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Artificial Intelligence and Academic Integrity in Islamic Higher Education: Exploring Ethical Challenges among Islamic Education Students

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Abstract

The purpose of this study is to explore the ethical challenges associated with the use of Artificial Intelligence (AI) in the academic activities of Islamic Education (PAI) students in Islamic higher education and to examine the strategies and constraints involved in addressing these challenges. The study responds to the rapid adoption of generative AI tools in higher education, which has raised concerns regarding academic integrity, critical thinking, and the preservation of Islamic educational values. This research employed a qualitative case study design conducted at the Islamic Education Study Program of Universitas Negeri Padang. Data were collected through semi-structured interviews with ten PAI students and two lecturers, complemented by participant observation and document analysis. The data were analyzed using the interactive model of Creswell and Poth, strengthened by thematic analysis and validated through source and method triangulation. The findings reveal five interrelated ethical challenges: (1) students' dependency on AI, (2) declining critical thinking skills, (3) reduced learning autonomy, (4) plagiarism and academic integrity concerns, and (5) the inaccuracy of AI-generated information. Efforts to address these challenges include independent verification of AI outputs, the use of alternative scholarly sources, assessment redesign, and contextual case-based learning. However, their effectiveness remains constrained by the absence of formal institutional policies, diverse understandings of academic ethics, and limited collaboration among stakeholders. The originality of this study lies in the development of an Islamic Values-Based AI Ethics Framework that integrates AI literacy, academic integrity, institutional governance, and the Islamic principles of *ṣidq*, *amanah*, and *thalab al-'ilm*. This study contributes to the growing discourse on ethical AI adoption by providing a contextually grounded framework for promoting responsible AI use in Islamic higher education.

Keywords: Artificial Intelligence; Academic Integrity; Islamic Higher Education; Islamic Education Students; AI Ethics; Islamic Values-Based AI Ethics Framework

Introduction

The rapid advancement of digital technology in the era of globalization has brought significant transformations across various sectors of human life, including education. The emergence of Artificial Intelligence (AI), defined as a technology that enables computer systems to simulate human cognitive abilities such as language comprehension, data analysis, problem-solving, and automated decision-making, has fundamentally reshaped the landscape of higher education. AI is no longer viewed merely as a technological tool; rather, it has evolved into a cognitive partner capable of supporting teaching and learning processes through personalized learning experiences, adaptive feedback, and intelligent content generation. In higher education, AI has increasingly been utilized to enhance learning efficiency, broaden access to information, and support more flexible and adaptive learning environments (Chen et al., 2020; Makarenko et al., 2024; Dikkatwar et al., 2025). The emergence of generative AI platforms such as ChatGPT, Gemini, Claude, and Perplexity has further accelerated this transformation by enabling students to obtain instant responses to academic inquiries that previously required extensive information searching, critical evaluation, and knowledge synthesis (Ansari et al., 2024; Arista et al., 2023).

Despite the substantial benefits offered by AI, its widespread adoption in higher education has also generated considerable debate regarding its implications for student learning and academic development. Recent studies indicate that AI can improve accessibility to educational resources, facilitate independent learning, and support academic productivity when used appropriately (Costa et al., 2024; Mijwil et al., 2023). However, concerns have emerged regarding excessive dependence on AI-generated outputs, which may reduce students' engagement in higher-order thinking processes and diminish opportunities for developing analytical and reflective skills (Genjga & Muratovic, 2026). As AI systems become increasingly capable of generating sophisticated academic content, students may be tempted to prioritize efficiency over intellectual engagement, thereby shifting the learning process from active knowledge construction to passive information consumption. Such developments pose significant challenges for universities, whose primary mission extends beyond producing correct answers to fostering critical thinking, creativity, and intellectual autonomy among students (Makarenko et al., 2024; Dikkatwar et al., 2025).

These concerns are particularly relevant to the growing discourse on academic integrity in the age of artificial intelligence. The integration of AI into academic work has blurred traditional boundaries between legitimate technological assistance and unethical academic practices. Ansari et al. (2024) emphasize that while ChatGPT and similar tools provide substantial educational benefits, they simultaneously raise serious concerns regarding plagiarism, authorship, intellectual ownership, and the authenticity of student work. From a broader perspective, academic integrity encompasses not only the avoidance of misconduct but also the cultivation of honesty, trust, fairness, responsibility, and respect in all scholarly activities (Eaton, 2021).

Building on this perspective, Eaton (2024) introduced the Comprehensive Academic Integrity (CAI) Framework, which conceptualizes academic integrity as a holistic ethical foundation for educational environments, including those increasingly shaped by digital technologies and artificial intelligence. Similarly, Dahal (2025) argues that the AI era requires a more integrative approach to academic ethics because the distinction between human intellectual contribution and machine-generated content has become increasingly complex and difficult to assess.

