

Islamic Spiritual Counseling in Improving the Emotional Resilience of Broken Home Students at Muhammadiyah Middle School Tanjung Redeb

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ABSTRACT

This study aims to describe the model of Artificial Intelligence utilization in Islamic Religious Education learning and analyze its implications for student learning motivation at SMK Muhammadiyah Berau. This research used a qualitative descriptive approach with a case study design. Data were collected through observation, interviews, and documentation involving Islamic Religious Education teachers, students, the principal, and the vice principal for curriculum affairs. The findings show that AI is used as a learning reference, instructional support tool, creative learning medium, evaluation aid, and independent learning assistant. AI helps students access materials more easily, understand religious concepts faster, create digital learning products, and increase their interest in learning. However, the use of AI also creates challenges, such as dependence on instant answers, weak critical thinking, limited source verification, and reduced spiritual reflection. Therefore, the role of Islamic Religious Education teachers remains central in guiding students to use AI ethically, verify religious content, and connect learning with Islamic values. This study proposes an AI-assisted Islamic Religious Education learning model based on Islamic adab, consisting of orientation, exploration, verification, dialogue, production, reflection, and evaluation. The model strengthens student motivation while preserving the moral and spiritual mission of Islamic education.



Introduction

Artificial Intelligence has become one of the most influential digital innovations in contemporary education. It supports learning through adaptive content, automated feedback, personalized learning paths, learning analytics, and administrative efficiency (Thomas K F Chiu, Xia, Zhou, Chai, & Cheng, 2023). In educational theory, AI does not only function as a technical tool. It also changes how students access knowledge, how teachers design instruction, and how schools manage learning processes (Ouyang & Jiao, 2021). This development shows that AI should be studied not only from a technological perspective, but also from a pedagogical, ethical, and motivational perspective.

Recent studies show that AI in education offers several advantages, especially in personalization, learning support, assessment, and student engagement (Chiu et al., 2023).

In K-12 education, AI has been used to support pedagogy, subject content, and school administration, yet its implementation still faces challenges related to digital skills, ethical awareness, ease of use, and teacher readiness (Crompton & Burke, 2023). Large Language Models such as ChatGPT also create new opportunities for students to ask questions, generate ideas, summarize materials, and receive immediate explanations, but these tools raise concerns about misinformation, overdependence, academic integrity, and reduced critical thinking (Kasneci et al., 2023). Therefore, AI integration in schools must be guided by clear learning objectives and strong teacher supervision.

In the context of Islamic Religious Education, the issue becomes more complex. Islamic Religious Education does not only aim to improve cognitive achievement. It also aims to shape faith, worship awareness, morality, discipline, responsibility, and spiritual character. AI can help students access religious learning materials more easily, but it cannot replace the role of teachers as moral guides, spiritual mentors, and interpreters of Islamic values. Studies on AI adoption in Islamic education show that AI can support personalized learning and institutional innovation, but it must remain aligned with Islamic ethical principles, teacher authority, data privacy, fairness, and holistic spiritual development (Achruh, Rapi, Rusdi, & Idris, 2024).

The relationship between AI and student motivation also needs serious attention. Motivation determines how students engage with learning tasks, how long they persist, and how deeply they process learning materials. Self-Determination Theory explains that students develop stronger motivation when their needs for autonomy, competence, and relatedness are supported (Howard, Bureau, Guay, Chong, & Ryan, 2021). AI can support autonomy by giving students flexible access to learning resources. It can support competence by providing instant explanations and feedback. It can also support engagement when teachers use it as part of meaningful classroom interaction. However, AI may weaken motivation when students use it only to get instant answers without reflection, effort, or personal understanding.

Teacher support plays a central role in this issue. A study on AI-based chatbots found that students' intrinsic motivation and perceived competence depended on both teacher support and student expertise (T K F Chiu, Moorhouse, Chai, & Ismailov, 2024). This finding is important for Islamic Religious Education because students do not only need access to information. They need guidance to verify sources, understand religious meaning, and connect knowledge with moral practice. Without teacher direction, AI may encourage shortcut learning. With proper teacher direction, AI can become a tool for inquiry, discussion, reflection, and value internalization.

This issue is relevant to SMK Muhammadiyah Berau. The thesis background shows that students have begun to use AI in Islamic Religious Education activities, such as searching for materials, completing assignments, and supporting independent learning. The thesis also notes that teachers observed changes in students' learning behavior, especially in independence, accuracy, depth of understanding, and reflection. These findings indicate that AI creates both benefits and risks in Islamic Religious Education learning at the school level.

Based on the literature, several research gaps can be identified. First, many studies discuss AI in education in general, but fewer studies examine AI in Islamic Religious Education at the secondary school or vocational school level. Second, many studies focus on AI effectiveness, digital platforms, or student achievement, while fewer studies examine how AI shapes students' motivation in religious learning. Third, limited studies connect AI use with Islamic values, teacher guidance, ethical learning, and spiritual reflection. Fourth, the specific context of SMK Muhammadiyah Berau has not been widely studied. These gaps

justify the need for a contextual study on the model of AI utilization in Islamic Religious Education and its implications for student learning motivation.

