Jurnal LINGUA SUSASTRA
e-ISSN:2746-704X
vol. 7, no. 1, 2026
p. 48-58
DOI: https://doi.org/10.24036/ls.v7i1.529

Relationship Between Artificial Intelligence Use and Writing Anxiety: in English Writing Tasks

Sabrina Decriz Elvandintha[1,*] **Susiati**[2]
Universitas Muhammadiyah Surakarta[1,2]
*Corresponding Author. E-mail: a320220051@student.ums.ac.id

Submitted: 5 Feb 2026 Revised: 2 March 2026 Accepted: 23 April 2026

Abstract. Artificial Intelligence (AI) is increasingly integrated into students' English academic writing. While it provides real-time feedback, AI can also impact affective aspects like writing anxiety. However, empirical findings on its impact, particularly writing anxiety, are inconsistent and context-dependent. To address this gap, this study investigated how students use AI in English writing tasks and examined its relationship with writing anxiety. A quantitative correlational design involved 106 English Education students at Muhammadiyah University of Surakarta. Data, collected via a Likert-scale questionnaire (measuring writing anxiety with an adapted SLWAI, Cheng, 2004), were analyzed using descriptive statistics and simple linear regression in SPSS. Findings reveal students frequently use AI for multiple purposes. Furthermore, a weak but statistically significant positive relationship emerged between AI use and writing anxiety ($r = .224$, $p < .05$). Given this weak correlation, educators should integrate AI as a scaffolded tool, not a crutch, emphasizing its role in reducing technical burdens while fostering self-efficacy and critical thinking to mitigate potential anxiety.

Keywords: *Artificial Intelligence, writing anxiety, english language learning, writing skill*

Abstrak Artificial Intelligence (AI) telah menjadi teknologi yang semakin terintegrasi dalam praktik penulisan akademik mahasiswa, khususnya dalam tugas penulisan bahasa Inggris. AI menawarkan kemudahan dalam membantu mahasiswa dengan umpan balik secara real-time, tetapi penggunaannya juga berpotensi memengaruhi aspek afektif, seperti kecemasan menulis. Namun, temuan empiris tentang dampaknya pada domain afektif, khususnya kecemasan menulis, masih belum konsisten dan bergantung pada konteks. Untuk mengatasi kesenjangan ini, penelitian ini menyelidiki bagaimana mahasiswa memanfaatkan AI dalam tugas penulisan bahasa Inggris dan untuk memeriksa hubungan antara penggunaan AI dan kecemasan menulis mahasiswa. Penelitian ini mengadopsi desain korelasional kuantitatif yang melibatkan 106 mahasiswa Pendidikan Bahasa Inggris di Universitas Muhammadiyah Surakarta. Data dikumpulkan melalui kuesioner skala Likert, dengan kecemasan menulis diukur menggunakan SLWAI (Cheng, 2004) yang diadaptasi, dan dianalisis menggunakan statistik deskriptif dan regresi linier sederhana di SPSS. Temuan menunjukkan bahwa mahasiswa sering menggunakan alat AI untuk berbagai tujuan. Selain itu, ditemukan hubungan positif antara penggunaan AI dan kecemasan menulis, meskipun kekuatan hubungannya lemah tetapi signifikan secara statistik ($r = 0{,}224$, $p < 0{,}05$). Mengingat korelasi yang lemah, pendidik harus mengintegrasikan AI sebagai alat pendukung daripada sebagai penopang, menekankan perannya dalam mengurangi beban teknis sambil secara aktif mendorong efikasi diri dan berpikir kritis untuk mengurangi potensi kecemasan.

