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Enhancing Fiqh learning outcomes through artificial intelligence applications at Sekolah Indonesia Johor Bahru

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Abstract: Artificial Intelligence (AI) has rapidly emerged as a transformative force in education, offering innovative solutions to enhance learning and teaching processes. This technology is revolutionising traditional educational methods by enabling more efficient, accessible, and engaging learning environments. This study aims to evaluate the impact of AI on Fiqh education at Sekolah Indonesia Johor Bahru (SIJB), reflecting the technological advancements of the Fourth Industrial Revolution. The research employs a quantitative quasi-experimental design, involving 73 students, to assess the effectiveness of AI tools in enhancing Fiqh learning outcomes. Pre-test and post-test data were analysed using the Wilcoxon Signed-Rank Test to measure the effect of AI-based interventions on student performance. The results indicate positive effects of AI-based learning methods on students in Fiqh education. Additionally, a four-point Likert scale questionnaire was used to assess students' perceptions of the ease of use of AI tools, their understanding, and the impact of these tools on learning. The study concludes that the integration of AI tools in Fiqh education at Sekolah Indonesia Johor Bahru significantly enhances students' knowledge and learning outcomes. The implications of these findings suggest that AI can be effectively integrated into Fiqh learning to foster a more engaging and efficient learning environment, ultimately improving student performance and understanding.

Keywords: *Artificial Intelligence, Fiqh learning, Learning,*

1. Introduction

The rapidly evolving science of artificial intelligence (AI) has the power to completely transform how people live and work. The advancement of this technology presents both possibilities and difficulties for every facet of society, including the economics, health, education, and industry. The focus of teaching and learning resources in the field of education has shifted away from instructors, and the resources themselves have a broader orientation that involves using learning aids to expedite the dissemination of knowledge [1]. Nowadays, utilizing artificial intelligence (AI) in education to improve student learning results is becoming more popular. Researchers have hypothesized that obstacles to student learning will be removed by using AI. For instance, the shortage of resources and trained instructors may be eradicated, and educational potential could be maximized. Hwang [2] argues that the employment of AI in education is a path towards comparative education rather than an alternative. To increase human job results and productivity, artificial intelligence (AI) technology is being increasingly incorporated into our daily lives and various workforces, including manufacturing, healthcare, agriculture, and more. Besides, it is an undeniable truth, according to Huang et al. [3], stated that artificial intelligence is now permeating the classroom and the way teachers educate.

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Growing numbers of individuals are becoming aware of the significance of this technology in the field of education as it is being developed. AI has proven tremendous application benefits and has been employed extensively in the field of education. These benefits have a significant influence on classroom management and the teaching process.

Fauziyati[4] mentioned that virtual reality (VR), augmented reality (AR), chatbots and other technologies can all be used in the application of artificial intelligence (AI). Along with increasing the quantity and quality of learning overall, this technology creates a multitude of new options for learning both inside and outside of the classroom. Artificial Intelligence possesses the capacity to offer a customized educational journey that caters to the individual requirements of every pupil. Learning aids that are more targeted and customized to the interests, skills, and learning preferences of each student are now possible for educators thanks to artificial intelligence (AI). Researchers benefit from its usage, but its application in education, particularly Islamic Studies, has to be carefully considered and polished since there is concern that it may have unintended negative effects. Wijaya et al[5] noted that there is just one learning tool available which is books. No other media are used to assist in the learning process. The community is less interested in studying Fiqh because they are fearful of it and are not excited about it. Fiqh is rarely studied. An engaging film is included with efforts to overcome it and learn how to revive the community's spirit.

It is said that instead of focusing on a specific subject, this study examines the issue's research propensity. We thus know very little about the early study on the effects of AI on learning Fiqh. A number of studies have examined the effects of artificial intelligence (AI) on Islamic education, financial services, and economic growth. The benefits and implications of applying AI to the study in Fiqh, however, have not received much attention in the literature. This study investigates the potential impact of AI on the acquisition of Fiqh in an effort to fill this research vacuum. The results of this study, in our opinion, will further our knowledge of the advantages of AI for Fiqh learning.

2. Literature Review

2.1. Artificial Intelligence

Artificial intelligence (AI) is the emulation of human intellect in a device intended to carry out operations such as perception, synthesis, and information inference from auditory or visual data that often call for human input. In light of this, the implications of AI technologies start to show their potentially disruptive nature. At its center is ChatGPT, a sizable language model that is user-friendly, free, and able to generate text that resembles that of a human being in response to user input [6]. Since artificial intelligence is a technology that is thought to be able to improve human lives, education must incorporate it in order to teach students how to identify and make use of technology in their daily lives. Artificial intelligence technology may serve as a guide for developing curricula and educational policy, as well as a tutor system, intelligent tutee, learning tool, and media [7]. Artificial Intelligence has matured quickly in recent years. The education industry has been affected both positively and negatively by the deployment of AI technology, which has been deployed in a number of other areas. Although AI has long been an element of educational technology, its widespread use has only lately started. Artificial Intelligence (AI) has the power to completely transform education, increasing accessibility, efficacy, and efficiency. AI is a technology that can enhance human intellect and lead to advancements in science and society across the board [8].