The novelty of this study lies in its focus on three integrated aspects. First, this study examines the concrete model of AI utilization in Islamic Religious Education, including AI as a learning reference, learning assistant, creative media, and evaluation support. Second, this study analyzes AI's implications for student motivation by considering both positive and negative dimensions, such as increased interest, easier access, faster understanding, overdependence, and weaker reflection. Third, this study places teacher guidance and Islamic ethics at the center of AI integration. This makes the study different from research that only views AI as a technical learning tool.

This research is important because Islamic Religious Education faces a dual challenge in the digital era. On one side, teachers and students need to adapt to AI-based learning tools. On the other side, Islamic Religious Education must protect its core mission, namely forming students who are knowledgeable, ethical, reflective, and spiritually aware. A model of AI utilization that is ethical, pedagogical, and value-based can help teachers use AI without losing the essence of Islamic education. For this reason, this study is expected to contribute to the development of AI-based Islamic Religious Education that improves learning motivation while maintaining adab, academic integrity, and religious meaning.

Thus, the study entitled "Model of Artificial Intelligence Utilization in Islamic Religious Education Learning and Its Implications for Student Learning Motivation at SMK Muhammadiyah Berau" is academically and practically relevant. It contributes to the literature on AI in education, Islamic Religious Education, and student motivation. It also offers practical insight for teachers, schools, and policymakers in designing AI-based learning that is innovative, ethical, and spiritually grounded.

Methods

This study used a qualitative descriptive design with a case study orientation to examine how Artificial Intelligence is used in Islamic Religious Education and how this use shapes students' learning motivation at SMK Muhammadiyah Berau. This design was appropriate because the study aimed to understand classroom practices, student experiences, teacher guidance, and school policy in a natural setting rather than to test statistical relationships (Lim, 2025). Qualitative research was selected because AI use in Islamic Religious Education involves complex meanings, such as learning independence, ethical awareness, religious reflection, teacher supervision, and student motivation. Qualitative inquiry allows researchers to capture these meanings through participants' voices, observed behavior, and contextual school realities ((Creswell & Poth, 2021).

The research was conducted at SMK Muhammadiyah Berau because the school had begun to use AI-based tools in learning activities, including material searching, assignment completion, digital media production, and independent learning support. The uploaded thesis states that the research focused on the use of AI in Islamic Religious Education and its relationship with students' motivation at SMK Muhammadiyah Berau. The study was planned from February to May 2025. The pre field stage was conducted in February, data collection was carried out in March and April, and data analysis and report writing were completed in May. This schedule allowed the researcher to observe learning activities, interview key informants, examine learning documents, and verify the consistency of emerging findings across data sources.

The participants were selected through purposive sampling because the study required informants who had direct knowledge and experience of AI use in Islamic

Religious Education (N Nurhayati, Latif, & Anwar, 2024). Purposive sampling is suitable in qualitative research when participants are chosen because they can provide rich and relevant information about the phenomenon under study (Busetto, Wick, & Gumbinger, 2020). The informants consisted of Islamic Religious Education teachers, students who actively used AI tools, the principal, and the vice principal for curriculum affairs. Students were selected because they used tools such as ChatGPT, Canva AI, Google Classroom, or digital Qur'an applications in learning activities. Teachers were selected because they guided the learning process and observed changes in students' motivation, discipline, and depth of understanding. School leaders were included because they provided information about institutional policy, digital learning support, and the school's readiness to adopt AI.

Data were collected through observation, in depth interviews, and documentation (Nurhayati Nurhayati & Rosadi, 2022). These three techniques were used because qualitative research commonly relies on document study, observation, and semi-structured interviews to understand social practice and participant experience in depth (Busetto et al., 2020). Observation was used to examine how teachers and students used AI during Islamic Religious Education learning. The researcher observed the use of AI tools, student responses, classroom interaction, student initiative, and signs of motivation such as attention, curiosity, questioning, task completion, and dependence on instant AI-generated answers. Observation was important because it helped the researcher compare what participants said in interviews with what actually happened in the classroom.

In depth interviews were used to explore teachers' and students' experiences with AI-based learning. Semi-structured interviews were selected because they allow researchers to use guiding questions while still giving participants space to explain their experiences openly (Adeoye-Olatunde & Olenik, 2021). The interview questions focused on four main issues. These were the model of AI utilization in Islamic Religious Education, changes in students' learning motivation, challenges faced by teachers and students, and teacher strategies for keeping AI use aligned with Islamic values. This focus was relevant because recent research shows that teacher support influences student motivation when students learn with AI-based technologies (Chiu et al., 2024).

Documentation was used to strengthen the data from observation and interviews. The documents included lesson plans, school notes on digital learning, student assignments produced with AI support, screenshots or photos of learning activities, and school policies related to technology use. Document analysis was useful because it provided physical evidence of how AI was integrated into classroom practice and how the school regulated digital learning. The research instrument was the researcher, supported by observation sheets, interview guidelines, and documentation checklists. In qualitative research, the researcher acts as the main instrument because the researcher interprets meaning, follows emerging data, and connects participant experiences with the research focus (Lim, 2025).

Data analysis was conducted through thematic analysis. The analysis included transcription, data familiarization, keyword identification, coding, theme development, interpretation, and conceptual model construction. This procedure follows the systematic thematic analysis model, which helps researchers transform qualitative data into themes and conceptual findings (Naeem, Ozuem, Howell, & Ranfagni, 2024). The coding process focused on several themes. These included AI as a learning reference, AI as a creative learning medium, AI as an independent learning assistant, AI as an evaluation support tool, student motivation, student dependence on AI, teacher guidance, ethical use, and Islamic value internalization. These themes were developed to explain how AI supported learning motivation while also creating risks related to shortcut learning and weak reflection.

