Ethics of Using Artificial Intelligence in Learning: Perception of College Students in the Islamic Education Study Program

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Abstract

Artificial intelligence (AI) is a key component of digital literacy systems. AI is a significant innovation in education that has the potential to improve learning and educational administration. Based on observations made at STIT Al-Khairiyah Cilegon, Banten, many students have begun using AI to assist with various academic tasks, including generating ideas and writing essays. Although its use is becoming increasingly popular, AI in academic settings remains highly controversial, raising serious concerns regarding academic integrity and the potential for misconduct. This research aims to explore the perceptions students in the Islamic education programs regarding ethical aspects in the use of AI such as trustworthiness, honesty, and the promotion of common good. A phenomenological technique combined with descriptive qualitative study was employed, involving 85 college students as respondents to achieve the intended research objectives. The methods of interviewing, and the Miles, Huberman, and Saldaña models for data analysis, data condensation, data display, and conclusion drawing are all used in data collection. Based on the study findings and discussions, AI-based technology makes tasks more efficient and helps students comprehend their study materials more fully. College students with strong religious backgrounds exhibit a more critical attitude toward the use of AI, putting forth high ethical considerations to ensure that the use of AI always stays in line with Islamic principles with a combination of structured academic training and religious feeding. The ethich of using AI in learning are focused on three things, namely data privacy security, plagiarism avoidance, and responsibility. This study offers a theoretical addition and offers insightful information about the role of AI in Islamic education.

Keywords: Artifical Intelligence; Educational Innovation; Islamic Education; Learning Quality

Abstrak

Kecerdasan buatan (AI) ialah sebuah komponen kunci dari sistem literasi digital. AI adalah inovasi utama di bidang pendidikan yang memiliki potensi secara signifikan meningkatkan pembelajaran, dan juga administrasi pendidikan. Berlandaskan pengamatan yang dilakukan di STIT Al-Khairiyah Cilegon, Banten, banyak mahasiswa mulai menggunakan AI untuk membantu berbagai tugas akademik, termasuk menghasilkan ide dan menulis esai. Meskipun semakin

populer, penggunaan AI dalam lingkungan akademik tetap sangat kontroversial, menimbulkan kekhawatiran serius tentang integritas akademik dan potensi kecurangan. Studi ini bertujuan untuk mengkaji persepsi mahasiswa Program Pendidikan Agama Islam mengenai aspek-aspek etis dalam penggunaan AI seperti amanah, kejujuran, dan kemaslahatan. Teknik fenomenologis dipadukan dengan penelitian kualitatif deskriptif dengan 85 mahasiswa sebagai responden dalam rangka untuk mencapai tujuan yang telah ditentukan. Metode wawancara, dan model Miles, Huberman, and Saldaña untuk analisis data, kondensasi data, tampilan data, serta penarikan kesimpulan semuanya digunakan dalam pengumpulan data. Berdasarkan temuan penelitian dan diskusi, teknologi berbasis AI bisa membuat tugas lebih efisien dan membantu mahasiswa memahami materi pelajaran mereka dengan lebih baik. Mahasiswa dengan latar belakang agama yang kuat menunjukkan sikap yang lebih kritis terhadap penggunaan AI, mengedepankan pertimbangan etika yang tinggi untuk memastikan bahwa penggunaan AI selalu sejalan dengan prinsip-prinsip Islam dengan kombinasi pelatihan akademis yang terstruktur dan penguatan agama. Etika penggunaan AI dalam pembelajaran difokuskan pada tiga aspek, yaitu privasi keamanan data, penghindaran plagiarisme, dan tanggung jawab. Riset ini menawarkan tambahan teoritis dan memberikan informasi yang mendalam tentang peran AI dalam pendidikan Islam.

Kata kunci : Kecerdasan Buatan; Inovasi Pendidikan; Pendidikan Islam; Kualitas Pembelajaran.

I. Introduction

In the increasingly advanced digital era, advances in Artificial Intelligence (AI) have created new opportunities across several domains, including education. In various countries, this technology has been used to improve access to education, teaching methods, and accelerate the learning process (Vodenko & Lyausheva, 2020). AI has the potential to transform teaching and learning by offering more adaptive, personalized, and efficient solutions. The learning revolution triggered by these technological advancements has not only changed the way we access and process information but also influenced teaching and learning methods worldwide, including in Islamic education (Zaharah et al., 2024). AI integration into Islamic education can support the dissemination of religious education resources, the introduction of interactive teaching techniques, and the expansion of access to Islamic literature worldwide. This tradition prioritizes a comprehensive approach to help students develop their spirituality and character alongside their academic knowledge (Rif'ah et al., 2024). The manner in which Islamic education is provided and received will undoubtedly change as a result of the introduction of cutting-edge technologies such as artificial intelligence (AI) (Djazilan et al., 2024).

One noteworthy development is the introduction of AI into Islamic colleges, which offers students opportunities for more personalized instruction and increased participation. Suhendi et al. (2024) explain how artificial intelligence (AI) helps college students with their homework preparation and customized feedback, improving their learning process and facilitating language learning. This supports the results of studies by Rahman & Afandi (2024) and Syukur et al. (2024): the flexibility and timeliness of AI

support contribute positively to college students' academic outcomes. The advantages of applying AI are further supported by Kasman & Madjid (2024); Suwendi et al. (2025), AI-powered flipped learning greatly improves college students' performance and also motivation. But even with these obvious advantages, it is important to recognize the restrictions. Hussen (2024) finds problems the limited capacity of AI to comprehend intricate inquiries and the ensuing absence of human engagement may impede the richness of educational experiences. However, the ethical use of ChatGPT and other AI techniques requires a rigorous assessment of their results. Fihris et al. (2024) warn that college students need to be able to determine the veracity and correctness of information produced by AI, highlighting the need for a thorough empirical investigation of the tools' substantial influence on academic abilities. As Zadeh (2023) emphasizes, although AI has the potential to improve individual learning, educational frameworks should be in place to ensure its safe application. To ensure that the use of such tools does not erode critical thinking and creativity, lecturers are urged to help college students develop a vital grasp of AI's potential and limitations. Students should have a thorough understanding of the tool to use it for their learning, according to a study by Sumadiyah et al. (2025).

