IMPACT OF ISLAMIC BELIEFS ON TECHNOLOGY ANXIETY AND ATTITUDE TOWARDS AI: ROLE OF RELIGION AS END AND PERCEIVED RISK OF TECHNOLOGY

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Abstract: Purpose: This study examines the impact of Islamic beliefs on AI-based system attitudes, considering the mediating role of technology anxiety and the moderating roles of perceived technology risk and religion as an end. As AI is being used more and more in every aspect of life, it is crucial to understand how religious beliefs shape perceptions of AI so that AI adoption can be made ethical and culturally appropriate. Method: A quantitative design was employed, and data were collected from 228 university students with a standardized questionnaire. Established measures from the literature were used to operationalize the variables of interest. Structural equation modeling (SEM) through AMOS was applied to test the direct, indirect, and moderating effects within the conceptualized framework. Confirmatory factor analysis (CFA) was used to determine the reliability and validity of the constructs. Findings: The results showed that Islamic beliefs play a major role in influencing students' attitudes towards AI-based systems. Technology anxiety partly mediates the relationship, revealing that religious beliefs influence emotional and cognitive responses to AI. Perceived technology risk and religion as an end also moderate the relationship, which shows that contextual and intrinsic religious factors shape AI perceptions. Originality/Implications: This study enriches AI adoption theories by integrating religious and psychological variables. Findings make theoretical contributions to technology acceptance theory and practical implications for AI developers, educators, and policymakers aiming to improve culturally responsive AI integration.

Keywords: Islamic Beliefs, Technology Anxiety, AI-Based Systems, Perceived Risk, Religion as an End

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1. Introduction

Artificial intelligence (AI) is one of the most ground breaking technologies of the modern era, which has been impacting various industries, including education, healthcare, finance, and government (Gonçalves et al., 2023). AI systems can augment decision-making, streamline complex processes, and improve efficiency (Gupta et al., 2023). Its use is not only determined by technological innovation but also social, psychological, and cultural forces, like religious faith (Arli et al., 2023). Religion also plays a very significant role in determining individuals' beliefs and attitudes towards innovation, and in the majority of cases, playing a role as a moral compass in the event of what is right and wrong (Al-Kassimi, 2023). Islamic beliefs, especially, offer a complete system of ethics that dictates decision-making, behavior, and interaction with technology (Mahdzan et al., 2023). Islamic teachings prioritize moral responsibility, justice, and the ethical effects of human action, all of which are contributing factors to attitudes towards AI-based systems. Since AI has found extensive use in Muslim societies, how Islamic values influence attitudes toward embracing AI is a key focus of research (Karataş & Cutright, 2023). Although AI is associated with numerous advantages, there have been widely debated ethical issues in the literature concerning its implications, transparency, and autonomy to make decisions (Al-Kassimi, 2023). Most of the public, particularly the religious ones, are of the opinion that AI poses a danger to human autonomy, privacy, and moral standards (Burdett, 2023). In Muslim populations, a call has been sounded on the subject of AI-mediated automation, personal data privacy, and algorithmic justice, having implications for acceptability and use patterns (Al-Osaimi & Wedell, 2012). Islamic philosophy does not merely constructs explicit attitudes to AI but produces technology anxiety, emotional fear and anxiety when faced with emerging and emerging technology (Andriansyah, 2023). In addition, subjective risk is also an important moderator, dictating whether Islamic beliefs lead to the adopting or rejecting of AI (Cita Sari et al., 2023). Religion as an end, or intrinsic religiosity, makes it even harder, since persons who internalize religious mandates will display greater heightened resistance to AI-based systems than those who have a more pragmatic view of religion (Taghavi & Segalla, 2023). Having these in mind, this study will try to investigate the impact of Islamic beliefs on AI-based systems' attitudes considering the impact of technology anxiety, perceived risk, and intrinsic religiosity. The role of religious faith in the utilization of technology has been studied for decades, mainly in the context of digital revolution and automation. Empirical facts have proved how religious values decisively affect the acceptability of people towards new technology to carry out facilitation or inhibition roles based on perceived ethical compatibility (Van Tongeren & DeWall, 2023). For instance, empirical work on the adoption of e-

commerce and online banking by Muslim customers has established that religious factors like Shariah compliance are determinants of use (Almaiah et al., 2023). Islamic finance studies have similarly established that Muslim customers will adopt AI-powered financial systems if these systems conform to Islamic ethics (Abdullah et al., 2024). These results demonstrate the wider penetration of Islamic religion into technology-driven decision-making. Technology anxiety, the second most common reason for the adoption of technology, has also been studied empirically extensively. Technologically anxious individuals have been found to be resistant to AI systems since they will lose their employment, their privacy will be invaded, and there are ethical concerns (Budhathoki et al., 2024). Studies in learning settings identified that technologically more cautious students are less inclined to embrace AI-based learning technologies, viewing them as complex, buggy, or intrusive (Rahmani et al., 2023). Additional empirical findings indicate that religious people, especially those with dominant Islamic beliefs, feel increased technology anxiety when exposed to AIbased automation primarily due to dehumanization and moral responsibility concerns (Fekih-Romdhane et al., 2023). The moderating effect of perceived risk on technology adoption has also been extensively documented. Perceived risks, including security risks, loss of control, and moral issues, have been seen to influence people's attitudes toward AI systems significantly (Farzin et al., 2023). In Islamic communities, perceived risk from the ethical implications of AI will heighten resistance, particularly if there is apprehension that AI will be incompatible with religious teachings (Tannady & Dewi, 2024). In addition, intrinsic religiosity studies show that individuals who define religion as an end are likely to adopt technology based on religious and moral considerations rather than utilitarian benefits (Arli et al., 2023). In spite of the increasing number of studies on religion and technology adoption, there are still some important gaps. To begin with, although earlier research has investigated the role of religious beliefs in the acceptance of AI, it has mainly addressed overall moral issues without considering particular religious doctrines and their direct influence on AI attitudes (Mahdzan et al., 2023). Past studies on the Islamic faith and technology adoption were mainly confined to fintech, e-commerce, and digital banking, with hardly any emphasis put on AI systems in education, healthcare, and governance (Zhao & Khaliq, 2024). With AI transforming continuously, research on its embracement across disciplines from an Islamic viewpoint is a field yet to be fully developed. Second, while technology anxiety has been researched at length, not much is known about its mediating effect between religious beliefs and attitudes toward AI. Most research that has been done on technology anxiety has been conducted in general population samples without understanding the influence of religious values on anxiety levels (Taghavi & Segalla, 2023). Since religious persons are likely to feel more worried about the moral consequences of AI, more investigation is required regarding how Islamic teachings make contributions towards technology anxiety and subsequently influence the perception of AI-based systems (Karataş & Cutright, 2023). Third, although perceived risk has been recognized as a determinant of technology adoption, its moderating effect on the Islamic beliefs-AI attitudes relationship has not been adequately explored. Prior studies have mostly focused on perceived risk as an independent factor in predicting AI adoption instead of as a contextual variable that affects the relationship between religious beliefs and technology acceptance (Li, 2025). Similarly, intrinsic religiosity has been studied in technology acceptance but the role of intrinsic religiosity as a moderator in bridging Islamic beliefs and AI attitudes is yet to be investigated (Rohden & Zeferino, 2023). The theoretic support for this research is based on the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB). TAM asserts that perceived ease of use and perceived usefulness have impact on technology acceptance but in the religious environment ethical issues and moral issues have to be taken into account. TPB proposes that subjective norms, attitudes, and perceived behavioral control influence technology adoption choices, and Islamic beliefs are an important subjective norm influencing AI attitudes (Ajzen, 1991). Affective models of technology adoption also confirm the mediating role of technology anxiety, since fear and anxiety have been found to generate psychological barriers to acceptance (Budhathoki et al., 2024). The mediating effects of intrinsic religiosity and perceived risk are evidenced by risk perception models, which acknowledge the mechanisms by which perceived danger and individual values are purported to influence technology acceptance (Almaiah et al., 2023). The aims of the current study are: (1) to investigate the effect of Islamic beliefs on the attitude of students towards AI-based systems, (2) to test the mediating effect of technology anxiety on the relationship stated above, (3) to investigate the moderating impact of perceived risk on the strengthening or weakening effect of Islamic beliefs on students' attitudes towards AI systems, and (4) to investigate the impact of intrinsic religiosity on whether Islamic beliefs have an effect on acceptance or rejection of AI systems. By examining these goals, this study adds to the emerging literature on religious impacts on AI adoption and sheds light on the psychological and cultural determinants of technology adoption among Islamic communities.