The issue becomes even more significant within the context of Islamic higher education. Unlike many secular academic disciplines, Islamic Education programs are designed not only to develop students' intellectual competencies but also to nurture moral character, ethical awareness, and spiritual responsibility based on Islamic values (Halstead, 2004). Within the Islamic intellectual tradition, the pursuit of knowledge (*thalab al-'ilm*) is regarded as both an intellectual and spiritual endeavor that requires sincerity, diligence, honesty, and accountability. Knowledge is viewed as a trust (*amanah*) that must be acquired, interpreted, and utilized responsibly (Sertkaya, 2026). Consequently, the excessive reliance on AI to replace essential processes of inquiry, reflection, and critical engagement may conflict with the fundamental principles of Islamic education, which emphasize personal intellectual effort and ethical responsibility in the pursuit of knowledge (Abdul-Jabbar, 2026; Thalgi, 2019).

Recent scholarship in Islamic education has increasingly emphasized the importance of integrating technological advancement with Islamic ethical values. Khimmataliev et al. (2025) argue that contemporary Islamic education must balance technological innovation with moral and spiritual development to prepare future educators capable of navigating complex societal challenges. Likewise, Bakti et al. (2025) demonstrate that the integration of Islamic values into educational practices can strengthen students' sense of responsibility, empathy, and ethical awareness. Similar perspectives are reflected in studies highlighting the transformative role of Islamic education in responding to contemporary challenges while maintaining its moral and spiritual foundations (Mariyono & Wiyono, 2026; Fauzi et al., 2024). Furthermore, character formation in Islamic education is not solely achieved through formal curricula but is also shaped through hidden curricula, institutional culture, and everyday academic practices that influence students' ethical behavior and decision-making processes (Obaid et al., 2024; Aminudin & Hasan, 2025; Ramly et al., 2026).

Although research on AI in higher education has expanded rapidly, much of the existing literature remains focused on technological adoption, learning effectiveness, and student perceptions of AI-based tools (Arista et al., 2023; Costa et al., 2024). Within Islamic education, studies such as Abubakari et al. (2026) acknowledge the substantial pedagogical potential of AI while simultaneously highlighting unresolved ethical, legal, and curricular concerns. However, these studies primarily address how AI can support teaching and learning processes, paying relatively limited attention to its

implications for academic integrity and the preservation of Islamic intellectual traditions. Consequently, the existing literature has largely answered the question of how AI is used in educational settings but has not sufficiently explored how AI influences academic integrity, ethical decision-making, and the culture of knowledge acquisition within Islamic higher education.

Previous research conducted by Alfurqon and Wirdati (2024) among Islamic Education students at Universitas Negeri Padang found that students actively utilized AI platforms such as ChatGPT, Perplexity, and Gemini to support their academic activities. Nevertheless, they continued to encounter challenges related to AI's limitations in interpreting Islamic studies and concerns regarding the validity of AI-generated information. Similarly, Niyu et al. (2024) reported a significant increase in ChatGPT usage among Indonesian university students and lecturers, accompanied by growing debates concerning academic ethics and technological dependency. Studies by Rizki (2024) and Putra and Novalia (2025) revealed comparable patterns in other academic disciplines, demonstrating that while AI facilitates task completion and information retrieval, it also raises concerns regarding overreliance, critical thinking decline, and information accuracy. Despite these valuable contributions, existing studies have not explicitly examined the intersection of AI utilization, academic integrity, and Islamic educational values among students preparing to become future Islamic educators.

Preliminary observations conducted among students of the Islamic Education Study Program at Universitas Negeri Padang revealed several practices that raise concerns regarding responsible AI usage. These include copying AI-generated responses without verification, relying on AI outputs as substitutes for independent analysis, and demonstrating limited awareness of the ethical boundaries between technological assistance and personal intellectual contribution. Such practices suggest a shift in students' roles from active seekers of knowledge to passive consumers of instant information. From the perspective of Islamic education, this phenomenon extends beyond academic concerns and touches upon broader issues of trustworthiness (*amanah*), honesty (*ṣidq*), accountability, and ethical knowledge acquisition, all of which constitute essential principles of the Islamic intellectual tradition (Asrori et al., 2025; Muhamad et al., 2024; Abdul-Jabbar, 2026).

Based on the foregoing discussion, a significant research gap remains. First, studies on AI in higher education continue to be dominated by technological and pedagogical perspectives. Second, research on AI within Islamic education has primarily focused on its opportunities and applications rather than its implications for academic integrity. Third, there remains a lack of empirical studies specifically examining the challenges of AI utilization among Islamic Education students through the integrated lenses of academic integrity and Islamic ethical values. Therefore, this study aims to explore the forms of challenges associated with the use of Artificial Intelligence in the academic activities of Islamic Education students at Universitas Negeri Padang and to identify the strategies and obstacles encountered by both students and lecturers in addressing these challenges.