The adoption of ChatGPT within Islamic education, particularly in localized settings such as STIT Al-Khairiyah Cilegon, Banten, presents a valuable field of inquiry given the complex interplay of ethical, religious, and cultural factors. Initial discussions on the use of artificial intelligence (AI) in Islamic education indicate that AI technologies can enrich personalized learning and help college students achieve their academic goals (Hakim et al., 2024). Efrizal (2024) explains that AI can offer customized learning experiences that align with students' diverse linguistic backgrounds in Islamic educational settings, enabling personalized feedback that can significantly enhance their academic performance. Ethical issues related to the use of AI at STIT Al-Khairiyah Cilegon, such as maintaining academic integrity and ensuring the authenticity of AI-generated work, are relevant in Islamic educational settings. and Mutmainah et al. (2024) note that perceptions of AI ethical use vary widely, with some college students viewing it as an efficient learning tool, while others worry about its potential for misuse. These concerns are even more pronounced in Islamic institutions, where ethical and religious principles strongly influence educational practices. and Nun et al. (2025) point out that many students emphasize the need for human supervision to ensure that AI-generated content aligns with Islamic values, reflecting a broader cultural commitment to ethical responsibility.

Samsudin (2025) claims that AI can offer customized learning experiences aligned with the diverse language backgrounds of college students in Islamic schools, enabling personalized feedback that could significantly enhance their academic performance. Understanding how religious values, such as academic integrity and critical thinking, shape college students' views of AI-generated content is essential, especially as they

engage with technology with varying degrees of digital literacy and familiarity. Nun et al. (2025) found that several factors, such as the need for culturally sensitive implementation strategies, may affect college students' receptivity to AI tools. A deep comprehension of the ethical ramifications of AI use is necessary for its successful adoption in this setting. Islamic principles impose stringent rules on academic integrity, which makes people wary of material produced by artificial intelligence. the significance of educating and training college students in Islamic educational environments so they can develop the critical thinking abilities needed to assess the data supplied by artificial intelligence. Since previous research has chiefly focused on larger higher education contexts, there is an urgent need for studies that specifically examine these dynamics within Islamic education. According to studies by Saiddaen (2024), using AI technologies could further enhance college students' participation, provided that these technologies align with cultural values and Islamic standards.

Regarding learning, the use of AI for educators will help improve their professionalism and creativity (Al-Zahrani, 2024; Gayed, 2025). For college students, the use of AI will increase the efficiency and effectiveness of learning, influencing critical thinking and creativity, and affect learning independence (Sun & Zhou, 2024; Vieriu & Petrea, 2025). The use of AI in Islamic religious education, commonly known as PAI learning, can help educators create learning modules and conduct summative and formative evaluations (Rahman & Afandi, 2024). For students, the use of AI in PAI learning can improve writing quality and digital literacy, supporting concept learning, research, and the identification of additional references, as well as the development of soft skills (Samsudin, 2025). The various benefits of using AI in PAI learning make it essential to discuss in more depth. The use of AI must still pay attention to the ethical aspects in its use so it does not violate applicable norms or rules. AI can assist virtual communities, analyze sacred texts, and offer customized religious learning experiences, increasing access to religious education. But issues like misunderstandings, reliance, privacy issues, and moral conundrums show how difficult it is to apply AI in an area as delicate and morally oriented as Islamic teaching (Adiyono et al., 2025).

The ethical aspects of AI use pose challenges for education, including privacy, dependency, transparency, fairness, and a responsible attitude. For example, responsible ethics related to the use of AI in learning can be implemented by providing explicit, concrete references to the material or learning materials generated by AI, so that the material can be accounted for. Ethics is the urgency to ensure that AI is used wisely. The ethics of using AI philosophically refer to the ethics of digital communication, so the use of AI must also use appropriate language. Another reason ethics is fundamental to the use of AI is the potential for bias in the information provided, so users must be cautious when sorting through information and using AI wisely. Given these things, ethics is, of course, an essential foundation for the use of AI, so that the benefits derived from AI do not violate

existing rules and culture, including in the education and learning environment, especially in the university environment. Several previous studies have discussed the use of AI in learning. A survey by Balalle & Pannilage (2025) explained that the use of AI undoubtedly improves writing effectiveness and academic content accuracy, but it also compromises academic integrity. On the other hand, a study by Mumtaz et al. (2025) explained that the use of AI is very relevant in higher education, so the ethics of using AI in the academic context need to be considered. A study by Shahzad et al. (2024) found that students' perceptions indicate that the use of AI and social media is significantly associated with academic performance and mental well-being. Meanwhile, research by Suardewa et al. (2024) explained that AI reviewed from a college student and lecturer perspective has a positive effect on self-efficacy, writing ability, and understanding of academic integrity.

Few studies currently examine the complex interactions between technology and the fundamentals of Islamic education, instead focusing on the technical aspects of AI. Previous studies have not found any research specifically discussing the ethical issues of using AI in learning, despite its frequent mention, especially among college students who use AI. In fact, as mentioned earlier, the concept of ethics is critical and necessary to apply. This research aims to explore the ethics of using AI in learning, including data privacy and security, plagiarism prevention, and responsibility, based on the perceptions of PAI college students at STIT Al-Khairiyah Cilegon, Banten. The uniqueness of this study lies in its emphasis on aligning AI's transformative potential with the core objectives of Islamic education and in providing stakeholders with tactical advice on balancing technological advancement with conventional educational roles. Many stakeholders, including educators, legislators, and tech developers, find this research to be significant. By offering a fair analysis of how technology can improve educational outcomes within the framework of Islamic principles, this study contributes to the ongoing conversation about artificial intelligence and education.

II. Research Method

This study employed a qualitative case study design to examine the resource person's perception of the ethics of using AI, based on experiences and events. This study used a phenomenological approach, so the data are presented as arguments, explanations, and processes identified in the local context, understood descriptively in terms of the subject being studied (Creswell & Creswell, 2018). This methodological decision was especially beneficial, as it enabled a thorough investigation of college students' perspectives, experiences, and attitudes within a particular educational setting, providing a nuanced understanding of intricate phenomena in an academic setting with a religious foundation (Suciati et al., 2022). This study was conducted for two months, from January to February 2025, in the Islamic education study program at STIT Al-Khairiyah Cilegon, Banten, an

Islamic institution of higher learning distinguished by its unique educational and cultural surroundings. This site was carefully chosen since it offered a wealth of background for analyzing how college students use technology to enhance their learning. Based on their level of involvement with the tool and willingness to participate, informants were selected from Islamic education study programs, and the study's participants were college students who actively used AI.

In-depth interviews, document analysis, and participant observation, all acknowledged as essential elements of qualitative research methodologies, were used to collect data. Semi-structured interviewing techniques allowed for flexibility and depth in the information collected, thereby enhancing the richness of the qualitative data. In accordance with best practices that prioritize openness and rigor, informants consented to the interviews being recorded and transcribed for in-depth analysis. Additionally, college students' experiences with AI during their learning activities were documented through observation notes, an established qualitative research method for capturing contextual nuances and real-time data (Vieriu & Petrea, 2025). The informant as data resources in this study are active students of the Islamic education study program in semesters 4 and 6 who have used AI in learning at STIT Al-Khairiyah Cilegon, Banten. The phenomenon will be demonstrated by the informant based on interviews with researchers and supported by a survey of 85 respondents. The data were analyzed using the three-stage concept analysis by Miles et al. (2018), namely data condensation, data display, and conclusion drawing. By using triangulation procedures, peer conversations, and member checking, in which interim results were validated with informants to ensure alignment with their experiences, the validity of the findings was further maintained, thereby increasing the reliability of the research.