Safitri et al.[9] claimed that artificial intelligence (AI) might boost data management productivity, tailor instruction, deliver insightful feedback, and enhance overall instructional efficacy. As a result, AI turns into a useful tool for enhancing the educational process, raising standards, and equipping students with the skills they'll need to succeed in the digital age. While AI may offer suggestions and customized content, instructors are skilled at offering direction, promoting dialogue, and offering one-on-one assistance. Teachers may improve their interaction with pupils by utilizing the insights AI provides. Teachers and students are starting to employ artificial intelligence (AI) technologies in the classroom more and more. Some educators view artificial intelligence (AI) as a technology that may support them

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in giving pupils a more tailored and flexible learning environment. But as long as students utilize it, the integration of artificial intelligence (AI) technology into the classroom may have a big impact on instructors and bring about substantial improvements. The advancement of artificial intelligence (AI) technology has made a significant contribution to improving education. There is worry, nevertheless, that the employment of AI may supplant the function that educators play in the educational process. Some educators are concerned that if students rely too much on technology, they may overlook crucial traditional teaching techniques [9].

Besides, Permana et al.[10] defines artificial intelligence (AI) as a branch of computer science that focuses on creating computers and computer systems that can carry out activities that often call for human intellect. The creation of algorithms and methodologies for computers to "understand" and "learn" from data and make judgements is included in artificial intelligence (AI). In order to give computers the ability to "think" and make decisions on their own using data and prior experience, artificial intelligence (AI) uses sophisticated algorithms and methodologies. Enhancing computers' intelligence and performance to enable them to accomplish jobs that often require human intellect is the primary goal of artificial intelligence. Artificial intellect (AI) is defined by Kurniawan et al.[11] as the replication of human intellect in devices, such as computers or robots, that have been programmed to mimic human cognitive processes. Artificial Intelligence is a generic term for methods created to educate computers to do cognitive tasks similar to those of humans. AI is characterized as a hardware or software system with complicated human-designed functions that operates in digital or physical dimensions. Deep learning techniques, artificial neural networks (ANNs), and machine learning (ML) are the three main categories of AI techniques.

2.2. Artificial Intelligence in Education

According to Ali et al.[12], it is crucial that academics and students are well-versed in the use of AI, are aware of its possible advantages, and are aware of any ethical dilemmas that could occur in a learning environment. AI has a great deal of promise for use in the academic setting. It can help students and undergraduates do activities more quickly and efficiently, including writing. Though AI has the ability to completely transform education by making it more accessible, efficient, and personalized, it also opens up new possibilities and perspectives for the field of education. The researcher also stated in his study that researchers are interested in studying artificial intelligence (AI) and how it applies to the field of education. This is evident from the term AI, which is a subject of growing interest in research. There has been a rise in the quantity of published papers on "education and Artificial Intelligence" according to Google Scholar between 2011 and 2022. Research on artificial intelligence (AI) and education has grown significantly over the past ten years; it has grown by 69.41% and even 96.29% when the keywords "artificial intelligence" and "education" are used. The figures have increased significantly from a decade ago.

In addition, according to Ali et al.[12], regarding the current trends in AI usage, most students are aware of the technology; in fact, a large number of them learn about it via social media. Perception-wise, the majority of students believe that AI-powered tools save them time and effort while completing lecture assignments. They also believe that AI is a useful tool for enhancing university instruction and learning. Additionally, students must be prepared with information on the morality of applying AI in a classroom setting. The use of AI in writing assignments and examinations should also be governed by explicit policies and procedures. AI in education has the potential to be a useful tool that supports students' learning.

A study conducted by Kirana et al.[8] stated that AI has been extensively used in the field of education to supplement the current educational framework, particularly during the pandemic. The availability of content and digital learning resources, virtual mentors, automated assessment, and personalized learning all demonstrate the mode of implementation. In the modern era of technology, advancements in technology are utilized to make tasks easier and satisfy human wants. The field of education also makes use of technological advancements, and one type of technology that is being

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produced right now is the smart system. A control system that combines artificial intelligence with human-like intelligence is called an intelligent system. The development of robotics technology that can make decisions that mirror human thought processes is known as artificial intelligence, or AI. The researcher also stated, in order for artificial intelligence technology to advance quickly, specialists are still developing it. It is anticipated that artificial intelligence (AI) will be utilized to develop robots or software that will assist people with their daily tasks. It is anticipated that the existence of AI would increase machine intelligence. It is anticipated that it will significantly aid people in addressing challenging issues, for example, by enabling the creation of rapid-thinking calculators. The development of AI technology has revolutionized the use of technology in education to support learning. Education may accelerate when technology is used sensibly and under supervision. Students can develop independence via the use of artificial intelligence technologies.