The theoretical contribution of this study lies in its effort to advance understanding of the relationship between artificial intelligence, academic integrity, and Islamic education through the introduction of an Islamic Values-Based AI Ethics Framework. This framework integrates AI literacy, academic integrity, and Qur'anic ethical principles as interconnected foundations for responsible AI utilization. Unlike previous studies that primarily focus on technological effectiveness or user perceptions, this research conceptualizes AI as both a pedagogical and ethical issue within the broader tradition of Islamic scholarship. Accordingly, the study is expected to contribute to the growing international discourse on AI ethics in higher education while providing a conceptual foundation for developing policies and guidelines that align AI utilization with the distinctive values and objectives of Islamic higher education.

Method

This study employed a qualitative approach using a single-case study design to obtain an in-depth understanding of the challenges associated with the utilization of Artificial Intelligence (AI) in the academic activities of students enrolled in the Islamic Education (PAI) Study Program at Universitas Negeri Padang. A qualitative case study was considered the most appropriate approach because the phenomenon under investigation is highly contextual, socially constructed, and closely related to the experiences, perceptions, and ethical considerations of the participants. According to Creswell (2020), qualitative research is particularly suitable for exploring the meanings individuals or groups assign to a social phenomenon, while case study research enables researchers to investigate a contemporary issue within its real-life context. In the context of this study, AI utilization among Islamic Education students is not merely a technological practice but also an educational, ethical, and cultural phenomenon that requires comprehensive examination from the perspectives of those directly involved. Furthermore, qualitative inquiry has been widely recognized as an effective approach for investigating emerging educational technologies and their implications for learning behavior, academic integrity, and institutional culture (Ansari et al., 2024; Eaton, 2024).

The study was conducted between May and June 2026 at the Faculty of Social Sciences, Universitas Negeri Padang, specifically within the Islamic Education Study Program. The research site was selected because the integration of AI tools such as ChatGPT, Gemini, and Perplexity has become increasingly visible in students' academic activities, including coursework, presentations, assignments, and academic writing. The participants were selected through purposive sampling, a strategy commonly used in qualitative research to identify information-rich cases that can provide deep insights into the phenomenon being studied (Merriam & Tisdell, 2016). The participants consisted of ten undergraduate Islamic Education students from the 2023 cohort and two lecturers teaching within the program. Students from the 2023

cohort were intentionally selected because they had completed several semesters of study and had accumulated substantial experience in utilizing AI technologies within various academic contexts. Meanwhile, lecturers were included due to their direct involvement in supervising, assessing, and evaluating students' academic work, thereby enabling them to provide informed perspectives regarding both the benefits and challenges of AI utilization in higher education. This sampling strategy aligns with recommendations in qualitative educational research emphasizing the importance of selecting participants who possess direct and sustained engagement with the phenomenon under investigation (Creswell & Poth, 2018).

Data were collected through three complementary techniques: semi-structured interviews, participant observation, and document analysis. Semi-structured interviews served as the primary source of data because they allowed participants to articulate their experiences, perceptions, and ethical considerations regarding AI utilization in their own words while enabling the researcher to probe emerging themes and clarify ambiguous responses (Merriam & Tisdell, 2016). The interview protocol consisted of open-ended questions focusing on patterns of AI use, perceived benefits and risks, experiences related to academic integrity, and strategies employed to ensure responsible utilization of AI-generated content. Interviews were conducted individually and recorded with participants' consent to ensure the accuracy of data collection.

Participant observation was undertaken to examine how AI was integrated into actual academic activities, including classroom discussions, assignment preparation, presentation development, and information-seeking practices. Observation enabled the researcher to capture behavioral patterns that might not be fully articulated during interviews and provided contextual understanding of how students interacted with AI tools in authentic learning environments. In addition, document analysis was conducted to enrich and triangulate the data obtained through interviews and observations. Documents examined included course assignments, academic writing guidelines, thesis-writing manuals, assessment rubrics, institutional policies related to academic ethics, and students' written work that reflected AI-assisted learning practices. The use of multiple data sources is particularly important in studies examining educational technology and academic integrity because it enables researchers to compare reported behaviors with actual academic practices (Eaton, 2021; Dahal, 2025).

The study adopted a conceptual lens informed by contemporary scholarship on AI in higher education, academic integrity, and Islamic educational ethics. Recent studies have emphasized that the educational implications of AI extend beyond technological efficiency and include concerns regarding critical thinking, student autonomy, ethical decision-making, and responsible knowledge production (Makarenko et al., 2024; Genjga & Muratovic, 2026). Likewise, research on academic integrity highlights the need to understand how emerging technologies reshape students' perceptions of

authorship, originality, and scholarly responsibility (Eaton, 2024; Dahal, 2025). These perspectives informed the development of interview questions, observation guidelines, and analytical categories, enabling the study to examine AI utilization not only as a technological phenomenon but also as an ethical and pedagogical issue within Islamic higher education.