Data saturation was considered when no new keywords, patterns, codes, or themes emerged from interviews, observations, and documents. Saturation in thematic analysis

indicates that the data have been explored deeply enough to answer the research objectives (Crompton, Jones, & Burke, 2024). The validity of the findings was strengthened through triangulation, member checking, and audit trail. Triangulation was conducted by comparing interview data, observation notes, and documents. Member checking was conducted by asking selected informants to review the accuracy of key findings. The audit trail was maintained by documenting field notes, interview summaries, coding decisions, and theme development. These strategies helped ensure that the findings reflected the actual practice of AI use in Islamic Religious Education.

Ethical procedures were applied throughout the study. The researcher requested permission from the school, explained the purpose of the study to informants, protected participant identities, and used the data only for academic purposes. This was important because research on AI in education involves sensitive issues such as student behavior, teacher practice, digital ethics, and school policy. Based on this method, the study was designed to produce a contextual model of AI utilization in Islamic Religious Education. The expected model explains how AI can support student motivation when it is used as a learning aid, verified by teachers, connected with Islamic values, and guided by ethical classroom practice.

Results and Discussion

1. Model of AI Utilization in Islamic Religious Education Learning

The findings show that the use of Artificial Intelligence in Islamic Religious Education at SMK Muhammadiyah Berau has developed as a learning support system that helps teachers and students manage the learning process more effectively. AI is not positioned as a substitute for teachers, but as a tool that supports the preparation of materials, classroom learning, student exploration, creative assignments, independent study, and learning evaluation. In this context, AI strengthens the learning process when teachers continue to guide students, verify information, and connect digital learning activities with Islamic values.

The first model found in the study is the use of AI as a learning reference and exploratory tutor. Students use AI to search for explanations, summaries, examples, and additional references related to Islamic Religious Education materials, such as aqidah, worship, morality, Islamic history, and Qur'anic understanding. This use helps students access learning materials faster and more flexibly. AI chatbots can provide direct explanations, answer students' questions, and offer additional learning resources that support independent learning (Labadze, Grigolia, & Machaidze, 2023). In practice, students at SMK Muhammadiyah Berau use AI to review materials outside classroom hours, clarify difficult concepts, and obtain examples that make religious learning easier to understand.

However, AI as a learning reference must remain under teacher supervision. This is important because AI-generated answers do not always come from authoritative Islamic sources. Large language models can support learning, but they can also produce inaccurate information, biased answers, and shallow explanations if students use them without verification (Kasneji et al., 2023). Therefore, AI should only be used as an initial learning aid, while the final validation of religious content must remain with the teacher and reliable Islamic sources.

The second model is the use of AI as an instructional design assistant for teachers. Teachers can use AI to prepare lesson plans, learning scenarios, slides, worksheets, assessment rubrics, question banks, and case-based learning materials. This model helps

teachers reduce technical workload and gives them more time to focus on guiding students, building classroom interaction, and strengthening character formation. AI in education supports teaching, learning, assessment, feedback, and adaptive learning experiences when it is designed and controlled properly by teachers (Chiu et al., 2023). In Islamic Religious Education, this model helps teachers present religious material in a more contextual, attractive, and relevant way for students.

The third model is the use of AI as a creative learning media tool. Students and teachers use AI-based platforms such as Canva AI, AI presentation tools, and visual generators to create posters, infographics, digital da'wah media, presentation slides, and visual summaries of Islamic values. This model makes Islamic Religious Education more engaging, especially for vocational school students who are familiar with digital and visual communication. Generative AI tools can help produce multimodal learning materials and support flexible learning design (Luo, Zheng, Yin, & Teo, 2025). Through this model, students do not only receive information. They also process, design, and present religious messages creatively.

Even so, creative media in Islamic Religious Education must not be assessed only from its visual appearance. The accuracy of the content, the clarity of the message, and the suitability of the material with Islamic teachings must also be examined. A digital poster or presentation may look attractive, but it can mislead students if the religious content is weak or inaccurate. For this reason, teachers must review students' AI-assisted products and ensure that every message remains in line with Islamic values.

The fourth model is the use of AI as a tool for evaluation and feedback. Teachers can use AI to generate test questions, create case simulations, prepare remedial materials, and identify student mistakes. Intelligent tutoring systems can support education by analyzing student learning data, providing feedback, monitoring student performance, and helping teachers design appropriate interventions (Lin, Huang, & Lu, 2023). In Islamic Religious Education, this function should not only measure cognitive understanding. It should also encourage students to reflect on moral issues, such as honesty, responsibility, plagiarism, and ethical use of technology.

The fifth model is the use of AI as a support tool for Qur'anic and spiritual learning. Digital Qur'an applications and AI-assisted learning tools can help students practice reading, review religious materials, and access Islamic content more easily. This model supports technical aspects of religious learning, but it cannot replace the spiritual and moral guidance of the teacher. Islamic education requires the presence of teachers as role models, moral guides, and spiritual mentors. AI adoption in Islamic education must therefore remain aligned with Islamic values, teacher authority, digital literacy, and ethical responsibility (Achruh et al., 2024).

