



## **Ethical Inquiry into Dependence and Assistance in AI Use for Academic English Writing**

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### **Abstract**

The rapid advancement of artificial intelligence (AI) has reshaped academic writing practices, particularly among non-native English speakers in higher education. This study investigates the ethical implications of AI-assisted academic writing by conducting a comprehensive literature review of ten articles published between 2023 and 2025. The findings reveal that AI functions as an ambivalent technology providing substantial benefits while simultaneously introducing significant risks. AI tools such as ChatGPT, Grammarly, and paraphrasing systems enhance linguistic accuracy, support idea generation, and improve writing efficiency, thus helping students overcome language-related barriers. However, these advantages are largely technical, and excessive reliance on AI contributes to cognitive delegation, reduced critical thinking, diminished academic independence, and increased risks of indirect plagiarism. The literature also highlights ethical concerns related to transparency, validity, authorship, and the reliability of AI-generated information, particularly given the prevalence of factual inaccuracies and fabricated references. A recurring issue across studies is the lack of institutional readiness to regulate AI usage. Many universities do not yet have clear guidelines or training frameworks to promote responsible and ethical AI engagement, resulting in widespread moral ambiguity among students. This review concludes that AI should serve as a proportional and ethically guided cognitive partner rather than a substitute for human reasoning. To address existing gaps, future research should adopt longitudinal and experimental designs to examine the long-term cognitive effects of AI dependence and expand the scope to include lecturers, researchers, and policymakers to support the development of comprehensive institutional policies.

**Keywords:** Artificial Intelligence (AI), Academic Writing; Ethical Use, Student Dependence, Critical Thinking

## **INTRODUCTION**

The rapid evolution of artificial intelligence (AI) has generated substantial transformations across numerous fields, particularly academic writing and higher education. Tools such as ChatGPT, Grammarly, and QuillBot are now widely used by students and scholars to compose, revise, and refine English-language academic texts (Cotton et al., 2024; Kasneci et al., 2020). The increasing accessibility of language-based AI systems promises a new phase of academic digital literacy in which the boundaries between human and machine capabilities are progressively blurred. Despite these advancements, this technological shift raises complex ethical concerns, especially regarding the extent to which AI can be considered legitimate academic assistance and when its use may develop into dependency or even violate established principles of scholarly integrity. These concerns become more urgent as AI writing assistants continue to proliferate globally within academic contexts.

A survey conducted by *Nature* Bieber, (2023) reported that more than 46 percent of academics had used AI to write or edit scientific manuscripts, even though universities are still



debating appropriate policies to regulate AI use. On one hand, AI enhances linguistic accuracy, improves writing efficiency, and offers support for non-native English users. On the other hand, fears persist that reliance on such technologies may erode critical thinking skills and diminish independent writing capabilities (Jiang et al., 2025).

The ethical complexity deepens when AI becomes directly involved in human cognitive processes. For many non-native English academic writers, AI tools may serve as liberating instruments that reduce linguistic barriers. However, critics argue that such practices risk obscuring intellectual ownership and undermining the integrity of scholarly work (Floridi, 2023). This tension highlights a conceptual gap between the ideal notion of AI as a supportive tool and the concerning possibility of AI-induced dependency an issue closely linked to contemporary debates on academic ethics.

A further underlying challenge concerns the inadequacy of current ethical and policy frameworks in higher education. Most institutional regulations remain focused on traditional notions of plagiarism, leaving the dynamics of human and AI collaboration insufficiently addressed (Susnjak, 2024). At the same time, students often lack adequate digital ethical literacy to fully comprehend the implications of responsible AI use (Heaven, 2023). Consequently, a state of moral ambiguity emerges wherein academic efficiency is increasingly pursued, but at times at the expense of scholarly integrity.