Kata Kunci: *Kecerdasan Buatan, kecemasan menulis, pembelajaran bahasa Inggris, keterampilan menulis*

INTRODUCTION

Writing in a second or foreign language is widely recognized as a cognitively and emotionally demanding process, often associated with difficulties in idea generation, linguistic accuracy, and self-confidence. In recent years, the emergence of artificial intelligence (AI) tools has begun to reshape how learners approach L2 writing by offering immediate support such as generating ideas, suggesting organizational frameworks, and providing grammatical feedback (Rahmah & Ramli, 2025). This technological assistance can make the writing process more efficient and accessible, reducing the time and effort traditionally required to compose texts (Helmiatin et al., 2024). However, the increasing reliance on AI has also raised pedagogical concerns. When frequently used as more than a supportive tool, AI may foster overdependence, potentially weakening learners' critical engagement, creativity, and confidence in completing writing tasks independently (Octaberlina et al., 2024). Such conditions suggest that, alongside its practical benefits, AI use may also intersect with affective factors, particularly learners' experiences of anxiety in L2 writing contexts.

The issue related to the use of AI in writing task by students is not only theoretical, but also realistic in various countries. The reality that shows the use of AI, which has been commonly used to complete tasks, occurred at Nanyang Technological University (NTU), Singapore. Three students were found using generative artificial intelligence (Gen AI) in their tasks, which included unrealistic references and statistics. The three students were given a zero score for the task and this penalty covers 45% of the overall score due to concerns to academic integrity (Chan & Lo, 2025). Meanwhile in Indonesia, the use of AI in academic writing by students is also increasingly widespread, which helps in completing writing tasks. In a study entitled *The Impact of AI Usage in Supporting English Literature Student's Learning* conducted at the State University of Medan, it shows that there is a dual perspective on AI in education. It was obtained that 54% of the 22 students surveyed considered the existence of AI to improve academic performance effectively, while the rest admitted that they had difficulty in thinking critically and developing creativity because they were dependent on using AI (Fahira et al., 2024). Similar incidents were also found in China with different educational setting, this shows that the issue of dependence on the use of AI and its impact on student psychology does not only occur in Indonesia.

A study conducted by Yu (2024) reported the intensity of the use of AI in writing academic tasks and all forms of writing anxiety shows a positive correlation. This means that the more often students use AI, the higher the level of anxiety that arises when writing. These three findings indicate that the use of AI is able to facilitate the completion of writing tasks, on the other hand, when its use is excessive, it can have an impact that not only affects the quality of writing but also the psychological aspect. In conceptualizing writing anxiety, this study is guided by Cheng's (2004) multidimensional framework of second language writing anxiety, as operationalized in the Second Language Writing Anxiety Inventory (SLWAI). According to this model, writing anxiety comprises three interrelated components: somatic anxiety, cognitive anxiety, and avoidance behavior. This framework allows for a nuanced investigation into how AI interaction might differentially relate to these distinct anxiety components.

Existing empirical evidence presents divergent conclusions regarding the relationship between AI use and writing anxiety. Some quantitative studies report no significant association between the use of AI tools and reduced anxiety levels (Debinda et al., 2024) suggesting that technological assistance alone does not address underlying

psychological factors. In contrast, qualitative research highlights a dual effect in which AI alleviates technical challenges while simultaneously heightening concerns about dependency, originality, and authorship (Putriana, 2025). However, on the other hand, it can give rise to new anxieties such as dependency, doubts about one's own writing abilities, and ethical concerns about the authenticity of the work (Darmawan et al., 2024). Adding to this complexity, recent correlational findings indicate a positive relationship between the frequency of AI use and anxiety levels (Yu, 2024).Taken together, these inconsistencies point to a nuanced and context-dependent interaction that requires further investigation to clarify how AI reshapes, rather than simply reduces, students' writing anxiety.