2. LITERATURE REVIEW

Islamic beliefs impact the manner in which people behave and think when it comes to new technologies, such as AI-based systems (Cita Sari et al., 2023). Based on Islamic principles like responsibility, Tawhid (unity of God), and moral responsibility, Islamic values direct innovation and its applications. Scholars believe

that AI needs to be aligned with Islamic ethical guidelines to receive more social acceptance from Muslim students. Concepts of justice (Adl) and prevention of harm (La Darar wa La Dirar) are seen to pose challenges to decision-making by AI, bias, and implementation (Hastuty et al., 2025). Confidence in systems relying on AI is typically mitigated by Islamic principles because learners question whether the systems align with Islamic moral rules, particularly justice, openness, and confidentiality (Mukmin Hakim & Mat Jubri Shamsuddin, 2024). Previous work shows that individuals with greater religious commitment are more likely to judge AI technologies not just in terms of utility but also in terms of moral permissibility. Therefore, Muslim students are likely to be wariness in their attitudes towards AI, ensuring that its use does not contradict with their spiritual and moral teachings (Mamdukh et al., 2024). In addition, Islamic eschatological imaginations and theological interpretations of artificial intelligence play a crucial role in shaping attitudes toward AI-based systems. There are issues highlighted by some authors concerning AI's role in decision-making and autonomy, especially in areas such as education, healthcare, and governance, where human moral reasoning matters (Pardianto, 2024). Such an attitude leads to hesitation towards full adoption of AIbased automation, particularly when there is involvement of human judgment and emotional quotient (Abdullah et al., 2024). In conjunction with this, the argument on AI and free will in Islam is an evidence that students are not going to feel at ease with AI and think of AI in a negative manner for being assumed to act against human will or God's will (Mamdukh et al., 2024). Despite such fear, there is widespread belief among Muslim scholars that it has to be accepted if it contributes to human welfare like medicine and education but with religious and ethical boundaries. Student attitudes towards AI, therefore, among Muslims are shaped by a delicate balance of religious prudence and technological excitement (Hastuty et al., 2025).

• Islamic Beliefs and Attitude towards AI-Based System

Islamic beliefs encompass a set of religious, moral, and ethical doctrines founded on the Quran, Hadith, and Islamic law that guide people's knowledge and behavior in technology uptake and numerous other aspects of life (Sarudin & Yaakob, 2024). They define people's perceptions of the world by defining their acceptability, confidence, and ethical concerns towards new emerging technologies such as AI-based systems (Al-Kassimi, 2023). Attitude towards AI systems involves individuals' evaluative attitudes, either positive or negative, toward applying artificial intelligence in various fields, including education, healthcare, and the government (Ullah et al., 2023). The attitude is informed by a broad array of variables, including moral values,

perceived utility, and religious or cultural beliefs. Within the Islamic religious system, AI attitudes are framed by its compatibility with religious values, possible ethical concerns, and effects on human agency and divine will (Cita Sari et al., 2023). Hence, there is a need to explore how AI attitudes are associated with Islamic beliefs in understanding how religious interpretations influence acceptance and resistance to technology. Empirical research showed the involvement of religious beliefs in human interaction with technology in terms of trust, ethical, and perceived threat (Mahdzan et al., 2023). Religious community studies on the acceptance of technology showed that people with prevailing religious beliefs provide ethically and morally based reasons affecting their attitude towards AI-based systems (Taghavi & Segalla, 2023). AI ethics research suggests that individuals who have strong religious beliefs will be suspicious of AI because of automation concerns, justice concerns, as well as decision-making through non-use of human moral cognition (Van Tongeren & DeWall, 2023). In the Islamic world, research has discovered that AI is more acceptable if it is Shariah-compliant as well as used in a positive way in areas like education and healthcare (Mamdukh et al., 2024). From such evidence, one can theoretically take into consideration that Islamic belief is a factor influencing students' attitude towards AI systems, either towards the direction of acceptance if AI is thought of as something positive or in the direction of resistance if as opposite to religious teaching (Arli et al., 2023).

H1: Islamic beliefs have a significant impact on attitude towards AI-based system

Islamic Beliefs and Technology Anxiety

Empirical findings have all pointed to the fact that individuals' religious beliefs inform their psychological and emotional reactions towards new technologies, such as the spread of technology-related phobias (Hastuty et al., 2025). Technology anxiety has been described as the perception of anxiety, apprehension, or discomfort regarding the utilization of technological systems, specifically those based on automation and artificial intelligence (Arli et al., 2023). Literature has established that religious people have remained conservative in terms of adopting technology innovations based on ethics, moral values, and upsetting conventional traditions (Andriansyah, 2023). For instance, studies on adopting digital technology in religious groups have established that religious people remain conservative with respect to using AI-driven technologies owing to worries about the compatibility of their spirituality and moral values (Taghavi & Segalla, 2023). Moreover, researchers have argued that religious education on God's sovereignty in human existence can give rise to skepticism about AI decision-making, thus encouraging fear of the increasing

control of technology in human existence (Van Tongeren & DeWall, 2023). The intersection of Islamic faith and technology anxiety can be explained on the basis of psychological and ethical principles offered by religious teachings (Yana et al., 2024). Islamic teachings encourage human responsibility, moral responsibility, and maintaining moral integrity, which would create more worries about the ethical use of AI. Besides, religious belief in Tawakkul (trust in God) would create fear of relying on AI systems, particularly in domains requiring moral consideration like governance, healthcare, and education (Sarudin & Yaakob, 2024). Empirical data suggest religious people to worry whenever exposed to the indeterminacy of technology because they are afraid of being dehumanized, humans losing control, and AI running contrary to religious morals.

H2: Islamic Beliefs have a Significant Impact on Technology Anxiety

Technology Anxiety and Attitude Towards AI-Based Systems

Existing empirical studies indicate that technology anxiety is a key variable influencing individuals' attitudes toward AI-based systems (Abdullah et al., 2024). Technology anxiety occurs when individuals view technological innovation as complex, ambiguous, and unmanageable, leading to fear and resistance to embrace (Al-Kassimi, 2023). Existing studies have established that technology-anxious individuals are less likely to acquire positive attitudes toward AI-based systems because of their usability concern, ethics, and risk. For example, research on AI workplace adoption has determined that highly tech-anxious workers resist AI technologies as disruptive or problematic to their job (Almaiah et al., 2023). Pedagogy research meanwhile discovered that tech-anxious students are less tolerant and less open to integrating AI-driven learning systems into their teaching procedures (Alrawad et al., 2023). This rationale explains the negative relationship between positive attitudes toward AI and technology anxiety because fear encourages reluctance and resistance. The influence of technology anxiety on AI-based system attitudes can be described in terms of the psychological processes of perceived risk, uncertainty avoidance, and cognitive resistance. Individuals with high technology anxiety might associate AI with potential harm, including loss of human control, privacy invasion, or ethical misuse, leading to unfavorable attitudes towards adoption (Al-Swidi et al., 2024). Aside from that, empirical research states that people with higher anxiety levels feel AI as invasive, uncertain, and even threatening, thus creating resistance towards using AI-based products. This psychological resistance can be seen in most areas, including healthcare, education, and business, where individuals might prefer human decision-making to AI automation (Andriansyah, 2023).