This conceptual and practical gap forms the foundation of the present study. There is a pressing need to establish clearer moral boundaries between AI as a legitimate writing tool and AI as a form of dependency that compromises academic authenticity. Grounded in ethical theories such as utilitarianism, deontology, and virtue ethics, this study seeks to offer a refined conceptualization of AI's role in knowledge production and the moral responsibilities of academic authors. The overarching aim is to critically examine the moral dimensions of AI-assisted English academic writing and its implications for scholarly integrity. Theoretically, this study contributes to ongoing debates on AI ethics within global academic literacy. Practically, its findings are expected to serve as a basis for developing institutional policies and ethical guidelines that ensure responsible, transparent, and equitable AI use in higher education.

With these objectives, the study undertakes a comprehensive literature review, analyzing existing research to identify recurring themes and theoretical tensions that elucidate the ethical challenges posed by AI in academic writing. By synthesizing findings from diverse contexts, particularly those involving non-native English speakers, the study seeks to highlight the nuanced ways in which AI can both empower and potentially undermine academic practices.

The exploration is set against the backdrop of a rapidly evolving educational landscape, where digital literacy is becoming an integral component of scholarly success. As universities continue to grapple with the implications of AI technology, there is an increasing recognition of the need for educational reforms that address these technological advancements without compromising core academic values. This study not only aims to advance the conversation on AI ethics but also to propose actionable insights that can guide institutions in fostering a balanced approach to AI integration.

Beyond technical considerations, the integration of artificial intelligence into academic writing represents a fundamental epistemological shift in how knowledge is produced and



communicated. Artificial intelligence systems are not merely neutral tools but socio-technical agents that actively shape human reasoning, authorship, and moral responsibility (Floridi et al., 2018) In academic contexts, this shift challenges traditional assumptions about intellectual ownership, originality, and accountability in scholarly writing.

The ethical implications of AI-assisted academic writing have been widely discussed in global AI ethics frameworks, which emphasize principles such as transparency, responsibility, and human agency. According to Jobin et al. (2019), ethical guidelines for AI consistently stress that human users must remain accountable for decisions and outputs generated with technological assistance. Without clear ethical awareness, the use of AI in academic writing risks blurring moral boundaries and weakening academic integrity.

From an educational perspective, the pedagogical value of artificial intelligence depends on how actively learners engage with its output. (Bing et al., 2023) argue that while AI can function as a cognitive scaffold that supports learning, excessive reliance on AI-generated text may lead to cognitive offloading, where critical thinking and analytical engagement are gradually reduced. Therefore, the integration of AI into academic writing should be guided by ethical reflection and pedagogical responsibility rather than convenience alone.

Ultimately, the research underscores the importance of cultivating a culture of digital ethics literacy among students and educators alike. By equipping academic communities with the tools to responsibly navigate this complex technological terrain, the hope is to preserve the integrity of scholarly work while embracing the potential benefits that AI can offer. Through this dual focus on ethical clarity and practical application, the study aspires to contribute meaningfully to the ongoing dialogue on the future of AI in academia and beyond.

### ***Previous research***

Several previous studies have examined the role of artificial intelligence (AI) in academic writing from a cognitive and ethical perspective. Research related to AI as a learning support tool has developed rapidly in recent years, particularly within the fields of educational psychology and academic literacy.

A study conducted by Bing et al. (2023) investigated the use of AI as a mediational tool in students' academic writing processes. Using a qualitative approach grounded in educational psychology, the study examined how AI-supported writing tools function as scaffolding to assist learners in organizing ideas, refining linguistic structures, and improving textual coherence. The findings indicate that AI can effectively support cognitive development when students actively engage with and critically evaluate AI-generated output rather than passively accepting it.

From a cognitive load perspective, Sweller et al. (2019) explored the implications of excessive reliance on external technological tools in learning contexts. Employing a theoretical and analytical framework, their study focused on how the outsourcing of cognitive tasks affects learners' internal cognitive effort. The results suggest that persistent dependence on technological systems may reduce problem-solving and analytical skills, particularly when higher-order cognitive tasks are delegated to automated tools. In the context of academic writing, this manifests as a reduced opportunity for students to develop independent reasoning and argumentation skills.