In response to this issue, various studies have been conducted to explore the influence of the use of AI in education, especially on writing. This inconsistency, coupled with a lack of studies examining this relationship through the multidimensional lens of a validated instrument like Cheng's (2004) SLWAI, limits our understanding of AI's holistic impact on the L2 writer. To address this, the present study has a dual objective: firstly, to investigate the patterns of AI utilization in academic writing tasks, and secondly, to empirically examine the correlation between AI use and the multifaceted construct of writing anxiety as measured by the SLWAI. This research gap needs to be explored further, considering that the existence of AI ideally helps overcome linguistic barriers with real-time feedback to improve the accuracy and quality of writing (Azhar et al., 2025). But in reality, the use of AI is not always compatible with its ideal function.

Therefore, this article will focus on answering two research questions: 1) How do students utilize AI in writing tasks? and 2) Is there a relationship between the use of AI and student's writing anxiety in English writing tasks?. This article is expected to obtain results in the form of a more comprehensive understanding of the role of AI in assisting the writing tasks process, as well as the relationship between the use of AI and the writing anxiety. It is expected that the findings will contribute more nuanced empirical data to the evolving discourse on technology and affect in L2 writing. Furthermore, they may inform educators seeking to integrate AI tools in a manner that supports writing development while mindful of students' psychological responses. It should not replace functions as a substitute for human intellectuals and is completely dependent on existing technology (Kurniasari et al., 2025).

METHODS

This study uses a quantitative correlational approach to identify the relationship between the use of Artificial Intelligence (AI) and writing anxiety in English writing task. This approach was chosen because it can describe patterns of AI utilization and examine the extent to which the intensity of Use of AI is related to writing anxiety. It focuses on two variables: Use of AI as the independent variable and writing anxiety as the dependent variable. The aim is to describe the use of AI by students in English writing tasks and analyze the relationship between the two variables. Participants were selected using a non-probability purposive sampling technique to ensure the inclusion of students who had prior experience using AI tools in academic writing. The sample was drawn from semesters 1, 3, 5, and 7 of the Department of English Education at Muhammadiyah University of Surakarta to represent learners at different stages of study, ranging from initial exposure to academic writing to more advanced levels of writing practice. This stratification enabled the study to capture variations in writing experience,

familiarity with AI-assisted learning, and potential differences in writing anxiety across academic progression. A total of 106 students participated in the study, satisfying the recommended minimum sample size for correlational and regression analyses as suggested by Using Multivariate Statistics. The inclusion criteria required participants to have used Artificial Intelligence (AI) tools, such as ChatGPT, Perplexity, or Gemini, in completing English writing tasks, ensuring that the data collected were directly relevant to the research objectives (Etikan et al., 2016).

The research instrument consisted of a structured questionnaire employing a five-point Likert scale ranging from strongly disagree, disagree, neutral, agree, and strongly agree (Simamora, 2022). The questionnaire was designed to measure two variables: AI use in English writing tasks and students' writing anxiety. The writing anxiety scale was adapted from Cheng's (2004) Second Language Writing Anxiety Inventory (SLWAI). The adaptation process involved contextual rephrasing of items to align with AI-assisted writing settings and minor linguistic modifications to ensure clarity and relevance to the participants' academic context. To establish content validity, the instrument was evaluated by two experts in applied linguistics and educational research. The Content Validity Index (CVI) indicated that all items met the acceptable validity threshold. The reliability analysis demonstrated satisfactory internal consistency, with Cronbach's alpha coefficients exceeding the acceptable threshold of .70 for both scales. The final questionnaire was divided into two main sections, with the first section consisting of 10 items measuring AI use and the second section assessing writing anxiety based on the multidimensional construct proposed by Cheng (2004).

