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User Experience Analysis: ChatGPT-based AI in Islamic Religious Education Learning

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ABSTRACT

The purpose of the study was to analyse the user experience of ChatGPT-based AI in Islamic education learning. This study used a quantitative approach with a survey research type, with 84 teachers in Teacher Professional Education (PPG) as the respondents. The instrument had twenty-six items and six scales and was analysed using ueq-online.org. The study's findings demonstrated the value of incorporating AI under the direction of experienced educators in the subject of Islamic religious studies, on the six scales of user experience: Attractiveness, Efficiency, Perspicuity, Dependability, Stimulation, and Novelty, found on the benchmark above average, except on the Stimulation scale the results were good, meaning that the Stimulation value has shown more attention for Islamic Education teachers, In conclusion, even if the study's findings are outstanding, it is crucial to apply ChatGPT-based AI in Islamic education by taking consideration of students' interests, difficulties, and other barriers to make learning more innovative and effective.

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INTRODUCTION

In the current digital era, information and communication technology, including in the sphere of education, has advanced extremely quickly (Prasojo et al., 2019). Among the developments that have gained interest and are modified for the application of artificial intelligence (AI) in education (Fitria, 2021), especially language models such as ChatGPT (Alnaqbi, 2023), have even been widely used in the learning process. ChatGPT, developed by OpenAI, has shown extraordinary ability in understanding and producing relevant and contextual text.

In the educational setting, ChatGPT can give students a more engaging and dynamic learning experience, particularly in Islamic Religious Education (PAI) classes (Abdalla, 2025), because fascinating learning will make it easier for students to comprehend the material (Salehudin et al., 2023), PAI teachers, by utilizing all learning resources will make learning more optimally delivered in class.

However, the use of ChatGPT-based AI has not been known in more depth in Islamic Religious Education learning, particularly ChatGPT-based AI, the use of this technology has not been thoroughly understood in Islamic Religious Education learning, particularly in terms of users by Islamic Religious Education teachers and students in the classroom, both in relation to measuring novelty in the use of technology and not yet in the analysis of the experience of Islamic Religious Education teachers towards the use of ChatGPT-based AI technology, whether there have been additional studies measuring user experience in learning creativity using Instagram social media (Salehudin et al., 2021a), Studies have also been conducted on the function of learning interactions (Sutcliffe & Hart, 2017).

The challenges faced in Islamic Religious Education, learning are often related to less interesting teaching methods and limited interactive teaching resources The application of multimedia and media in learning (Ayu & Manuaba, 2021; Rao, 2015), the use of learning model (Maria & Sediyono, 2017; Zaf & Falasifah, 2018), it is hoped that all of this will help address issues with Islamic Religious Education instruction that arise in the classroom, and Islamic Religious Education learning can even occur outside the classroom.

As an idea for AI-based Islamic Religious Education learning, leading to the material of the Qur'an and Hadith, the history of Islamic culture, *Aqidah Akhlak*. as an example of searching for teaching materials on the function of several verses and their explanations, Islamic Religious Education teachers use ChatGPT.

As explained about AI which is known as gen-AI (Al-Abdullatif, 2024), Through ChatGPT which continues to develop rapidly with various forms of applications that use AI, ChatGPT offers a number of benefits for assisting human endeavors (Salih et al., 2025), can function as a learning assistant that is able to answer questions, provide explanations, and present material in a more interesting way (Elliott et al., 2025; Youssef et al., 2024). A study conducted by the Pew Research Center (2021) shows that 70% of educators believe that technology may enhance students' educational experiences. , it is important to explore how ChatGPT can be applied in PAI learning and how user experiences can be analyzed to improve its effectiveness (Deng et al., 2025).

In terms of Human-Machine Interaction, which has also been studied by Lamia Berriche and Souad Larabi-Marie-Sainte (2024) it was shown that More advanced language models can be used to enhance human-machine interaction, used to compose and respond to the desired text (Berriche & Larabi-Marie-Sainte, 2024). ChatGPT, In language learning, the use of ChatGPT continues to grow, allowing students to cheat on their work, which is what educators fear, even though ChatGPT allows students to study effectively outside of the classroom and meet all of their learning demands that aren't adequately satisfied in the classroom, like when chatbots are used (Rahimi et al., 2025).