H3: Technology Anxiety has a Significant Impact on Attitude Towards AI-Based Systems.

Technology Anxiety as Mediator

Empirical studies have shown that religious belief affects people's perceptions of technology, in most cases raising technology anxiety (Budhathoki et al., 2024). It has also been seen from studies that technology anxiety is a major factor in shaping attitudes toward AI-based systems, and it indicates that there is a possible mediating relationship between religious belief and acceptance of AI (Zhou et al., 2023). The technology anxiety mediation has been investigated in various contexts, more specifically to what extent religious and cultural variables play in the fear of technology (Fekih-Romdhane et al., 2023). As an example, a study of the adoption of technology among religious communities revealed that high religiosity people are more worried about AI because they mostly worry about the morality issue with and spiritual beliefs incompatibility with technology (Rahmani et al., 2023). Besides, consumer attitude studies have shown that technology anxiety is a psychological adoption barrier to embracing AI, acting as a mediator between religious beliefs and views on automatic decision-making systems. The presence of this indirect impact of technology anxiety on religious beliefs and the perception of AI is shown in these results (Kim et al., 2023). The mediating effect of technology anxiety in the Islamic beliefs-attitudes toward AI-based systems relationship can be attributed to the convergence of ethical concerns, uncertainty perception, and risk aversion (Cita Sari et al., 2023). Islamic philosophy emphasizes moral obligation, justice, and God's will, and these can lead to safeguarding AI-based systems from users with fear and caution (Mukmin Hakim & Mat Jubri Shamsuddin, 2024). Increased sense of ethical and existential concerns will amplify technology anxiety, causing a fear of potential impacts of AI. This affects attitudes towards AI, causing a higher resistance or reluctance to the use of AI-based technology.

H4: Technology Anxiety Mediates the Relationship Between Islamic Beliefs and Attitude Towards AI-Based Systems

Perceived Risk of Technology as Moderator

Empirical research has always supported the fact that perceived risk is a decisive factor shaping individuals' attitude towards new technology, particularly AI-based

technology (Zhao & Khaliq, 2024). Perceived risk indicates individuals' perception of the unfavourable consequence of using a particular technology, for example, ethics problems, safety hazard, loss of control (Tannady & Dewi, 2024). Studies have discovered that religious people, including Muslims, are likely to evaluate advances in technology from the point of view of moral and ethical values and thus more sensitive to the perceived dangers of AI (Silva et al., 2023). For example, research examining the adoption of AI in the fields of healthcare and education has confirmed that adopters who see AI as a risk, most notably in decisions and data confidentiality, tend to have negative views towards its introduction (Rohden & Zeferino, 2023). Furthermore, digital divide research acknowledges that religious people perceive greater risk vis-à-vis technology due to concern over the compliance of AI with spiritual and moral principles. This would mean that perceived risk is an important determinant of whether individuals who are strong in Islamic beliefs will adopt or reject AI-based systems (Farzin et al., 2023). The moderating role of perceived risk in Islamic beliefs' effect on attitudes toward AI-based systems is understood through the explanation of the interaction between trust, ethics, and uncertainty about technology (Almaiah et al., 2023). While Islamic principles can bring about acceptance or suspicion of AI, perceived risk widens the effect by reinforcing adverse attitudes when AI is seen as ethically suspicious or harmful to religion (Mamdukh et al., 2024). For instance, individuals who have strong Islamic beliefs and consider AI as risky due to potential misuse, prejudice, or transgression of human agency will certainly have more negative attitudes toward AI-based systems. However, if the perceived risk is low, the influence of Islamic beliefs on AI attitudes might be lessened, enabling higher acceptance of AI applications that are in line with religious ethics (Zhao & Khaliq, 2024).

H5: Perceived Risk of Technology Moderates the Relationship Between Islamic Beliefs and Attitude Towards AI-Based Systems

Religion as End as Moderator

Religiosity research has proven that people differ in the reason for religious devotion, with some perceiving religion as a path to personal or societal gain (extrinsic religiosity) and others as an end in itself (intrinsic religiosity) (Arli et al., 2023). Religion as an end means an in-depth, internal dedication to religious values and teachings, whereby individuals follow their faith not for rewards outside themselves but as an integral part of their identity and belief system (Karataş & Cutright, 2023). Empirical research has demonstrated that intrinsically religious persons are likely to appraise new technologies, such as AI, based on whether they

conform to religious teachings or not, rather than by their utility (Van Tongeren & DeWall, 2023)y. Research on psychology and technology acceptance indicates that individuals who perceive religion as an end will be more careful with innovations that threaten religious principles, resulting in more conservative stances toward AI-based systems (Andriansyah, 2023). For instance, research on AI adoption in religious communities has established that people with high intrinsic religiosity are more concerned about the ethical and spiritual implications of AI because they value religious principles over technological efficiency or convenience (Al-Kassimi, 2023). This indicates that how people internalize their religious beliefs whether as an intrinsic end or a pragmatic means impacts how they react to AI-based innovations. The moderating function of religion as an end in the relationship between Islamic attitudes and beliefs regarding AI-based systems can be accounted for through the level of religious commitment and how it affects decision-making processes (Taghavi & Segalla, 2023). Whereas Islamic values offer a framework for assessing the ethical implications of AI, people who live religion as an end will tend to be more absolutist in their approach, confirming negative sentiments against AI if they see it going against religious doctrines (Sarudin & Yaakob, 2024). On the other hand, people who view religion as an instrument may be more pragmatic in their attitude, combining religious and pragmatic advantages, and this may give rise to more positive attitudes towards AI.

H6: Religion as an End Moderates the Relationship Between Islamic Beliefs and Attitude Towards AI-Based Systems

• Theoretical Framework Supporting the Research

Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) offer a robust theoretical model to understand inter-relations in this research, i.e., Islamic beliefs and attitudes towards AI-based systems through mediating and moderating factors. TAM explains that perceived ease of use and usefulness drive people to adopt technology, but in the case of religious beliefs, ethical acceptability, moral acceptability, and perceived risk play their roles. TPB, however, describes how attitudes, subjective norms, and perceived behavioral control shape technology adoption decisions (Ajzen, 1991). Islamic beliefs as a subjective norms core shape attitudes towards AI, especially when combined with perceived risk and intrinsic religiosity. Empirical studies have indicated that religious beliefs were influential in forming attitudes toward new technology, tending to generate more technology anxiety due to ethical doubt and moral issues (Yana et al., 2024). The mediating role of technology anxiety in support of affective technology adoption models is based on

the belief that fear and anxiety construct psychological barriers to adoption (Chatterjee et al., 2022). Besides, perceived risk has also been demonstrated to moderate the acceptance of technology in that it can enhance or mute fear towards automation and decision-making through AI (Rohden & Zeferino, 2023). Religion as a purpose also proves this fit in that the people who do make religious ideals their core will resist change that may be detrimental to their religion (Andriansyah, 2023). This theoretical model (Figure 1) explains the dominance of Islamic beliefs on students' perceptions of AI-based systems, and technology anxiety being the mediating variable, whereas perceived risk and intrinsic religiosity are the key moderation variables. Such findings being realized, this research model integrates psychological, technological, and religious paradigms of understanding the complex dynamics of belief, fear, and readiness to adopt AI.