The first section consisted of 10 items measuring the independent variable, AI Use, which was constructed as a composite of five indicators: frequency of use, purpose of use, perception of AI, level of student trust in the results produced by AI, and reliance on AI. The 'AI Use' score was calculated as the sum of responses to these 10 items, yielding a theoretical range of 10–50, with higher scores indicating more frequent and intensive use of AI in writing tasks.The second section contains The dependent variable, Writing Anxiety, was measured using 15 adapted items from Second Language Writing Anxiety Inventory (SLWAI) by (Cheng, 2004), reflecting its dimensions of somatic anxiety (physical symptoms), cognitive anxiety (mental worries), and avoidance behavior. The total Writing Anxiety score was obtained by summing the responses to the 15 items (theoretical range: 15–75), where higher scores indicated higher levels of anxiety. The SLWAI items were adapted to fit the AI-assisted writing context, including rephrasing several statements to reflect students' experiences when writing without AI support. The instrument's face and content validity were evaluated by experts in Applied Linguistics, resulting in a scale-level Content Validity Index (CVI) indicating a high level of agreement on item relevance. There are 25 items in total, and each item of statement in the questionnaire must undergo content validation by expert lecturers in the field of research methodology and English language teaching. This validation is carried out to ensure conceptual suitability and the accuracy in measuring the targeted indicators (Taherdoost, 2016). Afterwards, the reliability of the instrument was tested using the Cronbach's alpha coefficient to ensure the internal consistency of the instrument in measuring the research variables.

After being declared eligible, data collection was carried out via a Google Form which was distributed to students according to the sample criteria. This process will take approximately 3 weeks to ensure widespread, efficient, and accessible access until the required number of respondents is reached. Given the ordinal nature of the

questionnaire data derived from Likert-scale responses, Spearman's rank-order correlation (ρ) was selected *a priori* as the primary inferential statistic to examine the relationship between AI Use and Writing Anxiety, as non-parametric techniques are appropriate for ordinal data analysis (Sugiyono, 2017). Descriptive statistics, including the mean, median, standard deviation, and percentage distributions, were calculated for each item and for the composite scale scores to identify patterns of AI use among students. A normality assessment using the Shapiro–Wilk test was conducted to evaluate data distribution; the results indicated that the AI Use variable was not normally distributed ($p < .05$), thereby supporting the use of non-parametric procedures (Mishra et al., 2019). The strength and direction of the association were interpreted based on the correlation coefficient (r_s) and the corresponding significance level (p-value). Ethical considerations were strictly observed throughout the study. Participation was voluntary, and informed consent was obtained from all respondents prior to data collection. The questionnaire was completed anonymously, and all data were treated confidentially and used solely for research purposes.

FINDINGS

Descriptive Statistics on AI Use and Writing Anxiety

A total of 106 valid responses were included in the analysis, as no incomplete or invalid questionnaires were identified. Descriptive statistics were calculated to examine patterns of AI Use and Writing Anxiety among students. The results indicate that students reported a relatively high level of AI use across various writing-related purposes.

Table 1. Descriptive Statistics

Variable	Valid	Mean	Median	Std. Deviation	Min	Max
Use of AI	106	36.94	36.00	3.180	30	46
Writing Anxiety	106	45.76	45.00	9.083	26	73

Table 1 shows that students reported a high level of engagement with AI tools in their English writing tasks, as reflected in a mean AI Use score of 36.94 (SD = 3.18) on a scale with a possible range of 10 to 50. The relatively small standard deviation and the actual score range (30–46) indicate a consistently high level of use across the sample with limited variation. In contrast, Writing Anxiety scores demonstrated greater variability among respondents. The mean anxiety score was 45.76 (SD = 9.08) on a scale ranging from 15 to 75, with scores spanning a wider interval (26–73). This pattern suggests that while AI use was uniformly high, the associated experience of writing anxiety was more moderate and dispersed within the student cohort.