In addition to cognitive dimensions, ethical considerations of AI use in academic writing have been addressed by Cotton et al. (2024). Their study examined AI use from a deontological perspective, emphasizing adherence to academic norms such as honesty, originality, and transparency. Using a policy and ethics-based analytical approach, the authors found that undisclosed use of AI-generated content constitutes a violation of academic integrity, regardless of the practical benefits offered by AI technologies.

Although these studies provide valuable insights into the cognitive and ethical implications of AI-assisted academic writing, several limitations remain. Most of the existing research focuses on theoretical analysis or isolated cognitive outcomes, with limited integration between cognitive, ethical, and pedagogical perspectives. Furthermore, empirical evidence examining how these dimensions interact in real academic writing practices is still relatively scarce.

Based on the reviewed studies, it is evident that previous research has not sufficiently addressed the intersection between cognitive dependency and ethical responsibility in AI-assisted academic writing. Therefore, the present study seeks to fill this gap by offering an integrated ethical inquiry into whether AI functions as legitimate academic assistance or fosters dependency that undermines scholarly integrity.

## **METHOD**

This study adopts a literature review as its research design and employs a qualitative approach to analyze and synthesize existing scholarly works related to the ethical implications of AI-assisted academic writing. As a type of secondary research, the literature review aims to critically examine, interpret, and integrate findings from previous studies in order to identify recurring themes, theoretical tensions, and conceptual gaps within the field. The qualitative method is used to enable in-depth interpretation of ethical issues, patterns of dependence, and normative arguments presented in the reviewed literature. All stages of the review process were conducted systematically, transparently, and in a replicable manner, following established guidelines for qualitative literature-based research.

## **Participants**

Because this study is a literature review, it does not involve human participants. Instead, the —participantsl in this context refer to the selected academic sources (journal articles, conference papers, and scholarly reports) that meet the inclusion criteria. These sources serve as the units of analysis.

## **Instruments**

The main instruments used in this study are literature selection protocols, including predefined inclusion–exclusion criteria, keyword search strategies, and evaluation matrices. Digital databases such as Google Scholar, and SINTA were used as the primary platforms for retrieving relevant literature. A coding sheet was developed to categorize each source based on research focus, methodology, theoretical framework, and findings.



### Data Collection Procedures

Data collection was conducted through a multi-step process. First, relevant keywords such as —AI in academic writing, —ethical issues in AI, —scholarly integrity, and —AI-assisted writing tools were used to search across selected academic databases. Second, duplicate records were removed, and the remaining articles were screened based on titles and abstracts. Third, full-text screening was conducted to ensure the relevance of each publication to the research topic. Only articles published within a predetermined timeframe and indexed in reputable databases were included.

### Data Analysis

The selected literature was analyzed using thematic analysis, which involves identifying, categorizing, and interpreting recurring themes related to the ethical dimensions of AI use in academic writing. Each article was examined based on its arguments, theoretical perspectives, empirical evidence, and conclusions. Themes emerging from the literature such as academic integrity, dependency risks, cognitive impact, and institutional policy responses were synthesized to construct a comprehensive understanding of the topic. The analytic process emphasizes comparison, contrast, and integration across sources to highlight conceptual gaps and theoretical tensions.

### Ethical Considerations

Since the study does not involve human subjects, ethical clearance is not required. However, all publications are cited accurately, and intellectual property rights are fully respected.

## FINDINGS

**Table 1 : Literature Review**

No	References / Articles	Main theme / Relevance
1	Firdaus, J. A. (2025). Ketergantungan Penggunaan Kecerdasan Buatan (AI) pada Tugas Akademik Mahasiswa — Jurnal Didaktika.	Measuring students' dependence on AI in academic tasks, including its impact on critical and creative thinking.
2	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.	Examining the level of student dependence on AI in completing university assignments, as well as the consequences for creativity and thinking skills.
3	Reva, R., Risqy, & Haliq, A. (2025). Integrasi AI dalam Penulisan Karya Ilmiah dan Dampaknya terhadap Kemampuan Berpikir Kritis — Pendas : Jurnal Ilmiah Pendidikan Dasar.	Discussing the utilization of AI (including ChatGPT) in academic writing, as well as its impact on the quality of ideas and critical thinking skills.