Abderahman Rejeb (2024) Shows that the application of ChatGPT in the field of education must be carefully planned, utilizing a variety of preparations pertaining to recommendations for integrating AI in education, ethical principles while utilizing it, and concerns about protecting and preserving user privacy (Rejeb et al., 2024). As the language evolved in robotics with AI, ChatGPT can instantly find a variety of responses provided by its users, even handle frequent inquiries, and decrease the tiresome and inefficient human tasks (Tlili et al., 2020).

The topic of ChatGPT's user experience is becoming more and more pertinent in the current digital age. As artificial intelligence technology has advanced, ChatGPT has emerged as a popular tool for both individuals and enterprises. It may be used for a variety of tasks, such as helping with writing or delivering information that is needed. (Stojanov et al., 2024). Therefore, it is crucial to investigate various aspects of user experience (Hinderks et al., 2019; Somers & Scholten, 2011), including benefits, advantages, and disadvantages, as well as its impact on human interaction with technology (Espartinez, 2024).

The simplicity of using ChatGPT is one of the key elements of the user experience. With only a few clicks, users may quickly and simply access the platform (Baber, 2021). The simple and intuitive user interface allows users from various backgrounds to adapt quickly. A student seeking references for a final assignment, for instance, can simply ask ChatGPT a question and get a pertinent and educational response in a matter of seconds. This convenience not only saves time but also boosts user productivity (Zaharias & Pappas, 2016).

Even though accessibility is one of the primary benefits, users can suffer dissatisfaction when ChatGPT is unable to deliver adequate responses or when the responses do not fit the intended context (Skjuve et al., 2023). When a user queries ChatGPT about the background of an event, they could receive a response that is either too broad or not detailed enough. This demonstrates that despite technological advancements, comprehension of more complicated settings is still limited (Espartinez, 2024; Habibi et al., 2023).

In addition to being a tool for dialogic user interaction, ChatGPT enhances the user experience. The ability for users to seek clarification or offer follow-up questions fosters a more organic dialogue. Users can ask more detailed questions about specific resources or methods for learning formulas and certain sciences once they first inquire about how to create their learning assignments. This interaction adds a personal touch that can boost user satisfaction (Song et al., 2024).

In the context of professional use, ChatGPT also shows significant potential. Many companies are starting to use this technology to improve their customer service. Over time, ChatGPT's accuracy can be increased by the application of machine learning algorithms, but students also make the most of ChatGPT when learning (Youssef et al., 2024). In an in-depth analysis of the impact of user experience, we must also consider the emotional aspect, users often have certain expectations when using ChatGPT, and it is also necessary to discuss how the social and cultural context may affect things. While this technology has a lot of potential to boost productivity and efficiency, it's crucial to keep improving these systems to satisfy user demands and get past current constraints. By understanding and analyzing the user experience in-depth, we can create better interactions between humans and technology, ultimately benefiting all parties involved (Aini et al., 2019).

Through this study, it is necessary to analyze the user experience in using ChatGPT in the context of Islamic religious education (Fathur Rohiem & Aulya Salsabila, 2024), This is because ChatGPT is also used to discuss opportunities, challenges, and ethical issues that may come up in multicultural education (Mahmudulhassan et al., 2024). and discuss the advantages and challenges faced, the impact on understanding Islamic Religious Education material, and the potential for further development in the integration of AI technology in education. It is intended that by employing pertinent data and statistics, the analysis's findings will offer comprehensive insights to curriculum creators, educators, and other stakeholders in order to enhance the caliber of Islamic religious education in the digital age (Daniela, 2022; Nasution & Nurhafizah, 2019).

The purpose of this study is to analyze the user experience of ChatGPT-based AI used in Islamic Religious Education learning. An analysis is needed that discusses in depth the analysis of user experience from the six scales developed, starting from the use of ChatGPT from its attractiveness, and efficiency to novelty. In order to make a substantial contribution to the creation of more inventive and successful teaching materials, learning strategies, and PAI learning resources based on AI technology based on ChatGPT, a study detailing the implementation and evaluation of user experience in the context of Islamic Religious Education learning is anticipated to be proposed at the conclusion of this manuscript.

RESEARCH METHOD

Methods and Design

This study used a quantitative approach (Creswell, 2013; Mukrimaa et al., 2016), This research conducted more surveys to find out whether the research questions could be found to provide a clear picture in this research.