III. Result and Discussion
A. The Artificial Intelligence Phenomenon in Education

Intelligence, according to Sajja et al. (2023), is the ability to compute to achieve goals in the world. The purpose in question will be very general and broad, so it is not specific to one goal. Definition of artificial intelligence (AI) in accordance with the definition mentioned by Ocampo & Gozum (AI or artificial intelligence is often referred to through the mass media as a system capable of performing tasks that human intelligence should perform through the ability to learn or adapt. On the other hand, Muchlis (2025) defines AI as technology through a computer program that applies human skills such as learning, detecting, perceiving, and understanding language. AI has several types, i.e., knowledge representation, expert systems, computer reasoning, machine learning, artificial neural networks, natural language processing, pattern recognition, computer vision, robotics, and decision support systems. Although AI is quite reliable, it raises pros and cons, especially in education, because it can lead to academic cheating. AI can make it easier for

users to access information through conversation bubbles, but this can lead to fraud, such as plagiarism. Plagiarism is taking someone else's work or ideas without giving appropriate credit or citing sources. It can harm many parties, including the original author, readers, educational institutions, and AI users. Therefore, when creating assignments, articles, or scientific publications, AI users must adhere to academic ethics by adequately and explicitly citing, referencing, or noting the sources of information (Rahardyan et al., 2024).

The increasing use of AI by college students at STIT Al-Khairiyah Cilegon, Banten has created a notable phenomenon that raises important ethical considerations in the learning process. As AI tools become more accessible and integrated into academic tasks, college students are relying on them to generate ideas, draft assignments, and obtain quick explanations of complex topics. While these tools offer many benefits, their widespread adoption has brought attention to three key ethical issues, i.e., privacy and data security, plagiarism prevention, and responsible use. Concerns about privacy and data security arise because college students may unknowingly share personal information or academic content with AI platforms whose data handling practice they do not fully understand. This lack of awareness increases the risk of data misuse or unauthorized access (Alzamil et al., 2025; Xue et al., 2025). The ease with which AI can generate text highlights the challenge of preventing plagiarism. AI can produce complete essays or answers, making it difficult to distinguish between original college students' work and AI-generated content. This threatens academic integrity and reduces college student motivation to think critically and develop their own ideas (Livberber & Ayvaz, 2023; Odri & Yoon, 2023). The phenomenon underscores the importance of responsible use. College students must learn to use AI as a supportive learning tool rather than a substitute for their own effort. This involves verifying the accuracy of AI-generated information, especially in the context of Islamic studies, and ensuring that its use aligns with ethical values, such as honesty, accountability, and intellectual sincerity (Ciriello et al., 2025; Hutson, 2024).

The effectiveness and productivity of learning are two areas where artificial intelligence (AI) presents prospects in education. Additionally, AI can help students, instructors, and universities do jobs more quickly and efficiently. AI can be utilized for summaries, immediate data retrieval, and several other research tasks. AI can therefore save time and effort while improving the educational process. Next, in relation to the development of AI, (Atmini et al., 2024) outlined how such developments can be anticipated in advance, despite the concept of artificial intelligence being quite unexpected. But there are hazards and restrictions to using AI in education that should be taken into account. AI is limited in its comprehension, cannot fully replace creative effort, provides responses that aren't always correct, and can't distinguish between opinion and fact. Additionally, AI can help college students develop their critical thinking

and creativity while simplifying the manual research process (Odri & Yoon, 2023). Therefore, in addition to prioritizing academic ethics when creating assignments, papers, and scientific articles, AI users must also prioritize critical thinking, creativity, and teamwork to advance science effectively. Indeed, one of the advancements in artificial intelligence that could support research and education is AI. But it also brings up difficulties and moral dilemmas that must be resolved. Users of AI must use this technology responsibly and sensibly, keeping in mind the human qualities of creativity and academic integrity. AI is a tool that, when utilized properly, can increase the efficacy and quality of education rather than the ultimate objective (Kocak, 2024).

For college students and teachers, the utilization of AI in education, including Islamic education, offers numerous advantages. Using AI, lecturers can acquire more fascinating material to aid in their learning and enhance their pedagogical approaches. AI in Islamic education can provide instructors and college students with a dynamic and engaging educational experience (Suwendi et al., 2025). AI has a great deal of promise to improve efficacy and efficiency in Islamic education. Lecturers in Islamic education can use AI as a virtual teaching assistant. AI has the potential to significantly impact the field's teaching methodologies, curriculum design, and assessment techniques. AI has the potential to be a responsive chatbot that helps instructors create educational resources. With the development of artificial intelligence (AI), conventional lectures and demonstrations might no longer be helpful in delivering knowledge or supporting college students' learning. The best teaching strategies for technology-enabled learning must thus be actively and thoroughly investigated and implemented by educators (Samsudin, 2025).

B. The Use Artificial Intelligence in Learning

The use of Artificial Intelligence (AI) in the context of learning refers to the use of tools to support the learning process.

Based on interviews, students use AI as a trigger for ideas when writing papers, searching for references for assignments, summarizing, reviewing scientific articles, and searching for information related to questions from assigned tasks (Interview, January 2025).

Regarding the use of AI, the researcher also conducted a survey of 85 active students of Islamic Education Program from semesters 4 and 6 about the type of AI used in learning. This survey is semi-open, in that the researchers provide several closed-answer options but also an open-answer option if the respondent's answer is not available among the given options. The use of AI in learning, according to most respondents, can help provide resources and references from the needed and relevant materials to perform the task. Some respondents stated that the use of AI can stimulate knowledge, so that college students can elaborate on the material explored using AI, as well as become the basis for

thinking and determining topics for discussion. The use of AI can certainly support learning so that its possible to provide learning from various sources. In the context of PAI, learning using AI can be used to confirm material related to Islamic educational values, but still requires further verification by educators with adequate insights.

Based on the survey results conducted on 85 active PAI college students by the researcher, it is known that the majority of PAI college students in even Semester of 2025 at STIT Al-Khairiyah Cilegon use AI in learning. The use of ChatGPT as the most popular AI is due to the name AI which is the most familiar to college students, with a percentage of 50% of the number of respondents who use it. In addition, some college students stated that there were several lecturers who suggested using AI in learning to support the material and references provided by the lecturers. The second most widely used AI is Perplexity at 35% of the respondents. The third most used AI is Quillbot with a percentage of 15% of the total number of respondents. The use of AI in learning is considered normal thing, because it helps students in doing assignments, and searching for references related to learning. The existence of percentage of AI use can provide practical benefits, namely by holding further training related to the use of ChatGPT as the most widely used AI among college students.