Table 2. Use of AI's Indicator

Indicator	Valid	Mean	Median	Std. Deviation	Min	Max
Frequency of Use	106	4.04	4.00	0.661	2	5
Purpose of Use	106	4,09	4.00	0.70	1	5
Perception of AI	106	4,02	4.00	0,67	1	5
Trust in AI	106	3.00	3.00	0.756	1	5
Reliance on AI	106	2,79	3.00	0.939	1	5

Table 2 presents the descriptive statistics for the five indicators constituting the AI Use variable, providing a more detailed profile of how students engage with AI in English writing tasks. The results show that Frequency of Use, Purpose of Use, and Perception of AI recorded relatively high mean scores (M = 4.04, 4.09, and 4.02, respectively) with small standard deviations, indicating consistent and frequent utilization of AI across respondents. These findings suggest that students commonly employ AI to support various stages of the writing process and generally hold positive views toward its usefulness. In contrast, Trust in AI demonstrated a moderate mean score (M = 3.00, SD = 0.756), indicating a more cautious stance toward fully relying on AI-generated outputs. Meanwhile, Reliance on AI showed the lowest mean (M = 2.79, SD = 0.939) and the greatest variability, suggesting that although students frequently use AI as a support tool, they do not consistently depend on it as a primary resource. Overall, this pattern reflects functional use of AI accompanied by selective trust rather than unconditional dependence.

Table 3. Writing Anxiety's Indicator

Indicator	Valid	Mean	Median	Std. Deviation	Min	Max
Somatic Anxiety	106	3.03	3.00	0.572	1	5
Cognitive Anxiety	106	3.05	3.00	0.796	1	5
Avoidance Behavior	106	3.06	3.00	0,697	1	5

Table 3 displays the scores for the three subcomponents of Writing Anxiety, allowing an examination of its multidimensional structure within the data. The Somatic Anxiety indicator shows a score range from 1 to 5, with a mean of 3.03, indicating a moderate level. The standard deviation of 0.572 suggests relatively low variation in responses, and the median of 3.00 reflects a consistent tendency toward moderate somatic anxiety among students. The Cognitive Anxiety indicator also ranges from 1 to 5, with a mean of 3.05, which likewise falls within the moderate category. Its standard deviation of 0.796 indicates a moderate spread of responses, while the median of 3.00 confirms that students generally experience cognitive anxiety at a moderate level. Similarly, the Avoidance Behavior indicator shows scores between 1 and 5, with a mean of 3.06, signifying a moderate level. The standard deviation of 0.697 reflects moderate variability, and the median of 3.00 indicates that avoidance behavior in English writing is present but not dominant.

Table 4. Tests of Normality

Variable	Statistic	df	Sig.
Use of AI	.126	106	.000
Writing Anxiety	.069	106	.200

Table 4 reports the results of the normality test used to determine the appropriate statistical technique for further analysis. The Kolmogorov–Smirnov test indicates that the Use of AI variable is not normally distributed ($p < 0.05$), whereas the Writing Anxiety variable is normally distributed ($p > 0.05$). Since not all variables satisfy the assumption of normality, the analysis of the relationship between the variables was conducted using the non-parametric Spearman's Rho correlation test.

Correlation between AI Use and Writing Anxiety

Table 5. Spearman's Rho correlation (N = 106)

Variable	Mean	Std. Deviation	Correlation coefficient	Sig. (2-tailed)
Use of AI	36.94	3.180	1	-
Writing Anxiety	45.76	9.083	.224	.021

Table 5 presents the results of the Spearman's Rho correlation analysis examining the relationship between Use of AI and Writing Anxiety. The findings indicate a weak but statistically significant positive correlation ($r = .224$, $p = .021 < .05$), suggesting that higher use of AI is associated with slightly higher levels of writing anxiety, although the strength of this relationship is limited.

DISCUSSION

Student's utilization of Artificial Intelligence in English writing tasks

The observed pattern of high-frequency yet relatively low reliance on AI suggests that students are adopting a strategic, tool-based approach rather than developing passive dependency. AI appears to function as a supportive resource while the core cognitive work of writing remains with the students. This indicates that learners position AI as a digital assistant that enhances efficiency and confidence, not as a substitute for their own abilities. Positive perceptions of AI also reflect the positive acceptance of this technology as part of modern learning. This utilization pattern is in line with the findings of Fitria (2021), that the use of Grammarly as an AI-powered English writing assistant shows an increase in the quality of student's writing in improving writing mechanics such as grammar, spelling, and sentence structure. Similar to (Mehmood & Aziz, 2025) findings, AI played an effective role in helping students improve linguistic accuracy and coherence in their writing through fast and consistent feedback.