4	Syahriani, N., Winarti, & Gongma Sari Siagian (2025). Artificial Intelligence (AI) dalam Kepenulisan Ilmiah: Manfaat dan Tantangan Penggunaan Tools Parafrase — Pendas : Jurnal Ilmiah Pendidikan Dasar.	Focus on the utilization of AI tools (such as paraphrasing) in academic writing; highlighting efficiency but also the risks of meaning distortion and dependency.
5	Trends in automated writing evaluation systems research for teaching, learning, and assessment: A bibliometric analysis — Barrot, J. S. (2023).	A bibliometric study on Automated Writing Evaluation (AWE) indicates an increase in the use of automated writing assessment systems, suggesting that many authors and writing instructors are adopting AI as a writing aid, which raises the possibility of dependency.
6	Academic writing in the age of AI: Comparing the reliability of ChatGPT and Bard with Scopus and Web of Science — Garg, S., Ahmad, A., & Madsen, D.Ø. (2024)	This article compares the reliability of output from AI models (such as ChatGPT, Bard) with traditional academic databases and concludes that AI cannot yet be fully relied upon for academic writing. These findings are relevant as they highlight the risks of relying on AI for academic tasks.
7	Using artificial intelligence in academic writing and research (M. Khalifa et al., 2024)	AI assists in six areas of academic writing: idea generation, content structuring, literature review, data management, editing, and ethical compliance. However, the authors emphasize the necessity of ethical and careful integration.
8	Anwari, M. F., & Retnaningsih, W. (2025). Persepsi Penggunaan Kecerdasan Buatan untuk Meningkatkan Keterampilan Menulis Akademik Bahasa Inggris — Eloquence : Journal of Foreign Language.	A qualitative study on English language students found that while AI is helpful, there are concerns regarding overdependence, ethics, and originality.
9	Septri Rahayu (2024). Pemanfaatan Artificial Intelligence (AI) dalam Penulisan Artikel Ilmiah — Pitnas (tinjauan literatur).	Reviewing the literature on the role of AI in scientific writing; noting the benefits as well as challenges such as dependency, validity, and ethics.
10	P. Purba (2025). Optimalisasi Penggunaan AI untuk Penyusunan Karya Tulis Ilmiah secara Efisien — Jurnal Pengabdian kepada Masyarakat Nusantara.	Based on the training on the use of AI (including ChatGPT) for students, it demonstrates the benefits of efficiency but also indicates the need for control to prevent excessive dependency.



This section presents the synthesis results of a study examining the use of digital learning technology on student motivation. A summary of the main characteristics of each study is presented in **Table 1**.

The synthesis of ten analyzed articles reveals a complex and layered pattern regarding the use of artificial intelligence (AI) in academic writing, particularly in the context of higher education. The reviewed articles, published between 2023 and 2025, encompass various contexts, primarily within Indonesian campus environments, along with several international studies such as Barrot, (2023) and Garg et al. (2024). In general, the research designs analyzed consist of qualitative research based on interviews and perception studies, quantitative studies based on surveys concerning student dependency levels, literature reviews, and bibliometric analysis. The dominance of qualitative studies indicates that the phenomenon of AI usage in academic writing is still primarily understood from the perspective of user behavior and perception, rather than from experimental models or long-term empirical studies.