According to research by Hikmawati et al.[7] schools should be able to balance the use of this technology into the curriculum starting in elementary school. This will allow them to guide students in using the technology to further their education. Artificial intelligence may enhance learning and increase student independence, which makes its application in education and learning crucial. Artificial intelligence (AI) is predicted to enhance education in numerous ways, including fostering more efficient and individualized learning. Learning with the support of Artificial Intelligence is believed to be able to increase student focus because it has the ability to direct students' learning process individually and recognize the areas needed to find the right teaching method for students. The researcher added that it is anticipated that the application of AI technology would be able to significantly enhance educational quality and assist students in realizing their full learning potential. Curriculum management may become more effective in the design, execution, and assessment of learning by leveraging AI's skills in data processing, analysis, and autonomous learning. AI technology has several applications, including tutoring systems, intelligent tutors, learning aids and media, and advisory support for developing curricula and educational policy, particularly for primary school students.

2.3. Fiqh

"Fiqh" is derived from the Arabic word "*fiqh*," which denotes knowledge and comprehension of a certain subject. When it comes to preserving a Muslim's ties with God, other people, and the cosmos, jurisprudence refers to the knowledge and comprehension of Islamic law that centers on the Sharia of Muslim life. The four primary pillars of fiqh education are worship (the relationship with God), *Muamalat* (the relationship with society), *Munakahat* (marriage), and crime. It is imperative that the area of fiqh studies pay close attention to the level, substance, and teaching and learning. To guarantee that a Muslim has the necessary understanding and expertise, this subject should always be updated and maintained [13].

According to Hamdan[14] students of noble character are shaped in both behavior and character by Islamic religious instruction. Understanding Islamic jurisprudence is one of the key components of learning Islam. It is crucial that worship and fiqh are incorporated into the teachings of Islam in schools in order to produce a generation of students who are well-versed in and adhere to Islamic principles. The researcher also stated that a number of considerations should be made when integrating religious jurisprudence into Islamic education in schools. These include presenting the content in a methodical and contextualized way, selecting the appropriate teaching strategy, and creating engaging and simple-to-understand learning materials. The inclusion of the Ibadah fiqh in the Islamic curriculum aligns with the national education goal, which highlights the significance of character education. by fully comprehending and putting Islamic principles into practice. The practices of worship, including prayer, fasting, zakat, the hajj, and so on, are covered in Fiqh Ibadah. Every Muslim should be aware that every form of worship includes requirements, pillars, sunnahs, and elements that render it invalid. The rules pertaining to worship are also included in Fiqh Ibadah. These include the laws governing the location and timing of worship, the attire required for worship, the laws governing prayer and Qur'anic reading. Comprehending the fiqh of worship thoroughly will

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enable Muslims to offer prayers accurately and in compliance with Islamic law. For instance, one can learn the correct manner to pray, including the movements involved and the ablution processes, by studying the jurisprudence of prayer. In general, Muslims view the law of worship as a highly significant area of law. Through acquiring knowledge of the fiqh of worship, an individual can enhance the quality of his spiritual and moral life by appropriately performing worship in compliance with Islamic law [14].

The integration of religious law with Islamic education in schools has a number of difficulties, including time limits that make it difficult to fit in a large amount of intricate Islamic jurisprudence content in the curriculum. In order to properly acquire the fiqh content of worship in a condensed amount of time, this demands creativity and originality in learning. Furthermore, the scarcity of sufficient teaching personnel. Sufficient instructors or teaching personnel are needed for the integration of fiqh of worship, both in terms of credentials and expertise, as well as prior experience instructing fiqh of worship. This restriction can be addressed by organising training sessions for educators who lack prior expertise instructing religious fiqh or by incorporating fiqh experts and practitioners in the learning process. Lack of resources, such as proper equipment and instructional materials, is another issue. Not all schools have the necessary resources to facilitate the study of religious jurisprudence [14].

3. Research Question

The study is conducted to investigate the following questions:

i. What is the impact on students' achievement in Fiqh learning before and after the implementation of AI technology?
ii. How do students perceive and accept the use of AI technology in Fiqh learning?

4. Methodology

This research adopted a quantitative approach, utilizing a one-group pre-test/post-test quasi-experimental design to explore the efficacy of AI tools in Fiqh learning such as ChatGPT 3.5, Gamma AI, and Imagine Art AI. This design was chosen due to its suitability for measuring changes within the same group over time, providing objective, measurable, and statistically analysable data. Implementing a control group was deemed impractical and unethical, as it would withhold potential educational benefits from some students. This approach controls for between-group variability, ensuring focused analysis on the intervention's impact while efficiently utilizing resources. Thus, the chosen design appropriately addresses the research question by effectively capturing the AI tools' influence on student knowledge.

The study involved 15 students purposively sampled from an Indonesian school in Johor, Malaysia, with Forms 1 to 3 specifically targeted. This selection was aimed at assessing the validity of our questions by analysing reliability values derived from the students' test scores. Reliability was quantified using the Pearson correlation coefficient, based on the scores from two administrations of the test. In this context, the Pearson correlation coefficient (r) for our sample was 0.776 for the Fiqh Studies test, demonstrating a strong positive relationship between the first and second test scores and indicating consistent measurement across time.