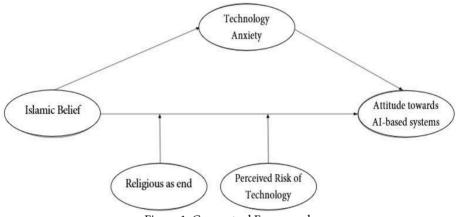


Figure 1: Conceptual Framework

3. METHODOLOGY

This study employed a quantitative approach to examine the impact of Islamic beliefs on technology attitudes toward AI-based systems with technology anxiety and the moderating factors of perceived technology risk and religion as an end. The survey tool was used to collect data from the respondents and analyzed using AMOS, a structural equation modeling (SEM) software, to establish the hypothesized relationships. The methodology section describes the research design, population and sample, variable measurement, and data analysis methods applied in this study. The population targeted in this study was university students pursuing different courses because they are a technologically active group that interacts with AI-based systems in academic and personal lives most often. Since students are the early adopters of digital technologies, their attitudes towards AI have important

implications for the future acceptance of AI. 228 responses were gathered using convenience sampling, providing sufficient representation of students with varying academic backgrounds. The sample size was found to be suitable for performing SEM analysis since it was higher than the generally accepted minimum requirement for effective model estimation. The research used previously tested scales (Table 2) from earlier studies to assess technology anxiety, attitude towards AI-based systems, perceived technology risk, and religion as an end. A six-item scale was, however, specifically created to assess Islamic beliefs in the context of AI adoption. To confirm the validity and reliability of the newly created scale, an exploratory factor analysis (EFA) was performed. EFA (Table 1) was applied to determine the factor structure of the scale underlying the newly constructed scale and ensure that all the items were loaded onto one construct appropriately. KMO measure and Bartlett's test of sphericity were checked for the evaluation of the sample adequacy prior to performing factor extraction.

Table 1: Results of Exploratory Factor Analysis (EFA)

Item	Factor	Communalities	Eigenvalue	% Variance Explained	KMO	Bartlett's Test (Sig.)
Code	Loading					
IB1	0.830	0.689	4.124	68.73%	0.848	0.000
IB2	0.813	0.660				
IB3	0.797	0.636				
IB4	0.805	0.648				
IB5	0.821	0.673				
IB6	0.803	0.645				

EFA findings validated the suitability of six-item scale for subsequent analysis. Following scale refinement, a pilot study was administered to a sample of the respondents in order to assess its reliability and construct validity prior to its administration in the main data collection. The study used a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) on all measurement items in order to measure differences in the degree of respondent agreement.

Table 2: Questionnaire Profile

Variables	No of Items	Source	
Attitude Toward AI-based system	4	(Li, 2023)	
Religious as End	8	(Voci et al., 2017)	
Perceived Risk of Technology	3	(Zhao & Khaliq, 2024)	
Technology Anxiety	10	(Wilson et al., 2023)	

The data obtained were processed with the use of AMOS, a robust statistical software for structural equation modeling (SEM), in order to verify the hypothesized hypotheses and analyze the interrelationship among variables. The process involved a number of steps, ranging from data screening to confirmatory factor analysis (CFA) and path analysis. CFA was conducted to test the reliability and validity of the

measurement model so that all constructs were found to possess adequate levels of internal consistency, composite reliability, and average variance extracted (AVE). Model fit was tested based on important fit indices like RMSEA, CFI, and chi-square/df to validate the adequacy of the measurement model proposed. Path analysis was also done to identify the direct, indirect, and moderating effects and to validate the hypothesized relationships empirically. The mediation effect of technology anxiety was also tested using bootstrapping methods to establish its significance in mediating Islamic beliefs with attitudes towards AI-based systems. In addition, moderation analysis was conducted to evaluate the impact of perceived risk of technology and religion as an end on the strength of the relationship between Islamic beliefs and AI attitudes. The statistical findings supported strongly the hypothesized model with significant relationships among the focal variables.

4. RESULTS

Table 3 shows the reliability and validity scores for the most important variables in this study, measured using Cronbach's alpha, composite reliability, and average variance extracted (AVE). The Cronbach's alpha values for all the variables are well above the generally accepted cut-off of 0.7, reflecting high internal consistency. Islamic beliefs, technology anxiety, and attitude toward AI-based systems are particularly reliable with Cronbach's alpha values of 0.927, 0.917, and 0.897, respectively. Composite reliability measures are also high for all constructs, ranging from 0.952 to 0.981, further supporting the reliability of the measurement items. The AVE measures for all variables, however, fall just short of the ideal cut-off of 0.5, ranging between 0.488 and 0.495. Although this is suggestive of the existence of measurement error variance component, the strong composite reliability measures ease construct validity worries. All things considered; results show the measurement model reflects satisfactory reliability as well as satisfactory validity for extended structural analysis.

Table 3: Variables Reliability and Validity

Variable	Cronbach's	Composite Reliability	Average Variance		
	Alpha		Extracted		
Islamic Beliefs	0.927	0.981	0.495		
Technology Anxiety	0.917	0.978	0.494		
Attitude Toward AI-Based	0.897	0.972	0.493		
Systems					
Perceived Risk of Technology	0.831	0.952	0.488		
Religion as an End	0.886	0.969	0.492		

Table 4 reports the confirmatory factor analysis (CFA)-derived model fit indices (Figure 2). The root means square error of approximation (RMSEA) of 0.074 is in the

acceptable range, reflecting a satisfactory fit between the model and the observed data. The comparative fit index (CFI) value of 0.915 is higher than the recommended minimum of 0.9, reflecting an adequate incremental fit. Second, the chi-square to degrees of freedom ratio of 2.953 is less than the generally accepted threshold of 3 and supports a good-fitting model. Individually, these indices show that the pooled CFA model has an acceptable goodness-of-fit level, which forms a sound basis for further structural model investigation.

Table 4: Pooled CFA Model Fitness Tests

Name of Category	Name of Index	Value in Analysis		
Absolute Fit	RMSEA	0.074		
Incremental Fit	CFI	0.915		
Parsimonious Fit	Chisq/df	2.953		

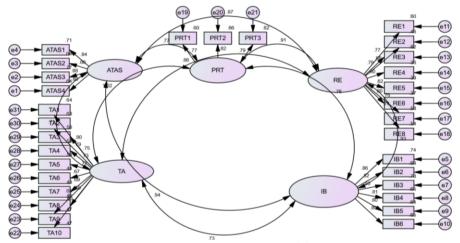


Figure 2: Measurement Model

Table 5 presents the factor loadings of every measurement item on their corresponding constructs, as illustrated in the measurement model. All items show high loadings, reflecting their contributions to the corresponding latent constructs. For attitude toward AI-based systems, item loadings are between 0.800 and 0.877, which reflects high item reliability. Likewise, the loadings for Islamic beliefs are between 0.799 and 0.863, indicating that the items are good at measuring the dimensions of the construct. Religion as an end has moderate loadings ranging from 0.602 to 0.791, indicating some item strength variations. Perceived risk of technology and technology anxiety also have acceptable loadings, with all values above the minimum recommended of 0.6. Although certain items in religion as an end and technology anxiety have comparatively lower loadings (e.g., 0.602 and 0.666), they are still within an acceptable range, strengthening the validity of the measurement

model. These findings affirm that the items accurately represent their respective constructs, lending credence to the measurement model's robustness.