The collected data were analyzed using the interactive qualitative analysis framework proposed by Creswell and Poth (2018), complemented by reflexive thematic analysis as developed by Braun and Clarke (2019). The analytical process consisted of several iterative stages: data familiarization, initial coding, category development, theme generation, theme refinement, and interpretation. First, interview transcripts, observation notes, and documentary evidence were read repeatedly to facilitate immersion in the data. Second, meaningful units of information related to AI utilization, academic behavior, ethical concerns, and institutional responses were coded systematically. Third, related codes were grouped into broader categories representing recurring patterns across participants. Finally, these categories were synthesized into overarching themes that addressed the study's two primary objectives: (1) identifying the forms of challenges associated with AI utilization and (2) exploring efforts and obstacles in addressing these challenges. Consistent with recommendations by Braun and Clarke (2019), thematic analysis was treated as a reflexive and interpretive process through which meanings were constructed rather than merely extracted from the data. The findings were continuously compared across different data sources to enhance analytical depth and ensure conceptual coherence.

To strengthen the trustworthiness of the findings, several strategies were employed. Data credibility was established through source triangulation and methodological triangulation (Luthfiyani & Murhayati, 2024). Source triangulation involved comparing information obtained from students and lecturers to identify convergences and divergences in their perspectives regarding AI utilization. Methodological triangulation was achieved by cross-checking interview data with observations and documentary evidence. Whenever discrepancies emerged among data sources, additional clarification was sought from participants to ensure interpretive accuracy. Furthermore, prolonged engagement with participants and repeated examination of the data enabled the researcher to develop a nuanced understanding of the phenomenon under study. An audit trail documenting data collection procedures, coding decisions, and analytical reflections was also maintained throughout the research process to enhance transparency and dependability. These procedures are consistent with contemporary qualitative research standards and recommendations for studies investigating educational technologies and academic integrity in higher education (Creswell & Poth, 2018; Eaton, 2024).

Finally, ethical considerations were carefully observed throughout the study. Prior to data collection, all participants were informed about the objectives of the research, the voluntary nature of their participation, and their right to withdraw at any stage without consequence. Written informed consent

was obtained from all participants. To protect confidentiality, pseudonyms were used in all transcripts and research reports, and identifying information was removed from the dataset. Given the sensitivity of issues related to academic integrity and AI-assisted learning, particular attention was paid to ensuring that participants could express their views freely without fear of academic repercussions. This ethical commitment was essential for generating authentic and trustworthy accounts of students' experiences and perceptions regarding AI utilization in Islamic higher education.

Results and Discussion

Results

Data were collected through semi-structured interviews with ten undergraduate students from the 2023 cohort of the Islamic Education (PAI) Study Program and two PAI lecturers at Universitas Negeri Padang. These data were further enriched through classroom observations and document analysis. The analysis revealed that the challenges associated with the use of Artificial Intelligence (AI) in students' academic activities manifested in five interrelated forms, namely: (1) dependency on AI, (2) declining critical thinking skills, (3) reduced learning autonomy, (4) plagiarism and academic integrity issues, and (5) concerns regarding the accuracy of AI-generated information. In addition, the findings identified various strategies employed by students and lecturers to address these challenges, although their implementation continues to face several institutional and pedagogical constraints.

Forms of Challenges in the Use of AI in Islamic Education Students' Academic Activities

Student Dependency on AI

One of the most prominent findings of this study concerns the growing dependency of students on AI technologies for completing academic tasks. Nearly all participants reported using AI tools to prepare assignments, write papers, summarize learning materials, and develop presentation content. However, observations and interview data indicate that AI is often used not merely as a supporting tool but as the primary source of knowledge production, reducing students' engagement in independent inquiry and intellectual exploration.

A student participant explained: "AI has become problematic because it becomes the main factor in completing tasks. Students no longer study on their own; they simply copy and paste. They do not read further or search again to verify whether the information is actually valid." (Interview with a 2023 PAI student, May 2026)

Classroom observations confirmed this pattern. During several group presentation sessions, students frequently relied on AI-generated summaries and explanations without demonstrating a deeper understanding of the material being discussed. Follow-up questions from lecturers often revealed

difficulties in explaining concepts beyond what had already been generated by AI systems.

One lecturer further emphasized that many students have become highly dependent on AI across different courses. According to the lecturer, while students are increasingly skilled at creating effective prompts, they often struggle to conduct independent analysis of learning materials. In some cases, students were found to use generative AI platforms to produce entire academic papers based on sample documents provided by lecturers, with their contribution limited to formatting corrections, editing minor language errors, or designing the cover page.

These findings suggest that AI dependency extends beyond technological convenience and has begun to influence students' learning habits and intellectual engagement. Rather than functioning as a cognitive support tool, AI is increasingly positioned as a substitute for academic effort, raising concerns regarding the development of higher-order thinking skills and academic responsibility.

Declining Critical Thinking Skills

The second major challenge identified in this study relates to the perceived decline in students' critical thinking abilities. Both students and lecturers expressed concerns that the instant availability of AI-generated answers reduces opportunities for learners to engage in analytical reasoning, evaluation of evidence, and reflective thinking.