A total of 73 students participated in the study, adhering strictly to ethical considerations to ensure the confidentiality of the participants' identities. The participants were identified and recruited using purposive sampling, as there is only one Indonesian school in Johor, which served as the study site. The selection of participants was also determined by the availability of computer equipment at the location, ensuring that all students had the necessary resources to participate. Necessary approvals were secured from the Consulate General of the Republic of Indonesia in Johor Bahru and the school administration, affirming the study's compliance with ethical standards.

This design was deemed appropriate for assessing the impact of innovative educational tools on learning outcomes within a specific educational setting. By focusing on the same group of students

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before and after the intervention, we could directly attribute observed knowledge gains to the use of AI during the learning process, despite the inherent limitations of not including a control group for comparison. The research procedure is illustrated in Figure 1.

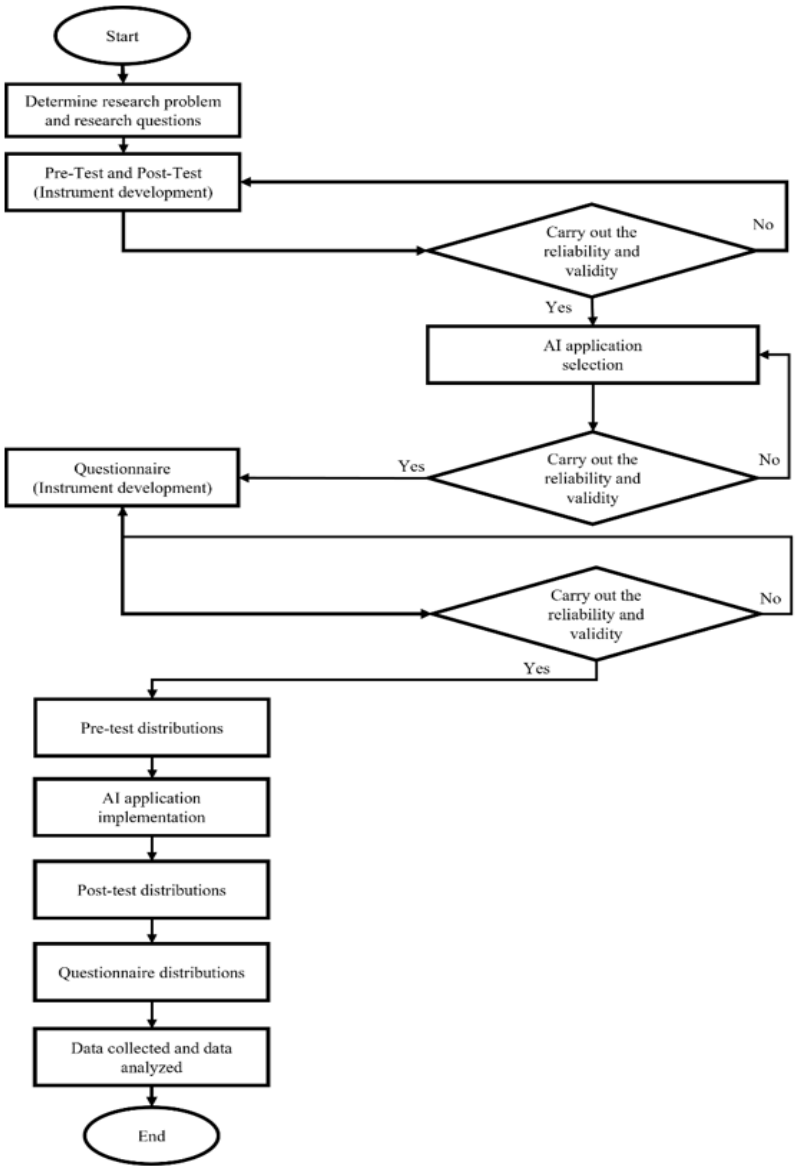

Figure 1.
Research procedure.

4.1. Research Procedure

A total of 73 students were involved in this study. An instrument was developed to achieve the objectives of this study. This instrument underwent a validation test by the necessary experts to ensure its validity and reliability for use with the sample. The researcher distributed Fiqh test papers to the sample during the pre-test and post-test, after which the data was collected and analysed to find out the difference between the two results. Next, a questionnaire was distributed to find out students' perceptions and acceptance levels of the use of AI in learning.

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4.2. Data Analysis

Findings of the analysis conducted on the data obtained from the pre-test and post-test. According to Astuti et al., [15] that the signed Wilcoxon Signed-Rank Test is used to determine whether two sets of data are different, whether observations before and after treatment can be compared, and whether a treatment is effective. The data obtained from this study was initially analyzed using the Statistical Package for Social Science (SPSS) software. The Wilcoxon Signed-Rank test analyzed pre- and post-Fiqh test scores to account for non-normality of the data. Non-parametric analysis was considered appropriate because of the non-normal distribution of test scores. The Wilcoxon Signed-Rank test was used to compare scores before and after the intervention, ensuring that the analysis was not affected by the assumption of normality.