Research Respondents

Respondents in this study were PAI teachers, with respondents being Islamic Religious Education teachers who took Professional Education in Teacher Professional Education (PPG), the number of respondents who provided answers was 84 people, with the characteristics of the respondents stated as follows:

Research Instruments

With a survey research type (Fred, 2019) The instrument makes use of a user experience (UX) tool that has been utilized and evaluated in over 30 nations, taken from www.ueq-online.org as in its UX handbook (Schrepp, 2018) which can be accessed at https://ueqplus.ueq-

research.org/Material/UEQ+_Handbook_V5.pdf consists of 26 items and 6 indicators, which include 6 scales (Attractiveness, Efficiency, Perspicuity, Dependability, Stimulation and Novelty). Meanwhile, in conducting data analysis, this study uses ueq-online.org as described in research on UX by its developers (Law et al., 2014; Schrepp et al., 2017), drawing conclusions using the existing benchmarks, ranging from the very poor to the very good benchmark category, and using the average test and standard deviation.

Table 1. The characteristics of respondent

No	Characteristics	Prosentase
1	Male	46%
	Female	54%
2	Education	
	Undergraduate S1	87%
	Postgraduate S2	13%
3	Work Place	
	Elementary Teacher	92%
	Junior High School Teacher	8%
4	Total respondents	84 teachers

Data Collection Techniques and Detailed Data Analysis

Data collection with quantitative surveys using the Indonesian language provided by ueq-online.org. as shown in the following image, while data analysis uses quantitative data analysis techniques of user experience, using ueq-online.org. Data collection with 26 question items was distributed in Indonesian, as shown in the example image of this research instrument.



	1	2	3	4	5	6	7		
menyusahkan	○	○	○	○	○	○	○	menyenangkan	1
tak dapat dipahami	○	○	○	○	○	○	○	dapat dipahami	2
kreatif	○	○	○	○	○	○	○	monoton	3
mudah dipelajari	○	○	○	○	○	○	○	sulit dipelajari	4
bermanfaat	○	○	○	○	○	○	○	kurang bermanfaat	5
membosankan	○	○	○	○	○	○	○	mengasyikkan	6
tidak menarik	○	○	○	○	○	○	○	menarik	7
tak dapat diprediksi	○	○	○	○	○	○	○	dapat diprediksi	8
cepat	○	○	○	○	○	○	○	lambat	9
berdaya cipta	○	○	○	○	○	○	○	konvensional	10
menghalangi	○	○	○	○	○	○	○	mendukung	11
baik	○	○	○	○	○	○	○	buruk	12
rumit	○	○	○	○	○	○	○	sederhana	13
tidak disukai	○	○	○	○	○	○	○	menggembirakan	14
lazim	○	○	○	○	○	○	○	terdepan	15
tidak nyaman	○	○	○	○	○	○	○	nyaman	16
aman	○	○	○	○	○	○	○	tidak aman	17
memotivasi	○	○	○	○	○	○	○	tidak memotivasi	18
memenuhi ekspektasi	○	○	○	○	○	○	○	tidak memenuhi ekspektasi	19
tidak efisien	○	○	○	○	○	○	○	efisien	20
jelas	○	○	○	○	○	○	○	membingungkan	21
tidak praktis	○	○	○	○	○	○	○	praktis	22
terorganisasi	○	○	○	○	○	○	○	berantakan	23
atraktif	○	○	○	○	○	○	○	tidak atraktif	24
ramah pengguna	○	○	○	○	○	○	○	tidak ramah pengguna	25
konservatif	○	○	○	○	○	○	○	inovatif	26

Figure 1. Data collection techniques

RESULTS AND DISCUSSION

PAI teachers often use ChatGPT for studying the Al-Quran and Hadith, as well as searching for and studying sources of interpretation and discussing the meaning of verses in the Al-Qur'an. (exp. EssayAilab)