Furthermore, the majority of research has been conducted on student populations or novice academic writers, with a focus on the context of scientific writing in English. This condition illustrates that most studies are still centered on the academic abilities of the current student generation, while the behavior of senior lecturers or researchers has not become the main focus. On the other hand, international studies such as Barrot, (2023) and Garg et al. (2024) add a global dimension to the literature findings, as they depict trends in the utilization of automated evaluation systems and the comparison of the quality of information generated by AI. Thus, this collection of articles creates a cross-context representation that is quite representative for understanding the general patterns of AI usage in academic writing.

However, there is a significant contextual imbalance: six out of ten articles originate from Indonesian journals, while only four represent international reviews. This implies that the findings tend to reflect the concerns of Indonesian students regarding dependence on AI, which may differ from the context in other countries with more advanced digital literacy and academic regulations. Furthermore, some articles do not employ empirical methods but rather literature reviews, thereby limiting the empirical evidence on the impact of AI. Nevertheless, the combination of various types of publications still allows for the articulation of strong thematic patterns.

The initial findings from the literature synthesis indicate that all articles in the dataset agree that the use of AI encompasses two major dimensions: significant benefits in supporting the writing process, and the risks of dependency that affect critical thinking competence and academic integrity. No article presents the impact of AI as entirely positive or entirely negative, suggesting that the academic perspective on AI tends to be balanced, ambivalent, and requires deeper analysis from normative, epistemic, and pedagogical perspective.

### 1. Advantages of AI in Academic Writing

The literature indicates that AI makes a significant positive contribution to the academic writing process of students. Firdaus et al. (2025) explains that students feel more confident when writing after using tools like ChatGPT or Grammarly,



particularly because AI can improve sentence structure, grammar, and consistency in academic style. Rahman et al. (2025) found that the use of AI can expedite the brainstorming process and the organization of writing frameworks. Meanwhile, Khalifa & Albadawy, (2024) outline that AI assists in six aspects of academic writing: ideation, content structure, literature search, data management, editing, and ethical compliance. This demonstrates that AI not only serves as a proofreading tool but also acts as a cognitive companion throughout the entire academic writing cycle.

On a broader level, Barrot, (2023) adds that the trend of using automated writing evaluation (AWE) has increased significantly in recent years. AWE systems are not only used by students but also by lecturers for assessing writing, indicating that AI is beginning to become an integral part of the language learning ecosystem. With the rise in the use of automated evaluation systems, students' ability to receive instant feedback becomes easier. This accelerates the improvement of writing quality and, in some cases, enhances students' motivation to write more frequently because they feel the evaluation process is no longer daunting.

Other findings indicate that AI assists in reducing linguistic barriers for non-native English-speaking students. Anwari & Retnaningsih, (2025) note that students feel freer to express their ideas when language barriers are removed through the use of AI. AI enables students to focus on the substance of their arguments rather than getting caught up in the technical difficulties of the language. Rahayu, (2024) also suggests that AI contributes to enhancing students' confidence when writing academic articles, particularly in the context of publication.

Although the benefits are extensive, the literature consistently asserts that these advantages are primarily technical and linguistic in nature. In other words, AI assists in the mechanical processes of writing and stylistic improvement, but it should not replace the need for higher-level thinking skills such as analysis, argumentation, and evaluation.

These cognitive skills remain within the purview of the student, necessitating critical engagement and thoughtful reflection. As AI tools continue to evolve, it is essential for educational systems to strike a balance between harnessing these technologies and fostering the intellectual development of students.

While AI offers significant support in terms of language fluency and technical precision, educators and students must remain vigilant about the potential for over-reliance. The development of a comprehensive academic skill set involves integrating AI as a supplement rather than a replacement for human reasoning and creativity. Furthermore, the ethical implications of AI in academic writing must be considered. Students require guidance on how to use AI responsibly, ensuring that academic integrity and originality are upheld. As the



educational landscape transforms with technological advancements, the role of AI in learning will undoubtedly continue to expand, presenting both opportunities and challenges for the future of education. This forms the basis for subsequent findings regarding the risks of dependency.