5. Results and Findings

5.1. Tests of Normality

Table 1.
Test of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Group	**Statistic**	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Test	Pre	0.178	73	0.000	0.885	73	0.000
	Post	0.193	73	0.000	0.822	73	0.000

Note: a. Lilliefors significance correction.

The results from the Kolmogorov-Smirnov and Shapiro-Wilk tests, with significance levels (p-values) at .000 for both the pre- and post-tests, clearly reject the null hypothesis of normal distribution for the groups in question. These outcomes, significantly below the conventional alpha level of 0.05, validated the decision to employ non-parametric tests for analysis. Consequently, the use of the Wilcoxon Signed-Rank Test, which does not presuppose normality of the data, was justified as the appropriate analytical approach for examining the differences between the pre-test and post-test scores obtained during this study.

5.2. Analysis of Students' Achievement Levels in Fiqh Studies (Wilcoxon Signed-Rank Test)

This section explains the analysis of the treatment groups for the pre-test and post-test. The results of this analysis are shown in Table 2. The initial hypotheses for this statistical analysis were as follows:

H_0 = *There is no difference between the achievement levels in Fiqh Studies among the treatment group before and after the intervention.*
H_1 = *There is a difference between* the achievement levels in Fiqh Studies among the treatment group before and after the intervention.

Table 2.
Analysis of students' achievement levels for pre-test and post-test treatment group.

Ranks

		N	**Mean rank**	**Sum of ranks**
PostTest - PreTest	Negative ranks	0[a]	0.00	0.00
	Positive ranks	70[b]	35.50	2485.00
	Ties	3[c]		
	Total	73		

Note: a. PostTest < PreTest
b. PostTest > PreTest
c. PostTest = PreTest

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Referring to Table 2, the results of the Wilcoxon Signed-Rank Test, which was conducted on a sample of 73 students to assess the effectiveness of an educational intervention in Fiqh Studies, demonstrated a significant increase in their achievement levels post-intervention. This is indicated by the 70 positive ranks (Mean Rank = 35.50, Sum of Ranks = 2485.00) and the absence of negative ranks. The lack of negative ranks, along with three instances of ties, not only suggests an overall improvement but also indicates a consistent performance for a subset of the sample. These findings provided compelling evidence for rejecting the null hypothesis, confirming that the intervention had a statistically significant positive impact on the students' achievement levels in Fiqh Studies.

Table 3.
Analysis of students' achievement levels for pre-test and post-test treatment group.

Score pre-test treatment group Score post-test treatment group	
Z	- 7.365[b]
Asymp. sig. (2-tailed)	0.000

Referring to Table 3, the Wilcoxon Signed-Rank Test, which was applied to assess the variation in the students' Fiqh knowledge before and after the intervention, revealed a Z value of -7.365. The asymptotic significance (2-tailed) for this test is .000, which indicates a statistically significant difference between the pre-test and post-test scores. The obtained p-value of 0.000, being less than the conventional significance level of 0.05, signifies a statistically significant improvement in the students' Fiqh knowledge following the intervention with AI tools, including ChatGPT, Gamma AI, and Imagine Art AI. These results suggest that such AI tools can substantially enhance student learning outcomes in Fiqh Studies.

Table 4.
Analysis of domain 1 (Perceived ease of use).

Item	N	Minimum	Maximum	Mean	Mean interpretation
I find it easy to get what I want from AI tools during my learning process.	73	1.00	4.00	3.55	Very High
I am able to use AI tools for learning purposes.	73	1.00	4.00	3.53	Very High
I find AI educational tools easy to understand.	73	1.00	4.00	3.55	Very High
I need to make an effort to interact with AI tools.	73	1.00	4.00	3.10	High
I find AI tools flexible for interaction in my learning activities.	73	2.00	4.00	3.36	Very High
Overall mean				3.42	Very High

5.3. Analysis of Users' Acceptance of Technology

Referring to Table 4, the analysis of the questionnaire concerning Domain 1 (Perceived Ease of Use) - which was related to the use of AI learning tools in the Fiqh Studies context - revealed that the 73 respondents demonstrated a very high level of satisfaction with the ease of use of these tools. More specifically, the ease of obtaining what was needed from AI tools; the usability of these tools for learning; and their flexibility in learning activities all scored within the 'Very High' range, with mean scores ranging from 3.36 to 3.55. The effort required to interact with AI tools also scored 'High', with a mean of 3.10. Overall, the collective mean of 3.42 fell within the 'Very High' category, underscoring the

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effectiveness and user-friendly nature of AI tools in the process of learning Fiqh. This indicates that the participants found the AI tools highly accessible and beneficial for their educational needs in the field of Fiqh.

Table 5.
Analysis of domain 2 (Perceived usefulness).