Although the indicators of trust in AI-generated results and reliance on AI found in this study showed moderate level, with a mean score of trust in AI of 3.00 and reliance on AI of 2.79, students still tended to be selective in trusting the results, they continue to make further revisions and did not completely replace their thinking processes with AI. Similar to the research of (Nurazizah, 2025), which shows that students use Artificial Intelligence (AI) to help with technical aspects in English writing and are positioned as a support tool in writing. The results of this study indicate that student's use of AI is balanced, as a supporting tool in the writing process, but does not replace writing skills themselves. This pattern reflects the existence of academic awareness and the use of AI by students is controlled, not consumptive or directly dependent. Overall, the results of this study show that the use of AI by students is in a balanced position, used as a supporting tool in the writing process, but does not replace the role of cognitive and writing skills itself.

The Relationship between the Use of Artificial Intelligence and Student's Writing Anxiety in English writing tasks

Data collected from students regarding writing anxiety yielded balanced mean scores at a moderate level. The main indicators, namely somatic anxiety, cognitive anxiety, and avoidance behavior, indicate conditions that are quite common among students, but not at an extremely inhibiting level. Starting with somatic anxiety, which

had an average score of 3.03 and a median of 3.00, indicating that physical symptoms such as tension or discomfort when writing were quite felt by students. The indicators of cognitive anxiety and avoidance behavior showed a similar pattern with average scores of 3.05 and 3.06, respectively, and a consistent median of 3.00. Indicating that students felt cognitive worries and avoided writing activities, although not too dominant, but still emerged as a response to the anxiety felt. Meanwhile, the findings found (Hartono & Maharani, 2020), cognitive anxiety is the most dominant form of anxiety experienced rather than avoidance of writing activities, so that students feel mentally burdened but still do their tasks. In English learning, this can be interpreted as a normal psychological response to academic demands, while also reflecting the challenges students still experience in expressing ideas when writing.

The balance of the average and median scores for the three indicators reinforces the view (Cheng, 2004) in the *Second Language Writing Anxiety Inventory (SLWAI)* instrument that writing anxiety is multidimensional. The meaning of multidimensionality is that writing anxiety does not only appear in the form of physical reactions, but also involves cognitive processes and certain behavioral tendencies. This is also in line with the findings (Debinda et al., 2024) who emphasized that writing anxiety is not solely influenced by external factors such as technology use, but is more strongly related to internal student factors, such as self-confidence, writing experience, and perceptions of writing tasks. The next stage is the normality test, which reveals differences in the data distribution characteristics of the data for the two variables studied. The Use of AI variable does not meet the assumption of normality, with a significance value of less than 0.05, while the writing anxiety variable shows a normal distribution with a significance value of 0.20 or greater than 0.05. This indicates that the data obtained are not completely homogeneous in terms of distribution, so that the analysis of the relationship between variables cannot be carried out using a parametric approach (Abdi, 2023). The measurement of both variables in the questionnaire uses a Likert scale, which produces ordinal data, making the conceptual analysis more appropriate using the nonparametric Spearman Rho technique.

