

# Artificial Intelligence Misuse and Digital Ethics Among University Students

Ratin Wahyu Juni Atma<sup>1✉</sup>, M Zainul Hafizi<sup>2</sup>, Zihori Maulida<sup>3</sup>  
(1) Universiti Pendidikan Sultan Idris, Perak, Malaysia  
(2) Universitas Tanjungpura, Pontianak, Indonesia  
(3) Institut Pendidikan Nusantara Global, Lombok Tengah, Indonesia

✉ Corresponding author  
[ratinwahyu@gmail.com](mailto:ratinwahyu@gmail.com)

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## ABSTRACT

The development of Artificial Intelligence (AI) in higher education presents both opportunities and digital ethical challenges among university students. This study aims to analyze the forms of AI misuse and their implications for students' digital ethics within Indonesian online media spaces. The study employed a qualitative approach using a netnographic research design through observations of national media reports, digital documentation, and social media activities related to AI usage among university students. The findings indicate that AI misuse has developed in various forms, including AI-based plagiarism, academic dependency on automated technologies, digital identity manipulation through deepfake practices, the creation of manipulative content, and privacy violations. These phenomena are influenced by the accessibility of AI technology, limited AI literacy, weak digital ethical awareness, and the popularity-oriented culture of social media. The study also found that unethical AI usage potentially reduces academic integrity, critical thinking abilities, and the quality of students' social interactions within digital spaces. Therefore, strengthening AI literacy, digital ethics, and institutional policies is essential to promote more responsible technology usage in higher education environments. This study contributes to the growing discourse on AI ethics and digital culture among university students in the era of digital transformation.

*Perkembangan kecerdasan buatan (Artificial Intelligence/AI) dalam pendidikan tinggi menghadirkan peluang sekaligus tantangan etika digital di kalangan mahasiswa. Penelitian ini bertujuan untuk menganalisis bentuk penyalahgunaan AI serta implikasinya terhadap etika digital mahasiswa dalam ruang media daring di Indonesia. Penelitian menggunakan pendekatan kualitatif dengan jenis penelitian netnografi melalui observasi terhadap pemberitaan media nasional, dokumentasi digital, dan aktivitas media sosial terkait penggunaan AI di lingkungan mahasiswa. Hasil penelitian menunjukkan bahwa penyalahgunaan AI berkembang dalam berbagai bentuk, seperti plagiarisme berbasis AI, ketergantungan akademik terhadap teknologi otomatis, manipulasi identitas digital melalui praktik deepfake, hingga pembuatan konten manipulatif dan pelanggaran privasi. Fenomena tersebut dipengaruhi oleh kemudahan akses teknologi, rendahnya literasi AI, lemahnya kesadaran etika digital, serta budaya popularitas media sosial. Penelitian ini juga menemukan bahwa penggunaan AI secara tidak etis berpotensi menurunkan integritas akademik, kemampuan berpikir kritis, serta kualitas interaksi sosial mahasiswa dalam ruang digital. Oleh karena itu, penguatan literasi AI, etika digital, dan kebijakan institusional menjadi langkah penting untuk mendorong penggunaan teknologi yang lebih bertanggung jawab di lingkungan pendidikan tinggi.*

**Keywords:** artificial intelligence, deepfake, digital ethics

## Introduction

The rapid development of Artificial Intelligence (AI) in recent years has significantly transformed patterns of social interaction within digital spaces, including higher education environments in Indonesia. AI is no longer merely understood as a technical innovation but has evolved into an integral part of digital culture that influences how university students

learn, communicate, and produce information. Digital transformation in education has accelerated the adoption of generative AI through various platforms capable of automatically producing texts, images, audio, and videos. In Indonesia, this development has become increasingly visible following the expansion of digital learning practices and the massive use of social media among university students after the COVID-19 pandemic. These conditions indicate that technological advancement not only provides convenience in educational activities but also generates new ethical challenges concerning the responsible use of technology in academic and social life (Gómez-García et al., 2025; Lai et al., 2025).

