Challenges and Opportunities of Integrating AI in Guidance and Counseling Services

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Challenges and Opportunities of Integrating AI in Guidance and Counseling Services for Students in Islamic Higher Education

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Abstract: This study investigates student behavior in utilizing artificial intelligence (AI) to address academic and personal challenges, as well as the subsequent implications for guidance and counseling services within Islamic higher education contexts. A qualitative research approach was employed, utilizing literature reviews and semi-structured interviews conducted with four counselors and six students from an Islamic higher education institution in Bengkulu. Data analysis followed the Miles and Huberman interactive model, encompassing data reduction, data display, and conclusion drawing. The findings indicate that students predominantly use AI tools to efficiently manage academic tasks, such as organizing schedules and accessing information. However, excessive dependence on AI has been observed to adversely affect students' critical thinking abilities, as they often unquestioningly accept instantaneous solutions provided by these technologies without deeper reflection or critical assessment. Additionally, counselors identified significant challenges in integrating AI technologies with a humanistic and spiritually grounded counseling approach rooted in Islamic values, particularly concerning issues of data privacy, confidentiality, and ethical use of technology. The results of this study emphasize the necessity of developing a balanced strategy that combines the advantages of AI with robust human interaction in counseling practices. Consequently, it is recommended that Islamic higher education institutions enhance counselor training in ethical AI utilization, while concurrently supporting students in cultivating critical thinking capacities and moral consciousness aligned with Islamic ethical frameworks. Future research should consider employing quantitative methodologies to statistically assess AI's impact on students' academic and personal development and to broaden the exploration of effective integration between technological advancements and Islamic educational values.

Key Words: Student Behavior; Islamic Values; Data Privacy; Moral Awareness; Technology Integration

INTRODUCTION

Technological advancements have significantly impacted the activities of college students today, resulting in noteworthy changes in their learning methods, interactions, and workforce preparation (Timotheou et al., 2023). Digital technologies like the internet, smart devices, and artificial intelligence (AI) empower students to access journals, e-books, and study materials anytime and anywhere. Technology supports more flexible online and hybrid learning environments in education, promoting

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enhanced student collaboration through learning management systems (LMS) and communication applications. Furthermore, students leverage technology to improve their digital skills, complete assignments more efficiently, and manage their time effectively (Garlinska et al., 2023; Istiawanto et al., 2024).

Artificial intelligence has significantly enhanced student productivity and efficiency by effectively enabling virtual assistants to manage time and tasks (Harakat, 2024). Learning applications such as Duolingo and Khan Academy facilitate a more autonomous learning experience through adaptive systems that adjust the difficulty level based on the user's capabilities (Abin & Andas, 2022; Mahendra et al., 2023). Furthermore, AI is revolutionising social interactions. Sophisticated algorithms on platforms like Instagram, TikTok, and YouTube analyse user preferences to deliver personalised content, creating "bubbles" that expose users to relevant material without manual searches (Poleac et al., 2024; Singh, 2024). Additionally, students can communicate more swiftly, thanks to predictive features in chat applications that save time on typing (Okonkwo & Ade-Ibijola, 2021).

AI significantly impacts the entertainment industry, with students increasingly engaging with streaming services like Netflix and Spotify, which utilise algorithms to recommend personalised content. Digital content creators often employ AI-driven tools to enhance photos and videos on platforms like TikTok and Instagram, facilitating a faster creative process through advanced automation features (Cheng, 2024; McCarthy, 2024). Furthermore, AI is shaping their shopping habits and lifestyles. E-commerce platforms like Shopee, Amazon, and Tokopedia leverage AI-based recommendations to showcase products aligned with users' search histories, proving more effective than traditional advertising methods (Schwab, K., 2016). In the mental health sector, apps like Headspace and Calm are using AI to offer personalised meditation and sleep pattern guidance (Ningsih & Tjahjono, 2024; Zikry et al., 2024).

AI in education presents several challenges for students, particularly in learning and skill development. Many students lack digital literacy, resulting in an inadequate understanding of how to utilise AI morally and effectively (Fakhri et al., 2024; Joseph et al., 2024). Furthermore, an overreliance on AI may stifle creativity, problem-solving abilities, and critical thinking (Gerlich, 2025; Srikaanth, 2024). Also, not all students have the same access to technology. Students who live in remote areas or who are poor often have limited options (Chigwada & Ngulube, 2024; Indrawati, 2024; Norman et al., 2022). A lot of students still don't know what the ethical and privacy implications are of AI-based systems and how their data is handled (Usher & Barak, 2024; Zaidy, 2024). There are also concerns regarding plagiarism and academic integrity, as some students may be tempted to use AI to complete assignments without fully grasping their content (Cong-Lem, Tran, et al., 2024; Rodrigues et al., 2024; Sozon 16 al., 2024).

AI is a branch of computer science dedicated to developing systems and machines capable of emulating human cognitive functions, such as learning, reasoning, decision-making, and problem-solving (Manning, 2020). Using data and algorithms, AI performs analysis, makes predictions, and completes tasks that traditionally require human intervention. It is augmented by natural language processing (NLP) to interpret human language and computer vision to analyse images and videos (Chen et al., 2024). Additional technologies such as machine learning enable computers to learn from data without direct programming, while deep learning leverages artificial neural networks to process data on a large scale. AI finds applications across various sectors, including education, healthcare, business, transportation, and entertainment. As it continues to advance, AI is becoming a pivotal component of the ongoing digital transformation of our world, offering numerous advantages such as increased efficiency, quicker decision-making, and enhanced productivity (Aguilera-Cora et al., 2024; Aldoseri et al., 2024). However, AI raises significant concerns, including ethical i 22 lications, data security, and its impact on employment (Aguilera-Cora et al., 2024; Kocak, 2024). In the context of Islamic higher education, the integration of AI has transformed the processes of learning, research, and service delivery in alignment with Islamic values. AI facilitates adaptive learning by offering resources tailored to students' abilities, including materials on tafsir, hadith, and fiqh (Alhajj et al., 2024; Prasetyo, 2025). Furthermore, digitising Islamic references enables swift access to classic texts and manuscripts, thereby enhancing research and developing Islamic scholarship. Regarding class scheduling and data management, campuses employ AI to boost administrative efficiency (Bukhori & Sain, 2024; Herwinsyah et al., 2024; Lestari et al., 2024).

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Islamic colleges can leverage artificial intelligence-based chatbots to offer guidance on worship, address enquiries related to Islamic law, and provide Islamic counseling that assists students in overcoming psychological or spiritual challenges (Sholeh et al., 2024; Wan et al., 1943). Furthermore, this technology enables the creation of interactive da'wah media, including augmented reality (AR) applications aimed at exploring the history of Islam (Atho, 2024; Dina, 2023; Safar & Anggraheni, 2024). However, it is essential to consider ethics, digital literacy, and integrating Islamic values within technology. Consequently, the adoption of artificial intelligence can aid Islamic universities in their mission to cultivate a generation characterised by knowledge, faith, and virtuous character (Abu Bakar et al., 2024; Amriani et al., 2023; Meliani et al., 2022; Rabbianty et al., 2023; Safwandy et al., 2023).

