' perceptions of ChatGPT-based

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learning offers a potential solution for understanding how artificial intelligence can be integrated effectively into English writing instruction. Students' perceptions influence their attitudes, behaviors, and learning experiences when interacting with educational technologies. Consequently, investigating these perceptions can provide valuable insights into the opportunities and challenges associated with the implementation of ChatGPT in higher education.

Moreover, understanding students' perceptions may assist educators in designing pedagogical strategies that maximize the educational benefits of ChatGPT while minimizing potential risks related to technological dependency and academic misconduct. Through a comprehensive analysis of students' perceptions, educational institutions can formulate evidence-based policies that support responsible and effective AI integration within teaching and learning processes (Zhang, W., & Liu, X. 2025; He, Q., You, X., & Shen, J. 2025).

Several previous studies have investigated the implementation of ChatGPT and AI-assisted learning in language education. Song and Song (2023) reported that students who utilized ChatGPT demonstrated improvements in writing quality and learning motivation. Marzuki et al. (2023) found that AI-based writing tools facilitated students' ability to organize and develop written content more effectively. Similarly, Khan et al. (2024) revealed that EFL students generally exhibited positive attitudes toward the use of artificial intelligence in language learning activities. These studies collectively indicate the growing educational potential of AI technologies in enhancing language learning outcomes.

Despite these valuable contributions, several limitations remain evident. Most previous studies have focused primarily on the effectiveness of ChatGPT in improving writing performance and learning outcomes. Limited attention has been given to investigating students' perceptions as a determinant factor influencing the utilization of ChatGPT in writing activities. Furthermore, the majority of existing studies have been conducted outside the context of Indonesian Islamic higher education institutions. As a result, empirical evidence concerning students' perceptions of ChatGPT-based learning within English Education programs at Islamic universities remains scarce. This situation reveals a significant research gap that necessitates further investigation. Accordingly, the novelty of the present study lies in its focus on examining the influence of students' perceptions of ChatGPT-based learning on English paragraph writing skills within the context of an Islamic higher education institution.

The urgency of this study emerges from the increasing integration of artificial intelligence into higher education and the limited empirical evidence regarding its pedagogical implications in Indonesian universities. Without a comprehensive understanding of students' perceptions,

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educational institutions may encounter difficulties in developing effective strategies for integrating AI technologies into learning environments. Therefore, empirical investigations concerning students' perceptions are essential to ensure that the implementation of ChatGPT contributes positively to educational quality and student learning outcomes.

Preliminary observations conducted within the English Education Study Program at UIN Mataram indicate that many students have already incorporated ChatGPT into their academic writing activities. Students frequently utilize the platform to generate ideas, improve grammar, enhance vocabulary usage, and revise written assignments. Nevertheless, such utilization generally occurs without structured pedagogical guidance, resulting in diverse patterns of usage and varying perceptions regarding the platform's benefits and limitations. This phenomenon highlights the necessity of conducting systematic research to understand how students perceive ChatGPT-based learning and how such perceptions may influence their English paragraph writing skills.

Based on the foregoing discussion, this study aims to investigate the influence of students' perceptions of ChatGPT-based learning on English paragraph writing skills among students of the English Education Study Program at UIN Mataram. Specifically, the study seeks to analyze students' perceptions of ChatGPT-based learning and to examine the extent to which these perceptions contribute to the development of their English paragraph writing skills.

RESEARCH METHOD

This study employed a quantitative approach using a non-experimental survey design (Peker, H. 2022; Gibson, L. 2018; Roberts, D. R. 2021). A quantitative approach was chosen because the study aimed to examine the influence of students' perceptions of ChatGPT-based learning on their perceived English paragraph writing skills through numerical data and statistical analysis. The survey design was considered appropriate as it enables researchers to gather information regarding respondents' perceptions, attitudes, experiences, and self-assessments related to a particular phenomenon.

The study was conducted in the English Education Study Program at UIN Mataram. The population consisted of all students enrolled in the English Education Study Program at UIN Mataram. A sample of 32 students was selected using purposive sampling. The selection criteria included students who had experience using ChatGPT as a learning tool and had completed English writing courses, particularly those focusing on paragraph writing.