In the context of the ethics of using AI, some college students use AI to generate entire paper or answer without contributing their own understanding. This reduces the development of critical thinking, originality, and academic skills. AI-generated texts are often submitted as college student work without proper acknowledgment. The practices violate academic integrity and weakens the culture of honesty and also independent learning expected at STIT Al-Khairiyah Cilegon. Many college students do not fully understand what constitutes ethical and unethical AI use. Some college students have access to advaned AI tools, and others do not create inequality and unfair advantages in completing assignments. Not all college students know how to use AI critically, verify accuracy, or evaluate the reliability of AL-generated information. This can lead to misinformation, shallow understanding, and misuse of academic references. AI misuse may hinder the ability of lecturer to accurately assess college students learning, making it difficult to measure actual skill development.

Results of Interview with Mr. Ahmad State:

The use of artificial intelligence (AI) in learning also has its own risks for students and the resulting work. Risks of using AI in learning for students (Interview, February 2025)

Supported by Mr. Azis' opinion regarding other risks that can cause dependence:

The use of AI features is very limited if used for free, and will require payment if you want to use its features more freely. Regarding the work produced, the use of AI risks being detected as a form of plagiarism. Therefore, personal insight is

needed to overcome this. These risks are very consistent with the literature study by Vieriu & Petrea (2025), which explains that the use of AI risks causing dependence and plagiarism in the creation of work due to laziness, deadlines, and based on the user's own desires (Interview, February 2025).

AI integration in Islamic education has important ramifications that should be carefully considered for the field's future growth. The way AI changes the way practical education is delivered while upholding Islamic principles is one of the most significant ramifications. AI-powered platforms have proven to be remarkably effective in personalizing educational experiences, especially when it comes to teaching Islamic ideals. These results are consistent with earlier studies showing AI's potential to personalize faith-based education and guarantee that students learn religious lessons that are pertinent to their setting (Rif'ah et al., 2024). Impact of AI on interactions between college students and lecturers needs to be carefully considered. The core function of lecturers in offering moral and spiritual advice should not be replaced by AI tools, notwithstanding their shown efficacy in assisting with the delivery of education. The technology works best when used in conjunction with conventional teaching techniques, assisting instructors in identifying college students who require extra assistance and offering data-driven insights for monitoring both character development and academic success. From a university standpoint, integrating AI can improve overall educational quality by providing significant administrative benefits. These advantages must be balanced against the possible risks of surveillance and data privacy violations that could inadvertently disadvantage particular groups of college students. To safeguard the welfare of college students, the university must maintain stringent ethical oversight, and also provide clear policies governing the use of AI (Saiddaeni, 2024).

Table 1. Use of AI Towards in Learning at ATIT Al-Khairiyah Cilegon

No	Question	Agree	Very Agree	Disagree
1	Technology related to artificial intelligence (AI) has an impact on university teaching and learning strategies.	58.4%	31.5%	10.1%
2	AI can be used to enhance learning customization and accommodate various learning requirements of college students.	73.6%	17.2%	9.2%
3	AI can help in preparing college students for the increasingly complex world of work that requires different skills in the digital age	62.9%	22.3%	14.8%
4	AI can be used to improve effectiveness of learning assessment and evaluation, as well as provide more useful feedback to college students.	55.6%	31.5%	12.9%
5	AI technology growth and advancement is unavoidable considering current technical advancements.	57.5%	31.7%	10.8%

6	Is it possible to utilize AI to track and examine learning data in order to spot trends and patterns that could raise educational standards?	65.2%	21.5%	13.3%

Table 1 illustrates how artificial intelligence technology affects university teaching and learning strategies. According to information gathered from college students, 58.4% of them said there was an influence. According to 73.6% of college students who responded, AI may be used to enhance learning personalization and satisfy each student's unique learning requirements. According to 62.9% of college students, artificial intelligence (AI) is essential for preparing students to meet the increasingly complicated demands of the modern workforce, particularly in the digital age. This shows that most respondents acknowledge AI ability to give college students the skills they need for the changing labor market, but a sizable percentage of respondents voiced ambivalence, indicating that further research is necessary to fully understand usefulness of AI in this regard. Furthermore, there are a lot of chances to improve the quality of education thanks to AI capacity to track and evaluate learning data. 65.2% of college instructors concurred that AI can spot trends and patterns to enhance student learning. These results underline how crucial it is to show AI's worth in learning environments and to overcome any knowledge gaps or implementation-related worries. In general, the data reveals cautiously positive view of AI's role in employment preparation and education. Stakeholders must resolve underlying doubts and strive toward integrating AI technologies in a transparent, efficient, and educationally aligned manner in order to fully realize its potential.

C. The Ethical of Using Artificial Intelligence in Learning

Ethics explained by Aljabr & Al-Ahdal (2024) as a value that is believed by certain group or society regarding things that are right and wrong. Ethical issue certainly be relevant to various aspects, including ethics in the use of information technology, especially in realm of education. Ethics in the use of information technology in the realm of education includes universal moral values, including the truth and accuracy of information, data privacy and security, fairness and avoiding discrimination, responsibility, avoidance of bias, and copyright protection. Ethics in the use of AI, especially in learning mentioned by Mufid (2024) consists of three main things, i.e., goals and intentions, clarity of expression and transparency and also compliance with the code of ethics, for example avoiding plagiarism, respecting and protecting copyright, and responsibility. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) provides 10 core principles in order to explain human rights approach to AI ethics, include: (1) Appropriate and harmless proportion of AI usage; (2) Safety and security of its use; (3) Existence of privacy and data protection rights; (4) Collaboration between policy makers in various aspects and adaptive government; (5) Responsibility and accountability; (6) Transparency and explainability; (7) Human supervision and also

determination; (8) Sustainability; (9) Vigilance and literacy; (10) Fairness and non-discrimination.

The ethical of using AI in learning also regulated by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. The ethics pay attention to the 10 core principles of UNESCO that the researcher has explained in the previous paragraph, as well as the five principles of guaranteed trust, namely fairness, explainability, reliability, transparency, and also protection of personal data. Four ethics regulated by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia related to the use of AI in learning, include: (1) Academic integrity, namely as a manifestation of the main values of a university; (2) Data security and protection, which is vulnerable and high-risk when associated with digital technologies; (3) Equality and accountability in order to respond to potential gaps that occur when utilizing AI; (4) Environmental impact, i.e. as a result of the use of AI.

Based on the theoretical framework of AI ethics, this study further examines field findings regarding the perception and practice of students in the Islamic Education Program in using AI. Data collected through surveys and in-depth interviews were analyzed to assess the extent to which student's behaviors align with ethical principles established by Mufid (2024), UNESCO, and Ministry of Education, Culture, Research, and Technology of Republic Indonesia. This analysis covers several key aspects, including AI usage patterns, data security and privacy, plagiarism and academic integrity, responsibility in information verification, and the impact of AI on critical thinking skills and independent learning.