Previous research indicates that artificial intelligence has significant potential to enhance counseling and guidance services in Islamic higher education institutions, particularly in terms of efficiency and user friendliness. Several studies have shown that AI-based chatbots can offer Islamic counseling to students (Mashudi et al., 2023). These chatbots provide initial psychological support, address common enquiries about Islamic law, and share inspirational insights from Qur'anic verses and hadiths. Additionally, some research has focused on developing AI-driven digital platforms for Islamic counseling, including interactive learning modules aimed at strengthening spiritual values (Abdillah et al., 2024; Sofa, 2024; Sutrisno, 2024). These platforms analyse students' challenges and propose solutions grounded in Islamic methodologies. However, the study also highlighted several hurdles that impede the adoption of AI in Islamic counseling services. These challenges include the lack of technological proficiency among counselors, the necessity of utilising Islamic-based data to train AI algorithms, and ethical concerns such as safeguarding the privacy and confidentiality of student information (Andriansyah, 2022; Arif et al., 2024; Hakim & Anggraini, 2023; Yahya, 2024).

As technology advances rapidly and the demand for more efficient and accessible counseling services grows, it is crucial to research the challenges and opportunities associated with integrating artificial intelligence (AI) into guidance and counseling services for Islamic religious students. While addressing these challenges, this study explores how AI can be optimised to enhance counseling services' efficiency, inclusivity, and data-driven nature. Furthermore, this research will pave the way for developing AI-based counseling applications that cater to spiritual issues and uphold Islamic values such as integrity, patience, and mental health.

The study on "Challenges and Opportunities of Integrating AI in Guidance and Counseling Services for Students in Islamic Higher Education" examines the application of AI in addressing academic issues and personal challenges students face. AI can significantly enhance students' academic experiences by facilitating improved data search and analysis, providing structured support for academic writing, and helping them manage the workload that often impacts their mental well-being (Ambarita & Nurrahmatullah, 2024; Herawati et al., 2024; Kadhim & Mousa, 2024; Kalniņa et al., 2024; Pertiwi et al., 2024). Furthermore, AI enables the personalisation of tutoring services to cater to individual student needs, including the management of interviews and the provision of relevant academic materials.

On the other hand, AI-driven counseling applications can assist college students with personal challenges such as stress, anxiety, and identity crises by offering emotional and spiritual support grounded in Islamic values. The integration of AI into guidance and counseling services allows campuses to deliver quicker and more inclusive support to students requiring assistance, particularly in identifying mental health issues or related concerns (Arif et al., 2024; Hartafan et al., 2024; Indriani et al., 2024; Muhammad et al., 2024; Rabbianty et al., 2023). This research explores the challenges and opportunities associated with the thoughtful implementation of AI, ensuring that this technology is used ethically and effectively to support academic and personal development while remaining aligned with Islamic teachings.

METHOD

Research Approach

This research employed a qualitative approach and utilised a descriptive exploration technique (Liu & Jia, 2023). This research gathered extensive and detailed data from multiple sources, including

students and counselors in Islamic higher education. The gathered data was subsequently examined employing the interactive analytical methodology of Miles & Huberman (Asipi et al., 2022), encompassing the phases of data reduction, data display, and conclusion formulation.

Subject

This study focusses on Islamic higher education in Bengkulu, specifically the Institut Agama Islam Negeri (IAIN) Curup, Universitas Fatmawati Bengkulu, and Universitas Muhammadiyah Bengkulu. This study involved interviews with four professional counselors in guidance and counseling operations, together with six students utilising AI to address their academic and personal challenges. Participants aged 18–25 from varied socioeconomic backgrounds within Islamic institutions provided insights about the role of AI in Islamic therapy. Recruitment employs selective sampling by selecting participants through counseling departments, student associations, and social media platforms.

Researchers uphold professional and ethical interactions with participants, remain cognisant of power dynamics, and foster a respectful environment to elicit authentic responses. No incentives were provided; nevertheless, Participants received a comprehensive explanation of the study's objectives, guarantees of confidentiality, and the right to withdraw at any point.

Research Procedures

The research was conducted from February to July 2024. To collect data, the study conducted in-depth interviews with students and counselors. In addition, this study observes how AI-based technology interacts with guidance and counseling services; observation notes focus on how students and counselors use technology in the counseling process. The interviews were conducted directly via video call, with each session lasting between 50 and 75 minutes on average. Participants were given time to answer questions freely and in-depth according to their perspectives. Observation lasts between 60 and 90 minutes per session, depending on the duration of the observed tutoring service.

Questions asked to students when collecting data include:

1. What do you think about using AI to support guidance and counseling services?
2. Has there ever been a counseling service that uses technology? If that is true, what has your experience been like?
3. What problems have you encountered when using AI in counseling?
4. How do you think AI can help solve your academic or personal problems?

Meanwhile, the questions asked to counselors include:

1. What do you think about the use of AI in counseling?
2. How can the relationship between counselors and students during counseling be affected by artificial intelligence?
3. How do you see opportunities to improve the quality of counseling services with AI?
4. What obstacles did you encounter when implementing this technology?

Before the interview and data collection were conducted, participants were given detailed information about the purpose of the research and asked to sign a written consent sheet. All interviews are recorded with the participant's permission to ensure the data is accurate, and the participants double-checked the transcript to prevent misinterpretation.

The study follows the principles of utility and loyalty (O'Shea et al., 2016). The principle of loyalty is intended that the results of the study describe the original data without manipulation while the utility principle is implied that the results of this research provide practical suggestions on the development of artificial intelligence-based counseling services in Islamic higher education.

Data analysis

To identify patterns, themes, and relationships related to the challenges and opportunities of using artificial intelligence technology in guidance and counseling services, this study systematically analyzed the data. The analysis process is designed to guarantee the integrity, transparency, and validity of the

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methodology (Muhammad et al., 2024). Once the data were collected, the researchers assigned unique codes to be incorporated into each data collected. The data was then categorized based on its source (students and counselors) and its form (interviews, observations, documentation). Coding is used to find important ideas or concepts in data. This process includes several stages, such as Open Coding, where the data is divided into meaningful sections and labeled for each section. Axial Coding, where the initial codes are grouped into categories based on visible thematic relationships, and Selective Coding, where the main themes related to the research questions are selected to be given.

Once the coding is complete, a thematic analysis is carried out to find the main themes that emerge from the data. This process includes Initial Theme Recognition to identify based on frequently occurring code and its relevance to the focus of the research, and Theme Consistency Testing, where the data is double-checked, to ensure that the identified themes are consistent across the dataset. In addition, researchers compared data from students and counselors to identify similarities and differences. In addition, the development of the final theme, where the theme has been refined includes key challenges (such as ethical issues and technical limitations) and potential opportunities (such as personalization support and accessibility improvements).

Source Triangulation is a procedure that improves methodological validity and integrity by comparing data from observations, documents, and interviews to ensure that findings are consistent. Member examination, in which the results are provisionally confirmed to the study participants (both counselors and students) to ensure that the researcher's interpretation is in accordance with the experience. Where research associates review the data analysis to avoid individual bias in interpretation and lastly, Trail Audit which records the analysis decisions in detail to make everything clear and allow other researchers to replicate the results.