Within the context of Indonesian higher education, the use of generative AI has rapidly increased alongside students' growing dependence on practical and efficient technologies to support academic activities. Various AI-based applications are now commonly utilized to assist in completing assignments, searching for references, creating presentations, and producing digital content on social media platforms. However, such developments have also generated a dual-use phenomenon in which AI functions both as a learning support tool and as a medium for academic misconduct. Pérez-Portabella et al. (2026) demonstrated that the use of generative AI potentially encourages academic dishonesty practices, including automated essay production, assignment manipulation, and unethical technology use in learning processes. Furthermore, Angeles et al. (2024) and Chiclayo Padilla et al. (2026) highlighted increasing concerns regarding the validity of AI detection systems and the risk of misclassifying original student work as AI-generated content. This phenomenon has become a serious concern because it may affect academic integrity and the quality of students' digital ethics within Indonesian higher education institutions.

One form of AI misuse increasingly found within students' digital spaces is the use of deepfake technology. This technology enables the manipulation of faces, voices, and identities through AI systems, resulting in visual representations that appear highly realistic and difficult to distinguish from authentic conditions. In the Indonesian context, deepfake practices are increasingly visible across social media platforms such as TikTok, Instagram, and other video-sharing applications widely used by university students. This phenomenon has developed not only as a form of digital entertainment and viral culture but also as a source of ethical concerns related to privacy, consent, defamation, and the dissemination of manipulative information within digital spaces. As digital natives, university students are particularly vulnerable to the normalization of digital content manipulation due to their intensive use of social media and limited awareness regarding the ethical consequences of such technologies. Therefore, deepfake practices should not merely be understood as visual technological innovations but also as digital cultural issues closely related to ethics and social responsibility in the AI era (Sanusi et al., 2026; Lund et al., 2025).

Attention toward ethical AI usage in higher education environments has increasingly emerged in both international and national studies. Guillén-Yparrea and Hernández-Rodríguez (2024) found that several higher education institutions have begun implementing ethical guidelines and AI detection systems to regulate technology use in academic activities, although their implementation remains inconsistent. From a theoretical perspective, several studies have utilized the Multidimensional Ethics Scale (MES) to measure students' ethical judgments regarding AI usage (Pérez-Portabella et al., 2026), while Baytiyeh et al. (2026) developed the Community of Inquiry (CoI) framework to integrate social, technological, and ethical dimensions within AI-based learning environments. Additionally, Gómez-García et al. (2025) employed normative ethics theory to explain issues related to transparency, fairness,

and academic integrity in AI usage, whereas Mulaudzi and Hamilton (2025) applied the Technology Acceptance Model (TAM) to examine AI acceptance among students and educators. These approaches indicate that studies concerning AI ethics have become increasingly multidisciplinary and highly relevant within the context of digital educational transformation.

Nevertheless, research concerning AI misuse and digital ethics among university students still presents several significant research gaps. Hegazy et al. (2024) and Torres-Gastelú et al. (2025) demonstrated that studies focusing on strategies for improving AI ethical literacy and responsible AI training remain relatively limited. Moreover, Martínez-Requejo et al. (2025) emphasized the weakness of AI governance policies within higher education institutions, while Mena Guacas et al. (2026) revealed that equal access to AI technology in education has not yet received sufficient scholarly attention. Longitudinal studies examining behavioral changes among students in relation to AI usage also remain scarce (Gouveia et al., 2023; Castelló-Sirvent et al., 2024). In addition, Abubakar et al. (2025) argued that the psychological impacts of AI dependency on students' critical thinking abilities have not been adequately explored. These conditions demonstrate that AI development within higher education continues to raise various academic and ethical challenges requiring further investigation, particularly within the Indonesian higher education context.

Beyond issues of academic integrity, emerging concerns also involve algorithmic bias, data privacy, digital citizenship, and unequal access to technology that potentially widen educational disparities. Kumar et al. (2025) demonstrated that algorithmic bias and unequal technological access may affect learning quality and create digital inequality among students. Meanwhile, Lund et al. (2025) and Sanusi et al. (2026) emphasized the importance of strengthening digital citizenship to encourage responsible AI usage in higher education environments. In Indonesia, these challenges become increasingly significant due to the extensive use of social media among young people, which is often not accompanied by adequate digital literacy and technological ethics education. Therefore, numerous studies recommend the development of AI ethical guidelines, the strengthening of institutional policies, and the integration of AI ethics education into higher education curricula as efforts to promote digital literacy and more ethical, responsible technology use (Portales-Pairazaman et al., 2025).