Table 5: Measurement Item Fitness

Variable	Item	Estimate
Attitude Toward AI-Based Systems	ATAS1	0.843
	ATAS2	0.801
	ATAS3	0.877
	ATAS4	0.800
Islamic Beliefs	IB1	0.863
	IB2	0.822
	IB3	0.834
	IB4	0.807
	IB5	0.799
	IB6	0.803
Religion as an End	RE1	0.772
-	RE2	0.676
	RE3	0.791
	RE4	0.602
	RE5	0.623
	RE6	0.605
	RE7	0.759
	RE8	0.736
Perceived Risk of Technology	PRT1	0.773
-	PRT2	0.815
	PRT3	0.788
Technology Anxiety	TA1	0.798
<u> </u>	TA2	0.794
	TA3	0.749
	TA4	0.732
	TA5	0.766
	TA6	0.666
	TA7	0.693
	TA8	0.680
	TA9	0.687
	TA10	0.685

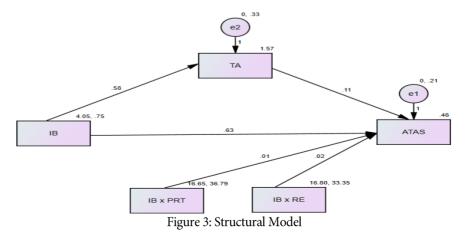


Table 6 shows the outcome of the path analysis of the structural model (Figure 3), testing the proposed relationships among variables. The results validate that Islamic beliefs have a significant effect on attitudes toward AI-based systems (β = 0.632, p < 0.001), which shows a direct and strong relationship. Islamic beliefs also have a significant effect on technology anxiety ($\beta = 0.579$, p < 0.001), confirming that religious views are responsible for emotional responses to technological innovation. Technology anxiety, on the other hand, exerts a large but weaker influence on attitudes towards AI-based systems ($\beta = 0.115$, p = 0.032), indicating that though anxiety does influence attitudes, it is not the sole factor in determining attitudes. The mediation influence of technology anxiety between Islamic beliefs and attitudes towards AI-based systems is also large and significant ($\beta = 0.078$, p < 0.001), reinforcing its position as an indirect mediator. Additionally, perceived risk of technology mediates the association between Islamic beliefs and attitudes toward AIbased systems ($\beta = 0.015$, p = 0.045), indicating that perceived risks of AI affect the degree to which religious beliefs influence attitudes. Finally, religion as an end also moderates this relationship significantly ($\beta = 0.024$, p < 0.001), suggesting that those who perceive religion as a core part of life have more belief-motivated attitudes towards AI. Generally, the structural model offers empirical support for the hypothesized associations, affirming the contribution of Islamic beliefs, psychological aspects, and influencing factors in the development of attitudes toward AI-based systems.

Table 6: Path Analysis

	Estimate	S.E.	C.R.	P
Islamic Belief has a Significant Impact on Attitudes Towards AI-	0.632	0.047	13.433	0.000
Base System				
Islamic Belief has a Significant Impact on Technology Anxiety	0.579	0.044	13.230	0.000
Technology Anxiety has a Significant Impact on Attitudes	0.115	0.054	2.139	0.032
Towards AI-Based System				
Technology Anxiety Mediates the Relationship Between Islamic	0.078	0.013	5.614	0.000
Belief and Attitude Toward AI-Based System				
Perceived Risk of Technology Moderates the Relationship	0.015	0.008	1.755	0.045
Between Islamic Belief and Attitude Towards AI-Based System				
Religion as End Moderates the Relationship Between Islamic	0.024	0.005	4.432	0.000
Belief and Attitude Towards AI-Based System				

5. DISCUSSION

The rapid development of artificial intelligence (AI) has precipitated intense discussions of its ethical consequences, social ramifications, and acceptance across different cultural and religious environments. Religious beliefs are particularly significant in influencing the manner in which individuals perceive AI-based systems

because they inform how people see technology progress through moral and religious lenses. The aim of the present study was to de-mystify the intricate relationship among Islamic belief, technology anxiety, perceived risk, and intrinsic religiosity in explaining students' attitudes toward AI-based systems. Confirmation of all six hypotheses suggests the multi-faceted and complicated nature of such relationships, pointing toward the impossibility of AI adoption in religious contexts being explained by a technological or utilitarian perspective. Rather, psychological, ethical, and religious considerations need to be taken into account in order to facilitate a comprehensive investigation of religious users' acceptance of AI. The results add considerably to the general technology acceptance literature by demonstrating that religious beliefs influence attitudes directly and indirectly via psychological mediators such as technology anxiety and indirectly via moderating variables such as perceived risk and intrinsic religiosity. This discussion places the findings in perspective of existing research, gaining a glimpse into where Islamic teachings cross with AI uptake and into why culturally and ethically attuned AI development and deployment strategies are necessary. The findings of the study confirm the first hypothesis (H1) that Islamic beliefs have a substantial impact on students' attitudes towards AI-based systems. The finding conforms with the existing literature that identified the religious values as a predictor of the adoption of new technologies (Al-Kassimi, 2023). Islamic values revolve around ethics, justice, and accountability that directly influence the way individuals perceive AI-based systems, particularly trustworthiness, fairness, and moral responsibility (Cita Sari et al., 2023). Confirmation of the hypothesis would imply that those students heavily committed to the belief of Islam would automatically find AI systems interpretable in light of religious dogma, such that they will be motivated to, or restrained from, implementing AI, in light of the judged ethical harmony. This result builds upon existing religion and technology adoption research in showing that Islamic values are not only a cultural influence but also a strong predictor of AI adoption (Andriansyah, 2023). Since AI systems are increasingly being employed in learning environments, policymakers and educators within Muslim-dominated contexts must weigh the religious and ethical implications of AI so that there would be more adoption and acceptance. The findings also suggest that religious students would need further counseling regarding why AI conforms to Islamic ethical principles in an effort to stem possible skepticism and resistance. This concurs with studies that noted the significance of having technology put into conformity with religious and cultural principles in an effort to maximize rates of adoption (Karataş & Cutright, 2023). Second, the presence of a direct link between Islamic beliefs and AI attitudes implies that AI development and deployment in Islamic countries must be in harmony with religious teachings in an attempt to establish trust and acceptance levels among the users. The research also confirms that Islamic beliefs lead to technology anxiety and thus confirms the second hypothesis (H2). This is highly significant since it points towards the psychological aspect of religious effects on technology use. It has been established in existing research that religious believers exhibit high anxiety towards new technology, especially where they know it goes against their moral or spiritual beliefs (Taghavi & Segalla, 2023). Verification of this hypothesis suggests that students who have high Islamic faith are prone to experience technology anxiety upon encountering AI-based systems due to apprehension regarding the morality of AI-based decisions, loss of control by humans on AI systems, and exposure to bias in AI codes (Li, 2023). This is also attested to by the fact that technology anxiety is also likely to result from fear and concern regarding the unknown for people who are more concerned with ethics than technological effectiveness (Mamdukh et al., 2024). Also, because Islamic values stress human responsibility and accountability, highly religious-biased students may feel that AI threatens their religious and moral values and hence be more resistant and averse to the use of AI-based tools. This study extends previous work by demonstrating that religious values are involved in technology anxiety, thus further confirming the fact that AI adoption is not just technologically but also psychologically and culturally driven. The research shows that to overcome technology fear among religious users, there must be some interventions such as educational programs elucidating the ethical aspects of AI and highlighting how AI is in accordance with Islamic principles, hence enhancing the image of AI-based systems. The third hypothesis (H3), that technology anxiety would be a strong determinant of AI-based system attitudes, was also confirmed. This is consistent with previous research, which has indicated that high technology anxiety is linked to negative attitudes towards AI due to fear of complexity, uncertainty, and perceived risk (Farzin et al., 2023).