Empirical data obtained through a systematic thematic analysis process supports the claims of this study. Each theme is based on direct quotes from participants, which increases the credibility and validity of the results. One example is the theme of Ethical Challenges, where many students complain about data privacy in AI-based counseling services. One student interviewed said, "I am afraid that my personal data will be misused if counseling uses AI applications."

RESULTS

According to the findings of the study, there are various important discoveries concerning the behaviour of students when utilising AI to address issues related to Islamic higher education. Through the processes of reduction, presentation, and drawing conclusions based on the Miles & Huberman approach, data analysis is carried out during the process. The following was discovered as a result of the study's findings:

Use of AI in Academic and Personal Problem Solving

According to the data presented in Table 1, the majority of students make use of artificial intelligence in order to address a number of academic challenges, such as managing their time effectively, retrieving information, and completing their work. After conducting interviews with four different counselors, it was determined that students commonly use AI programs in order to make their day-to-day academic activities easier. This was discovered as a result of the fact that students frequently use these programs.

Tabel 1. Use of AI by Students

Data sources	Findings	Statements	Explanation
Counselor Interview	6 counselors stated that college students believe that AI can help them complete tasks faster when they use tools such as virtual assistants and AI-based learning apps.	"College students often use AI apps like Google Assistant and Duolingo"	AI contributes to time efficiency and offers immediate solutions.

Student Case Study	5 out of 6 students admit to using AI to complete academic assignments.	"AI helps me manage my time and find information quickly and I don't have to think hard"	Save time and increase productivity

The Influence of AI on Critical Thinking Skills

Shown in Table 2 the vast majority of college students have a propensity to accept AI solutions without taking the time to undertake additional research, which has the potential to reduce their capacity for critical thinking. According to the statements made by three of the six students, the excessive use of artificial intelligence prompted them to think less deeply than they otherwise would have.

Tabel 2. Impact of AI Use on Critical Thinking Skills

Data source	Findings	Consequence
Student Interview	3 out of 6 students received an AI solution without further evaluation.	Critical thinking skills decline
Literature (Gleason, 2018; Carr, 2010)	Reliance on AI reduces analytical skills.	Potential decrease in thinking independence

Ethical Challenges and Religious Values

Those who work in counseling have expressed their concerns over the ethical implications of using artificial intelligence, particularly with regard to the security of personal information and the privacy of data. It is important to note that this is significant in the context of Islamic higher education, which places a high value on the incorporation of religious ideas into leading and consulting, as demonstrated in Table 3.

Tabel 3. Ethical Challenges and Religious Values

Data source	Findings	Explanation
Counselor Interview	Concerns about student data privacy.	The importance of strict regulations to maintain student trust
Literature (Bessant, 2018; Schwab, 2016)	AI has the potential to threaten privacy.	An approach that ensures ethical use is needed

The Role of Counselors as Technology and Humanistic Mediators

Table 4 demonstrates whether or not counselors acknowledge the significance of integrating humanistic principles and technological advancements in the provision of guiding and counseling services. Although artificial intelligence can assist with administration, students still require hands-on involvement in order to develop emotional skills and the ability to make moral decisions.

Tabel 4. The Role of Counselors in the Integration of Technology and Humanistic Values

Data source	Findings	Recommendation
Counselor Interview	Counselors need to balance technology with a humanistic approach.	Training counselors in the ethical use of AI.
Case study	Students are more comfortable with an approach that involves human interaction.	Increased capacity of counselors is needed

Table 5 provides an overview of the opportunities and problems associated with the application of artificial intelligence (AI) in guiding and counseling services for students enrolled in Islamic higher education. This summary is based on the findings of the research.

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Tabel 5. Summary of Challenges and Opportunities for the Use of AI in Guidance and Counseling Services for Students in Islamic higher education

Aspects	Findings
Reliance on artificial intelligence (AI)	Students use artificial intelligence to shorten time.
Reduces Thinking Ability	Decline in critical thinking skills
Challenges for Counselors	Combining technology in humanistic and Islamic ways
Problems with Privacy and Ethics	Concerns about the security of student data

In order to provide a more accurate depiction of the connection between the use of artificial intelligence, the ability to think critically, and the difficulties faced by counselors, please refer to Table 6.

Tabel 6. The Relationship Between AI Use, Critical Thinking Skills, and Challenges for Counselors

Challenge	Chance
Low Literacy of AI Technology Many students lack understanding of AI technology.	*Expanding Accessibility* AI allows one to get guidance and counseling at any time, especially in remote places
Problem of Data Privacy Concerns about the security of students' personal data and possible misuse	*Service Individualization* AI can tailor services to individual needs and circumstances
Reduces the Ability to Think Critically Students' ability to interact and analyze is reduced when they rely on instant AI solutions.	*Counseling Effectiveness* AI can allow counselors to concentrate on deeper relationships with students by automating administrative tasks.
Moral and Ethical Challenges Moral policy is necessary for the use of technology in counseling in accordance with the principles of Islam	*Innovation in Counseling* By combining artificial intelligence with Islamic humanistic and spiritual approaches, a more comprehensive counseling model can be created.

DISCUSSION

This research delves into the intricate challenges and promising opportunities of integrating AI in guidance and counseling services for Islamic religious students. The central question we seek to answer is: "What are the challenges and opportunities in applying AI to guidance and counseling in Islamic higher education?" This study holds significant weight in the face of the rapid technological advancements and the escalating need for responsive and efficient counseling services.

Interviews with four counselors from three Islamic higher education in Bengkulu provide valuable insights into the use of AI in guidance and counseling. Most counselors observed that students frequently use AI for academic purposes, such as time management, completing assignments, and searching for information. However, they noted that AI is less effective in addressing interpersonal relationships and emotional well-being.

A case study involving six students from three Islamic colleges revealed a significant reliance on AI, where 5 out of 6 students reported regularly using AI to solve personal and academic problems. They highlight that AI helps them save time and offer instant solutions, with chatbots, information search engines, and time management apps being the most commonly used tools.

Counselors, as mediators between technology and humanism, play a crucial role in integrating AI into Islamic education. They report challenges in combining AI with the humanist and spiritual approaches expected in Islamic educational settings. While AI facilitates access to information and simplifies administrative processes, in-person tutoring is essential for students to develop emotional intelligence and make morally sound decisions. Ethical concerns and religious values also emerged as key themes, with counselors emphasizing data privacy, the reliability of AI-provided information, and potential misuse. This underscores the complex task of balancing AI's integration with Islamic principles in counseling.

Regarding emotional and interpersonal issues, 4 out of 6 students indicated they do not rely on AI. Instead, they prefer to turn to friends, family, or medical professionals, underscoring the importance of ongoing human interaction in addressing emotional and moral issues. This preference highlights the limitations of AI in these areas. The impact of AI on critical thinking skills is a pressing issue, as 3 out

of 6 students admit that the extensive use of AI for problem-solving reduces their motivation to think critically. This raises concerns about the potential weakening of critical thinking skills among students, emphasizing the need for a balanced approach to AI integration.