Based on these issues, this study aims to analyze the forms of artificial intelligence misuse through deepfake culture among university students and to examine its implications for digital ethics within Indonesian online media spaces. This study employs a netnographic approach to understand student digital culture phenomena through observations of national media reports, digital documentation, and online interactions related to AI usage. This research is important because AI development not only provides innovation within educational contexts but also creates new ethical challenges that may influence digital behavior, academic integrity, and the quality of students' social interactions in the era of digital transformation.

## Methods

This study employed a qualitative approach using a netnographic research design to understand the phenomenon of artificial intelligence misuse and digital ethics among university students within online media spaces. The netnographic approach was selected because the study focused on digital activities, interactions, and cultures emerging through

online platforms, particularly concerning deepfake practices and the use of generative AI among students. Netnography is considered an extension of ethnographic methodology adapted to digital communities and online cultures by positioning the internet as a social space that can be systematically observed (Kozinets, 2020). This approach was chosen because the study did not involve direct field observations but instead relied on examining digital activities represented through national media reports, social media platforms, and online documentation related to AI misuse in Indonesian higher education environments. Therefore, this method enabled the researchers to interpret and understand student digital culture phenomena contextually and comprehensively within virtual spaces.

The research data consisted of both primary and secondary sources. Primary data were obtained from national media reports, social media posts, online comments, and digital documentation related to AI misuse and deepfake culture among university students. Meanwhile, secondary data were collected from scholarly articles, books, research reports, and policy documents relevant to digital ethics and AI usage in higher education. Data collection techniques included online observation, digital documentation, and literature review. The collected data were analyzed using thematic analysis through several stages, including data reduction, theme classification, meaning interpretation, and systematic conclusion drawing (Braun & Clarke, 2006). To ensure data validity, this study applied source triangulation and reference checking to maintain the consistency and credibility of information obtained from various digital platforms.

## **Result**

### **Forms of Artificial Intelligence Misuse Among University Students**

The development of generative artificial intelligence within higher education environments has significantly transformed patterns of digital technology use among university students. Based on observations of national media reports and various online activities, AI misuse among students appears not only in the form of digital content manipulation but also in practices involving violations of academic integrity. Various AI-based applications such as ChatGPT are increasingly utilized by students to complete assignments, generate essays, answer examination questions, and produce programming codes automatically without undergoing sufficient analytical and comprehension processes. This condition indicates that some students no longer use AI merely as a learning support tool but rather as a substitute for the entire academic thinking process. Consequently, students tend to develop dependency on instant technologies, potentially reducing their critical thinking abilities, creativity, and capacity to construct independent scientific arguments.

In addition to academic dependency, AI misuse is also reflected in disguised plagiarism practices through the use of content entirely generated by artificial intelligence systems. Students frequently copy AI-generated outputs without conducting verification processes, developing ideas independently, or checking the validity of the information used. In several cases, generative AI systems produce fabricated references and false citations, commonly referred to as hallucinations, which students nevertheless include in their bibliographies without proper academic verification. This phenomenon demonstrates a shift in the meaning of academic honesty within higher education because technology is increasingly used to obtain instant results without intellectual engagement, which should constitute the core of learning processes. If such conditions continue to develop, unethical AI usage may potentially reduce the quality of university graduates because students lose valuable learning

experiences in understanding concepts, analyzing problems, and developing reflective thinking abilities.

On the other hand, AI misuse has also expanded into ethical violations, privacy breaches, and digital criminal activities through deepfake technologies and face or voice manipulation software. According to various national media reports, such digital manipulation practices have become the focus of several cyber-related cases within university environments, including incidents involving students from Diponegoro University, Universitas Udayana, and Universitas Tanjungpura. AI technologies have been used to edit photographs, videos, and voices without consent, and in several cases were exploited to create deepfake-based pornographic content resembling the identities of victims. Such practices are not only carried out for digital entertainment or online harassment but also function as tools for defamation and technology-based abuse. The dissemination of manipulative content of this nature potentially causes serious psychological impacts on victims, including shame, social pressure, anxiety, and long-term reputational damage within digital spaces. This phenomenon demonstrates that AI misuse among university students has evolved into an increasingly complex social, moral, and digital ethical issue in the era of technological transformation.