Based on these findings, the most suitable model for SMK Muhammadiyah Berau is an AI-assisted Islamic Religious Education learning model based on Islamic adab. This model begins when students use AI to access initial information. After that, students explore the material through questions, summaries, examples, and digital media. Students then produce learning outputs, such as presentations, posters, reflections, or written answers. Teachers then verify the accuracy of the content, the validity of the sources, and the ethical quality of the AI-generated material. Finally, students reflect on the material and connect it with Islamic values, worship, morality, and daily behavior.

This model places AI in a supportive position. AI helps students learn faster and more creatively, but it does not become the main authority in Islamic Religious Education. The teacher remains the central figure who guides students to think critically, verify information, and internalize Islamic values. This position is consistent with Islamic virtue-based AI ethics, which emphasizes responsibility, justice, moral formation, and the

protection of human dignity in the use of technology (Raquib, Channa, Zubair, & Qadir, 2022). It is also in line with the need for ethical benchmarking in AI development, especially in relation to autonomy, fairness, transparency, and moral reasoning (Elmahjub, 2023).

The model also has important implications for student motivation. AI can increase curiosity because students can ask questions and receive immediate responses. AI can strengthen competence because students can obtain explanations, examples, and feedback. AI can also support autonomy because students can learn at their own pace. Research shows that student motivation in AI-based learning depends strongly on teacher support, learning design, and the way teachers guide students in using AI tools (Chiu et al., 2024).

At SMK Muhammadiyah Berau, AI helps students understand lessons, find additional references, complete assignments, and create digital learning products more effectively. This increases students' interest and participation in Islamic Religious Education learning. However, AI also creates risks when students become too dependent on instant answers. Students may copy AI responses without reading, analyzing, or reflecting on the material. This can reduce critical thinking, weaken spiritual reflection, and lower the depth of religious understanding. ChatGPT and other generative AI tools can support education, but they also raise concerns about academic integrity, source reliability, critical thinking, and ethical use (Kasneji et al., 2023).

Therefore, the main finding of this study is that AI can improve Islamic Religious Education learning when it is used with teacher guidance, school policy, and Islamic ethical control. AI becomes useful when it supports reading, questioning, discussion, creativity, evaluation, and reflection. AI becomes problematic when it replaces effort, weakens analysis, reduces teacher interaction, and encourages shortcut learning. For this reason, the model of AI utilization in Islamic Religious Education should combine technological innovation with Islamic adab, teacher verification, and spiritual reflection.

This discussion contributes a contextual model for integrating AI into Islamic Religious Education. The model does not treat AI as a neutral technical tool. It treats AI as a pedagogical tool that must be guided by Islamic values. This is the main uniqueness of the study. Many studies on AI in education focus on efficiency, personalization, and assessment. This study adds the dimensions of Islamic adab, teacher guidance, ethical verification, spiritual reflection, and student motivation. Through this model, AI-based Islamic Religious Education can produce students who are not only digitally skilled, but also honest, responsible, reflective, and spiritually aware.

2. Student Learning Motivation in AI-Based Islamic Religious Education Learning

The findings show that AI-based Islamic Religious Education learning at SMK Muhammadiyah Berau has a positive effect on students' learning motivation. Students feel that AI helps them understand lessons more easily, find additional references, and complete Islamic Religious Education assignments more effectively. AI also encourages curiosity, independent learning, and creativity in processing religious information. This finding confirms that AI can function as a motivational support tool when students use it to explore, ask, compare, and develop learning products under teacher guidance (Ibnu Abbas, 2025).

Student motivation increases because AI provides fast access to learning materials. In Islamic Religious Education, students often need explanations of concepts such as faith, worship, morality, Qur'anic values, Islamic history, and daily ethical issues. AI helps students obtain simple explanations, examples, summaries, and alternative learning resources. This makes the learning process more flexible because students can study outside

classroom hours and repeat explanations based on their own needs. This finding is in line with Labadze et al., who found that AI chatbots support students through homework assistance, personalized learning experiences, and skill development (Labadze et al., 2023).

The increase in motivation can also be explained through Self-Determination Theory. This theory states that students become more motivated when learning activities support autonomy, competence, and relatedness. AI supports autonomy because students can search, ask, and learn independently. AI supports competence because students receive quick explanations and feedback. Teacher guidance supports relatedness because students still feel connected to the teacher, class, and learning goals. Howard et al. found that student motivation is strongly related to positive learning outcomes when autonomy, competence, and relatedness are supported (Howard et al., 2021).

In the context of SMK Muhammadiyah Berau, AI strengthens students' intrinsic motivation when it stimulates curiosity and helps them feel capable of understanding Islamic Religious Education materials. Students become more interested in learning because AI makes religious materials easier to access, more interactive, and closer to their digital habits. This condition is important because Islamic Religious Education does not only require memorization. It also requires understanding, reflection, and willingness to practice Islamic values in daily life. The thesis shows that AI encourages students to become more curious, independent, and creative in processing religious information (Ibnu Abbas, 2025).

AI also strengthens students' extrinsic motivation. Students become more motivated because AI helps them complete assignments, prepare presentations, design digital da'wah media, and improve the quality of learning products. This external support creates a sense of achievement because students can produce better work in a shorter time. Chiu et al. explain that AI in education supports learning, teaching, assessment, and feedback, which can influence student learning outcomes when the learning design is clear and pedagogically guided (Chiu et al., 2023).