The research confirms that students are using AI for academic purposes, which reflects the integration of their digital tools into their daily lives. This supports findings that prefer to obtain information quickly and efficiently (Garlinska et al., 2023; Harakat, 2024; Istiawanto et al., 2024). With their familiarity with the technology that drives autonomous learning, students become more independent. Research has noted that technology has transformed learning by providing unlimited access to resources, allowing students to manage their learning pace and schedule. AI-based tools like Duolingo and Quizlet support language learning and test preparation, providing personalized assistance for complex material (Zhu et al., 2025).

AI increases productivity and efficiency, making it indispensable for students to manage academic assignments. AI speeds up tasks such as writing, reviewing, and analyzing data, which would be more time-consuming if done manually (Garg et al., 2024). The capacity of AI to complete repetitive tasks faster and more accurately than humans benefits college students who work under tight deadlines. Tools like Zotero and Mendeley simplify reference management and literature searches, while Turnitin, an AI-based tool, helps maintain academic integrity (Al Naqbi et al., 2024; Okagbue et al., 2022).

AI's ability to quickly retrieve information is why 4 out of 6 college students use it for academic problem-solving. AI's ability to analyze, organize, and present data from multiple sources is invaluable for academic research, especially in the era of big data. This feature helps students complete academic assignments more efficiently and produce better-quality research. Apps like Grammarly for checking grammar, ChatGPT for building ideas, and Khan Academy, which uses AI to customize learning materials, are examples of how AI has been incorporated into the learning process. While college students use AI extensively to solve everyday problems, there is a difference between using AI for emotional and technical problems. 4 out of 6 students do not use AI to solve interpersonal or emotional problems; They prefer to rely on human communication, such as with friends, family, or educators. These results support Turkle's argument that humans still need an emotional connection that artificial intelligence cannot replace, even though technology helps access information (Turkle, 2017).

Although AI has evolved into a valuable tool in various fields, such as data analysis and logic-based decision-making, it still fails to process human emotions. AI is usually better at solving structural and technical problems. However, it is ineffective in situations requiring emotional understanding and empathy. According to Turkle, AI-based human relationships often cannot handle complex emotional issues, especially in social interactions that require human attention and warmth (Alshawabkeh et al., 2025; Turkle, 2017). AI can process data but cannot provide the soothing emotional support or validation of empathy that people often seek when faced with interpersonal issues (Cong-Lem, Soyoof, et al., 2024; Farhan, 2023).

Social support from friends, family, and teachers is essential in dealing with emotional and interpersonal issues. According to social support theory, connecting with others can help reduce stress and improve emotional well-being (Acoba, 2024). Research indicates that college students who interacted with people rather than AI felt more at ease seeking support, particularly in terms of emotional interaction and mutual understanding. While technology can facilitate communication, face-to-face interactions remain vital for providing genuine emotional support, which college students often perceive as more authentic (Bargh & McKenna, 2004).

Research shows that people are more likely to share emotional issues with people they trust than with technology (Ford et al., 2021). The perception of privacy and trust is very important in this regard. People are more reluctant to share personal concerns through technological tools like AI because they are still determining how the technology handles and stores personal data. Communicating with friends, family, or educators, on the other hand, provides a sense of security and confidence that they will receive support without worrying about their privacy (Furizal et al., 2024).

Cultural and religious values in Islamic colleges greatly influence students' preferences for human communication (Karnadi et al., 2023; Musyahid & Kolis, 2023). Religious and cultural values often influence how a person resolves emotional and interpersonal issues. In such situations, students may feel more comfortable and appropriate talking to people they believe in and who understand their religious values. Communication with educators or counselors based on religious values tends to provide

support and a sense of security regarding their spiritual context, which artificial intelligence cannot provide (Sastra Negara et al., 2024).

This study demonstrates that artificial intelligence (AI) is beneficial in various aspects of life. However, its role as a supportive tool in emotional and interpersonal services is far more critical than simply replacing human communication. While AI can assist with administrative tasks in counseling—such as scheduling appointments and managing data—it cannot replicate the empathy found in human interaction. The essential human element must be preserved in guidance and counseling services. Technology can enhance and optimize these services, but it cannot replace the depth of support provided by a compassionate human being (Bessant, 2018).

The results of this study also open the door to the development of more humanistic artificial intelligence, which can address emotional and interpersonal problems by combining artificial intelligence with human empathy. Such developments could include creating artificial intelligence systems that can better read emotions, respond more personally, and offer more "human" interactions. Technology can improve emotional connections, but it requires a design approach that takes humans into account.

These findings directly impact guidance and counseling services in higher education, especially for students, because they prioritize interpersonal relationships involving people, meaning that guidance services must focus on personal interaction. While college counselors can use technology to improve their performance, face-to-face communication remains essential. The role of humans in providing empathy and deep understanding has become even more important for more complex and emotional issues. This makes it difficult for Islamic educational institutions to incorporate artificial intelligence technology without sacrificing the principles of humanistic and spiritual guidance.

In addition, the study found ethical issues related to the use of AI in Islamic higher education, especially regarding data privacy and reliability. Certain higher education counselors are concerned about the potential for the increased use of AI to manipulate data or violate student privacy. Beauchamp and Childress suggest that ethical principles such as privacy and fairness are essential when using new technologies (Childress, 2000).

In Islamic education, the proper use of technology must be based on religious principles. Although artificial intelligence has incredible capabilities that can help facilitate access to information, it must be governed by Islamic ethics (Esposito, 2011). The unethical use of artificial intelligence can threaten the moral principles desired by Islamic educational institutions, especially those related to student morals and behavior.

In the study, 3 out of 6 students reported that relying too heavily on AI hinders their ability to think critically. They expressed a tendency to accept answers provided by AI without further review or analysis. This observation aligns with previous research, which indicates that excessive use of technology can diminish a person's inclination to engage in deep and critical thinking (Carr, 2010).

Critical thinking means evaluating evidence, finding hypotheses, and making conclusions based on logical reasoning. This is crucial for a quality educational process, especially in higher education. Critical thinking includes skills such as clarification, inference, and evaluation, which help students receive and examine information skeptically (Bond et al., 2023). However, with the ease of artificial intelligence, college students may be inclined to accept AI-generated responses without engaging in further analysis or critical evaluation (Facione, 2011).

While technologies like AI make it easier for people to access information, research shows that relying too much on technology can interfere with cognitive development and active learning. Active learning encourages deeper thinking and engages students in interacting directly with the material. The finding that 3 out of 6 students are likely to receive answers from AI without further examination suggests that students need to be more utilized in self-assessment. Self-assessment is an important part of critical thinking, requiring people to test information sources' credibility and validity (Arini et al., 2023). While AI can provide technically accurate answers, further user understanding and evaluation are necessary to adopt incorrect or irrelevant information without question. This suggests that while AI is helpful, it should be seen as a tool to support critical thinking rather than as a substitute for mental processes.