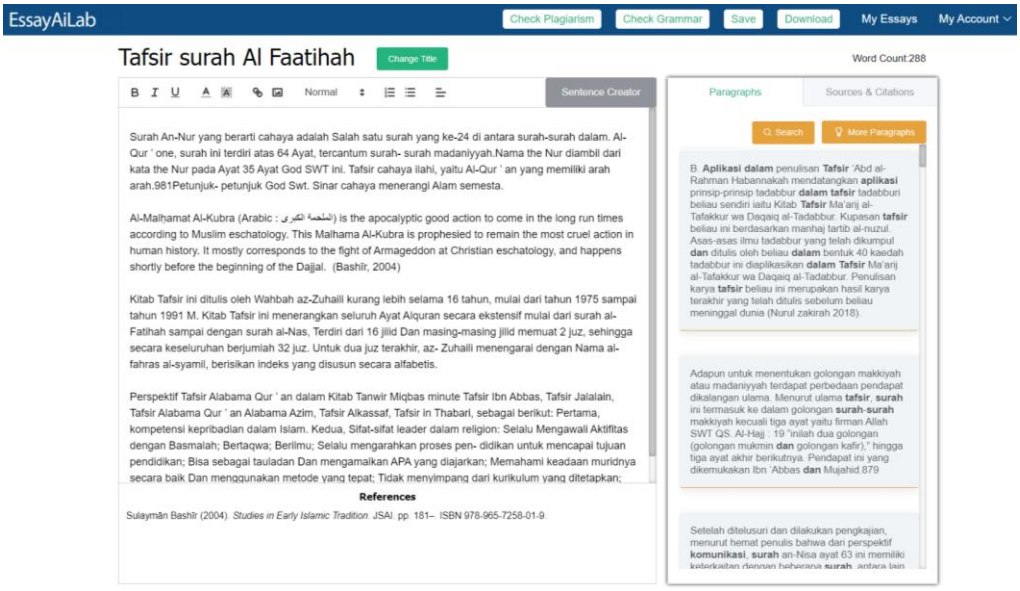


Figure 2. Example of ChatGPT used by islamic religious education teachers

The results of the answers to the questionnaire worked on by the respondents, with 26 question items with a total score of 1 to 7, The response data show that at particular scores, more people select, such as in question item 1, It was discovered that the response at score 4 was 11, at score 5, 21 respondents provided replies, at score 6, 37 responded, and at score 7, 13 responded, while the final results of each question item concluded that the one with the highest value was on the attractiveness scale, for all answers from the results of this study displayed in the following table:

Tabel 2. The distribution of answers to each item

No	Item	1	2	3	4	5	6	7	Scale
1	annoying/enjoyable	1	0	1	11	21	37	13	Attractiveness
2	not understandable/understandable	0	0	1	12	6	33	32	Perspicuity
3	dull/creative	0	4	11	20	15	21	13	Novelty
4	difficult to learn/easy to learn	1	1	5	21	18	13	25	Perspicuity
5	inferior/valuable	3	4	3	7	18	19	30	Stimulation
6	boring/exciting	0	0	1	24	16	24	19	Stimulation
7	not interesting/interesting	0	0	2	13	14	32	23	Stimulation
8	unpredictable/predictable	0	4	5	22	13	22	18	Dependability
9	slow/fast	0	0	16	31	17	9	11	Efficiency
10	conventional/inventive	3	6	17	25	7	20	6	Novelty
11	obstructive/supportive	0	1	0	19	15	17	32	Dependability
12	bad/good	1	2	3	15	16	22	25	Attractiveness
13	complicated/easy	0	0	3	11	33	15	22	Perspicuity
14	unlikable/pleasing	0	0	0	14	26	28	16	Attractiveness
15	usual/leading edge	1	3	8	19	22	18	13	Novelty
16	unpleasant/pleasant	0	1	0	15	18	32	18	Attractiveness
17	not secure/secure	0	5	6	20	24	17	12	Dependability

No	Item	1	2	3	4	5	6	7	Scale
18	motivating/demotivating	2	6	7	11	10	27	21	Stimulation
19	does not meet expectations/meets expectations	0	1	7	23	23	21	9	Dependability
20	inefficient/efficient	0	0	1	16	28	22	17	Efficiency
21	confusing/clear	1	4	6	25	20	20	8	Perspicuity
22	impractical/practical	1	0	3	18	15	23	24	Efficiency
23	cluttered/organized	0	1	10	24	19	17	13	Efficiency
24	unattractive/attractive	1	2	9	36	8	19	9	Attractiveness
25	unfriendly/friendly	0	2	4	22	30	16	10	Attractiveness
26	conservative/innovative	0	0	1	17	14	38	14	Novelty

Recapitulation of Respondents Answers

Overall, the findings fell into the above-average to good category based on the average value of all respondents' responses. With an average score between 0.94 and 1.47, each scale's value falls between the low and very good categories. The outcomes of calculating each scale's average are shown in the following table:

Table 3. UX average calculation results

Scale	Lower Border	Bad	Below Average	Above Average	Good	Excellent	Mean
Attractiveness	-1.00	0.7	0.47	0.39	0.27	0.67	1.31
Perspicuity	-1.00	0.71	0.54	0.48	0.27	0.5	1.40
Efficiency	-1.00	0.57	0.48	0.43	0.32	0.7	1.13
Dependability	-1.00	0.77	0.36	0.33	0.23	0.81	1.20
Stimulation	-1.00	0.5	0.49	0.32	0.24	0.95	1.47
Novelty	-1.00	0.25	0.52	0.35	0.49	0.89	0.94

It was found that the results of user experience in PAI learning based on AI based on ChatGPT are on the attractiveness scale in the Above average benchmark category, indicating that it is above average, while on the perspicuity scale, it is in the Above average benchmark category scale that the respondents' answers about user experience are above average.

For the results of the answers on the efficiency, dependability, and novelty scales, the respondents' answers about user experience are above average. Only on the Stimulation scale are at the Good category scale with the. All results are explained in the form of images, as can be seen in the following image:

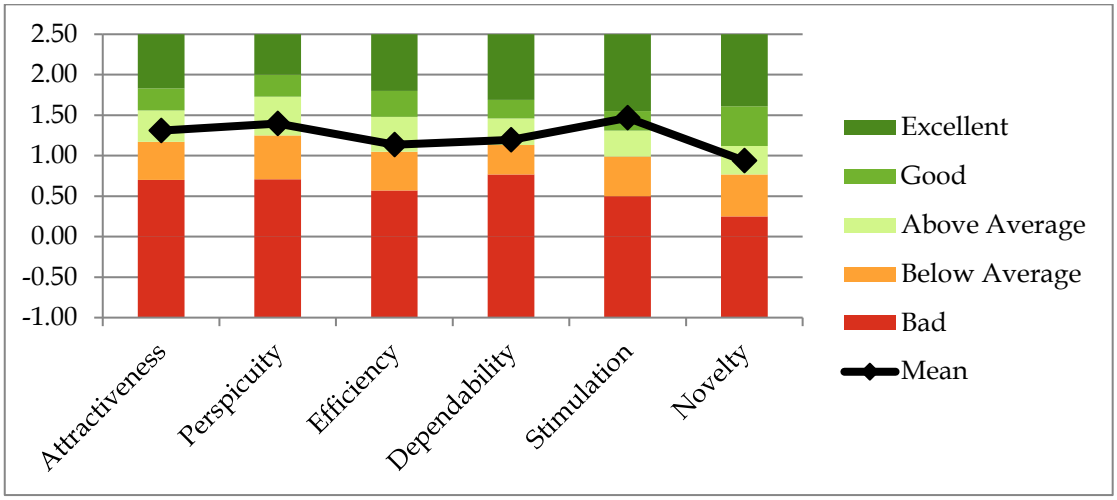


Figure 3. Benchmark value results

Then presented the results of the confidence interval (IC) as a tool to provide certainty on the scale value, with a scale interval of 0.05. The following is the calculation results in the table.3:

Table 4. Confidence intervals per scale

Confidence intervals (pConfidence intervals (p=0.05) per scale=0.05) per scale						
Scale	Mean	Std. Dev.	N	Confidence	Confidence interval	
Attractiveness	1.310	0.910	84	0.195	1.115	1.504
Perspicuity	1.396	0.966	84	0.207	1.189	1.603
Efficiency	1.134	1.003	84	0.215	0.919	1.348
Dependability	1.196	1.022	84	0.218	0.978	1.415
Stimulation	1.467	1.177	84	0.252	1.216	1.719
Novelty	0.938	0.912	84	0.195	0.742	1.133

Table 4 clearly demonstrates ChatGPT's significant potential. In addition to enhancing the quality of education, many educators have begun utilizing this technology to enhance Islamic Religious Education instruction and increase teacher performance (Donot S, Sowiyah, 2016; Quddus, 2020). some teachers have recognized the use of ChatGPT in supporting their work; others have even explored AI machine learning methods. ChatGPT can gradually increase its accuracy, but students also use it to their fullest potential when studying (Youssef et al., 2024).