The findings also show that AI improves behavioral engagement in Islamic Religious Education learning. Students become more active in searching for references, preparing assignments, asking questions, and producing digital learning media. This engagement appears when students use AI not only to obtain answers, but also to create posters, summaries, presentations, and reflections on Islamic values. AI can improve engagement and interaction because large language models can personalize learning experiences and help students understand complex texts through summaries and explanations (Kasneci et al., 2023).

AI-based learning also improves cognitive engagement. Students can compare explanations, check concepts, and develop their understanding through repeated interaction with AI tools. This process helps students build confidence in learning Islamic Religious Education, especially when they face difficult concepts or long reading materials. However, this cognitive engagement becomes meaningful only when students evaluate AI responses and connect them with reliable Islamic sources. Kasneci et al. stress that AI use in education needs critical thinking, fact checking, and continuous human oversight because AI systems may produce biased, incorrect, or shallow responses (Kasneci et al., 2023).

The findings also reveal emotional engagement. Students feel more interested and less afraid to ask questions because AI gives quick responses without direct judgment. For some students, this creates a safer space to explore religious materials before discussing them with the teacher. AI can support this process by making learning more interactive and personal. However, emotional engagement must still be connected to teacher guidance because Islamic Religious Education needs warmth, role modeling, and moral direction

from the teacher. Chiu et al. found that teacher support strengthens students' relatedness in AI-based learning, although it may reduce autonomy if the teacher controls the process too strongly (Chiu et al., 2024).

The role of the teacher is central in maintaining student motivation. At SMK Muhammadiyah Berau, AI does not become the main source of religious authority. Teachers still guide students, check the accuracy of information, and ensure that AI use remains ethical and consistent with Islamic adab. This finding is important because students' motivation in Islamic Religious Education must not stop at task completion. It must lead to reflection, character formation, and religious practice. The thesis states that AI works as a learning support tool, while the teacher remains responsible for verifying information, planting Islamic values, and maintaining students' digital ethics (Raquib et al., 2022).

Teacher guidance also prevents students from becoming passive users of AI. Chiu et al. found that students' intrinsic motivation and perceived competence in learning with AI chatbots depend on student expertise and teacher support (Chiu et al., 2024). This means that students with weak digital literacy or low self-regulated learning need more teacher assistance. In Islamic Religious Education, this support is even more important because students must learn how to verify religious content, avoid plagiarism, and use AI with honesty. The research findings also show a motivational challenge. Some students may become dependent on instant answers. They may copy AI responses without reading, analyzing, or reflecting on the meaning of the material. This weakens deep learning and reduces the spiritual dimension of Islamic Religious Education. The thesis notes that AI can decrease motivation when students rely only on instant answers without thinking, analysis, or spiritual reflection (Ibnu Abbas, 2025).

This challenge is consistent with the wider literature on generative AI in education. Large language models can improve access, interaction, and personalization, but they also raise concerns about academic integrity, misinformation, overreliance, and loss of critical thinking (Kasneci et al., 2023). Therefore, AI-based Islamic Religious Education must avoid shortcut learning. Students should not only ask AI for answers. They should be trained to ask better questions, compare sources, explain findings in their own words, and reflect on Islamic values.

The motivational impact of AI also depends on how teachers frame the task. When teachers ask students only to submit answers, AI may encourage copy-paste behavior. When teachers ask students to compare AI responses with Qur'anic verses, hadith, teacher explanation, and textbook sources, AI becomes a tool for critical learning. When teachers ask students to write personal reflections, AI becomes a starting point for spiritual meaning-making rather than a substitute for thinking. This approach fits the view that AI in Islamic education must preserve the central role of teachers in moral and spiritual development (Achruh et al., 2024).

Based on these findings, student motivation in AI-based Islamic Religious Education can be understood in four forms. The first is curiosity-based motivation, where students are interested because AI gives quick access to religious explanations. The second is competence-based motivation, where students feel more capable because AI helps them understand difficult material. The third is task-based motivation, where students feel helped in completing assignments and producing digital learning products. The fourth is spiritual-reflective motivation, where students connect AI-supported learning with Islamic values, worship, morality, and daily behavior. This fourth form is the most important in

Islamic Religious Education because the goal of learning is not only academic success, but also value internalization.

The main implication is that AI can increase student motivation when it is integrated through a balanced model. The teacher must combine digital exploration, source verification, classroom discussion, ethical reflection, and value internalization. AI should support learning autonomy, but it should not weaken discipline. AI should support competence, but it should not replace effort. AI should support creativity, but it should not reduce originality. AI should support access to religious knowledge, but it should not replace the teacher's role as moral guide.

Thus, the results show that AI-based Islamic Religious Education at SMK Muhammadiyah Berau strengthens students' motivation through easier access, interactive learning, faster understanding, independent learning, and creative production. However, the positive effect appears only when AI use remains guided by teachers and controlled by Islamic ethics. Without guidance, AI may produce dependence, shallow understanding, weak analysis, and reduced spiritual reflection. Therefore, the most effective motivational model is not AI-centered learning, but teacher-guided AI learning based on Islamic adab.

3. The Role of PAI Teachers in Guiding AI Use

The findings show that PAI teachers play a central role in guiding the use of Artificial Intelligence in Islamic Religious Education learning at SMK Muhammadiyah Berau. AI helps students access material, complete assignments, design digital learning products, and learn independently, but the teacher remains the main actor who directs, verifies, and gives moral meaning to the learning process. The thesis findings show that students at SMK Muhammadiyah Berau have begun to use AI to find learning materials, understand lessons, and complete PAI assignments, while PAI teachers and the school guide its use so that it remains ethical, responsible, and in line with Islamic adab (Ibnu Abbas, 2025).