Critical thinking requires skepticism of the information received, constantly asking questions, and looking for additional evidence. Skepticism can disappear due to reliance on AI. Technology often leads

people to trust the results they produce too much, reducing the desire to question and explore other options. This causes students to refrain from trying to test information from different perspectives, which in turn causes them to lose their critical thinking skills. An "instant solution" culture has been created using AI in everyday life, significantly when solving academic problems. Students prioritize instant results over deep and analytical thought processes. Educational institutions, especially Islamic higher education, are challenged to create curricula and mentoring programs that help students learn to think critically and make good use of AI technology. For example, counseling programs can be modified to teach students how to use technology wisely, integrate critical thinking skills with technology, and help them make moral decisions based on Islamic values. Counselors should emphasise the importance of critical thinking and evaluating using AI, especially in more complex contexts.

A significant outcome of this study is that the use of AI in guidance and counseling can reduce the stigma that often prevents students from seeking help. Research indicates that AI-based applications can make initial support more accessible, allowing college students to seek assistance more comfortably, without feelings of shame. Additionally, AI can help human counselors focus on building more productive relationships with their clients by automating administrative tasks. This approach enables counselors to gather faster and more detailed information about student needs while still maintaining face-to-face interactions, which is essential for a humanistic approach.

In Islamic educational institutions, artificial intelligence can be utilized to support Islamic values, such as promoting openness and honesty in the guidance process. Ensuring that AI guidance remains aligned with Islamic values and morals is important. In addition, this study emphasizes the importance of combining Islamic values with AI in the Islamic higher education guidance and counseling process. The counselors interviewed stated that while AI can offer some practical benefits, developing spiritual and moral values remains integral to the counseling process. In Islamic higher education, AI-based education must emphasize the importance of Islamic moral awareness and ethics when using technology. For example, values such as amanah (trustworthy), istiqamah (consistency), and tawakkul (leaning on God) can be taught along with the technical skills to use AI. Counselors can play an important role in helping students understand that technology, including AI, was given by God for the good of humanity but should still be used with caution and responsibility (Fitryansyah & Fauziah, 2024; Sholeh et al., 2024).

Other studies show that technology can improve access to mental health services. However, there are significant differences in methodology. This study emphasizes how important it is to adapt AI systems to local cultural values to be more effective in Islamic societies; many other studies have focused on the technical aspects of AI, but this study emphasizes how important it is to work together between technology developers and traditional counselors to create culturally appropriate AI solutions.

This study concludes that the challenges of using AI in Guidance and Counseling services in Islamic higher education are the low technological literacy possessed by students, students' concerns about their privacy data, the decline in students' critical thinking skills because they always get instant information from AI and the lack of integration of Islamic-based and humanistic counseling services. While the opportunity to use AI in guidance and counseling services in Islamic higher education is that AI counseling services are easier to access anytime and anywhere, opportunities for the use of AI are in accordance with the needs of students, and the use of AI can allow counselors to concentrate on more profound relationships with students by automating administrative tasks, and they need to combine artificial intelligence with humanistic and spiritual approaches to Islam so that guidance and counseling services are more comprehensive. According to this study, it is necessary to have policies that support the use of AI in guidance and counseling, including training counselors to use AI technology properly. Additionally, more research is needed to study the long-term impact of AI in Islamic education and how it can be adapted to religious principles.

This research has several limitations that need to be considered. First, the scope of this study is limited to Islamic higher education in Bengkulu Province, which means that the results may need to be more representative of the situation in other Islamic higher education in Indonesia or the broader educational context. Second, the number of study subjects, namely four counselors and six students, is relatively small, so generalizing the findings requires caution. The data collected is potentially influenced by subject bias, especially in interviews and case studies, where respondents are likely to provide the answers they think are expected. Third, this study uses a qualitative method, so even though

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it is in-depth. The results are descriptive and cannot be used to conclude a causal relationship between the use of AI and its impact on student's critical thinking skills or ethics.

It is recommended that further research be carried out with a broader scope, involving more higher education and subjects to increase external validity. Quantitative research or mixed methods can be applied to provide a more comprehensive picture and statistically measure the impact of AI on student behavior. In addition, more in-depth research on the influence of AI on the ethical dimensions and Islamic values across various demographic backgrounds is also needed. Further studies should test interventions involving training in the responsible use of AI and integrating humanistic approaches in counseling guidance. This research can also be expanded by examining the long-term impact of AI on the development of students' soft skills and how AI can be used to support moral and spiritual development in higher education.

CONCLUSION

This research reveals the challenges and opportunities in integrating artificial intelligence (AI) into guidance and counseling services in Islamic higher education. The research findings show that most university students utilize AI to complete academic tasks efficiently, but over-reliance on AI may weaken their critical thinking skills. In addition, AI has not been able to fully replace human interaction in dealing with emotional and interpersonal issues. From the counselor's perspective, using AI in guidance and counseling services poses challenges related to ethics, data privacy, and alignment with Islamic values. However, AI also offers positive potential, such as increased accessibility of services, personalization of academic and emotional support, and efficiency in administrative tasks. Therefore, a balanced strategy is needed to utilize AI while maintaining the primary role of human interaction in the counseling process.

The implications of this study highlight the need for policies that support the ethical use of AI in guidance and counseling, including training for counselors to make optimal use of AI without compromising Islam's humanistic and spiritual principles. In addition, this study recommends developing a guidance service model that combines AI with an Islamic values-based approach to ensure more comprehensive and responsive services to students' needs. For future research, it is recommended to expand the scope of the study with quantitative methods to measure the impact of using AI more objectively. Further studies also need to explore how AI can be integrated more effectively into the Islamic higher education ecosystem while prioritizing ethics and strengthening students' moral character.

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REFERENCES

Abdillah, I., Nugraha, L., & Java, E. (2024). STRATEGIES FOR INNOVATIVE LEARNING BASED ON ISLAMIC VALUES IN THE DIGITAL ERA. *Proceedings of the International Conference on Education, Society and Humanity, 02*(02), 841–851.

Abin, R., & Andas, N. H. (2022). The Effect of Using Autonomous Learning Model by Duolingo-Assisted to Improve Students' Vocabulary Mastery at VIII Class of SMPN 3 Buton Tengah.