The weak positive correlation indicates that AI use may act as both support and pressure in the writing process. While AI helps reduce linguistic difficulties through suggestions and structure, it also requires students to evaluate, adapt, and ensure the appropriateness of generated content. This additional critical engagement can increase self-monitoring and concerns about accuracy or academic integrity. This means that the more frequently students use AI in English writing tasks, the more their writing anxiety tends to increase, but the effect is not dominant. This is also in line with the findings (Yu, 2024) that the frequency of Use of AI in English writing is positively correlated with various aspects of writing anxiety. Although it helps complete tasks more quickly, excessive use is actually associated with increased writing anxiety. While (Pawestri & Pratolo, 2024) found anxiety reduction, our correlational data suggest a more complex dynamic. A key differentiating factor may be the level of instructional scaffolding. Their findings likely reflect structured, pedagogically integrated AI use, whereas our data, capturing general usage patterns, might reflect more unstructured reliance, potentially leading to the uncertainty and anxiety linked to the weak correlation we observed. This relationship can be influenced by various other factors and depends on the context and how it is used, so the relationship between AI use and writing anxiety is associative, rather than direct cause-and-effect.

CONCLUSION

This study elucidates the complex duality of AI in L2 writing pedagogy: it is a widely adopted tool for strategic support, yet its unguided use is subtly associated with increased writing anxiety, though not as a primary causal factor. Although AI contributes to assisting students with linguistic techniques when writing, this technology does not completely replace the process of critical thinking, and academic psychological pressure still plays a role. Writing anxiety is a complex symptom that is influenced by various other factors, not only caused by technology such as AI. Therefore, the relationship detected in this study cannot be understood as a cause-and-effect relationship, but rather as a relationship between two interrelated variables.

Therefore, the primary implication of this work is the critical need for pedagogical frameworks that guide the ethical and psychologically aware integration of AI into writing curricula. Student's awareness of their role as writers is expected to support students in maintaining self-confidence and academic responsibility in the process of writing English tasks. The practical implication of this finding is that educators can also direct wisely and responsibly guidance so as not to foster dependency or anxiety, but rather to build student's skills, confidence, and independence. Future research, employing longitudinal designs, should investigate the causal pathways suggested by this correlational evidence, particularly the role of self-efficacy. Ultimately, this study underscores that the goal of technology integration in education is not merely efficiency, but the empowerment of confident and capable autonomous writers.

REFERENCES

Abdi, S. J. (2023). A Comprehensive Guide for Selecting Appropriate Statistical Tests: Understanding When to Use Parametric and Nonparametric Tests. *Open Journal of Statistics*, *13*(04), 464–474. https://doi.org/10.4236/ojs.2023.134023

Azhar, M., Yolanda, D., Frananda, A., Saputra, M. R., Mulyani, R., & Nurdinah, S. (2025). Revolusi Pembelajaran Bahasa Arab Di Era Digital: Analisis Peran Artificial Intelligence Dalam Pengembangan Kompetensi Berbahasa. *Al-Ma'lumat : Jurnal Ilmu-Ilmu Keislaman*, *3*(2), 58–81. https://doi.org/10.56184/jam.v3i2.506

Chan, G., & Lo, E. (2025). NTU penalises three students over use of AI tools; students dispute university's findings. *The Straits Times*. https://www.straitstimes.com/singapore/parenting-education/ntu-penalises-three-students-for-use-of-ai-tools-students-dispute-universitys-findings

Cheng, Y.-S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, *13*(4), 313–335. https://doi.org/10.1016/j.jslw.2004.07.001

Darmawan, I. K. A., Supriyadi, & Adiguna, J. (2024). Analisis persepsi dan preferensi mahasiswa terhadap penggunaan ChatGPT dalam proses pembelajaran (studi kasus di Universitas Samawa, Fakultas Ekonomi dan Manajemen): Analysis of student perception and preference toward the use of ChatGPT in the learning process (case study at Samawa University, Faculty of Economics and Management). *Jurnal TAMBORA*, *8*(2), 10–24. https://doi.org/10.36761/tambora.v8i2.4176

Debinda, P., La'biran, R., Rachel, & Rum, E. P. (2024). The Influence of Chatgpt on Writing Anxiety Among English Department Students. *Indonesian TESOL Journal*, *6*(1), 65–70. https://doi.org/10.24256/itj.v6i1.7278