One student stated: "AI can reduce a person's abilities. Students no longer think critically because AI is instant—it can find and provide answers directly." (Interview with a 2023 PAI student, May 2026)

Several participants observed that the convenience of receiving immediate answers often discourages students from questioning information, comparing alternative perspectives, or conducting further investigation. This tendency is particularly problematic in Islamic Education, where understanding religious issues frequently requires contextual interpretation, critical examination of sources, and engagement with diverse scholarly opinions.

Nevertheless, not all participants viewed AI negatively. Some students offered a more balanced perspective, arguing that the impact of AI largely depends on how the generated content is utilized. When students simply copy AI outputs without reflection, critical thinking is weakened. However, when AI-generated responses are critically reviewed, compared with academic sources, and further developed through independent reasoning, AI can contribute positively to learning.

One lecturer explained that the competencies most affected by excessive AI reliance include analytical reasoning, creativity, and comprehensive critical thinking. Observation data supported this claim, showing that students who relied heavily on AI-generated content often struggled to elaborate on

arguments, defend their viewpoints, or respond to analytical questions during classroom discussions.

Declining Learning Autonomy

A third challenge concerns the weakening of students' learning autonomy. The ease with which AI provides information and ready-made explanations has encouraged some students to prioritize instant answers rather than engage in independent information-seeking and knowledge construction.

A student remarked: "When using AI, many students simply take the answer directly from AI without understanding it. Especially during presentations, they just read it aloud." (Interview with a 2023 PAI student, May 2026)

Observation findings corroborated this statement. During presentations, several students were observed reading AI-generated content verbatim, often without demonstrating a clear understanding of the concepts being presented. In some instances, students were unable to answer follow-up questions concerning the material they had just delivered.

Lecturers perceived this phenomenon as evidence of declining academic independence. According to one lecturer, students frequently submit assignments generated through AI without carefully reviewing or comprehending the content beforehand. As a result, the originality and intellectual quality of student work may be compromised.

From a broader educational perspective, these findings indicate that unrestricted reliance on AI may shift students from active learners into passive consumers of information. Such a shift is particularly concerning within Islamic Education, where meaningful learning requires reflection (*tafakkur*), inquiry (*ijtihad*), and personal engagement with knowledge.

Plagiarism Practices and Academic Integrity Issues

The study also revealed significant variation in students' understanding of academic integrity and ethical AI use. Participants expressed differing opinions regarding the boundary between acceptable AI-assisted learning and plagiarism.

One student explained: "If we use AI and directly copy the result, that is plagiarism. But if we process it further and verify it using relevant sources, then it may not be considered plagiarism." (Interview with a 2023 PAI student, May 2026)

This statement reflects an emerging awareness among some students that responsible AI use requires intellectual engagement beyond merely reproducing generated content. However, other participants expressed a different view, arguing that copying AI-generated text does not necessarily constitute plagiarism because the content is not directly attributed to another human author.

These differing perspectives indicate the absence of a shared understanding regarding authorship, originality, and attribution in AI-assisted academic work. The issue becomes even more complex because conventional plagiarism frameworks were developed before the emergence of generative AI technologies.

One lecturer emphasized that academic misconduct occurs when students delegate the entire intellectual process—including data collection, theoretical framing, methodological design, and analytical interpretation—to AI systems without meaningful personal contribution. From this perspective, the ethical issue is not merely whether AI is used, but whether students remain intellectually accountable for the work they submit.

Document analysis further revealed that institutional guidelines addressing AI-assisted writing remain limited. As a result, students often rely on personal interpretations when deciding how AI should be used in academic assignments. This situation creates ambiguity regarding acceptable academic practices and increases the risk of integrity violations.

Inaccuracy of AI-Generated Information

The final challenge identified in this study concerns the reliability and accuracy of AI-generated information. While participants generally acknowledged AI's ability to produce comprehensive and convincing responses, many questioned the validity of the information provided.

A lecturer stated: "The references used by AI are often of low quality. Therefore, we cannot rely too heavily on AI-generated answers." (Interview with a PAI lecturer, June 2026)

Both lecturers and students reported encountering instances in which AI generated inaccurate references, fabricated citations, misleading interpretations, and inconsistent factual information. Such inaccuracies were particularly concerning in academic contexts requiring rigorous evidence and reliable scholarly sources.

Observation and document analysis further indicated that students rarely verify AI-generated references before incorporating them into assignments. In several cases, cited sources could not be located in academic databases, suggesting the occurrence of AI-generated "hallucinations."

These findings demonstrate that the apparent sophistication of AI-generated responses may create an illusion of reliability. Consequently, students who lack adequate information literacy skills may be vulnerable to accepting inaccurate information without critical evaluation.

Efforts to Address the Challenges of AI Utilization

Despite these challenges, both students and lecturers reported implementing various strategies to promote more responsible and ethical AI use.

At the student level, efforts focused on strengthening alternative learning resources, including textbooks, peer-reviewed journal articles, Google

Scholar, and university library collections. Many students also reported attempting to paraphrase, revise, and verify AI-generated content before incorporating it into academic assignments.