EduLine: Journal of Education and Learning Innovation, 2(4), 415–426. https://doi.org/10.35877/454ri.eduline1258

Abu Bakar, A. Z., Nabghan, W., Elhaei, M., Abul Khassim, Z., Mustafa, W. A., & Abd Aziz, N. H. (2024). Comprehensive Review on Islamic Ethics and the Rise of Technology. *Journal of Advanced Research in Applied Sciences and Engineering Technology, 51*(1), 184–194. https://doi.org/10.37934/araset.51.1.184194

Acoba, E. F. (2024). Social support and mental health: the mediating role of perceived stress. *Frontiers in Psychology, 15*(February), 1–12. https://doi.org/10.3389/fpsyg.2024.1330720

Aguilera-Cora, E., Lopezosa, C., Fernández-Cavia, J., & Codina, L. (2024). Accelerating research processes with Scopus AI: A place branding case study. *Revista Panamericana de Comunicación, 6*(1). https://doi.org/10.21555/rpc.v6i1.3088

Al Naqbi, H., Bahroun, Z., & Ahmed, V. (2024). Enhancing Work Productivity through Generative Artificial Intelligence: A Comprehensive Literature Review. *Sustainability (Switzerland),16*(3). https://doi.org/10.3390/su16031166

Aldoseri, A., Al-Khalifa, K. N., & Hamouda, A. M. (2024). AI-Powered Innovation in Digital Transformation: Key Pillars and Industry Impact. *Sustainability (Switzerland),16*(5). https://doi.org/10.3390/su16051790

Alhajj, I. Q. A., Budiman, Karolina, A., Apriani, E., Warlizasusi, J., & Kurniawan. (2024). Artificial Intelligence: Opportunities and Threats in Islamic Higher Education. *Mudir : Jurnal Manajemen Pendidikan, 6*(1), 1–9. https://ejournal.insud.ac.id/index.php/mpi/index

Alshawabkeh, I., Mara, U. T., Alam, S., & Sharolyn, L. (2025). Artificial Intelligence and Human Resource Management : A Bibliometric Analysis. *The International Journal of Business & Management, 12*(2), 128–141.

Ambarita, N., & Nurrahmatullah, M. F. (2024). Impacts of Artificial Intelligence on Student Learning: A Systematic Literature Review. *Jurnal VARIDIKA, 36*(1), 13–30. https://doi.org/10.23917/varidika.v36i1.4730

Amriani, A., Maftuh, B., Nurdin, E. S., & Safei, M. (2023). Ethics of Using Technology in Strengthening Students Religious Character. *Al-Hayat: Journal of Islamic Education, 7*(2), 488. https://doi.org/10.35723/ajie.v7i2.362

Andriansyah, Y. (2022). Ethical Dimensions of the Covid-19 Pandemic: Some Religious Studies Point of View. *Millah: Journal of Religious Studies, 21*(3), xi–xxiv. https://doi.org/10.20885/millah.vol21.iss3.editorial

Arif, M., Irfan, S., Shaoan, M. M. R., & Ali, W. (2024). AI And Machine Learning In Islamic Guidance: Opportunities, Ethical Considerations, And Future Directions. *Guidance: Jurnal Bimbingan dan Konseling, 21*(02), 429-451.

Arini, R., Rahayu, Y. S., & Erman, E. (2023). Profile of Critical Thinking Results Analyzed from Facione Indicators and Gender of Learners. *IJORER : International Journal of Recent Educational Research, 4*(4), 434–446. https://doi.org/10.46245/ijorer.v4i4.328

Asipi, L. S., Rosalina, U., & Nopiyadi, D. (2022). The Analysis of Reading Habits Using Miles and Huberman Interactive Model to Empower Students' Literacy at IPB Cirebon. *International Journal of Education and Humanities, 2*(3), 117–125. https://doi.org/10.58557/ijeh.v2i3.98

Atho, A. (2024). *Integration of AI Tools in Islamic Education Curriculum Development Management : Challenges and Opportunities*. 1(June), 117–132.

Bessant, J. (2018). *Ethical Issues in AI Counselling*. Cambridge University Press.

Bond, R. R., Mulvenna, M. D., Potts, C., O'Neill, S., Ennis, E., & Torous, J. (2023). Digital transformation of mental health services. *Npj Mental Health Research, 2*(1), 1–9. https://doi.org/10.1038/s44184-023-00033-y

Bukhori, M. I. B., & Sain, Z. H. (2024). The influence of ai on islamic education: revolutionizing learning models and strategies. In *Proceeding of International Conference on Education and Sharia* (Vol. 1, pp. 336-342).

Carr, N. (2010). *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton & Company.

Chen, Y., Wang, S., Lin, L., Cui, Z., & Zong, Y. (2024). Computer Vision and Deep Learning Transforming Image Recognition and Beyond. *International Journal of Computer Science and Information Technology, 2*(1), 45–51. https://doi.org/10.62051/ijcsit.v2n1.06

Cheng, G. (2024). Research on the Displacement Impact of Artificial Intelligence on the Film Industry. *Highlights in Business, Economics and Management, 28*, 48–53. https://doi.org/10.54097/waqav705

Chigwada, J., & Ngulube, P. (2024). Bridging the knowledge gap. *The International Journal of Information, Diversity, & Inclusion, 8*(3/4), 68-87.

Childress, C. A. (2000). Ethical Issues in Providing Online Psychotherapeutic Interventions. *Journal of Medical Internet Research, 2*(1).

Cong-Lem, N., Soyoof, A., & Tsering, D. (2024). A Systematic Review of the Limitations and Associated Opportunities of ChatGPT. *International Journal of Human-Computer Interaction, 0*(0), 1–16. https://doi.org/10.1080/10447318.2024.2344142

Cong-Lem, N., Tran, T. N., & Nguyen, T. T. (2024). ACADEMIC INTEGRITY in the AGE of GENERATIVE AI: PERCEPTIONS and RESPONSES of VIETNAMESE EFL TEACHERS. *Teaching English with Technology, 24*(1), 28–47. https://doi.org/10.56297/FSYB3031/MXNB7567

Dina, S. (2023). Superior Islamic Education Reform Through Ai Digital Transformation Bridge: Opportunity or Challenge? *Proceedings of Imam Bonjol International Conference ..., 2020*, 445–458. https://ibicie.uinib.ac.id/index.php/ibicie/article/view/86

Esposito, J. L. (2011). *What Everyone Needs to Know about Islam*. Oxford University Press.

Facione, P. . (2011). *Critical Thinking: What It Is and Why It Counts*. Insight Assessment.

Fakhri, M. M., Isma, A., Hidayat, W., Saleh Ahmar, A., Dewi, &, & Surianto, F. (2024). Digital Literacy Training and Introduction to Artificial Intelligence Ethics to Realize Digital Literate Teachers Pelatihan Literasi Digital dan Pengenalan Etika Kecerdasan Buatan untuk Mewujudkan Guru Melek Digital. *Jurnal Pengabdian Masyarakat, 5*(1), 2746–5233. https://doi.org/10.35877/454RI.mattawang2603

Farhan, A. (2023). The Impact of Artificial Intelligence on Human Workers. *Journal of Communication Education, 17*(2). https://doi.org/10.58217/joce-ip.v17i2.350

Fitryansyah, M. A., & Fauziah, F. N. (2024). Bridging Traditions and Technology: AI in The Interpretation of Nusantara Religious Manuscripts. *Jurnal Lektur Keagamaan, 22*(2), 317-346.