The hypothesis that reads, "More apprehensive students with spiritual issues about technology are less likely to use or implement AI-based systems," has the implication that it validates or confirms the fact that affective and psychological variables are predictors of technology acceptance (Arli et al., 2023). This is complemented by evidence suggesting technology anxiety is a key barrier to the adoption of AI, especially where individuals lack direct exposure to AI technologies or feel AI will supplant their values and beliefs (Kim et al., 2023). The findings also suggest that technology anxiety based on religion further elevates the negative attitudes toward AI, and hence interventions in building acceptance of AI need to be directed not only toward technological capability but also toward emotional and ethical concerns. Teachers, policymakers, and AI developers should collaborate to

minimize technology anxiety among religious students by giving them adequate instructions on the ethical aspects of AI, openness in AI decision-making, and making sure that AI technologies are Islamic ethics-compliant. Besides, this study emphasizes the need for AI developers to apply human-centered AI design principles that emphasize ethical reasoning, fairness, and inclusivity to reduce anxiety and enhance trust in AI-based systems. Based on these findings, future studies should examine other psychological and cultural variables that can affect technology anxiety and AI attitudes in an attempt to develop more inclusive theories of AI adoption in religious cultures. The results of the study confirm that technology anxiety indeed mediates Islamic beliefs and attitudes towards AI-based systems to a significant degree in support of the fourth hypothesis (H4). This indicates that high Islamicbelief students are most likely to attain high technology anxiety, which in turn affect their attitudes towards AI-based systems in a negative way. This result concurs with existing research to the point that religious values tend to influence the enjoyment of technological innovations, especially where there is a matter of morals at stake (Karataş & Cutright, 2023). Islamic philosophy values human responsibility, justice, and moral accountability of actions, which can be a cause of apprehension for AI decision-making due to dehumanization fears, possible prejudice, and the absence of ethical oversight (Mamdukh et al., 2024). The testing of this hypothesis builds upon earlier research in proving that technology anxiety is an emotional process by which religious belief influences attitudes towards AI and thereby validates the point that affective responses are imperative to the acceptance of technology (Andriansyah, 2023). This mediation effect suggests that religious people with strong Islamic convictions are not necessarily anti-AI but may become anti-AI because of increased fears and concerns about the morality of AI. This is significant because it shows the importance of interventions for overcoming technology anxiety in religious individuals. This can only be resolved through tailored education programs that clarify why AI is in accordance with Islamic ethical principles, promote digital literacy, and develop greater understanding of how AI works in ethical paradigms (Sarudin & Yaakob, 2024). Besides this, developers of AI should have transparency, fairness, and ethical design guidelines in mind to lower anxiety and lessen the harmful effects of technology anxiety. This study contributes to the understanding of AI adoption by revealing that technology anxiety reduction can increase AI acceptance, particularly in religious environments where moral concerns prevail in shaping sentiments toward technological innovations. The fifth hypothesis (H5) is also confirmed through this study, i.e., Islamic beliefs-attitudes towards AI-based systems are moderated by technology perceived risk. This shows that students with high Islamic beliefs would form negative attitudes towards AI if they perceive more risk from AI-based systems. It was established by previous research that perceived risk, say fear regarding privacy, security, bias, and ethics, is influential in technology adoption (Tannady & Dewi, 2024). Perceived risk is particularly relevant in Islamic thought because AI technologies are implemented in ways that create ethical decision-making problems, data privacy problems, and moral accountability (Silva et al., 2023). Maintenance of this hypothesis would mean that while Islamic beliefs condition attitudes towards AI, their effectiveness relies on perceived risk for participants in AI-led systems. This aligns with research showing perceived risk as an indicator of resistance to technology (Gupta et al., 2023), particularly where users doubt the fairness, accountability, and future implications of AI-led automaton. The moderating role of perceived risk brings to the forefront the need for reducing ethical concerns and establishing trust in AI technologies, particularly within religious communities where ethics is the paramount consideration. This study brings to the forefront the necessity for AI developers and policymakers to adopt controls that lower perceived risks by offering transparency, explainability, and compliance with ethical and religious principles. Additionally, religious scholars and computer technology experts can possibly serve as a middleman in closing the gap in AI adoption acceptance and Islamic religion by facilitating dialogue to eliminate misconceptions, making Islamic religious rulings on AI ethics, and building people's confidence towards AI technology. Future studies will have to explore how varying facets of perceived risk—namely, ethical risk, privacy risk, and security risk—affect the adoption of AI individually, and jointly in the religious community. Finally, this study confirms the sixth hypothesis (H6), which states that religion as an end moderate the Islamic beliefs-attitudes toward AI-based systems relationship. This finding shows that individuals who hold religion as a fundamental and essential part of their identity are likely to develop stronger attitudes positive or negative toward AI, based on their religious beliefs. This is in line with previous work on intrinsic religiosity, where it was discovered that individuals who internalize religious doctrine as part of their lives are likely to draw on religious teachings to make a wide range of decisions, for example, the adoption of technology (Abdelaziz et al., 2023). The acceptance of this hypothesis presumes that religion is not only a passive cultural factor but an active moderating factor that determines the manner in which people interact with AI technologies.

People who perceive religion as a means will evaluate AI systems according to their performance in relation to Islamic values and thus show strong acceptance or strong rejection (Mamdukh et al., 2024). This result adds to the general body of knowledge on how religiosity affects attitude toward technology, consistent with highly religious people dealing with technology differently than people who keep

their religion pragmatically (Arli et al., 2023). The intrinsic religiosity moderating effect suggests that policy towards AI adoption must be segmented at the level of religious practice among adopters. To high-intrinsic religiosity individuals, AI creators must stress the moral framing of AI, align AI usage with Islamic principles, and frame AI as a product that generates social and moral values. Conversely, in the case of people who have lower intrinsic religiosity levels, cost considerations and functional advantages can be more influential factors of AI adoption. This study points out the necessity for a multi-faceted approach in the acceptance of AI in religious groups given that religious affiliation significantly influences technology attitudes. Future studies need to investigate how different views of Islamic religion influence AI adoption and provide more information regarding evolving religiontechnology acceptance trends. This study discusses the function of Islamic faith in forming attitudes of students towards AI systems and positions technology anxiety as front and center in a key mediating process in which perceived risk and intrinsic religiosity function as common moderators. These results extend the AI adoption literature because it demonstrates that religious belief both affects technology acceptance as an ingrained cultural influence and also acts as a significant factor interdependently functioning with psychological and contextual factors. By presenting evidence that technology anxiety acts as a mediator between Islamic attitudes and beliefs regarding AI, this study highlights the importance of overcoming uncertainties and anxieties surrounding AI in a bid to improve its acceptability among religious people. Moreover, the moderating effects of perceived risk and religion as an end suggest that AI adoption strategies must be framed in terms of confrontational ethical challenges and religious belief to enhance more acceptability. Finally, these results highlight the necessity of joint efforts among AI developers, educators, and policymakers for building AI systems that are compatible with moral and religious requirements and mitigating perceived risks and concerns. Future research will need to explore religious effects' nuance on AI uptake, factoring in varied interpretations of Islamic norms and their implications for regulating moral AI. When AI is created, the work will entail aligning AI with human values, and religious communities in general, as a key theme of trust building, acceptance, and efficient use of AI systems.

6. CONCLUSION

The study presents a clear vision of Islamic beliefs' role in shaping students' attitude toward AI-based systems and the underlying psychological and contextual variables that correspond with this correlation. The evidence supports that Islamic

beliefs have prominent effects on AI attitudes, as well as on technology anxiety both directly and indirectly, which in this case works as a mediator. Additionally, the study demonstrates how perceived risk of technology and religion as an end mediate such a relationship further, demonstrating how complex AI adoption is in religious contexts. Such findings enhance both theoretical and pragmatic domains by mapping technology acceptance models to include religious and psychological realms, offering a more culturally sensitive model for the adoption of AI. Moreover, the results have significant practical implications for AI developers, educators, and policymakers, who are urged to consider ethical, religious, and psychological factors when promoting AI-based technologies in religious societies. Nevertheless, like any research, this study is not without its limitations, including its reliance on selfreported data, its focus on student populations, and its examination of a limited set of variables. Subsequent research will need to address these shortcomings through examining AI use across different demographic and cultural groups, using other psychological and ethical theories, and examining AI acceptance in specific sectors such as health care, education, and finance. As AI continues to advance, its incorporation into society will not just be an issue of technological advancement but the extent to which it aligns with people's values, assumptions, and understanding. Therefore, ongoing investigation of the convergence of religion, psychology, and AI uptake is necessary to ensure that AI technologies are developed and utilized in a manner that is inclusive, ethical, and culturally sensitive.