This study involved two variables. The independent variable (X) was Students' Perceptions

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of ChatGPT-Based Learning, while the dependent variable (Y) was Students' Perceived English Paragraph Writing Skills. Students' perceptions of ChatGPT-based learning refer to their evaluations, attitudes, and experiences regarding the use of ChatGPT to support English learning activities. Meanwhile, perceived English paragraph writing skills refer to students' self-assessments of their ability to generate ideas, organize paragraphs, use appropriate grammar and vocabulary, maintain coherence and cohesion, and produce effective English paragraphs.

The primary research instrument was a questionnaire developed based on the indicators of each variable. The Students' Perceptions of ChatGPT-Based Learning variable consisted of twenty statement items covering dimensions such as writing support, linguistic benefits, writing efficiency, writing confidence, autonomous learning, and critical-ethical awareness. Similarly, the Students' Perceived English Paragraph Writing Skills variable consisted of twenty statement items designed to measure students' perceptions of their writing competence. All items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data were collected through survey and documentation techniques. The survey was administered by distributing questionnaires to respondents through an online platform. Documentation was used to obtain supporting information related to the research setting, student data, and other institutional documents relevant to the study.

Before conducting hypothesis testing, the questionnaire data were subjected to validity and reliability tests to ensure the quality of the research instrument. Subsequently, descriptive statistical analysis was performed to describe respondents' characteristics and the distribution of the research variables. To test the research hypothesis, Simple Linear Regression Analysis was employed to determine the extent to which students' perceptions of ChatGPT-based learning influenced their perceived English paragraph writing skills (Creswell, J. W., & Creswell, J. D.2017; Creswell, J. W., & Poth, C. N., 2016).

The regression model used in this study is expressed as follows:

$$\mathbf{Y = a + bX + e}$$

where Y represents students' perceived English paragraph writing skills, X represents students' perceptions of ChatGPT-based learning, a is the constant, b is the regression coefficient, and e is the error term.

The hypothesis was tested at a significance level of 0.05. If the significance value (Sig.) was less than 0.05, the alternative hypothesis (Ha) was accepted and the null hypothesis (H_o) was rejected, indicating that students' perceptions of ChatGPT-based learning had a significant influence on their perceived English paragraph writing skills. Conversely, if the significance value

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(Sig.) was greater than 0.05, the null hypothesis (H_0) was accepted and the alternative hypothesis (Ha) was rejected, indicating that students' perceptions of ChatGPT-based learning did not significantly influence their perceived English paragraph writing skills.

RESULT AND DISCUSS

This chapter presents the findings of the study concerning the influence of students' perceptions of ChatGPT-based learning on their perceived English paragraph writing skills among students of the English Education Study Program at UIN Mataram. The presentation of the findings is organized systematically based on the research objectives and the data analysis procedures employed in this study.

The study involved 32 sixth-semester students from the English Education Department at UIN Mataram, drawn from Classes A through F. Table 1 provides a summary of the respondent profile.

Table 1. Respondent Profile (N = 32)

Characteristic	Category	Frequency (%)
Semester	Semester 6	32 (100%)
Classes	A, B, C, D, E, F	Multi-class
Total Respondents	—	32 (100%)

Furthermore, the researcher presents the statistical data of this study to provide a more comprehensive explanation of the research data. The descriptive statistics are presented in Table 2.

Table 2. Descriptive Statistics

Statistics			
		Students' Perceptions of ChatGPT-Based Learning	English Paragraph Writing Skills
N	Valid	32	32

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	Missing	0	0
Mean		73.72	62.66
Median		75.00	63.00
Mode		75	64
Std. Deviation		9.302	3.148
Minimum		49	57
Maximum		87	68
Sum		2359	2005

Based on Table 2, a total of 32 respondents were analyzed, with no missing data reported. The variable Students' Perceptions of ChatGPT-Based Learning obtained a mean score of 73.72, a median of 75.00, and a mode of 75, indicating that students generally held positive perceptions toward the use of ChatGPT in the learning process. Meanwhile, the English Paragraph Writing Skills variable obtained a mean score of 62.66, a median of 63.00, and a mode of 64, suggesting that students perceived their English paragraph writing skills to be at a relatively good level.