## 2. The Risk of Dependency and Decline in Critical Thinking Skills

The majority of the Indonesian articles analyzed Firdaus et al. (2025), Kurniasari et al. (2025), Rahman et al. (2025), and Syahrani et al. (2025) affirm an increase in students' reliance on AI for completing academic tasks. This dependency primarily occurs when students use AI to generate paragraphs or entire writing structures without engaging in understanding or critical reflection on the content produced. This phenomenon is known as "cognitive delegation," which refers to the tendency to transfer the thinking process to automated systems.

The study by Firdaus et al. (2025) indicates that students who frequently utilize AI in their assignment writing tend to have a lower level of understanding of the course material. Kurniasari et al. (2025) reinforce these findings by demonstrating that the majority of students no longer verify the accuracy of the information provided by AI and merely accept the results passively. This situation threatens the quality of students' academic reasoning, particularly their ability to construct independent arguments.

Furthermore, the article by Rahman et al. (2025) indicates that students who rely excessively on AI face difficulties when asked to write essays without the aid of digital tools. They exhibit tendencies of indirect plagiarism, such as automatic paraphrasing without understanding the concepts. Syahrani et al. (2025) add that dependence on paraphrasing tools can lead to distortion of meaning and loss of originality in ideas.

These findings are significant because they demonstrate that dependence not only affects the quality of writing but also impacts the development of students' academic identity. At a certain stage, dependence can impede the formation of intellectual discipline, critical reflection, and synthesis skills, which are central to academic competence.

## 3. Ethical, Validity, and Originality Challenges

Several articles in the dataset particularly Syahrani et al. (2025), Anwari & Retnaningsih, (2025), and Rahayu, (2024) identify ethical issues as the most sensitive aspect of AI usage. The most common ethical challenge is the lack of transparency in the use of AI in academic writing processes. Many students do not disclose their use of AI, making it difficult for lecturers to assess whether the work is original or not. This raises questions regarding academic integrity and intellectual ownership.



The findings of Garg et al. (2024) indicate that AI outputs are not entirely reliable, as they frequently produce inaccurate, biased, or even completely erroneous information (AI hallucination). When students utilize AI to seek references, they risk citing nonexistent or incorrect sources. This jeopardizes the academic validity of a scholarly work.

Rahayu, (2024) posits that the use of AI in academic writing also raises concerns regarding the originality of ideas. When students or writers excessively rely on paraphrasing tools or text generators, the authenticity of academic thought becomes obscured. This concern is particularly relevant in the context of scientific publications, which demand high standards of originality.

Overall, these ethical challenges are inseparable from the risks of dependency. When the use of AI is not conducted with moral consideration, users may enter the gray areas of academic ethics, which directly impact the integrity of educational institutions.

#### 4. The Need for Institutional Oversight and Digital Ethics Literacy

The articles within the dataset also highlight that reliance on AI is closely linked to a lack of digital ethics literacy. Purba, (2025) and Rahayu, (2024) explicitly state that students do not yet possess adequate knowledge on how to use AI ethically. Clear training and regulations from institutions are believed to be able to reduce the level of misuse of this technology.

Purba, (2025) asserts that training university students in the use of AI can enhance their understanding of when and how AI should be appropriately utilized. However, the article also reveals that training without supervision can create opportunities for students to increasingly rely on AI.

Additionally, these articles highlight a policy gap the disparity between technological advancements and regulatory preparedness within educational institutions. The majority of universities lack official guidelines regarding the limits of AI usage in academic writing. This creates uncertainty, which confuses both students and lecturers.

In this context, digital ethical literacy not only encompasses the technical ability to use AI but also includes an understanding of the moral responsibilities associated with its use. Considering the increasing intensity of AI usage, educational institutions greatly require comprehensive and easily understandable policies.

## DISCUSSION

The discourse in the literature indicates that AI serves as an ambivalent technology, creating both benefits and risks in academic writing. This ambivalence aligns with modern technology ethics theory, which emphasizes that digital innovations have the potential to shape human behavior



both epistemically and morally. The findings from the literature suggest that AI technology expands students' writing capacities, while also diminishing their cognitive engagement.