1. Patterns of AI Utilization and Their Relevance to The Ethnics of Technology Use

This study found that students of Islamic Education Program utilized three main AI platforms, namely ChatGPT (50%), Perplexity (35%), and Quillbot (15%). The dominance of ChatGPT indicates that students tend to choose the paltform that is most accessible, fast, and capable of providing comprehensive responses. This align with research findings of Esyarito et al. 2023 that AI is widely used as an academic aid for searching references, analyzing materials, or performing paraphrasing. The proportion of usage is illustrated in the following Figure 1.
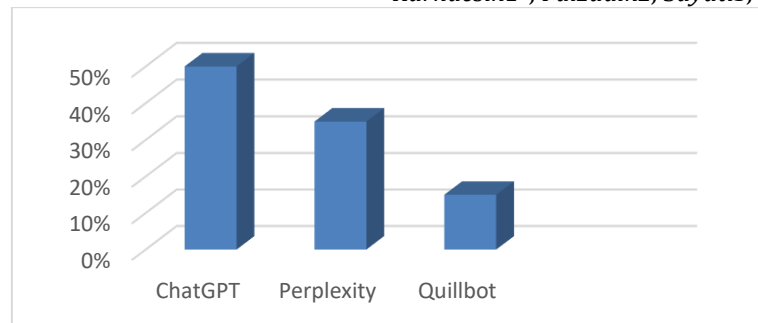
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Figure 1. The Usage of Various AI Platforms Among Students

Based on perspective of (Mufid, 2024) the use of AI in education must consider the purpose and intent of its application. Students should use AI to support the learning process rather than to replace critical thinking or to copy information verbatim. This means that even with high level of AI usage, students must still utilize this technology ethically and responsibly. According to UNESCO, the principle of "an appropriate and harmless proportion of AI usage and human oversight" emphasize that AI should be use in proper proportion, without causing harm, and always under human supervision. In the context of this findings, although 50% of students use Chat GPT, not all students necessarily understand the ethical proportion of its use. Some students tend to rely on AI generated answers without verification, which can lead to dependency and diminish critical thinking. Furthermore, ministry of Education, Culture, Research, and Technology of Republic Indonesia emphasized academic integrity and equitable access as ethical principles for AI usage. AI should encourage students to uphold academic values, conduct balanced literature searches, and use AI as a supportive tool rather than a shortcut. The study findings indicate that most students use AI as an aid, however, the high intensity of usage needs to be balanced with digital literacy and ethical awareness to ensure that learning objectives are not compromised.

2. Data Privacy and Security: Disrepancies Between Student Perception and Literature

Survey results indicate that majority of students perceive their data privacy and security as relatively safe when using AI platforms. The survey data show that 65% of students feel secure, while 35% perceive potential risks. The following Figure 2 illustrates the student's perceptions:
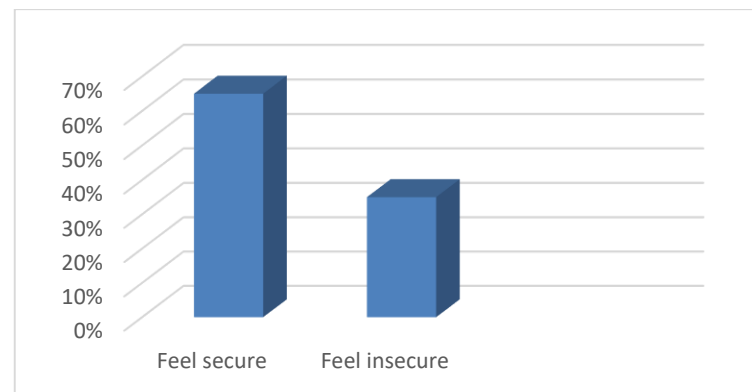
Figure 2. Perceived Safety of personal Data in AI Platforms

Mufid (2024) esmphasized that the use of AI in education must be grounded in responsibility, including responsibility to safeguard personal data. Mufid highlight that students should understand the consequences of entering personal data into digital platforms and use AI ethically to prevent the misuse of personal information. UNESCO established the principle of privacy and data protection emphasizing that AI must ensure data security, safeguard users privacy rights and be used safely and proportionally. The Ministry of Education, Culture, Research, and Technology of Indonesia underscores that data security is part of academic integrity and equitable digital access. Students must use AI responsibly, while educational institutions are obliged to provide educational and protection to ensure the safe use of AI.

The interview with Mr.Ahmad revealed that most students feel that the use of AI does not threaten the privacy and security of important data.

> This certainly contradicts the research conducted by Mufidah et al. (2024), which explains that personal data security and privacy, partly due to the use of AI in Indonesia, are still weak and vulnerable to hacking due to the absence of regulations related to this issue. For example, when using AI to search for references related to books on Islamic education, a classic model in Islamic education, AI will ask users to enter their email and password as a requirement to create an account, which is quite concerning for students who want to access these references in more depth. (Interview, February 2025) .

> Meanwhile, Azis and Siti believe that:

> The level of sophistication of AI is certainly accompanied by a sophisticated security system, which must have been considered by the developers of the AI used. To anticipate data leaks. explained that users could create an email account separate from their main email account specifically for registration or AI usage requirements, so that data leaks do not occur. (Interview, February 2024)

These findings indicate a gap between student's perception and actual risks, highlighting the importance of ethic-based digital literacy education. Students need to understand that feeling secure does not necessarily equate to actual security, and mitigation measures, such as using a dedicated email can be an effective strategy to enhance data protection.

3. Plagirism and Academic Integrity

The survey results regarding student behavior related to plagiarism in the use of AI show that 55% students check and paraphrase AI-generated content while also citing the source, 32% still engage in copy pasting without paraphrasing, and 13% exhibit uncertainty or inconsistent behavior. The proportions are illustrated in the following Figure 3:
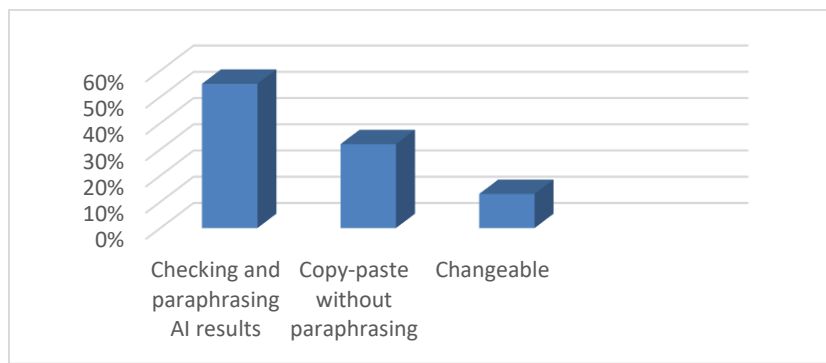