The standard deviation of the students' perception variable (9.302) was higher than that of the writing skills variable (3.148), indicating that students' perceptions of ChatGPT were more varied than their perceptions of their writing skills. Overall, the descriptive statistical results demonstrate that students had positive perceptions of ChatGPT-based learning and favorable perceptions of their English paragraph writing skills. These findings provide preliminary evidence of a positive relationship between the two variables, which will be further examined through Simple Linear Regression Analysis.

However, before conducting hypothesis testing, it is essential for the researcher to perform classical assumption tests as prerequisites for regression analysis. Classical assumption tests are intended to ensure that the research data meet the necessary statistical requirements so that the results of the regression analysis can be considered valid and interpreted accurately. In this study, the classical assumption tests consisted of the normality test and the linearity test.

The normality test was conducted to determine whether the research data were normally distributed. A normal data distribution is one of the primary assumptions for the application of parametric statistical analyses, including Simple Linear Regression Analysis. In this study, the normality test was performed using the Kolmogorov–Smirnov test. The decision criterion for the normality test was that if the significance value (Sig.) was greater than 0.05, the data were

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considered normally distributed. Conversely, if the significance value (Sig.) was less than 0.05, the data were considered not normally distributed. The results of the normality test are presented in Table 3.

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		32
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.13037355
Most Extreme Differences	Absolute	.132
	Positive	.087
	Negative	-.132
Test Statistic		.132
Asymp. Sig. (2-tailed)		.169[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The results of the Kolmogorov–Smirnov normality test indicate that the significance value (Asymp. Sig. 2-tailed) is 0.169, which is greater than 0.05. Therefore, it can be concluded that the residual data are normally distributed. This finding demonstrates that the normality assumption has been satisfied, allowing the regression analysis to proceed.

In addition, a linearity test was conducted to determine whether a linear relationship existed between the independent variable, namely Students' Perceptions of ChatGPT-Based Learning (X), and the dependent variable, namely English Paragraph Writing Skills (Y). The linearity test is important because Simple Linear Regression Analysis assumes that the relationship between the two variables is linear. The test was performed using the Test for Linearity procedure. The relationship between the variables is considered linear if the significance value of the Deviation from Linearity is greater than 0.05. If this assumption is met, the Simple Linear

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Regression Analysis can be continued. The results of the linearity test are presented in Table 4.

Table 4. Linierity Test

			Sum of Squares	df	Mean Square	F	Sig.
English Paragraph Writing Skills * Students' Perceptions of ChatGPT-Based Learning	Between Groups	(Combined)	207.352	18	11.520	1.500	.231
		Linearity	3.442	1	3.442	.448	.015
		Deviation from Linearity	203.910	17	11.995	1.561	.210
	Within Groups		99.867	13	7.682		
	Total		307.219	31			

Table 4, the results of the linearity test show that the significance value of Deviation from Linearity is 0.210, which is greater than 0.05. This indicates that there is no significant deviation from linearity in the relationship between Students' Perceptions of ChatGPT-Based Learning and English Paragraph Writing Skills. Therefore, it can be concluded that the relationship between the two variables is linear. Since the linearity assumption has been satisfied, the data are appropriate for further analysis using Simple Linear Regression Analysis to test the research hypothesis.

Since the results of the classical assumption tests indicate that both the normality and linearity assumptions have been satisfied, the researcher proceeded with hypothesis testing using Simple Linear Regression Analysis. This analysis was conducted to determine whether Students' Perceptions of ChatGPT-Based Learning significantly influence English Paragraph Writing Skills. Furthermore, Simple Linear Regression Analysis was employed to identify the direction and magnitude of the influence of the independent variable (X) on the dependent variable (Y). The results of the regression analysis are presented in Table 5.