Item	N	Minimum	Maximum	Mean	Mean interpretation
The use of AI tools helps me improve my understanding of Fiqh learning.	73	3.00	4.00	3.52	Very High
The use of AI tools aids me in completing learning activities more quickly.	73	2.00	4.00	3.64	Very High
The use of AI tools increases my effectiveness in the learning process.	73	2.00	4.00	3.49	Very High
The use of AI tools helps me understand difficult topics.	73	2.00	4.00	3.48	Very High
The use of AI tools enhances my productivity in learning activities.	73	2.00	4.00	3.45	Very High
Overall mean				3.52	Very High

Referring to Table 5, the analysis of Domain 2 (Perceived Usefulness) from the questionnaire reflects a unanimous recognition among the 73 respondents of the value provided by AI learning tools in Fiqh Studies. With mean scores ranging from 3.45 to 3.64, each aspect evaluated—from the improvement of understanding Fiqh concepts to the enhancement of productivity in learning activities—was rated as 'Very High'. This consistent appraisal underscores the significant role played by AI tools in not only facilitating a deeper comprehension of Fiqh but also streamlining the learning process and assisting in the efficient completion of learning tasks. The overall mean score of 3.52 firmly places the usefulness of AI tools in the 'Very High' category, indicating that the integration of these tools into Fiqh learning was not only appreciated by the respondents but also considered to be highly effective in advancing their educational pursuits.

Table 6.
Analysis of domain 3 (Attitude towards using).

Item	N	Minimum	Maximum	Mean	Mean interpretation
I have a positive attitude towards the use of AI tools in my learning.	73	3.00	4.00	3.42	Very high
The use of AI tools in learning is a good idea.	73	2.00	4.00	3.58	Very high
I feel comfortable using AI tools in my learning.	73	2.00	4.00	3.59	Very high
I enjoy using AI tools for learning purposes.	73	2.00	4.00	3.47	Very high
I would recommend to my friends the use of AI tools in learning.	73	2.00	4.00	3.70	Very high
Overall mean				3.55	Very high

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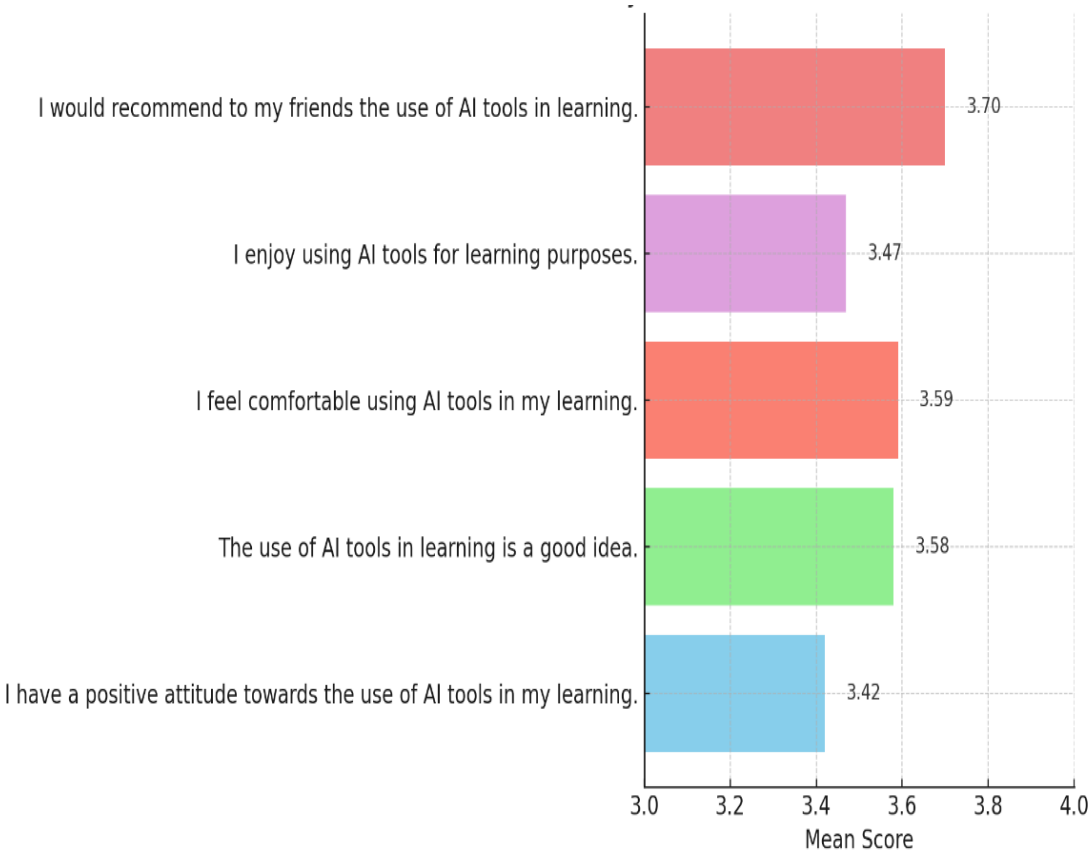

Figure 2.
Analysis of domain 3 (Attitude towards using).