Figure 3. Student Behavior Related to Plagirism

These findings underscore the varying levels of ethical awareness among students in the use of AI. This is consistent with the findings of Livberber & Ayvaz (2023), explained that the use of AI has the potential to cause plagiarism, so it must be avoided. It was also confirmed by Safitri (Interview, January 2025), that the use of AI for task work has high probability of being detected as plagiarism. When doing assignments that require college students to look for previous studies in the field of Islamic education, college students who use AI in finding references tend to only copy-paste articles obtained through AI and do not add personal thoughts or synthesis from the article, thus leading to plagiarism. Putri et al (Interview, January 2025) explained that plagiarism is an act that must be avoided because it violates the copyright of other peoples works, so that every sentence quote must be accompanied by references and paraphrasing as ethics to avoid plagiarism. Paraphrasing and listing references is also recommended by Bin-Nashwan et al. (2023), as one of the ethics to avoid plagiarism because quoting other people's statements must be clearly stated in the written sentence as a form of respecting and protecting the work. An equally important ethic in the use of AI in learning is responsibility.

Ilham explained that the ethical of using AI will refer to academic ethical, such as being responsible, namely being able to account for the writing made by including its references. Regarding plagiarism that has been discussed in previous paragraph, college students who cite material obtained through AI search, and then paraphrase must verify the origin of the material through a search engine and quote from the original source. After that, the form of college student's responsibility writing or citing the material is to provide citations in the form of footnotes or body notes, as well as listing the sources that have been referred to in the reference list or bibliography. (Interview, February 2025)

Another perception of the ethical of responsibility related to the use of AI in learning was conveyed by Juwariyah

The use of AI must still be accompanied by insights from users, so that users can take full responsibility for their work. This is done because AI includes technology made by humans, so it is prone to have unexpected errors. The phenomenon that occurred, most of PAI college students were mentioned has been responsible for the use of AI by verifying sources and tracing AI-generated statements through online books, and articles. Some PAI college students stated in the survey that answers provided by AI need to be confirmed, either with their own knowledge and insights, or by asking friends. The confirmation is done because not everything answered or provided by the AI is in accordance with the desired context. (Interview, January 2025)

The group of students who engage in paraphrasing and citation reflects behavior aligned with the ethical principles of AI use as outlined by Mufid (2024), namely avoiding plagiarism, respecting intelectual property rights, and taking responsibility for the content they utilize. Moreover, this behavior is consistent with guidelines of UNESCO, which emphasize safety, accountability, transparency, digital literacy, human oversight, fairness, and non-discrimination in the use of AI, as well as the principle of Indonesian Ministry of Education, Culture, Research, and Technology, which include academic integrity, data protection, equity, and accountability. Conversely, the group that directly copies AI-generated outputs without modification demonstrates a lower level of ethical awareness, indicating that the use of AI may compromise their academic originality and violate the ethical principles recommended by these three institutions. These findings highlight the importance of AI literacy, academic integrity training, and strengthening student's sense of responsibility, so that AI can be utilized in creative, ethical, and accountable ways.

4. Academic Responsibility Through Information Verification

The survey results show that 58% of students always verify the information obtained from AI, 28% sometimes verify the information, and 14% never verify it. The following Figure 4 illustrates this data:
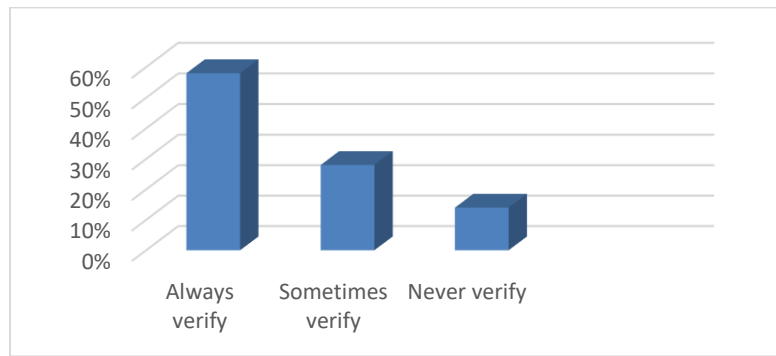

Figure 4. Student Information Cheking Behaviors

These findings indicate that the majority of students have adopted the principles of responsibility and accountability in the use of AI, in line with the guidelines provided by Mufid (2024) and UNESCO. Students who regularly verify information tend to produce writing writing with deeper analysis, demonstrating active engagement in the academic process, while respecting copyright and information integrity. Conversely, student who fail to verify information are more susceptible to misinformation and exhibit excessive reliance on AI, which could undermine the quality and originality of their academic work.

In addition, interviews with several students from the Islamic Education Program reveal that responsibility in using AI can encourage a deeper understanding. This leads to more detailed statements and restructured ideas based on their personal understanding. Prasetyo et al. (2021) stated that among the forms of responsibility of AI is to verify and collect references from the results provided by AI. There were still some students who just copy the results of AI without caring about the validity and accuracy of the results.

It was also confirmed by Salwa which states,

That some students are still not responsible in the use of AI. Some college students stated in the survey that the AI is very sophisticated and the answers given are very accurate, so there is no need for further verification. The impact of relying on AI fully without confirmation stated by some college student can make them lazy cause they tend to use the ease of AI in answering something instead of using critical thinking. (Interview, January 2025)

5. The Impact of AI on Critical Skilss and Learning Independence

This study reveals two distinct trends regarding to the student use of AI. According to the survey, 58% of students always verify information form AI, 28% sometimes verify it, and 14% never verify (chart 4). These findings correlate with student's critical thinking

skills and independent learning. Students who consistently verify information demonstrate improved comprehension because they elaborate on AI-generated answers and trace them back to their original sources. This process encourages students to think critically, construct their own synthesis, and produce more analytical writing. This align with principles of responsibility and accountability proposed by Mufid (2024), as well as UNESCO's principles of "vigilance and literacy", which emphasize the importance of digital literacy and user awareness in addressing potential AI biases. Moreover, interviews with Islamic Education students indicate that responsible attitudes in verifying and processing AI-generated information can stimulate deeper understanding, enabling them to produce statements grounded in personal interpretation and critical thinking. Conversely, students who do not verify information (14%) or who only verify it occasionally (28%) exhibit a tendency toward high dependence on AI. Some students believe that AI is sufficiently advanced that verification is unnecessary, leading them to simply copy AI-generated answers without considering the validity or relevance of the information. This condition can undermine learning autonomy and diminish student's critical reflection skills, as they tend to rely on the convenience of AI rather than engaging their own analytical and synthetic thinking abilities.