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Table 5. Results of the Simple Linear Regression Analysis

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	65.297	4.564		14.307	.000
	Students' Perceptions of ChatGPT-Based Learning	-.036	.061	-.106	-.583	.564
a. Dependent Variable: English Paragraph Writing Skills						

Based on Table 5, the results of the Simple Linear Regression Analysis indicate that the regression coefficient for Students' Perceptions of ChatGPT-Based Learning is B = -0.036 with a significance value (Sig. = 0.564). Since the significance value is greater than 0.05, the effect of Students' Perceptions of ChatGPT-Based Learning on English Paragraph Writing Skills is not statistically significant. Therefore, the alternative hypothesis (Ha) is rejected, while the null hypothesis (H_o) is accepted. This finding suggests that students' perceptions of ChatGPT-based learning do not significantly influence their English paragraph writing skills. Furthermore, the regression coefficient is negative, indicating that the relationship between the two variables is negative; however, because the effect is not statistically significant, this relationship cannot be generalized to the wider population. The regression equation obtained from the analysis is Y = 65.297 – 0.036X, meaning that for every one-unit increase in Students' Perceptions of ChatGPT-Based Learning, English Paragraph Writing Skills decrease by 0.036 points. Nevertheless, this decrease is not statistically significant.

DISCUSSION

The findings of this study reveal that students' perceptions of ChatGPT-based learning do not significantly influence their English paragraph writing skills. This conclusion is evidenced by

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the significance value of 0.564, which exceeds the threshold of 0.05, leading to the rejection of the alternative hypothesis and the acceptance of the null hypothesis. These findings indicate that positive perceptions toward ChatGPT are not necessarily accompanied by improvements in students' English paragraph writing skills. In other words, students' favorable evaluations of ChatGPT do not automatically translate into higher levels of writing competence.

From a theoretical perspective, this finding suggests that perception alone is insufficient to produce changes in language skills. According to educational psychology, perception represents an individual's interpretation or evaluation of an object, technology, or learning experience (Schunk, D. H. 2012; MacKay, D. G., 2012). However, skill development requires more than positive attitudes; it demands consistent practice, repeated exposure, cognitive engagement, and constructive feedback. Therefore, although students may perceive ChatGPT as useful, such perceptions may not directly contribute to measurable improvements in writing performance (Goldstone, R. L., Landy, D. H., & Son, J. Y. 2010).

The results also indicate that the relationship between technology acceptance and learning outcomes may not always be linear. The Technology Acceptance Model (TAM) proposed by Davis emphasizes perceived usefulness and perceived ease of use as determinants of technology adoption (Stepp-Greany, J., 2002; Van Geert, P., 2017). Nevertheless, technology acceptance does not necessarily guarantee enhanced academic performance. Students may appreciate ChatGPT because it is accessible, efficient, and user-friendly, yet they may not utilize it in ways that effectively develop their writing skills. Consequently, positive perceptions may foster technology usage without necessarily improving learning outcomes.

Furthermore, writing is a complex productive language skill that involves multiple linguistic and cognitive components. Effective paragraph writing requires mastery of grammar, vocabulary, coherence, cohesion, organization of ideas, and critical thinking (Yahrif, M., et al., 2026; Deane, P., et al., 2008) These competencies are developed gradually through sustained practice and reflection. Therefore, students' writing proficiency may be influenced more strongly by factors such as prior language knowledge, writing habits, learning strategies, and instructional quality than by their perceptions of a technological tool.

The non-significant relationship identified in this study may also be explained by the nature of ChatGPT usage among the participants. Based on preliminary observations conducted at the English Education Study Program of UIN Mataram, many students reported using ChatGPT informally and independently without structured pedagogical guidance. As a result, the utilization of ChatGPT varied considerably among students. Some used it to generate ideas and receive

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explanations, while others relied on it primarily for completing assignments. Such differences in usage patterns may reduce the potential impact of ChatGPT on writing skill development (Andleeb, M., et al., 2025; Aryadoust, V., 2016).

Another plausible explanation is that students may become passive recipients of AI-generated content rather than active writers (Alghazo, S., et al., 2025). Constructivist learning theory emphasizes that knowledge is constructed through active engagement and personal meaning-making. If students depend excessively on ChatGPT-generated responses without critically evaluating or revising the output, the learning process may become superficial. Consequently, the technology serves merely as a productivity tool rather than a medium for developing writing competence.