Referencing Table 6 and Figure 2, the questionnaire analysis for Domain 3 (Attitude Towards Using) reveals that the 73 participants held in very high regard the use of AI learning tools in their Fiqh Studies. Ranging from 3.42 to 3.70, the mean scores denote a very high level of positive attitudes towards various aspects of AI tool usage. These aspects include positive personal attitudes towards learning with AI, belief in the value of incorporating AI into learning, comfort when using AI tools, enjoyment derived from their use, and a strong inclination to recommend AI tools to peers. The overall mean of 3.55 cements the notion that the respondents not only appreciated the value of AI in enhancing their learning experience but also actively endorsed its usage, indicating a favourable outlook on the integration of AI in Fiqh educational practices.

Table 7.
Analysis of overall users' acceptance of technology.

Aspect	Overall mean	Mean interpretation
Perceived ease of use	3.42	Very High
Perceived usefulness	3.52	Very High
Attitude towards using	3.55	Very High

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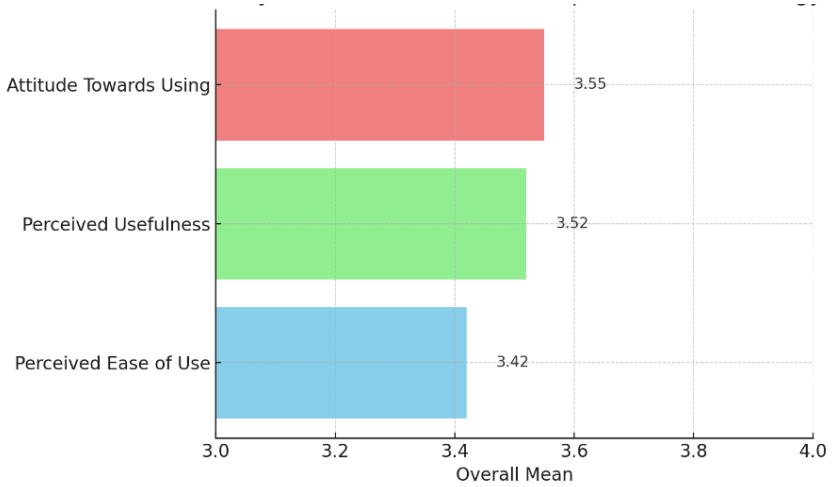

Figure 3.
Analysis of overall users' acceptance of technology.

Table 7 and Figure 3 shows the overall mean value for User Acceptance of Technology in terms of perceived ease of use, perceived usefulness and attitude to use. In conclusion, the level of perceived ease of use had a mean value of 3.42 (very high), perceived usefulness had a mean value of 3.52 (very high), and attitude to use had a mean value of 3.55 (very high). Referring to this data, the level of User Acceptance of Technology was high.

6. Discussion

The discussion related to this study shows the benefits and effects of using artificial intelligence in learning Fiqh. The Wilcoxon Signed-Rank Test analysis, which was undertaken to evaluate the variation in Fiqh knowledge of the students before and after the intervention, revealed a Z value of -7.365. The asymptotic significance (2-tailed) for this test is .000, indicating a statistically significant difference between the pre-test and post-test scores. The obtained p-value of 0.000, which is less than the conventional significance level of 0.05, shows a statistically significant improvement in students' Fiqh knowledge following the intervention with AI tools, including ChatGPT, Gamma AI, and Imagine Art AI. This finding shows that these AI tools had a major positive effect on student learning outcomes in Fiqh. This claim can be corroborated by a study by [16]. Artificial intelligence has had a significant impact on the education sector, particularly in Islamic religious education. AI technology makes it easier for educators to deliver engaging lesson plans and activities, which keeps students engaged and prevents them from feeling overstimulated. AI can also measure and expedite students' understanding of Islamic religious education. Using AI-powered tools like presentation translators, it is possible to use voice assistants like Cortana, Siri, and Google Assistant, as well as visual coaches. The growth of the Islamic education sector can benefit greatly from the application of AI technology. According to Nadia et al.[17] , the use of technology is important in learning strategies, which, in the context of this study, aligns with the views of Gocen and Aydemir [18], who state that exciting and promising advancements in AI for education are available to schools. It is critical to handle new developments by carefully considering their implications and context. For humans, artificial intelligence technology is an intriguing area. Yet as the study's participants made clear, AI is neither a panacea nor an advancement that will bring about perfect value. Thus, it is necessary to weigh the benefits and drawbacks from a legal, ethical, educational, psychological, and sociological standpoint. Since people are the ones most impacted by technology, it is crucial that the entire process be carried out legally to protect everyone.