Survey data on plagiarism-related behaviors show that 55% of students paraphrase and cite their sources. While 32% still copy-paste without paraphrasing, and 13% remain uncertaion or inconsistent (chart 3). This reinforces the connection between ethical AI use, information verification, and the quality of critical thinking. Students who practice paraphrasing and information verification tend to be more responsible and independent in their learning. Whereas those who copy content directly are less critical and more dependent on AI. Thus, although AI can accelerate access to information and support learning processes, its benefits are optimized only when accompanied by digital literacy, ethical AI use, and responsibility in verfying information.

D. Discussion

This study analyzes the perceptions and practices of students in the Islamic Education Program regarding the ethical use of Artificial Intelligence (AI) in learning, referring to ethical principles proposed by (Mufid, 2024), UNESCO, and the Ministry of Education, Culture, Research, and Technology of Indonesia. The following discussion elaborates the field findings comprehensively and integrates them with the broader context of AI integration in Islamic Education, which faces challenges related to religious values, digital literacy, and the development of critical thinking skills.

AI integration in Islamic education programs faces a number of important obstacles that call for calculated fixes. Making sure AI is in line with Islamic values, especially in assessment and material delivery, is one of the main concerns. AI-powered learning systems need to avoid spreading false information while faithfully representing Islamic

morality. This difficulty is consistent with earlier studies that maintain religious validity in AI-powered learning requires close supervision from Islamic authorities (Fitryansyah & Fauziah, 2024; Margareta et al., 2025). The high usage of AI in learning process indicate that, AI is seen by college students as a useful instrument for improving individualized learning and academic performance. This is consistent with earlier studies by Al-Zahrani (2024) which demonstrate how AI technology may be used to customize learning to meet the needs of each individual student, increasing engagement and academic achievement. College students, for example, value AI's capacity to offer prompt feedback, help with assignments, and enhance language acquisition. It highlights AI's adaptability and responsiveness, which are especially helpful for on-demand assistance. These advantages highlight how AI has the potential to revolutionize higher education, especially in terms of expediting the learning process and raising academic standards (Li et al., 2025).

From an ethical standpoint, however, high usage does not automatically translate to responsible usage. Ethical AI use-based on Mufid framework requires clear intention, transparency, and adherence to ethical codes such as avoiding plagiarism and ensuring accuracy. UNESCO's principle of "appropriate and harmless proportion of AI use" also emphasizes the importance of maintaining human supervision and preventing overdependence. The findings show that although most students use AI as part of their learning routine, not all understand the ethical boundaries of its use. Some rely on AI-generated text without verification, a practice that contradicts both ethical and academic principles. This is particularly important in Islamic Education, where the integrity of religious knowledge demands careful verification, especially regarding interpretations of Qur'anic verses, hadith, and classical scholarly opinions. In line with AI integration challenges noted in Islamic Education literature, student's reliance on AI must be balanced with Islamic values (accuracy, honesty, and intellectual responsibility). This highlights the need for structured digital ethics training to prevent misuse and promote reflective learning aligned with Islamic moral principles (Ilhami et al., 2026).

Although 65% of students feel safe when using AI, this perception does not necessarily correspond to actual cybersecurity realities. Many students log in using personal accounts and share academic files without understanding how AI platforms collect, store, and utilize user data. This false sense of security highlights a gap in digital ethics literacy that must be adressed by educational institutions.

This ethical dimension mirrors UNESCO's emphasis on privacy protection as a core AI governance principle. As (Mufid, 2024) notes, responsible AI use must integrate caution in sharing sensitive information. In the context of Islamic Education, this caution becomes even more critical because queries involving Qur'anic interpretation, Islamic jurisprudence, or religious arguments require contextual precision and must not be exposed to potential misrepresentation or data misuse. Therefore, Islamic Education

Programs must strengthen digital ethics training, teaching students to evaluate privacy policies, avoid uploading sensitive files, anonymize their accounts, and critically assess where their data may travel. Such steps align technological practice with Islamic moral responsibilities and ensure that the integration of AI supports, not undermines the dignity and ethical integrity of learners (Alamsyah & Remanda, 2026).

From an Islamic ethics perspective, data privacy is a moral obligation rooted in the principles of amanah (trust), hifz al-ird (protection of dignity), mas'uliyyah (responsibility), and la darrar wa la dirar (avoidance of harm). Personal data including identity, academic documents, or religious reflections, constitutes a form of private information whose misuse may compromise dignity and intellectual property. AI platforms, which often store user prompts and may analyze sensitive religious queries, pose risks that students may not fully recognize (Larhzizer et al., 2025).

The survey indicates three distinct student groups, 55% of students paraphrase AI-generated content and cite the sources, indicating ethical responsibility, 32% copy-paste without paraphrasing, reflecting unethical use and potential academic misconduct, and 13% remain inconsistent or unsure, indicating weak understanding of academic ethics. This distribution illustrates the varying levels of ethical literacy within the student population. Students who paraphrase and verify source origins align with ethical principles established by UNESCO (fairness, accountability, transparency) and Mufid (avoid plagiarism, respect copyright, ensure responsibility).

Although most students demonstrate academic integrity in their use of AI, some students have the potential to use the technology irresponsibly. This phenomenon aligns with the theory of academic integrity, which states that integrity is not only related to the prohibition of plagiarism, but also the obligation to reprocess information as a form of meaningful learning activity (Li et al., 2025). When students merely copy AI-generated content without understanding it, critical thinking and deep learning fail to develop. From the perspective of AI ethics, such as actions constitute misuse because the technology is used to gain convenience without considering the impact on learning and academic honesty. This also intersects with AI ethics principles that emphasize fairness, transparency, and accountability (Esyarito et al., 2026).

In the context of Islamic ethics, issues of plagiarism and the use of AI carry deeper implications. The Islamic scholarly tradition emphasizes scientific trustworthiness (al-amanah al-ilmiyyah), honesty (sidq), and the prohibition of taking other work without right (ghasb al-ilm). In addition, the objectives of Islamic law (maqasid al-shari'ah) place the protection of intellect (hifz al-aql) as a primary goal, meaning that the use of AI in ways that weaken critical thinking or obscure academic honesty contradicts the fundamental principles of Islamic education (Ali et al., 2025). Classical ethical source such as Al-Ghazali's views on proper conduct in seeking knowledge and Ibn Jama'ah's

emphasis on integrity scholarly writing, also affirm that learning must be grounded in effort, reflection, and understanding, rather than merely relying on instant results. Thus, when students use AI without paraphrasing and adding proper citation, such actions are not only academic violations but also deviations form the moral values of Islam (Larhzizer et al., 2025).