As one student explained: "AI should be treated as a tool that makes work easier, not as the main source. We ourselves should remain the primary actor—we should think, read, and analyze." (Interview with a 2023 PAI student, May 2026)

From the lecturers' perspective, several pedagogical strategies were developed to ensure continued student engagement in critical thinking processes. These included modifying assessment formats, designing contextual case-based assignments that are difficult for AI to answer automatically, conducting spontaneous classroom discussions and debates, and strengthening students' AI literacy and awareness of academic integrity.

Observation data indicated that courses incorporating case-based discussions and oral assessments tended to reduce excessive dependence on AI because students were required to articulate and defend their own ideas in real time.

Challenges in Implementing Mitigation Efforts

Although these initiatives have shown promising outcomes, the study identified several barriers that limit their effectiveness.

Absence of Formal Program-Level Policies

Both lecturers consistently acknowledged that the Islamic Education Study Program has not yet established formal regulations governing AI use in academic assignments. Consequently, decisions regarding whether AI use is permitted, restricted, or encouraged depend largely on individual lecturers' preferences and interpretations. This situation creates inconsistency in expectations and assessment practices across courses.

Diverse Understandings of Academic Integrity

The findings revealed substantial variation in students' understanding of ethical AI use and academic integrity. While some students recognized that direct copying of AI-generated content constitutes plagiarism, others viewed AI outputs as freely usable resources. This inconsistency suggests that AI-related ethical literacy has not yet been uniformly developed among students.

Weak Synergy Among Students, Lecturers, and the Study Program

The final challenge concerns the lack of coordinated institutional responses to AI-related issues. Current efforts remain largely individual and fragmented, relying on personal initiatives undertaken by lecturers or students. No comprehensive framework currently exists to integrate AI literacy, academic integrity education, ethical guidelines, and assessment practices within the study program.

As a result, responses to AI-related challenges remain reactive rather than systematic. The findings suggest that addressing the educational and

ethical implications of AI requires stronger collaboration among students, lecturers, and institutional leaders to develop coherent policies and shared expectations regarding responsible AI use in Islamic higher education.

Discussion

Problematics of AI Utilization as a Shift in Students' Role in the Pursuit of Knowledge

The findings of this study indicate that the challenges associated with AI utilization among Islamic Education (PAI) students at Universitas Negeri Padang stem primarily from a transformation in the students' role from active seekers of knowledge to passive consumers of instant knowledge products. This phenomenon was reflected in students' dependency on AI-generated outputs, declining critical thinking skills, reduced learning autonomy, varying interpretations of academic integrity, and limited verification of AI-generated information. These findings support the argument of Chen, Xie, Zou, and Hwang (2020), who emphasize that AI in education should function as a learning support system rather than a substitute for students' cognitive engagement. Similarly, Russell (2019) argues that excessive reliance on AI can diminish human intellectual participation because many cognitive processes are delegated to automated systems.

From the perspective of educational psychology, the findings suggest a weakening of self-regulated learning, a condition in which learners become increasingly dependent on external technological assistance rather than actively engaging in planning, monitoring, and evaluating their own learning processes. Recent studies on generative AI in higher education similarly report that excessive reliance on AI-generated content may reduce students' motivation to engage in deeper cognitive processing, reflective thinking, and independent inquiry (Makarenko et al., 2024; Genjga & Muratovic, 2026). Although AI offers substantial efficiency gains, its educational value depends largely on whether students employ it as a cognitive partner or merely as a shortcut for task completion.

These findings reinforce the study conducted by Alfurqon and Wirdati (2024) on PAI students at Universitas Negeri Padang while extending their conclusions by demonstrating that AI dependency affects not only task completion but also students' broader intellectual dispositions and academic attitudes. The results are also consistent with Niyu, Gerungan, Leksmono, and Purba (2024), who warn that intensive ChatGPT usage in Indonesian higher education may weaken students' learning autonomy. Likewise, Zawacki-Richter et al. (2019) highlight persistent concerns regarding the reliability, transparency, and pedagogical implications of AI systems in higher education.

More specifically, the findings regarding declining critical thinking skills are consistent with recent research showing that students who rely heavily on generative AI often engage less frequently in analytical reasoning, argument construction, and problem-solving activities (Ansari et al., 2024; Dikkatwar et al., 2025). While AI can provide rapid access to information, it cannot fully

replace the reflective and interpretive processes required for meaningful learning. This issue is particularly significant in Islamic Education, where students are expected not only to acquire knowledge but also to critically evaluate religious, ethical, and social issues through contextual interpretation and scholarly reasoning.

The findings also reveal substantial ambiguity concerning academic integrity in AI-assisted learning. Students expressed differing opinions regarding whether copying AI-generated content constitutes plagiarism, indicating the absence of a shared ethical framework governing AI use in academic work. This observation aligns with Ali et al. (2024), who identify significant risks of academic misconduct associated with AI integration in Islamic educational contexts. Similar concerns have been raised by Eaton (2021, 2024), who argues that generative AI challenges traditional understandings of authorship, originality, attribution, and intellectual responsibility in higher education. Dahal (2025) further emphasizes that academic integrity in the AI era should be viewed not merely as compliance with institutional rules but as a broader ethical commitment to honesty, accountability, and scholarly responsibility.