### **Deepfake Culture within Students' Digital Spaces**

The development of deepfake culture among university students cannot be separated from the increasing intensity of social media usage as the primary space for digital interaction among younger generations. Social media has evolved into a digital cultural arena that enables students not only to become consumers of information but also active content producers creating various forms of visual representation within online spaces. In this context, AI technology is utilized to produce content considered creative, entertaining, and highly capable of achieving virality. Various AI-based visual manipulation applications have become increasingly accessible through personal digital devices, allowing deepfake practices to develop as part of students' digital communication trends. This phenomenon indicates that contemporary student digital culture is increasingly influenced by social media popularity logic that encourages instant content production in order to gain public attention and social recognition within virtual environments.

The analysis of various media reports and students' digital activities demonstrates that deepfake practices are frequently perceived as a form of entertainment considered normal within contemporary internet culture. The manipulation of faces, voices, and videos is often viewed as part of digital creativity and social media humor without considering the ethical implications that may arise. In many cases, students tend to overlook issues related to privacy, consent, and individuals' digital identity rights as targets of manipulation. This situation illustrates the normalization of digital manipulation practices within students' online communication culture. Consequently, the boundary between digital entertainment and ethical violations becomes increasingly blurred because manipulative content is often accepted as reasonable as long as it successfully attracts the attention of other social media users.

In addition to being influenced by digital entertainment culture, the spread of deepfake practices is also reinforced by social media algorithms that tend to prioritize viral and sensational content. AI-based manipulative content more easily gains interactions such as views, comments, and resharing because it is perceived as attention-grabbing material. Such conditions indirectly encourage students to continuously produce similar content in order to

enhance their digital presence. In several cases, deepfake practices have even evolved into instruments of cyberbullying, defamation, and technology-based harassment against certain individuals. This phenomenon demonstrates that deepfake culture is not merely an issue of visual technological advancement but has developed into part of the broader dynamics of student digital culture that influences patterns of social interaction, communication behavior, and ethical quality within virtual spaces.

### **Factors Encouraging AI Misuse**

The accessibility of artificial intelligence technology has become one of the primary factors encouraging the increasing misuse of AI among university students. Various generative AI-based applications are currently accessible either free of charge or at relatively low costs through personal digital devices. Students no longer require advanced technical skills to generate automated texts, visual manipulations, or AI-based audio engineering because most applications have been designed with simple and instant user systems. Such conditions make AI technology increasingly easy to use across academic and social media activities without adequate usage control. In certain situations, this convenience encourages students to use AI excessively in order to obtain rapid results without considering ethical aspects or the social consequences of technology usage.

In addition to technological accessibility, limited digital ethical literacy also represents an important factor influencing the expansion of AI misuse practices among university students. Many students possess advanced digital technological abilities that are not accompanied by sufficient understanding of moral responsibility within virtual spaces. Awareness regarding digital privacy, identity rights, data security, and the impacts of disseminating manipulative content remains relatively low among young social media users. Consequently, practices such as deepfake manipulation, AI-based plagiarism, and unauthorized content distribution are frequently perceived as ordinary activities within internet culture. This situation demonstrates that the development of students' technological competencies has not been fully accompanied by the strengthening of digital ethical awareness and social responsibility in technology usage.

Another factor reinforcing AI misuse is the culture of popularity and the need for social recognition within digital media environments. Students are increasingly motivated to create content capable of attracting public attention through views, comments, and social media interactions. Within highly competitive digital cultures, AI-based content is often perceived as more attractive, unique, and more likely to become viral compared to ordinary content. As a result, AI technology is increasingly utilized as a tool for building digital existence and enhancing popularity within online spaces. In several cases, the desire for social validation causes students to ignore ethical boundaries in technology usage merely to gain public attention. This phenomenon illustrates that AI misuse is influenced not only by technological advancement but also closely related to the dynamics of digital culture and social interaction patterns among younger generations within online media environments.

### **Impacts on Students' Digital Ethics**

The misuse of artificial intelligence through deepfake practices, AI-based plagiarism, and digital content manipulation has generated significant impacts on the development of students' digital ethics. One of the most visible impacts is the declining awareness among students regarding the importance of privacy, consent, and responsibility in the use of digital technologies. The manipulation of individuals' faces, voices, and identities without permission

reflects a shift in moral values within students' digital interactions. Technologies that should ideally support creativity, innovation, and learning instead possess the potential to become instruments for violating the digital rights of others. This situation demonstrates that the advancement of AI technology has not been fully accompanied by the development of ethical awareness and social responsibility among its users.