In the context of Islamic Religious Education (PAI) Learning, user experience (UX) analysis focused on ChatGPT-based AI reveals intriguing advancements. With the growing use of technology in education, particularly in the contemporary digital era, the study's findings are becoming more and more relevant. The established scale's components—attractiveness, efficiency, perspicuity, dependability, stimulation, and novelty-are also examined in the in-depth study of user experience (Schrepp et al., 2017), However, some also recommend considering the emotional component, as users frequently have specific expectations when using ChatGPT. The following examines the popular and less-noticed places in this context while taking into account the six user experience dimensions:

In terms of Attractiveness, research shows that the attractiveness of the user interface is one of the main focuses. According to recent studies, appealing design is crucial for grabbing students' attention. In this regard, the usage of eye-catching visual components, vivid colors, and user-friendly layouts are all highly recommended (Salehudin et al., 2021b). This study supports the investigation of gamification features with technology (Sambung et al., 2017), such as rewards and challenges, which can increase the attractiveness of AI-based learning. Efficiency in the application of AI technology in education is the primary focus on the efficiency scale. More precisely, the results of this study demonstrate that ChatGPT can improve learning efficiency by offering rapid responses and extensive access to information, in line with the applicability of the research findings in Table 3 (Patac & Patac, 2025). Numerous studies have examined how much time students save in health or nursing education when utilizing AI as opposed to conventional techniques (Elliott et al., 2025). Nevertheless, there is currently little study on efficiency in relation to AI-assisted teacher workload and time management. Less focus has been placed on how AI can assist teachers in effectively organizing and running PAI classes.

Perspicuity: One crucial component of UX research is the clarity of the information provided by ChatGPT. Numerous research has looked at how AI can convey knowledge in a way that is simple for students to comprehend. Additionally, this study examines how AI language can be modified to match students' comprehension levels (Shuhaiber et al., 2025). This component is crucial to ensuring that students comprehend the context and deeper meaning in addition to receiving facts. Meanwhile, the study's primary focus is on the Dependability scale, which measures how reliable AI is in delivering relevant and accurate information. In the framework of PAI, researchers have extensively researched how students may rely on the information that ChatGPT provides and how AI can produce valid sources.

Stimulation: This study found good results on the Stimulation benchmark, thus showing that in the context of learning. It is an important focus, that AI can increase student engagement through dynamic and responsive interactions (Hinderks et al., 2019; Satti & Hussain, 2019). Numerous research has looked into how ChatGPT might encourage students to think critically and engage in discussion. Novelty: novelty in the form of innovation in the use of AI in Islamic Religious Education is one of the rapidly growing areas. Therefore, compared to traditional approaches, the utilization of modern technologies can offer a distinctive and diverse learning experience. In the context of Islamic Religious Education, ChatGPT can be used as a tool for understanding subject matter that is often complex and requires in-depth interpretation (Zaman, 2020).

To support this analysis, they can ask ChatGPT a direct inquiry regarding how to understand a verse in the Qur'an and receive a relevant and contextual response. According to a study on AI in higher education, using AI in the classroom can increase student comprehension by up to 30% when compared to traditional methods. This indicates that technology has gained popularity and is now a true friend for both teachers and students (Habibi et al., 2023; Sukendro et al., 2020). This demonstrates that AI not only aids in information provision but also enhances comprehension of the subject matter.

Some user experience-related findings from previous studies are not always positive. Some students expressed confusion when they received replies via ChatGPT that were occasionally inaccurate or unrelated to actual religious doctrines (Chiu et al., 2023). This demonstrates that despite AI's incredible potential, issues with information consistency and accuracy still exist. According to the research of Erlina et al., (2018) published in the Journal of Educational Technology, About 40% of AI users in education said they were still unsure about the data that AI was providing. Thus, it is crucial to incorporate AI under the direction of educators with expertise in Islamic religion (Fathur Rohiem & Aulya Salsabila, 2024).

Therefore, there are both opportunities and obstacles to address in the user experience of Islamic learning with ChatGPT-based AI. To maximize the benefits of AI for students, more research is required to determine the most effective ways to include it in the Islamic curriculum. This study is expected to provide a clearer picture of how ChatGPT-based AI is. Hence, technology can be used effectively in the Islamic education learning context.

CONCLUSION

On the user experience scale, which includes Attractiveness, Efficiency, Perspicuity, Dependability, Stimulation, and Novelty, the benchmark value for this user experience analysis fell into the above-average and good group. The results on the Stimulation benchmark were positive, indicating that teachers of Islamic Religious Education who have implemented ChatGPT-based AI in Islamic Religious Education instruction have paid greater attention to the stimulation value. As a result, the user experience of studying Islamic Religious Education using ChatGPT-based AI exhibits both enormous promise and obstacles that need to be addressed.

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