Ford, T., Mansfield, K. L., Markham, S., McManus, S., John, A., O'Reilly, D., Newlove-Delgado, T., Iveson, M. H., Fazel, M., Das Munshi, J., Dutta, R., Leavy, G., Downs, J., Foley, T., Russell, A., Maguire, A., Moon, G., Kirkham, E. J., Finning, K., … Shenow, S. (2021). The challenges and opportunities of mental health data sharing in the UK. *The Lancet Digital Health, 3*(6), e333–e336. https://doi.org/10.1016/S2589-7500(21)00078-9

Furizal, Ramelan, A., Adriyanto, F., Maghfiroh, H., Ma'arif, A., Kariyamin, Masitha, A., & Fawait, A. B. (2024). Concerns of Ethical and Privacy in the Rapid Advancement of Artificial Intelligence: Directions, Challenges, and Solutions. *Journal of Robotics and Control (JRC), 5*(6), 2015–2026. https://doi.org/10.18196/jrc.v5i6.24090

Garg, S., Ahmad, A., & Madsen, D. Ø. (2024). Academic writing in the age of AI: Comparing the reliability of ChatGPT and Bard with Scopus and Web of Science. *Journal of Innovation & Knowledge, 9*(2), 100484. https://doi.org/10.1016/j.jik.2024.100484

Garlinska, M., Osial, M., Proniewska, K., & Pregowska, A. (2023). The Influence of Emerging Technologies on Distance Education. *Electronics (Switzerland), 12*(7). https://doi.org/10.3390/electronics12071550

Gerlich, M. (2025). AI Tools in Society: Impacts on Cognitive Offloading and the Future of Critical Thinking. *Societies, 15*(1), 1–28. https://doi.org/10.3390/soc15010006

Hakim, A., & Anggraini, P. (2023). Artificial Intelligence in Teaching Islamic Studies: Challenges and Opportunities. *Molang: Journal of Islamic Education, 1*(02), 57–69. https://doi.org/10.32806/6ynvg541

Harakat, A. (2024). Scopus new AI tool: use case: what's the latest innovations in AI application in education field?

Hartafan, A. I., Nirwana AN, A., & Marheni, C. L. (2024). Bibliometric Analysis the Role of Islamic Psychology Based on Qur'an in Overcoming Anxiety and Improving Mental Health Among Women. *QiST: Journal of Quran and Tafseer Studies, 3*(2), 303–326. https://doi.org/10.23917/qist.v3i2.5042

Herawati, A. A., Yusuf, S., Ilfiandra, I., Taufik, A., & Ya Habibi, A. S. (2024). Exploring the Role of Artificial Intelligence in Education, Students Preferences and Perceptions. *AL-ISHLAH: Jurnal Pendidikan, 16*(2), 1029–1040. https://doi.org/10.35445/alishlah.v16i2.4784

Herwinsyah, Ridho, A., & Prasetyo, D. D. (2024). Revolutionizing Islamic education: Integrating artificial intelligence into Islamic education. *Islam in World Perspectives, 4*(2), 373–383.

Indrawati, R. A. (2024). Digitalization and Education Equity in Remote Areas : Challenges and Strategic Solutions. *Journal of Education, Humaniora and Social Sciences (JEHSS) 7*(2), 376–383. https://doi.org/10.34007/jehss.v7i2.2356

Indriani, T., Jarkawi, J., & Ridhani, A. R. (2024). Dhikr Therapy: Overcoming Life Anxiety with Islamic Counseling Based on QS Ar-Ra'd Verse 28. *Al-Hayat: Journal of Islamic Education, 8*(2), 562. https://doi.org/10.35723/ajie.v8i2.477

Istiawanto, Y., Hamdi, S., Zafrullah, Z., & Sembiring, Y. K. (2024). The Implementation of Technology in School Learning Over the Last 50 Years: A Bibliometric Analysis of the Scopus Database. *Jurnal Penelitian Pendidikan IPA, 10*(12), 865-889.

Joseph, G. V., Athira, P., Anit Thomas, M., Jose, D., Roy, T. V., & Prasad, M. (2024). Impact of Digital Literacy, Use of AI tools and Peer Collaboration on AI Assisted Learning: Perceptions of the University students. *Digital Education Review, 45*, 43–49. https://doi.org/10.1344/der.2024.45.43-49

Kadhim, A. S., & Mousa, H. Y. (2024). The role of artificial intelligence in improving the quality of education. *Exploring Youth Studies in the Age of AI, 6*(2), 203–222. https://doi.org/10.4018/979-8-3693-3350-1.ch011

Kalniņa, D., Nīmante, D., & Baranova, S. (2024). Artificial intelligence for higher education: benefits and challenges for pre-service teachers. *Frontiers in Education, 9*. https://doi.org/10.3389/feduc.2024.1501819

Karnadi, Hasanah, S., De Cómputo, E. S., & Wilson, E. (2023). Cultural Diversity Education in "Islam and Religious Moderation" Courses: Case Study in Islamic Higher Education. *Edukasia Islamika, 8*(2), 165–186. https://doi.org/10.28918/jei.v8i2.1713

Kocak, Z. (2024). Publication Ethics in the Era of Artificial Intelligence. *Journal of Korean Medical Science, 39*(33), 1–11. https://doi.org/10.3346/jkms.2024.39.e249

Lestari, J. T., Darmayanti, R., & Arifin, Z. (2024). Integration of Artificial Intelligence in Islamic Education Curriculum. *Journal of Pergunu and Contemporary Islamic Studies, 1*(1), 55–78. https://doi.org/10.31521/modecon.v44(2024)-08

Liu, X., & Jia, N. (2023). Qualitative Research in Counseling and Treatment Research. International *Journal of Education and Humanities, 7*(2), 98–99. https://doi.org/10.54097/ijeh.v7i2.5512

Mahendra, M. W., Nurkamilah, N., & Sari, C. P. (2023). Artificial-intelligence powered app as learning aid in improving learning autonomy: Students' perspective. *JEES (Journal of English Educators Society), 8*(1).

Manning, C. (2020). *Artificial Intelligence Definitions*. HAI Stanford University, September, 2020.

Mashudi, E. A., Nuroniah, P., Fatihaturosyidah, F., Tristyanto, B., & Nurmalasari, Y. (2023). the Use of Chatbot Systems in Online Counseling Services: a Bibliometric Mapping. *Journal of Engineering Science and Technology, 18*(6), 2823–2834.

Mccarthy, C. R. (2024). Artificial Intelligence and the Entertainment Industry.

Meliani, F., Muhyiddin, D. S., Ruswandi, U., Arifin, B. S., & Suzana, S. (2022). Challenges Of Using Technology In Islamic Religious Education Learning. *Edukasi Islami: Jurnal Pendidikan Islam, Special Issue,* 41–57. https://jurnal.staialhidayahbogor.ac.id/index.php/ei/article/view/3536

Muhammad, R., Patriana, P., Yusrain, Y., Astaman, A., & Manja, M. (2024). Counseling Career with Artificial Intelligence: A Systematic Review. *GUIDENA: Jurnal Ilmu Pendidikan, Psikologi, Bimbingan Dan Konseling, 14*(1), 299. https://doi.org/10.24127/gdn.v14i1.9357

Musyahid, M., & Kolis, N. (2023). Religious Moderation Implementation in Islamic Education: A Systematic Review. *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman, 9*(2), 265–284. https://doi.org/10.24952/fitrah.v9i2.9547