Within academic contexts, AI misuse also affects students' academic integrity and learning quality. The use of generative AI to complete assignments automatically causes students to lose valuable learning experiences in understanding concepts, conducting analysis, and constructing scientific arguments independently. Dependency on instant technology potentially reduces students' critical thinking abilities, creativity, and intellectual reflection within higher education processes. Furthermore, AI-based plagiarism practices blur the boundaries between original work and automated production, creating new challenges for universities in maintaining academic quality and learning evaluation systems. If such conditions continue to develop without supervision and the strengthening of digital ethics, the quality of university graduates may significantly decline.

In addition to academic consequences, AI misuse also influences the quality of students' social interactions within digital spaces. The dissemination of manipulative content, deepfake-based cyberbullying, and the creation of digitally manipulated pornographic content potentially cause psychological distress, shame, social anxiety, and long-term reputational damage to victims. In several cases, victims of digital manipulation experience difficulties in rebuilding their social identities due to the widespread circulation of digital traces across online media platforms. These conditions demonstrate that AI misuse is not merely a technological issue but has evolved into a broader social and moral problem affecting the quality of interpersonal relationships within digital culture. Therefore, strengthening AI literacy, digital ethics, and digital citizenship education becomes essential in promoting more responsible technology usage among university students.

## Discussion

The development of generative artificial intelligence within higher education demonstrates that digital technology has become an inseparable part of students' academic activities. The emergence of AI platforms such as ChatGPT provides convenience in information searching, idea generation, and the completion of academic tasks more quickly and efficiently. In certain contexts, AI is perceived as capable of enhancing students' learning productivity through instant and flexible informational support. Alonso-Muñoz and Casero-Ripollés (2026) and Pattier (2026) demonstrated that the use of generative AI among university students has increased significantly and has become an essential component of learning processes within higher education institutions. Nevertheless, these developments also indicate that AI usage does not always align with the strengthening of digital ethics and academic integrity among students. This phenomenon demonstrates that digital transformation in higher education not only introduces educational innovation but also creates increasingly complex moral and ethical challenges within students' academic lives.

The findings of this study reveal that AI misuse among university students manifests in various forms, including AI-based plagiarism, academic dependency on automated technologies, and digital identity manipulation through deepfake practices. These conditions demonstrate a shift in students' learning patterns from reflective educational processes toward an instant culture heavily dependent on technological automation. The use of AI to

complete assignments entirely without the involvement of critical thinking processes indicates that some students increasingly position technology as a replacement for intellectual capability rather than as a learning support tool. The findings of this study are reinforced by the research of Castelló-Sirvent et al. (2024) and Alsalmi et al. (2025), who emphasized that the increasing use of generative AI within education has generated serious concerns regarding academic integrity, particularly in relation to plagiarism, assignment manipulation, and students' difficulties in distinguishing ethical from unethical AI usage. These conditions indicate that AI development has transformed how students understand learning processes, academic honesty, and intellectual responsibility within higher education.

Beyond academic issues, deepfake practices and digital manipulation indicate that AI misuse has evolved into part of students' social media culture. Within contemporary digital culture, students are not only technology users but also active content producers constructing social identities through virtual spaces. Social media encourages the formation of popularity-oriented cultures that prioritize virality, public attention, and digital existence. In such situations, AI technologies are utilized to create content considered creative, entertaining, and capable of attracting internet users' attention. However, visual manipulation practices through deepfake technologies also demonstrate the normalization of privacy violations and digital identity manipulation within students' communication cultures. This phenomenon indicates that the boundaries between digital entertainment and ethical violations have become increasingly blurred due to the dominance of social media cultures that position digital popularity as the primary orientation of online interaction.

The misuse of AI through deepfake practices also demonstrates how technological development may influence the quality of students' social relationships within digital spaces. Manipulating individuals' faces, voices, and identities without consent not only violates personal privacy but also potentially triggers cyberbullying, defamation, and psychological pressure on victims. In several cases, deepfake technologies have even been utilized to create digitally manipulated pornographic content resembling the identities of certain individuals. These conditions indicate that AI is no longer merely used as a tool for entertainment or visual creativity but has evolved into an instrument capable of facilitating harassment and digital violence. This phenomenon demonstrates that technological advancement without the strengthening of digital ethics potentially creates unsafe digital spaces for students and other social media users.