The issue becomes even more significant when examined through the lens of Islamic educational philosophy. In the Islamic intellectual tradition, knowledge acquisition (*thalab al-'ilm*) is not merely a process of obtaining information but a transformative journey involving effort, reflection, discipline, and moral responsibility. Classical Islamic scholarship developed through rigorous engagement with authoritative sources, critical discussion, verification of knowledge, and continuous intellectual struggle. Consequently, when AI replaces rather than supports these processes, students risk losing essential dimensions of intellectual formation that have historically characterized Islamic scholarship.

This interpretation is supported by Halstead (2004), who argues that Islamic education fundamentally aims to cultivate morally responsible individuals capable of integrating knowledge, ethics, and action. Similarly, Thalgi (2019) emphasizes that Islamic educational values prioritize critical reflection, sincerity, and accountability in the pursuit of knowledge. From this perspective, the problem with AI is not the technology itself but the possibility that students may disengage from the intellectual and ethical processes necessary for meaningful learning.

Furthermore, the findings resonate with the ethical concerns raised by Abdul-Jabbar (2026), Sertkaya (2026), and Rahmah et al. (2025), who argue that the increasing presence of AI in educational environments necessitates stronger ethical literacy frameworks that balance technological innovation with moral responsibility. In Islamic higher education, this balance becomes particularly important because future Islamic educators are expected to embody the values of *ṣidq* (truthfulness), *amanah* (trustworthiness), and intellectual accountability. As emphasized in the Qur'anic command to read and seek knowledge (Qur'an 96:1), learning is not simply about obtaining

answers but about engaging in a process of inquiry and reflection (Shihab, 2017; Hafidhuddin, 2019).

The findings also support the ideas of M. Amin Abdullah regarding the importance of integrative, critical, and reflective thinking among Islamic Education students, as well as Azyumardi Azra's conception of Islamic intellectual traditions rooted in reading, discussion, and scholarly dialogue. Consequently, this study proposes that responsible AI use in Islamic higher education should be grounded in an Islamic Values-Based AI Ethics Framework, in which AI functions as a complementary learning tool while students retain primary responsibility for critical analysis, interpretation, and knowledge construction. Such a framework extends recent discussions on ethical AI adoption in education by incorporating Islamic epistemological and moral principles into contemporary digital learning environments (Aminudin & Hasan, 2025; Ramly et al., 2026; Obaid et al., 2024).

The Complexity of Challenges in Addressing AI-Related Problems

Although students and lecturers have initiated various efforts to mitigate the negative consequences of AI utilization, the findings demonstrate that these efforts remain constrained by several interconnected institutional and pedagogical challenges.

The first challenge concerns the absence of formal study-program policies regulating AI usage. The findings indicate that responses to AI remain highly individualized and dependent upon the preferences and initiatives of individual lecturers. This situation supports the argument that successful technology-responsive education requires alignment among institutional goals, organizational culture, leadership commitment, and policy implementation (Setianingrum et al., 2024). Without such institutional support, AI-related educational practices tend to be fragmented and inconsistent across courses and lecturers.

Recent scholarship similarly emphasizes that higher education institutions need comprehensive governance frameworks to regulate ethical AI use, establish academic integrity standards, and provide clear guidance for both lecturers and students (Costa et al., 2024; Abubakari et al., 2026). The absence of institutional policies creates uncertainty regarding acceptable AI practices and increases the likelihood of inconsistent assessment standards. Consequently, students often receive conflicting messages regarding when and how AI should be used in academic work.

The second challenge involves the diversity of students' understanding of academic ethics. The findings reveal that students possess varying interpretations of plagiarism, authorship, and intellectual responsibility when interacting with AI-generated content. This situation reflects the well-documented gap between ethical awareness and ethical behavior identified in technology-enhanced learning research (Petkou et al., 2025). Simply informing students about academic integrity does not automatically lead to ethical conduct, particularly when technological tools provide convenient opportunities for bypassing intellectual effort.

From the perspective of Islamic educational ethics, this challenge highlights the need for character formation rather than merely cognitive instruction. Ethical behavior develops through continuous practice, role modeling, institutional reinforcement, and reflective experiences. This observation is consistent with studies emphasizing that ethical AI literacy should encompass not only technical competencies but also moral reasoning, value awareness, and responsible decision-making (Bakti et al., 2025; Mariyono & Wiyono, 2026). Therefore, ethical education related to AI should be integrated into broader character education initiatives rather than treated as a standalone technological issue.

The third challenge relates to lecturers' limited time and capacity to redesign assessments that remain meaningful in the era of generative AI. Traditional assignments such as essays, summaries, and reports can now be produced rapidly by AI systems, requiring lecturers to develop more authentic forms of assessment that emphasize analysis, reflection, oral defense, contextual application, and collaborative problem-solving. However, designing such assessments requires substantial effort, pedagogical innovation, and institutional support.