The first role of the PAI teacher is as a pedagogical designer. Teachers do not only allow students to use AI freely. They design when, how, and for what purpose AI should be used in learning. In PAI learning, AI can support lesson exploration, digital media creation, question generation, and formative feedback, but these functions need teacher planning so that AI supports learning goals rather than replacing the learning process. Celik, Dindar, Muukkonen, and Järvelä found that AI can support teachers in planning, implementation, intervention, and assessment, but teachers still need to manage AI use according to pedagogical needs (Celik, Dindar, Muukkonen, & Järvelä, 2022).

The second role is as a verifier of religious knowledge. This role is very important because AI-generated answers may contain weak explanations, incomplete context, or religious information that does not come from authoritative Islamic sources. In PAI, teachers must check the accuracy of Qur'anic interpretation, hadith meaning, fiqh explanation, moral concepts, and Islamic history before students use AI-generated content as learning material. Sholeh, Rusydiyah, and Abu Bakar found that AI chatbots in Islamic Religious Education can improve productivity, learning quality, and personalization, but they also raise concerns about limited contextual understanding, information bias, plagiarism, fairness, privacy, and dependency (Sholeh, Rusydiyah, & Bakar, 2024).

The third role is as a guide for digital ethics and Islamic adab. PAI teachers need to teach students that using AI is not only a technical matter, but also a moral act. Students must learn honesty, responsibility, source verification, academic integrity, and respect for knowledge. The thesis findings show that SMK Muhammadiyah Berau provides workshops, assistance, and guidance on digital ethics so that teachers understand the potential and risks of AI in PAI learning. The findings also show that PAI teachers and

counseling teachers help students build honesty, discipline, information verification, and adab in seeking knowledge when using technology (Tripathi, Mishra, & Warraich, 2025).

This finding is consistent with Islamic AI ethics. AI use in Islamic education must not separate technology from moral responsibility. Raquib, Channa, Zubair, and Qadir argue that Islamic virtue-based AI ethics should be grounded in maqāsid, virtue, moral responsibility, and the protection of human dignity (Raquib et al., 2022). (Springer Nature Link) Elmahjub also explains that AI ethics needs pluralist ethical benchmarking so that global AI governance can include religious and moral reasoning, not only technical standards (Elmahjub, 2023).

The fourth role is as a protector of students' critical thinking. AI can make learning faster, but it can also make students rely on instant answers. This risk appears when students copy AI responses without reading, comparing, questioning, or reflecting. PAI teachers must prevent shortcut learning by requiring students to compare AI answers with textbooks, Qur'anic verses, hadith references, teacher explanations, and other valid Islamic sources. Kasneci and colleagues explain that large language models create opportunities for education, but they also require critical use because they can create risks related to accuracy, academic integrity, and overreliance (Kasneci et al., 2023).

The fifth role is as a motivator. AI can increase students' motivation because it makes learning more accessible, interactive, and flexible. However, student motivation becomes stronger when teachers give emotional support, clear learning direction, and meaningful feedback. Chiu, Moorhouse, Chai, and Ismailov found that teacher support influences students' motivation when they learn with AI-based chatbots, especially because teacher support helps students feel competent, connected, and guided (Chiu et al., 2024). In PAI learning, this means that teachers must connect AI use with spiritual reflection, worship practice, moral awareness, and daily Islamic behavior.

The sixth role is as a moral and spiritual mentor. PAI teachers cannot be replaced by AI because Islamic Religious Education is not only about information transfer. It also involves character formation, moral habit, spiritual awareness, and teacher modeling. The thesis states that in Islamic education, teachers act as murabbi who guide students' moral and spiritual development, while AI must remain within the framework of adab and must not replace the teacher's function as a moral example (Ouyang & Jiao, 2021).

The seventh role is as a classroom authority who balances innovation and control. Teachers need to decide which AI tools are useful, which tasks may involve AI, and which tasks must be completed through students' own thinking. This balance is important because AI can help teachers and students, but it can also weaken learning if the rules are unclear. Tripathi, Mishra, and Warraich found that K-12 teachers welcome AI for lesson planning and administrative efficiency, but they also worry about student overdependence and declining critical thinking, which shows the need for teacher-centered AI education and ethical training (Tripathi et al., 2025).

The eighth role is as a collaborator in school policy. AI use in PAI cannot depend only on individual teachers. Schools need clear rules, teacher training, ethical guidelines, and monitoring systems. The findings at SMK Muhammadiyah Berau show that the positive relationship between AI use and student motivation depends on the synergy between school policy, teacher guidance, and character development (Ibnu Abbas, 2025). This finding aligns with Chiu, Xia, Zhou, Chai, and Cheng, who found that AI in education covers learning, teaching, assessment, and administration, but its implementation still faces major challenges that require institutional direction and future research (Chiu et al., 2023).

The ninth role is as a developer of students' AI literacy. PAI teachers need to train students to ask good prompts, evaluate AI responses, identify weak sources, avoid plagiarism, and rewrite AI-generated ideas in their own words. This literacy is not only technical. It also includes ethical, intellectual, and spiritual literacy. Sholeh, Rusydiyah, and Abu Bakar emphasize that institutions need policies, education, and resources to reduce ethical risks in the use of ChatGPT in Islamic Religious Education (Sholeh et al., 2024).