According to the utilitarian perspective, the use of AI can be considered legitimate and ethical as long as it provides the greatest benefit to users. In this context, AI helps students write better, save time, and reduce language barriers. However, deontological theory warns that using AI may violate academic integrity principles if done without transparency. Meanwhile, virtue ethics highlights that long-term reliance on AI undermines the development of intellectual virtues such as perseverance, honesty, and courage in thinking.

The interpretation of the findings also reveals that the concept of "cognitive delegation" is a critical point in understanding the impact of AI. When students delegate their thinking processes to digital tools, they lose the opportunity to develop critical and analytical thinking skills. This phenomenon is clearly evident in the studies by Firdaus et al. (2025) and Rahman et al. (2025), which show that students' thinking abilities decline when they rely too heavily on AI. This indicates that AI not only affects the writing process but also the structure of learning.

From an epistemological perspective, the findings of Garg et al. (2024) that AI frequently produces inaccurate information reinforce the argument that AI cannot be fully relied upon as an academic tool. The use of AI to generate references or scientific information has the potential to undermine academic integrity, especially when students do not verify the data. In this context, AI is merely an auxiliary tool, not an authoritative source of knowledge.

Furthermore, the discussion indicates that the readiness of educational institutions to face AI technology remains low. The policy gaps identified in several articles demonstrate that academic regulations are not evolving as rapidly as technology. This leads to uncertainty and inconsistency in the use of AI within academic environments. In the long term, this lack of preparedness may undermine the academic culture based on integrity and hard work.

From a pedagogical perspective, the use of AI cannot be entirely prohibited due to its significant benefits in supporting the learning process. Conversely, institutions need to design policies that emphasize ethical, transparent, and proportional use. Training in digital ethics literacy is crucial to ensure that students can use AI without compromising academic integrity. A hybrid model that combines technology with manual thinking skills might be the most realistic solution.

The limitations of the analyzed literature should also be noted. The majority of studies originate from the Indonesian context and focus on students, thereby limiting the generalizability of findings to other countries or populations. Additionally, most articles do not employ long-term empirical methods, resulting in a lack of robust evidence concerning the impact of AI over extended periods. Future research should adopt experimental or longitudinal designs to more accurately assess the effects of dependency.

Finally, the theoretical implications of these findings underscore the necessity for a holistic ethical framework to guide the use of AI in academic writing. Concepts such as agency, autonomy, and virtue can be employed to formulate guidelines that encompass moral and epistemic dimensions. Practically, universities need to establish clear guidelines for AI use, conduct regular training, and foster an academic culture that values authenticity and intellectual effort.



### CONCLUSION

The results of a literature review encompassing ten articles published from 2023 to 2025 indicate that the use of artificial intelligence in academic writing is an ambivalent phenomenon that brings both benefits and risks. AI has been shown to expand students' writing capacities through technical support such as language improvement, enhanced fluency of ideation, and the structuring of writing. On the other hand, these benefits are primarily mechanical in nature and thus do not replace the importance of high-level cognitive engagement in the academic reasoning process. Consequently, AI functions as an aid to facilitate the process, rather than as a substitute for intellectual competence.

Alongside its benefits, this study reveals significant risks associated with students' dependence on AI, which impacts the decline in critical thinking abilities, academic decision-making, and the capacity to produce independent arguments. The risk of cognitive delegation and excessive use of paraphrasing tools pose serious challenges to academic integrity, including issues of originality of ideas, accuracy of information, and honest writing practices. This situation is exacerbated by findings that AI outputs remain susceptible to bias, factual errors, and fictitious references, necessitating users to independently verify information.

Furthermore, this study highlights a regulatory gap in higher education institutions, where the use of AI is advancing more rapidly than the institutional policies governing it. The absence of clear ethical guidelines leads students to utilize AI without adequate limitations, thereby increasing the potential for misuse. This underscores the importance of digital ethical literacy as a new competency in the modern academic ecosystem, which should be systematically instilled through training, written guidelines, and consistent oversight.