Next, referring to the analysis of the questionnaire regarding Domain 1 (Perceived Ease of Use), which was related to the use of AI learning tools in the context of Fiqh Studies, the respondents showed

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a very high level of satisfaction with the ease of learning to use these tools. This shows that they found AI tools very accessible and useful for their educational needs in the field of Fiqh. Madrasahs that can use artificial intelligence in Islamic Religious Education will have an edge in today's digital age in terms of raising learning standards and equipping students for future difficulties [19]. In their research, Nugraha et al. [20] claimed that the use of technology in the classroom, particularly while teaching Fiqh, presents both wonderful potential opportunities and difficulties that must be resolved. An intriguing possibility in the sphere of Islamic education is presented by the merger of ChatGPT and Fiqh. When used properly, this combination may be a powerful tool for teaching the fundamentals of Fiqh to a larger audience, including the younger generation growing up in the digital age. Based on this assessment, ChatGPT exhibits the capability to enhance the educational process, provide students with the chance to receive prompt replies, and promote comprehensive interactive conversations. However, how well the teacher integrates this technology with more conventional approaches and how well-versed in certain jurisprudential aspects schools are will determine how successful this deployment is.

Subsequently, based on the analysis of Domain 2 (Perceived Usefulness) from the questionnaire, the respondents unanimously recognized that the AI learning tools provided very high value in the study of Fiqh. This consistent assessment underlines the important role that AI tools play in not only facilitating a deeper understanding of Fiqh but also streamlining the learning process and assisting in the efficient completion of learning tasks. This shows that the integration of these tools into Fiqh learning was not only appreciated by the respondents but also considered very effective in advancing their educational efforts. According to research by Nugraha et al. [20], beyond textbooks and traditional Fiqh literature, ChatGPT or AI can be reliable sources of extra information. Naturally, this would help to address the current issue that thorough explanations may be lacking in works of ancient literature. This kind of contemporary approach also makes it possible to link ChatGPT and Fiqh with other sources, such *hadith*, *tafsir*, and other Fiqh literature. This would enable users to quickly debate Fiqh difficulties by referring directly to original sources. ChatGPT and modern Fiqh instruction can be more lively. To acquire a more thorough explanation of and knowledge about particular issues, learners can engage in role-playing specific legal circumstances or simulated discussions with the system.

Additionally, the analysis of the questionnaire for Domain 3 (Attitudes Toward Use) revealed that the participants valued AI learning tools highly in their legal studies. These aspects included positive personal attitudes towards learning with AI, belief in the benefits of incorporating AI into learning, comfort in using AI tools, enjoyment derived from using these tools, and a strong tendency to recommend AI tools to peers. The overall mean illustrates a strengthening of the notion that respondents not only appreciated the value of AI in improving their learning experience but also actively supported its use, thus revealing a favourable view of the integration of AI into Fiqh educational practice. According to research by Nugraha et al. [20], ChatGPT gives students access to more dynamic and engaging knowledge and exchanges about Islamic rules. According to Sarinda et al. (2023), artificial intelligence can help teachers provide engaging lesson plans and instructional strategies that prevent students from becoming overly engaged. It can also enhance the quality of instruction by fostering innovation and activity, measuring student comprehension, and expediting the pace at which students pick up new material.

The foregoing explanation indicates that the application of AI can have positive effects on the acquisition of Fiqh. Besides assisting educators in modifying their delivery strategies, technology also adds intrigue and participation to the process. Lessons can include a variety of multimedia components to make studying more pleasant for students, particularly when it comes to comprehending difficult concepts. Sitiris et al. [21] claimed that AI enables computers to learn and grow via experience in order to acquire additional information without the assistance of humans or programming. To make an AI system more palatable, it will be difficult to align it with religious and cultural values. This is significant because the ability of any new technology to be successfully implemented depends on its acceptability. Artificial intelligence systems could be seen as a danger to regional values and customs if they conflict with religious and cultural views [22].

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7. Conclusion

This study shows that there is a significant difference. The Wilcoxon Signed-Rank Test of the study application showing a statistically significant increase in students' Fiqh knowledge after the intervention with AI educational tools such as ChatGPT. This significant increase, evidenced by the asymptotic significance level being well below the conventional threshold, proves the effectiveness of AI in enriching religious education. Informed by the Technology Acceptance Model (TAM), our analysis outlines the encouraging adoption of AI tools across three domains - Ease of Use, Perceived Usefulness, and Attitudes Toward Use - each reflecting high user satisfaction. These findings not only reinforce the usefulness of AI in educational contexts but also suggest its important role in fostering an engaging and personalised learning environment. Further analysis revealed that the effective design of AI tools, evidenced by the high user satisfaction with ease of use, aligns with the educational needs of Fiqh Studies. The unanimous affirmation of the tool's utility in improving understanding and efficiency in learning proves its value. Moreover, users' positive attitudes towards and willingness to support AI tools indicate a strong intention to use these tools, which is important for actual technology adoption. The collective evidence from these domains supports the continued integration of AI into the study of Fiqh, reinforcing the predictions of the Technology Acceptance Model regarding technology adoption. This integration is not just a technological advance but also a strategic improvement to the pedagogical approach. Future scholarship should investigate the causal pathways through which AI tools influence learning outcomes and identify strategies to maximise their pedagogical effectiveness.

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