Based on these findings, the role of PAI teachers in guiding AI use can be formulated as a teacher-guided AI model based on Islamic adab. In this model, students may use AI to access initial information, explore explanations, create learning products, and support independent study. After that, teachers guide students to verify sources, compare answers, discuss meanings, reflect on Islamic values, and apply the lesson in daily life. This model keeps AI as a learning assistant, while the teacher remains the moral, pedagogical, and spiritual guide.

The practical implication is clear. PAI teachers should not reject AI, but they should not allow uncontrolled AI use. They need to integrate AI through structured tasks, source verification, reflective discussion, academic honesty, and Islamic value internalization. The thesis also recommends that PAI teachers improve digital literacy, balance AI with humanistic pedagogy, provide firm guidance on AI ethics, and combine AI with collaborative activities, reflective discussion, and character strengthening (Ibnu Abbas, 2025).

Therefore, the main finding of this section is that PAI teachers are the key factor that determines whether AI strengthens or weakens Islamic Religious Education. AI becomes beneficial when teachers use it to support curiosity, creativity, independent learning, and evaluation. AI becomes risky when students use it as a shortcut without verification, reflection, and moral control. The role of PAI teachers is to ensure that AI use remains accurate, ethical, reflective, and aligned with Islamic values.

4. Conceptual Model of AI Utilization in Islamic Religious Education

The findings show that the conceptual model of AI utilization in Islamic Religious Education at SMK Muhammadiyah Berau should place AI as a learning assistant, not as a replacement for the teacher. The thesis shows that AI is used to search for materials, complete assignments, support learning guidance, and enrich classroom activities, but teachers still need to protect the depth of understanding, reflection, and Islamic values in the learning process (Ibnu Abbas, 2025).

Based on these findings, the conceptual model can be called the AI-Assisted PAI Learning Model Based on Islamic Adab. This model combines digital innovation, teacher guidance, student motivation, source verification, ethical control, and internalization of Islamic values. This model is relevant because AI in education can support learning, teaching, assessment, and administration, but its use still requires pedagogical direction and ethical awareness (Chiu et al., 2023).

The first foundation of this model is the view that AI should support student agency. Ouyang and Jiao explain that AI in education has moved from an AI-directed model toward an AI-supported and AI-empowered model, where learners become active collaborators and reflective actors in learning (Ouyang & Jiao, 2021). (Semantic Scholar) This idea fits PAI learning because students should not only receive Islamic knowledge, but also ask questions, compare ideas, reflect on values, and apply religious understanding in daily life.

The second foundation is the need for teacher-centered guidance. AI can create learning content, improve interaction, and personalize learning, but teachers and students need digital literacy, fact checking skills, and critical thinking to avoid misinformation, bias,

and misuse (Kasneci et al., 2023). (ResearchGate) This point is important in PAI because religious material requires accurate sources, valid interpretation, and moral sensitivity.

The third foundation is Islamic ethics. AI use in PAI must reflect responsibility, honesty, justice, benefit, and protection from harm. Raquib et al. argue that Islamic AI ethics should be grounded in *maqāṣid al-sharīʿah* and virtue formation, so technology supports human dignity and moral development (Raquib et al., 2022). (Springer Nature Link) Elmahjub also argues that AI ethics should include Islamic moral reasoning, especially when AI affects autonomy, privacy, fairness, transparency, and public benefit (Elmahjub, 2023).

The fourth foundation is the specific character of Islamic education. Islamic education does not only aim to deliver information. It aims to form faith, adab, worship awareness, moral behavior, and spiritual maturity. Research on AI in Islamic education shows that AI can improve learning quality and engagement, but educators remain essential because they guide and contextualize learning according to religious values (Zaharah et al., 2024). (journal.staihubbulwathan.id) Achruh et al. also show that AI integration in Islamic education must balance personalized learning with traditional Islamic pedagogy, where teachers remain central in shaping moral and spiritual development (Achruh et al., 2024). In this study, the conceptual model consists of seven connected stages. These stages are orientation, exploration, verification, dialogue, production, reflection, and evaluation. Each stage has a specific function in keeping AI useful, ethical, and aligned with the goals of PAI.

The first stage is orientation based on Islamic adab. At this stage, the teacher explains the purpose, limits, and ethics of AI use before students use AI tools. Students are guided to understand that AI is only a tool for learning, not a source of absolute religious authority. This stage is needed because AI-based learning can support students, but it also carries risks of plagiarism, shallow thinking, and overreliance if students use it without ethical control (Kasneci et al., 2023).

The second stage is AI-assisted exploration. At this stage, students use AI to find explanations, examples, summaries, questions, and learning materials related to PAI topics such as *aqidah*, worship, *akhlak*, Islamic history, and Qurʿanic values. This stage supports student autonomy because students can access learning resources outside classroom hours. AI can improve learning experiences through personalized and targeted assistance that complements traditional teaching methods (Zaharah et al., 2024).

The third stage is *tabayyun* and source verification. At this stage, students do not accept AI answers directly. They compare AI responses with textbooks, teacher explanations, Qurʿanic verses, *hadith* references, and credible Islamic sources. This stage is central in PAI because religious knowledge needs accuracy and accountability. Large language models require clear pedagogical strategies, fact-checking, and human oversight when used in learning settings (Kasneci et al., 2023).