7. IMPLICATIONS

This study makes a notable contribution to the current knowledge base by combining religious beliefs, psychological constructs, and technology acceptance theories to account for students' attitudes towards AI-based systems. By showing that Islamic beliefs are at the core of defining attitudes toward AI, this research expands the generality of the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB) by adding a religious factor, which has previously been neglected in mainstream technology adoption research. The results indicate that religious beliefs are not simply background cultural influences but help to structure individuals' cognitive and affective responses to technology actively. The research also offers empirical confirmation of the mediating role of technology anxiety, supporting previous research emphasizing the psychological impediments to AI acceptance. By specifying perceived risk of technology and intrinsic religiosity (religion as an end) as moderators, this study further contributes to theoretical models by showing that individual differences, influenced by both cognitive risk

appraisals and strong religious values, powerfully influence the magnitude of these relationships. Moreover, the research fills the gap between psychology and technology acceptance literature by demonstrating that emotions such as anxiety, traditionally viewed as peripheral in models of technology adoption, are the cornerstone of forming attitudes toward AI, especially in religious cultures. The integration of the constructs gives us a more combined model of accepting AI that addresses the character of belief systems, risk estimation, and affect. These findings usher in new opportunities for theoretical research contributions through facilitating the development of AI acceptance theory with socio-religious variables included, which would be better adaptive to diverse settings of culture. Further, this research denies the assumption that technology adoption is absolute and stresses the need for culturally sensitive theoretical models that take into account the ethical, moral, and psychological dimensions of AI adoption in religious groups. Conclusions made here give policymakers, teachers, AI researchers, and religious institutions useful guidelines on how to promote the take-up of AI-based systems by religious communities. The fact that Islamic teachings feature prominently in determining attitudes towards AI suggests the utility of technology designers being guided by moral, ethical, and religious principles in the design and introduction of AIfacilitated solutions. AI systems need to be developed in line with Islamic moral principles, following transparency, justice, and compliance with religious laws to generate greater levels of trust and credibility. More importantly, the identification of technology anxiety as a mediating variable implies that psychological impediments to AI adoption need to be overcome. Education hubs and technology entrepreneurs must go out of their way to overcome fear and misinformation regarding AI by launching simple, accessible, and culturally adapted training programs that guarantee the benefits of AI while addressing ethical concerns. Also, the moderating role of perceived risk shows that policymakers should launch regulations and campaigns reducing AI abuse fears such that uses of AI become regarded as safe and beneficial rather than harmful. The religion's strong moderating function as an end further suggests that individuals with high religious commitments may respond differently to AI adoption efforts. Therefore, AI systems need to be formulated to bring out the harmony of AI technology with religious teachings, perhaps even using religious experts and community leaders to advance the use of AI responsibly. Additionally, organizations interested in deploying AI in Islamic societies must actively engage with religious communities so that AI applications are framed in a manner that appeals to their ethical and spiritual principles. Through the recognition and resolution of these challenges, AI developers, firms, and governments can create AI systems that are not only technologically viable but also ethically justifiable, culturally acceptable, and socially viable in religious societies.

8. LIMITATIONS AND FUTURE DIRECTIONS

In spite of its worth, this study is not free from limitations, which offer potential avenues for future research. A significant limitation is the use of self-reported data, which are susceptible to social desirability and personal interpretation of survey items. Since Islamic attitudes and beliefs about AI are highly personal and contextspecific, respondents may have answered as they thought they should be socially acceptable instead of reporting their actual perceptions. Future studies could use alternative methods, including in-depth interviews, behavioral experiments, or longitudinal studies, to obtain a more detailed picture of how religious beliefs shape AI acceptance over time. The study also targeted students as the primary sample, which, although relevant in light of the growing integration of AI in educational settings, may not fully represent the perspectives of older individuals, professionals, or those in different cultural and occupational backgrounds. Subsequent research can take into account more expansive demographic samples, such as users of AI from diverse occupations, religious scholars, and policymakers, to comprehend how multiple societal groups view and interact with AI-based systems. Another shortcoming is the geographic and cultural focus of the study, whereby it mainly considers individuals from a certain Islamic backdrop. Although the results are insightful into the association between Islamic beliefs and AI attitudes, further studies could broaden the study to different Islamic countries with different interpretations and practices and compare these results with other religious or non-religious groups to test the generalizability of the findings. In addition, the study examined a restricted number of psychological and environmental variables, such as technology anxiety, perceived risk of technology, and religion as an end, in attempting to explain attitudes towards AI-based systems.

Nevertheless, the nature of AI adoption in religious societies indicates that other factors, such as ethical issues, trust in AI, digital literacy, and government regulation, are also likely to contribute significantly towards shaping acceptance. Future studies might include these variables in the model to create a more robust framework that explains a broader set of influences. Furthermore, although the research demonstrates important associations between Islamic beliefs and AI attitudes, the cognitive and affective processes underlying these associations are only partially understood. Future research might investigate further the ways in which various aspects of religious beliefs, fatalism, ethical thinking, and spiritual well-being

influence AI perceptions. Another potential area of research is the examination of AI applications in particular industries, for example, healthcare, education, or finance, where religious and ethical concerns might be even more salient. Finally, as AI develops further, subsequent research needs to investigate how new AI technologies, including generative AI, autonomous systems, and AI-based decision-making, intersect with religious worldviews and social values. By overcoming these limitations and broadening the scope of research, subsequent research could contribute to more culturally and ethically inclusive AI development by providing more profound insights into the dynamic interplay between religious belief systems and AI uptake.

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REFERENCES

- Abdelaziz, M. A. A., Wu, J., Yuan, C., & Ghonim, M. A. (2023). Unlocking supply chain product and process innovation through the development of supply chain learning capabilities under technological turbulence: Evidence from Egyptian SMEs. *Journal of Manufacturing Technology Management*, 34(5), 793-819. https://doi.org/10.1108/JMTM-11-2022-0395
- Abdullah, O., Shaharuddin, A., Wahid, M. A., & Harun, M. S. (2024). AI Applications for Fiqh Rulings in Islamic Banks–Shariah Committee Acceptance. *ISRA International Journal of Islamic Finance*, *16*(1), 111-126. https://doi.org/10.55188/ijif.v16i1.685
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
- Al-Kassimi, K. (2023). A Postmodern (Singularity) Future with a Post-Human Godless Algorithm: Trans-Humanism, Artificial Intelligence, and Dataism. *Religions*, 14(8). https://doi.org/10.3390/rel14081049
- Al-Osaimi, S., & Wedell, M. (2012). Beliefs about second language learning: the influence of learning context and learning purpose. *The Language*

- *Learning Journal*, 42(1), 5-24. https://doi.org/10.1080/09571736.2012.661753
- Al-Swidi, A. K., Al-Hakimi, M. A., Al-Sarraf, J., & Al koliby, I. S. (2024). Innovate or perish: can green entrepreneurial orientation foster green innovation by leveraging green manufacturing practices under different levels of green technology turbulence? *Journal of Manufacturing Technology Management*, 35(1), 74-94. https://doi.org/10.1108/JMTM-06-2023-0222
- Almaiah, M. A., Al-Otaibi, S., Shishakly, R., Hassan, L., Lutfi, A., Alrawad, M., Qatawneh, M., & Alghanam, O. A. (2023). Investigating the Role of Perceived Risk, Perceived Security and Perceived Trust on Smart m-Banking Application Using SEM. *Sustainability*, 15(13). https://doi.org/10.3390/su15139908
- Alrawad, M., Lutfi, A., Almaiah, M. A., & Elshaer, I. A. (2023). Examining the influence of trust and perceived risk on customers intention to use NFC mobile payment system. *Journal of Open Innovation: Technology, Market, and Complexity, 9*(2). https://doi.org/10.1016/j.joitmc.2023.100070
- Andriansyah, Y. (2023). The Current Rise of Artificial Intelligence and Religious Studies: Some Reflections Based on ChatGPT. *Millah: Journal of Religious Studies*, 22(1), ix-xviii. https://doi.org/10.20885/millah.vol22.iss1.editorial
- Arli, D., van Esch, P., & Cui, Y. (2023). Who Cares More About the Environment, Those with an Intrinsic, an Extrinsic, a Quest, or an Atheistic Religious Orientation?: Investigating the Effect of Religious Ad Appeals on Attitudes Toward the Environment. *J Bus Ethics*, 185(2), 427-448. https://doi.org/10.1007/s10551-022-05164-4
- Budhathoki, T., Zirar, A., Njoya, E. T., & Timsina, A. (2024). ChatGPT adoption and anxiety: a cross-country analysis utilising the unified theory of acceptance and use of technology (UTAUT). *Studies in Higher Education*, 49(5), 831-846. https://doi.org/10.1080/03075079.2024.2333937
- Burdett, M. S. (2023). Proximate and Ultimate Concerns in Christian Ethical Responses to Artificial Intelligence. *Studies in Christian Ethics*, *36*(3), 620-641. https://doi.org/10.1177/09539468231180135
- Chatterjee, S., Chaudhuri, R., Vrontis, D., & Papadopoulos, T. (2022). Examining the impact of deep learning technology capability on manufacturing firms: moderating roles of technology turbulence and top management