Ningsih, S., & Tjahjono, B. (2024). Digital Marketing Innovation for MSMEs through ChatGPT Integration and Management Information Systems: A Technological Transformation Approach

for Competitive Advantage. *Jurnal Minfo Polgan, 13*(1), 1033–1044. https://doi.org/10.33395/jmp.v13i1.13924

Norman, H., Adnan, N. H., Nordin, N., Ally, M., & Tsinakos, A. (2022). The Educational Digital Divide for Vulnerable Students in the Pandemic: Towards the New Agenda 2030. *Sustainability (Switzerland), 14*(16). https://doi.org/10.3390/su141610332

O'Shea, O., McCormick, R., Bradley, J. M., & O'Neill, B. (2016). Fidelity review: a scoping review of the methods used to evaluate treatment fidelity in behavioural change interventions. *Physical Therapy Reviews, 21*(3–6), 207–214. https://doi.org/10.1080/10833196.2016.1261237

Okagbue, E. F., Ezeachikulo, U. P., Nwigwe, E. O., & Juma, A. A. (2022). Machine Learning and Artificial Intelligence in Education Research: A Comprehensive Overview of 22 Years of Research indexed in the Scopus Database. *ResearchSquare,* 1–27. https://doi.org/10.21203/rs.3.rs-1845778

Okonkwo, C. W., & Ade-Ibijola, A. (2021). Chatbots applications in education: A systematic review. *Computers and Education: Artificial Intelligence, 2*(September), 100033. https://doi.org/10.1016/j.caeai.2021.100033

Pertiwi, R. W. L., Kulsum, L. U., & Hanifah, I. A. (2024). Evaluating the Impact of Artificial Intelligence-Based Learning Methods on Students' Motivation and Academic Achievement. *International Journal of Post Axial: Futuristic Teaching and Learning, 2*(1), 151–160. https://journal.amorfati.id/index.php/postaxial/article/view/279

Poleac, G., Alexandra, Gherguț, N., & Babii. (2024). How social media algorithms influence the way users decide – Perspectives of social media users and practitioners. *JTechnium Social Sciences Journal, 57*, 69–81.

Herwinsyah, H., Ridho, A. R., & Prasetyo, D. D. (2025). Revolutionizing Islamic education: Integrating artificial intelligence into Islamic education. *Islam in World Perspectives, 4*(2), 373-383.

Rabbianty, E. N., Azizah, S., Abadi, M., Virdyna, N. K., & Al-Matari, A. S. (2023). Nurturing Ethical Character in Islamic Colleges through Interactive Technology: Lecturers Perspective. *TADRIS: Jurnal Pendidikan Islam, 18*(2), 33-52.

Rodrigues, M., Silva, R., Borges, A. P., Franco, M., & Oliveira, C. (2024). Artificial intelligence: threat or asset to academic integrity? A bibliometric analysis. *Kybernetes, December*. https://doi.org/10.1108/K-09-2023-1666

Safar, M., & Anggraheni, D. (2024). Language Learning through AI Chatbots: Effectiveness and Cognitive Load Analysis. *Journal of Social Science Utilizing Technology, 2*(3), 430-445.

Safwandy, M., Nugraha, Maskah, D. K., & Rohayani, A. (2023). Islamic Ethical Concepts Relevant to Digital Technology. *Proceedings of International Conference on Islamic Civilization and Humanities, 1*, 106–123. https://proceedings.uinsa.ac.id/index.php/iconfahum/article/view/1335

Sastra Negara, A. H., Waston, Hidayat, S., & Mulkhan, A. M. (2024). Development of Religious Character To Improve the Effectiveness of Teacher and Student Communication. *Revista de Gestao Social e Ambiental, 18*(6), 1–26. https://doi.org/10.24857/rgsa.v18n6-037

Schwab. K. (2016). The Fourth Industrial Revolution. *World Economic Forum.*

Sholeh, M., Rusydiyah, E. F., & Abu Bakar, M. Y. (2024). Integration of AI Chatbots in Islamic Religious Education: Potential and Challenges from a Doctoral Student Perspective. *AL-ISHLAH: Jurnal Pendidikan, 16*(2), 2105–2121. https://doi.org/10.35445/alishlah.v16i2.5409

Singh, N. (2024). *Exploring Social Media Dynamics, Trends, and Tranformations: The Digital Revolution.* BHUMI PUBLISHING.

Sofa, A. R., Mundir, M., & Ubaidillah, U. (2024). Integrasi Pendidikan Agama Islam: Kecerdasan Spiritual dan Emosional melalui Kitab Mahfudzot untuk Menumbuhkan Akhlak. *Edukasi Islami: Jurnal Pendidikan Islam, 13*(02).

Sozon, M., Mohammad Alkharabsheh, O. H., Fong, P. W., & Chuan, S. B. (2024). Cheating and plagiarism in higher education institutions (HEIs): A literature review. *F1000Research, 13*, 788. https://doi.org/10.12688/f1000research.147140.1

Srikaanth, P. B. (2024). *The erosion of cognitive skills in the technological age: How reliance on technology impacts critical thinking, problem-solving, and creativity*. June, 146–163. https://doi.org/10.5281/zenodo.11671150

Sutrisno. (2024). ISLAMIC SPIRITUAL E-LEADERSHIP INTEGRATION MODEL FOR EDUCATION QUALITY IMPROVEMENT IN THE DIGITAL ERA. *Didaktika Religia: Journal of Islamic Education, 12*(1), 51–70.

Timotheou, S., Miliou, O., Dimitriadis, Y., Sobrino, S. V., Giannoutsou, N., Cachia, R., Monés, A. M., & Ioannou, A. (2023). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. In *Education and Information Technologies (Vol. 28, Issue 6)*. Springer US. https://doi.org/10.1007/s10639-022-11431-8

Turkle, S. (2017). *Reclaiming Conversation: The Power of Talk in a Digital Age*. Penguin Press.

Usher, M., & Barak, M. (2024). Unpacking the role of AI ethics online education for science and engineering students. *International Journal of STEM Education, 11*(1). https://doi.org/10.1186/s40594-024-00493-4

Wan, C., Bahri, S., Wan, C., Ahmed, S. A., Rahman, K. A., Ahmad, S., & Basri, M. (1943). A Systematic Literature Review on AI-Powered Chatbot for Universities. 215–229.

Yahya, F. (2024). Ethical and Privacy Challenges in Using AI in Guidance & Counseling. *Bukittiggi International Counseling Conference*.

Al Zaidy, A. (2024). The impact of generative AI on student engagement and ethics in higher education. *Journal of Information Technology, Cybersecurity, and Artificial Intelligence, 1*(1), 30-38.

Zhu, M., & Wang, C. (2025). A systematic review of research on AI in language education: Current status and future implications. *Language Learning & Technology, 29*(1).

Zikry, A., Muhammad Bitrayoga, Siska Yulia Defitri, Akhmad Dahlan, & Nina Dwi Putriani. (2024). Analisis Penggunaan AI dalam Keberhasilan Customer Experience Pengguna Aplikasi E-Commerce Shopee. *Indo-Fintech Intellectuals: Journal of Economics and Business, 4*(3), 766–781. https://doi.org/10.54373/ifijeb.v4i3.1387

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