The fourth stage is guided classroom dialogue. At this stage, the teacher turns AI-generated information into discussion material. Students may bring AI answers to class, but they must explain, question, and evaluate them. The teacher then guides students to identify which information is correct, weak, incomplete, or ethically problematic. Teacher support is important because students' motivation and competence in AI-based learning depend on how teachers guide and mediate the learning process (Chiu et al., 2024). The fifth stage is creative production. At this stage, students use AI to produce learning outputs such as posters, infographics, digital *daʿwah* messages, reflection essays, presentation slides, or case analyses. This stage makes PAI learning more active and relevant to students'

digital culture. AI can support content creation, engagement, personalization, and targeted instruction when teachers use it with clear learning goals (Kasneci et al., 2023).

The sixth stage is spiritual and moral reflection. At this stage, students connect AI-assisted learning with Islamic values. For example, after using AI to study honesty, students reflect on academic integrity, plagiarism, and the ethics of using AI in school assignments. This stage protects PAI from becoming only cognitive learning. Islamic virtue-based AI ethics stresses that technology should help cultivate virtuous individuals and communities, not only improve technical efficiency (Raquib et al., 2022).

The seventh stage is evaluation and improvement. At this stage, the teacher evaluates students' understanding, originality, source accuracy, ethical awareness, and ability to apply Islamic values. Evaluation should not only assess the final product. It should also assess the process of questioning, verifying, discussing, and reflecting. Chiu et al. show that AI in education has roles in learning, teaching, assessment, and administration, but its learning outcomes must be examined carefully because AI also brings major implementation challenges (Chiu et al., 2023).

The model can be summarized as follows: students access AI, explore information, verify sources, discuss meaning with the teacher, produce learning outputs, reflect on Islamic values, and receive evaluation. This sequence prevents AI from becoming a shortcut tool. It makes AI part of a guided learning cycle. In this model, AI supports access and creativity, while teachers protect meaning, ethics, and religious validity.

The findings also show that this model has implications for student motivation. AI can increase curiosity because students receive quick explanations and examples. AI can increase competence because students feel helped in understanding difficult material. AI can increase autonomy because students can learn independently. However, these motivational benefits become stronger when teacher support is present, because teacher support helps students feel guided, connected, and competent in AI-based learning (Chiu et al., 2024). This model also reduces the risk of dependence on AI. Without guidance, students may use AI only to copy answers. With guidance, students use AI to ask better questions, compare sources, create learning products, and reflect on values. This finding supports the thesis argument that AI in PAI must be connected with teacher guidance, ethical control, and Islamic value internalization so that it improves motivation without weakening religious understanding (Ibnu Abbas, 2025).

The conceptual contribution of this model lies in its integration of three dimensions. The first dimension is the technological dimension, where AI supports access, personalization, creativity, and feedback. The second dimension is the pedagogical dimension, where the teacher guides inquiry, discussion, verification, and evaluation. The third dimension is the Islamic ethical dimension, where adab, honesty, responsibility, tabayyun, and value internalization become the core of learning. This combination makes the model different from general AI learning models that focus mainly on efficiency and personalization.

Practically, this model gives clear direction for PAI teachers. Teachers should allow AI use, but they should set ethical rules. Teachers should encourage exploration, but they should require verification. Teachers should use AI to increase motivation, but they should prevent shortcut learning. Teachers should use digital tools, but they should keep spiritual reflection as the center of PAI learning.

Therefore, the conceptual model of AI utilization in PAI at SMK Muhammadiyah Berau can be understood as a teacher guided, value based, and reflective model. AI functions as a learning assistant. The teacher functions as a pedagogical, ethical, and spiritual guide. Students function as active learners who explore, verify, create, reflect, and

apply Islamic values. This model makes AI useful for improving learning motivation while preserving the core mission of Islamic Religious Education.

Conclusion

Based on the discussion, the use of Artificial Intelligence in Islamic Religious Education (PAI) at SMK Muhammadiyah Berau demonstrates that AI serves as a learning aid that can enrich students' learning process. AI is used to search for references, understand material, create learning media, compile assignments, support evaluations, and assist students in independent learning. The use of AI makes PAI (Islamic Religious Education) learning more engaging, faster, interactive, and closely aligned with students' digital habits. This positively impacts learning motivation because students find it easier to understand the material, are more active in seeking information, and are more creative in producing learning materials.

However, the discussion also indicates that AI cannot replace the role of PAI teachers. Teachers remain the primary guides in ensuring the accuracy of religious material, the ethical use of technology, academic honesty, and the internalization of Islamic values. Without teacher guidance, AI risks encouraging reliance on instant answers, weakening critical thinking skills, reducing the depth of reflection, and diminishing the spiritual meaning of PAI learning. Therefore, AI should be positioned as a support, not the primary source of truth, in religious education.

The most appropriate conceptual model is one based on Islamic etiquette. This model places AI within a learning process consisting of orientation, exploration, verification, dialogue, work production, reflection, and evaluation. Through this model, students not only use AI to obtain answers but also learn to verify information, discuss its meaning, connect the material to Islamic values, and apply it to their daily lives. Thus, the use of AI in Islamic Religious Education (PAI) can increase learning motivation while maintaining the primary goal of Islamic education: to develop students who are knowledgeable, moral, honest, critical, and responsible.

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