The negative regression coefficient, although statistically insignificant, provides an interesting perspective. It suggests a tendency whereby higher perceptions of ChatGPT-based learning are associated with slightly lower perceived writing skills. While this relationship is weak and cannot be generalized, it may indicate that some students who rely heavily on ChatGPT become less confident in their own writing abilities or engage less frequently in independent writing practice. Such a tendency aligns with concerns raised in contemporary literature regarding the potential overreliance on artificial intelligence in educational contexts (Ziqi, C., et al., 2026).

The findings of this study differ from several previous studies that reported positive effects of ChatGPT on writing development. Song and Song found that the use of ChatGPT enhanced students' writing quality and motivation. Similarly, Marzuki and colleagues reported that AI-assisted writing tools helped learners organize ideas more effectively (Yang, K., et al., 2025; Goulart, L., et al., 2024). Khan and colleagues also observed favorable attitudes and improved learning experiences among EFL students using AI technologies. However, these studies primarily examined the use of ChatGPT itself, whereas the present study focused specifically on students' perceptions of ChatGPT-based learning. This distinction may explain the different outcomes.

The discrepancy between this study and previous research highlights an important methodological consideration. Positive perceptions and actual learning outcomes are distinct constructs. A student may perceive ChatGPT as useful, enjoyable, and innovative while simultaneously failing to improve writing performance. Therefore, future studies should distinguish between technology perception, technology utilization, and actual language achievement to gain a more comprehensive understanding of AI-assisted learning.

From a pedagogical standpoint, the findings imply that integrating ChatGPT into language learning requires careful instructional design. Simply encouraging students to use ChatGPT may

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not be sufficient to improve writing skills. Educators should provide guidance on how to employ ChatGPT critically and strategically, such as using it for brainstorming, receiving feedback, checking grammatical accuracy, and revising drafts. In this way, ChatGPT can function as a learning scaffold rather than a substitute for the writing process itself (Schultz, H. 2026; Lu, C., & Li, J., 2025).

In the context of higher education, particularly within Islamic universities, the integration of artificial intelligence should also be accompanied by ethical and academic considerations. Students need to develop digital literacy, critical thinking, and academic integrity when utilizing AI technologies (Wu, T. T., et al., 2024; Li, H., 2023; Mukhlis, M., 2024). The educational objective should not merely be technological adoption but the cultivation of independent, reflective, and responsible learners capable of using technology as a tool for intellectual development.

The findings of this study demonstrate that students' perceptions of ChatGPT-based learning do not significantly influence their English paragraph writing skills among students of the English Education Study Program at UIN Mataram. The results suggest that writing competence is a multidimensional construct influenced by various cognitive, linguistic, pedagogical, and behavioral factors. Therefore, future research should explore additional variables such as writing motivation, frequency of ChatGPT use, digital literacy, self-regulated learning, and actual writing performance to provide a more comprehensive understanding of the role of artificial intelligence in English language learning.

CONCLUSION

Based on the findings and discussion of this study, it can be concluded that students' perceptions of ChatGPT-based learning do not have a statistically significant influence on English paragraph writing skills among students of the English Education Study Program at UIN Mataram. This conclusion is supported by the results of the Simple Linear Regression Analysis, which revealed a significance value of 0.564 (> 0.05), indicating that the alternative hypothesis was rejected and the null hypothesis was accepted. Although students generally demonstrated positive perceptions toward the use of ChatGPT in learning activities, these perceptions were not sufficient to significantly improve their English paragraph writing skills. The findings suggest that writing skills are influenced by various factors beyond perceptions of technology, including language proficiency, writing practice, learning motivation, digital literacy, learning strategies, and the manner in which ChatGPT is utilized during the learning process. Therefore, the integration of ChatGPT into English language learning should be accompanied by appropriate pedagogical guidance to ensure that the technology functions as a supportive learning tool capable of fostering

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students' writing development in a meaningful and sustainable manner.

FUTURE DIRECTIONS

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