Based on these findings, this study concludes that the use of AI in academic writing should be directed towards ethical, proportional, and reflective usage patterns. AI should be positioned as a cognitive partner, rather than a substitute for the thinking process. For future development, long-term empirical research is essential to measure the impact of AI usage on the development of students' writing and critical thinking skills more comprehensively. Furthermore, studies involving the perspectives of lecturers, senior researchers, and policymakers will enrich the understanding of how AI should be responsibly integrated into the academic environment.

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**APPENDIX****Table 1 : Literature Review**

No	References / Articles	Main theme / Relevance
1	Firdaus, J. A. (2025). Ketergantungan Penggunaan Kecerdasan Buatan (AI) pada Tugas Akademik Mahasiswa — Jurnal Didaktika.	Measuring students' dependence on AI in academic tasks, including its impact on critical and creative thinking.
2	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.	Examining the level of student dependence on AI in completing university assignments, as well as the consequences for creativity and thinking skills.
3	Reva, R., Risqy, & Haliq, A. (2025). Integrasi AI dalam Penulisan Karya Ilmiah dan Dampaknya terhadap Kemampuan Berpikir Kritis — Pendas : Jurnal Ilmiah Pendidikan Dasar.	Discussing the utilization of AI (including ChatGPT) in academic writing, as well as its impact on the quality of ideas and critical thinking skills.
4	Syahriani, N., Winarti, & Gongma Sari Siagian (2025). Artificial Intelligence (AI) dalam Kepenulisan Ilmiah: Manfaat dan Tantangan Penggunaan Tools Parafrase — Pendas : Jurnal Ilmiah Pendidikan Dasar.	Focus on the utilization of AI tools (such as paraphrasing) in academic writing; highlighting efficiency but also the risks of meaning distortion and dependency.
5	Trends in automated writing evaluation systems research for teaching, learning, and assessment: A bibliometric analysis — Barrot, J. S. (2023).	A bibliometric study on Automated Writing Evaluation (AWE) indicates an increase in the use of automated writing assessment systems, suggesting that many authors and writing instructors are adopting AI as a writing aid, which raises the possibility of dependency.
6	Academic writing in the age of AI: Comparing the reliability of ChatGPT and Bard with Scopus and Web of Science — Garg, S., Ahmad, A., & Madsen, D.Ø. (2024)	This article compares the reliability of output from AI models (such as ChatGPT, Bard) with traditional academic databases and concludes that AI cannot yet be fully relied upon for academic writing. These findings are relevant as they highlight the risks of relying on AI for academic tasks.



7	Using artificial intelligence in academic writing and research (M. Khalifa et al., 2024)	AI assists in six areas of academic writing: idea generation, content structuring, literature review, data management, editing, and ethical compliance. However, the authors emphasize the necessity of ethical and careful integration.
8	Anwari, M. F., & Retnaningsih, W. (2025). Persepsi Penggunaan Kecerdasan Buatan untuk Meningkatkan Keterampilan Menulis Akademik Bahasa Inggris — Eloquence : Journal of Foreign Language.	A qualitative study on English language students found that while AI is helpful, there are concerns regarding overdependence, ethics, and originality.
9	Septri Rahayu (2024). Pemanfaatan Artificial Intelligence (AI) dalam Penulisan Artikel Ilmiah — Pitnas (tinjauan literatur).	Reviewing the literature on the role of AI in scientific writing; noting the benefits as well as challenges such as dependency, validity, and ethics.
10	P. Purba (2025). Optimalisasi Penggunaan AI untuk Penyusunan Karya Tulis Ilmiah secara Efisien — Jurnal Pengabdian kepada Masyarakat Nusantara.	Based on the training on the use of AI (including ChatGPT) for students, it demonstrates the benefits of efficiency but also indicates the need for control to prevent excessive dependency.