The research findings show that student's level of information when using AI vary considerably: 58% always verify, 28% verify occasionally, and 14% do not verify at all. This pattern has ethical implications for academic responsibility and the quality of critical thinking. When students do not verify AI-generated outputs, this principle of responsibility is neglected because AI-generated information may contain errors, biases, or copyright violations. This contradicts AI ethics framework proposed by (Mufid, 2024). Failing to conduct verification indicates weak human oversight, as well as lack of vigilance and literacy, as students passively accept AI-generated information without ensuring its accuracy and relevance as emphasized in UNESCO's AI ethics guidelines. Students who do not verify AI output disregard these values and are unable to take responsibility to accuracy of the information they use. This condition reflects technology overreliance, which can lower the quality of learning process and increase dependance on automated systems, as highlighted in the use of AI principles issued by the Ministry of Education, Culture, Research, and Technology of Indonesia.

From the perspective of Islamic educational ethics, information verification is part of the principles of tabayyun (clarification), tahqiq (validation), and the preservation of hifz al-aql (protection of the intellect). Islam requires caution in receiving information contradicts the values of carefulness and intellectual accountability. In the Islamic scholarly tradition, the process of acquiring knowledge always involves examination, reasoning, and thorough evaluation (ijtihad), rather than merely accepting information at face value. To prevent such issues, AI litercay education needs to be strengthened, including developing habits of cross-verification with academic literature and engaging in critical discussions (Pohan & Nasution, 2025).

The findings of this study reveal that student's critical thinking skills and learning independence are strongly shaped by their behavior when engaging with AI-generated information. Two sets of data highlight this pattern. First, the survey on verification habits show that 58% students always verify AI-generated information, 28% verify occasionally, and 14% never verify. Second, data on plagiarism-related behavior indicates that 55% of students paraphrase and cite AI-generated content, 32% copy-paste without paraphrasing, and 13% remain inconsistent or unsure. These two data sets illustrate a clear distinction between students who use AI critically and ethically and those who rely on it passively. Students who verify information and paraphrase while citing sources demonstrate active cognitive engagement. Their behaviors reflect essential

processes of higher-order thinking (analysis, evaluation, synthesis) as described by (Gerlich, 2025) and the framework of self-regulated learning proposed by (Salido et al., 2025). These students do not accept AI responses at face value but elaborate and reconstruct information based on their understanding, thus strengthening both critical thingking and learning independence.

Conversely, the 14% of students who never verify information and the 32% who copy-paste AI content without paraphrasing shows signs of "technology overreliance". Their passive acceptance of AI outputs minimizes cognitive effort, reduces analytical engagement, and increases the likelihood of superficial learning. This aligns with concerns raised by (Hwang et al., 2020; Odri & Yoon, 2023), who argue that excessive dependence on AI diminishes reflective thinking and weakens independent learning skills. The overlap between non-verifying students and copy-paste behavior suggests a broader issue: a lack of ethical literacy and weakened critical judgment.

Students who verify and paraphrase information have fulfilled principle of (Mufid, 2024) through accuracy and intellectual honesty, whereas those who directly copy content potentially violate academic and neglect persolan responsibility. Students who verify information demonstrate strong human oversight and vigilance, ensuring that AI remains a supporting tool rather than a replacement for human reasoning, as emphasized in principles of UNESCO. Conversely, the absence of verification weakens this principle because students delegate critical judgment entirely to AI. Similarly, the ethical guidelines of the Ministry of Education, Culture, Research, and Technology regarding academic integrity and fair academic practices are reflected in the behavior of students who verify and paraphrase information. In contrast, the practice of copying without paraphrasing demonstrates weak integrity and digital literacy.

From the perspective of Islamic ethics, the contrast is equally significant. ethical values such as amanah (responsibility), shidq (truthfulness), and adl (fairness) require learners to ensure that information they use is accurate, accountable, and properly attributed. AI weakens analytical ability, encourages dependence, and undermines academic integrity. Therefore, strengthening AI literacy, ethical guidelines, and moral awareness (grounded in both educational and Islamic ethical frameworks) is essential for ensuring that AI contributes positively to student's intellectual development (Ali et al., 2025).

IV. Conclusion

This study concludes that the integration of Artificial Intelligence (AI) in the Islamic Education Program at STIT Al-Khairiyah Cilegon, Banten, provides substantial academic benefits but also raises critical ethical concerns. Students widely use AI as a learning tool, and many perceive it as effective in improving task efficiency, offering quick explanations,

and supporting mastery of learning materials. However, the findings demonstrate that the ethical quality of AI use varies significantly among students. In terms of AI utilization patterns, students generally view AI as a helpful academic companion. Yet responsible use remains inconsistent. While some students show awareness of ethical boundaries, such as maintaining accuracy, transparency, and religious appropriateness, others rely on AI uncritically, reflecting a gap in ethical literacy. These findings mirror global concerns regarding the alignment of AI with moral, educational, and religious values. Although 65% of students feel safe using AI, many underestimate the actual risks associated with data privacy and security. Students often share personal accounts or academic files with AI systems without understanding how their data may be stored or processed. This indicates a lack of digital ethics awareness and contrasts with Islamic principles of amanah, hifz al-ird, and the prohibition of harm, as well as UNESCO's emphasis on privacy protection. The study also reveals significant variation in plagiarism-related behaviors. While 55% of students paraphrase and cite AI-generated content, 32% still copy-paste without paraphrasing, and 13% remain inconsistent. This disparity highlights different levels of ethical competence. Paraphrasing and citing reflect alignment with AI ethics (Mufid, UNESCO, Ministry of Education, Culture, Research, and Technology of Indonesia) and Islamic virtues (amanah al-ilmiyyah, sidq, adl). Copy-paste behavior, however, risks academic dishonesty and contradicts Islamic scholarly norms and contemporary academic integrity standards.

Survey data on verification show that most of students always verify AI-generated information. Verification habits are strongly correlated with academic responsibility. Students who verify demonstrate human oversight, vigilance, and accountability, as the key components of ethical AI use. In contrast, those who never verify exhibit technology overreliance and insufficient critical judgment, which violates Islamic principles of tabayyun, tahqiq, and hifz al-aql. The combined effects of plagiarism behavior and verification patterns reveal a clear impact on critical thinking and learning independence. Students who paraphrase, cite, and verify AI outputs show stronger cognitive engagement, higher-order thinking, and independent learning skills. Meanwhile, those who copy-paste or rely on AI without verification display weakened analytical abilities and reduced intellectual autonomy. Overall, the study concludes that AI's role in Islamic Education Program is highly dependent on student's ethical awareness, digital literacy, and adherence to Islamic moral values. While AI offers meaningful support for learning, it must be used critically and responsibly to avoid undermining academic integrity, data security, and intellectual development. Therefore, Islamic education institutions must strengthen AI literacy programs, develop clear ethical guidelines, integrate Islamic ethical principles into digital learning, and ensure that AI functions as a supportive tool rather than a substitute for human reasoning.

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