This finding aligns with recent studies indicating that generative AI is transforming assessment practices in higher education and requiring educators to reconsider conventional evaluation models (Khimmataliev et al., 2025; Mijwil et al., 2023). The challenge is particularly significant in Islamic higher education because assessment is expected not only to measure knowledge acquisition but also to evaluate students' ethical reasoning, character development, and ability to apply Islamic values in contemporary contexts.

The fourth challenge concerns the limited synergy among students, lecturers, and the study program. Current responses to AI-related issues remain largely individual and fragmented rather than coordinated through a comprehensive institutional framework. This finding strengthens the argument that educational responses to emerging technologies should adopt institution-wide approaches rather than relying solely on isolated classroom interventions (Qi et al., 2025). Similar conclusions have been reported in studies examining AI governance in higher education, which emphasize the importance of collaborative engagement among academic leaders, faculty members, students, and policy makers (Asrori et al., 2025; Muhamad et al., 2024).

Taken together, these challenges demonstrate that responsible AI utilization cannot be achieved solely through ethical reminders delivered in classrooms. Rather, it requires the alignment of institutional policies, academic culture, assessment practices, ethical literacy programs, and collaborative governance mechanisms. The findings therefore support contemporary calls for holistic and sustainable approaches to AI integration in higher education that combine technological innovation with ethical accountability (Eaton, 2024; Costa et al., 2024).

From the perspective of Islamic Education, such an approach is closely related to the concept of *amanah ilmiah* (scholarly trustworthiness), which requires students and educators to maintain honesty, responsibility, and intellectual integrity in all knowledge-related activities. Consequently, future efforts to address AI-related challenges should move beyond individual interventions toward comprehensive institutional strategies that integrate AI literacy, academic integrity education, ethical guidelines, and Islamic values. Through such an approach, AI can become a means of strengthening rather than weakening the intellectual and moral formation of future Islamic educators.

Conclusion

This study found that the challenges associated with the use of Artificial Intelligence (AI) in the academic activities of Islamic Education (PAI) students are more substantial and multidimensional than previously assumed. The findings revealed five interconnected challenges: students' dependency on AI, declining critical thinking skills, reduced learning autonomy, plagiarism and academic integrity concerns, and the inaccuracy of AI-generated information. These findings suggest that AI can gradually shift from a learning support tool to a substitute for intellectual engagement when its use is not accompanied by adequate ethical awareness, critical reflection, and AI literacy. Consequently, the study challenges the prevailing assumption that the educational implications of AI can be addressed solely through normative prohibitions or classroom-level ethical reminders. Instead, the findings demonstrate that the issue is deeply embedded within students' learning behaviors, academic culture, and institutional practices, thereby opening new discussions on the relationship between AI, academic integrity, and Islamic educational values in higher education.

From a scholarly perspective, this study reinforces previous research highlighting both the opportunities and risks of AI in higher education while also questioning the adequacy of existing approaches that focus primarily on technological adoption without sufficient attention to ethical and pedagogical dimensions. More importantly, the study introduces an Islamic Values-Based AI Ethics Framework, which enriches contemporary discussions on responsible AI use by integrating AI literacy, academic integrity, institutional governance, and the Islamic principles of *ṣidq* (truthfulness), *amanah* (trustworthiness), and *thalab al-'ilm* (the pursuit of knowledge). This framework contributes to the growing body of literature on ethical AI in education by offering a contextually grounded perspective that positions AI as a tool for supporting, rather than replacing, students' intellectual and moral development.

Nevertheless, this study has several limitations. First, it was conducted within a single study program at one university and involved a relatively small number of participants, limiting the generalizability of the findings to broader educational contexts. Second, the study focused on a specific case within

Islamic higher education, and therefore the findings may not fully represent the experiences of students from different academic disciplines or institutional settings. Future research should involve larger and more diverse samples across multiple universities and educational contexts to provide a more comprehensive understanding of AI utilization and its implications for academic integrity. Quantitative and mixed-methods approaches are also recommended to examine the extent of AI dependency, measure its impact on academic performance and critical thinking, and test the applicability of the proposed framework in different educational environments.

Based on these findings, several recommendations can be proposed. At the institutional level, Islamic Education Study Programs should develop formal policies and guidelines regulating the ethical use of AI in academic work to ensure consistency across courses and lecturers. At the student level, AI should be positioned as a complementary learning tool rather than a replacement for independent thinking, analysis, and scholarly inquiry, while maintaining the values of honesty, responsibility, and intellectual accountability. At the instructional level, lecturers should continue to redesign assessment practices, strengthen AI literacy education, and promote learning activities that encourage critical reflection, dialogue, and authentic intellectual engagement. Through the integration of institutional policies, ethical education, and pedagogical innovation, AI can become a constructive resource that supports both academic excellence and the cultivation of responsible future Islamic educators.

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