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11

Fahira, A. N., Siagian, C. R., Simarmata, D. Y., Manik, S. F., & Natsir, M. (2024). The Impact of AI Usage in Supporting English Literature Students' Learning (2022). *Indonesian Journal of Education and Development Research*, *3*(1), 756–762. https://doi.org/10.57235/ijedr.v3i1.4921

Hartono, H., & Maharani, M. M. (2020). English Writing Anxiety and the Writing Problems of Indonesia EFL Learners. *Proceedings of the 2nd Social and Humaniora Research Symposium (SoRes 2019)*, 513–517. https://doi.org/10.2991/assehr.k.200225.111

Helmiatin, Hidayat, A., & Kahar, M. R. (2024). Investigating the adoption of AI in higher education: A study of public universities in Indonesia. *Cogent Education*, *11*(1), 1–15. https://doi.org/10.1080/2331186X.2024.2380175

Kurniasari, P., Mardikaningsih, A., & Sari, R. S. (2025). Dependensi Penggunaan Kecerdasan Buatan AI (Artificial Intelligence) Terhadap Tugas Akademik Mahasiswa. *JUPEIS : Jurnal Pendidikan Dan Ilmu Sosial*, *4*(3), 604–612. https://doi.org/10.57218/jupeis.Vol4.Iss3.1801

Mehmood, H., & Aziz, R. (2025). The Role of AI-Based Feedback in Enhancing Academic Writing Skills of University Students: An Applied Linguistics Perspective. *Contemporary Journal of Social Science Review*, *3*(3), 2209–2214. https://doi.org/10.63878/cjssr.v3i3.1245

Mishra, P., Pandey, C., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1), 67–72. https://doi.org/10.4103/aca.ACA_157_18

Nurazizah, S. (2025). Penggunaan Artificial Intelligence (AI) dalam Pembelajaran Kemampuan Menulis Bahasa Inggris. *Karimah Tauhid*, *4*(7), 4571–4588. https://doi.org/doi.org/10.30997/karimahtauhid.v4i7.19617

Octaberlina, L. R., Muslimin, A. I., Chamidah, D., Surur, M., & Mustikawan, A. (2024). Exploring the impact of AI threats on originality and critical thinking in academic writing. *Edelweiss Applied Science and Technology*, *8*(6), 8805–8814. https://doi.org/10.55214/25768484.v8i6.3878

Pawestri, P., & Pratolo, B. W. (2024). Artificial Intelligence (AI) for EFL Writing Skills: Systematic Literature Review. *ADJES (Ahmad Dahlan Journal of English Studies)*, *11*(2), 43–52. https://doi.org/10.26555/adjes.v11i2.1460

Putriana, W. (2025). Between Assistance and Anxiety: How AI Impacts Writing Stress among EFL English Literature Majors. *Jurnal Riset Rumpun Ilmu Pendidikan*, *4*(3), 523–533. https://doi.org/10.55606/jurripen.v4i3.7012

Rahmah, S., & Ramli, M. (2025). Pemanfaatan ChatGPT Dalam Mendukung Kinerja Akademik Mahasiswa. *Jurnal Riset Multidisiplin Edukasi*, *2*(6), 479–493. https://doi.org/10.71282/jurmie.v2i6.506

Simamora, B. (2022). Skala Likert, Bias Penggunaan dan Jalan Keluarnya. *Jurnal Manajemen*, *12*(1), 84–93. https://doi.org/10.46806/jman.v12i1.978

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatof dan R&D* (Vol. 25). Alfabeta.

Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *SSRN Electronic Journal*, *5*(3), 28–36. https://doi.org/10.2139/ssrn.3205040

Yu, Z. (2024). The Study of the Correlation between AI-Assisted EFL Writing Frequency and Writing Anxiety among Chinese University Students. *Academic Journal of Humanities & Social Sciences*, *7*(7). https://doi.org/10.25236/AJHSS.2024.070702