The findings also indicate that limited AI literacy and digital ethical awareness constitute major factors contributing to the increasing misuse of technology within higher education environments. Many students possess advanced digital technological skills without adequate understanding of the moral and social implications of AI usage. Qoussini et al. (2026) and Melchior and Farinosi (2026) demonstrated that levels of AI literacy and ethical awareness among students remain uneven, with senior students and those from certain academic disciplines tending to possess better understanding compared to others. These conditions indicate that technological competence is not always accompanied by the development of digital ethical awareness. Consequently, students tend to use AI pragmatically without considering its long-term impacts on academic quality, social relationships, and moral responsibility within digital spaces.

In addition to limited ethical awareness, another factor reinforcing AI misuse is the weakness of institutional governance and policy communication concerning AI technology usage within universities. Guillén-Yparrea and Hernández-Rodríguez (2024) explained that

many higher education institutions still lack clear and adaptive guidelines regarding AI usage in response to rapid technological development. In many cases, students use AI without understanding the boundaries of acceptable usage within academic activities. Such conditions create ambiguity between AI usage as a learning support tool and AI usage as a violation of academic integrity. Furthermore, insufficient supervision and education regarding AI ethics cause students to establish standards for technology usage based on social media culture and everyday digital practices rather than on principles of responsible academic ethics.

On the other hand, the findings also demonstrate that students' perceptions of AI are inherently ambivalent. Some students perceive AI as a technology capable of improving learning efficiency, assisting idea generation, and facilitating academic task completion. However, others express concerns regarding the negative impacts of AI on data privacy, algorithmic bias, and the decline of critical thinking abilities resulting from excessive technological dependency. The findings of this study are reinforced by the research of Efthymiou et al. (2025) and Angeles et al. (2024), which demonstrated that the use of generative AI among university students creates dilemmas between technological benefits and accompanying ethical risks. These conditions indicate that AI development within higher education requires a balance between technological innovation and the strengthening of moral responsibility so that students become not only competent technology users but also individuals possessing ethical awareness in utilizing digital technologies responsibly.

Based on these findings, strengthening AI literacy, digital ethics, and digital citizenship becomes an essential strategy for addressing the increasing misuse of AI among university students. Higher education institutions need to develop clear and adaptive AI usage policies aligned with the dynamics of technological advancement within education. The findings of this study are reinforced by the research of Mulaudzi and Hamilton (2025) and Hua and Cunningham (2026), who emphasized the importance of integrating AI ethics education and critical thinking reinforcement into higher education curricula so that students may understand the academic, social, and moral dimensions of AI technology usage. Furthermore, Dogaru et al. (2025) highlighted that strengthening digital citizenship is necessary for fostering more responsible digital behavior within virtual environments. Therefore, AI usage within higher education should not merely focus on improving academic efficiency but also on developing ethical, critical, and responsible digital cultures among university students.

## Conclusion

The development of generative artificial intelligence within higher education has significantly transformed learning patterns, digital interactions, and students' academic culture. This study demonstrates that AI misuse among university students is not limited to plagiarism practices and academic dependency on automated technologies but also includes digital identity manipulation through deepfake practices, privacy violations, and the dissemination of AI-based manipulative content. These phenomena indicate that the use of AI in higher education creates a dilemma between technological innovation and digital ethical challenges. Limited AI literacy, weak digital ethical awareness, social media popularity culture, and the lack of effective institutional policies regarding AI usage have become the primary factors contributing to the increasing misuse of technology among university students. Therefore, AI usage within higher education should not merely be viewed as a technological issue but also as a moral, social, and digital cultural issue requiring continuous educational and regulatory approaches.

Based on these findings, this study emphasizes the importance of strengthening AI literacy, digital ethics, and digital citizenship within higher education environments as strategic efforts to promote more responsible technology usage. Higher education institutions need to develop clear, adaptive, and relevant AI usage policies aligned with the dynamics of digital technological development, including the integration of AI ethics education and critical thinking reinforcement into academic curricula. The findings of this study may be applied as a foundation for developing digital literacy programs, AI ethical guidelines, and technology-based academic supervision systems within universities. Furthermore, this study also opens opportunities for future research concerning the long-term impacts of AI usage on students' academic behavior, digital psychological well-being, ethical decision-making processes, and the transformation of learning cultures among future digital generations.

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