- support. *Ann Oper Res*, 1-21. https://doi.org/10.1007/s10479-021-04505-2
- Cita Sari, D., Ali, A. H., Harun, M., Batre, N. M., Hanafi, M. S., Jaludin, Z. Y., Cittra, J., Darodjat, Indria, N., Ridha, H., & Iwan, K. (2023). Transformation of Artificial intelligence in Islamic Edu with Ulul Albab Value (Global Challenge Perespective). *Firdaus Journal*, *3*(1), 1-9. https://doi.org/10.37134/firdaus.vol3.1.1.2023
- Farzin, I., Mamdoohi, A. R., & Ciari, F. (2023). Autonomous Vehicles Acceptance: A Perceived Risk Extension of Unified Theory of Acceptance and Use of Technology and Diffusion of Innovation, Evidence from Tehran, Iran. International Journal of Human–Computer Interaction, 39(13), 2663-2672. https://doi.org/10.1080/10447318.2022.2083464
- Fekih-Romdhane, F., Jahrami, H., Away, R., Trabelsi, K., Pandi-Perumal, S. R., Seeman, M. V., Hallit, S., & Cheour, M. (2023). The relationship between technology addictions and schizotypal traits: mediating roles of depression, anxiety, and stress. *BMC Psychiatry*, *23*(1), 67. https://doi.org/10.1186/s12888-023-04563-9
- Gonçalves, A. R., Pinto, D. C., Rita, P., & Pires, T. (2023). Artificial intelligence and its ethical implications for marketing. *Emerging Science Journal*, 7(2), 313-327. https://doi.org/10.28991/ESJ-2023-07-02-01
- Gupta, S., Kamboj, S., & Bag, S. (2023). Role of Risks in the Development of Responsible Artificial Intelligence in the Digital Healthcare Domain. *Information Systems Frontiers*, 25(6), 2257-2274. https://doi.org/10.1007/s10796-021-10174-0
- Hastuty, A., Maswati, M., Saharuddin, M., Sukri, A. M., & Halik, A. (2025). Artificial intelligence: A review of the philosophy of Islamic educational science. *Journal of Research in Instructional*, *5*(1), 90-102. https://doi.org/10.30862/jri.v5i1.573
- Karataş, M., & Cutright, K. M. (2023). Thinking about God increases acceptance of artificial intelligence in decision-making. *Proceedings of the National Academy of Sciences*, 120(33), e2218961120. https://doi.org/10.1073/pnas.2218961120
- Kim, H.-N., Freddolino, P. P., & Greenhow, C. (2023). Older adults' technology anxiety as a barrier to digital inclusion: a scoping review. *Educational Gerontology*, 49(12), 1021-1038. https://doi.org/10.1080/03601277.2023.2202080

- Li, K. (2023). Determinants of College Students' Actual Use of AI-Based Systems: An Extension of the Technology Acceptance Model. *Sustainability*, 15(6). https://doi.org/10.3390/su15065221
- Li, W. (2025). A Study on Factors Influencing Designers' Behavioral Intention in Using AI-Generated Content for Assisted Design: Perceived Anxiety, Perceived Risk, and UTAUT. *International Journal of Human–Computer Interaction*, 41(2), 1064-1077. https://doi.org/10.1080/10447318.2024.2310354
- Mahdzan, N. S., Zainudin, R., & Shaari, M. S. (2023). The influence of religious belief and psychological factors on borrowing behaviour among Malaysian public sector employees. *Asia-Pacific Journal of Business Administration*, 15(3), 361-385. https://doi.org/10.1108/APJBA-10-2020-0362
- Mamdukh, B., Mirza Mahbub, W., Rijal Wakhid, R., Iqbal Hidayatsyah, N., Safuan, S., & Rachmat, D. (2024). Artificial Intelligence (AI) in Islam: Building Ethics and Solutions Based on Tawhid. *Proceeding of the International Conference on Religious Education and Cross-Cultural Understanding*, 1(1), 60-76. https://prosiding.aripafi.or.id/index.php/ICRECCU/article/view/24
- Mukmin Hakim, M. K. I., & Mat Jubri Shamsuddin, M. (2024). Maqasid Al-Shariah in the Age of AI: A Critical Examination of ChatGPT Usage Among International Islamic University Malaysia Students. *Online Journal of Research in Islamic Studies*, 11(2), 01-18. https://doi.org/10.22452/ris.vol11no2.1
- Pardianto, P. (2024). The Utilization of Artificial Intelligence (AI) in the Development of Islamic Cultural Communication Strategies. *Proceedings of International Conference on Da'wa and Communication*, 6(1), 73-85. https://doi.org/10.15642/icondac.v6i1.2405
- Rahmani, D., Zeng, C., Chen, M., Fletcher, P., & Goke, R. (2023). Investigating the effects of online communication apprehension and digital technology anxiety on organizational dissent in virtual teams. Computers in human behavior, 144. https://doi.org/10.1016/j.chb.2023.107719
- Rohden, S. F., & Zeferino, D. G. (2023). Recommendation agents: an analysis of consumers' risk perceptions toward artificial intelligence. *Electronic Commerce Research*, *23*(4), 2035-2050. https://doi.org/10.1007/s10660-022-09626-9

- Sarudin, N. S., & Yaakob, A. (2024). ARTIFICIAL INTELLIGENCE (AI) IN ANSWERING ISLAMIC QUESTIONS FROM SHARIAH PERSPECTIVES. *SALAM Digest: Syariah and Law Undergraduate Symposium*, 2(1), 54-65. https://salam.usim.edu.my/index.php/salamdigest/article/view/82
- Silva, S. C., De Cicco, R., Vlačić, B., & Elmashhara, M. G. (2023). Using chatbots in e-retailing how to mitigate perceived risk and enhance the flow experience. *International Journal of Retail & Distribution Management*, 51(3), 285-305. https://doi.org/10.1108/IJRDM-05-2022-0163
- Taghavi, S., & Segalla, M. (2023). Is Work an Act of Worship? The Impact of Implicit Religious Beliefs on Work Ethic in Secular vs. Religious Cultures. *Journal of Business Ethics*, 188(3), 509-531. https://doi.org/10.1007/s10551-023-05325-z
- Tannady, H., & Dewi, C. S. (2024). Exploring role of technology performance expectancy, application effort expectancy, perceived risk and perceived cost on digital behavioral intention of GoFood users. *Jurnal Informasi Dan Teknologi*, 80-85. https://doi.org/10.60083/jidt.v6i1.477
- Ullah, M. S., Hoque, M. R., Aziz, M. A., & Islam, M. (2023). Analyzing students' e-learning usage and post-usage outcomes in higher education. *Computers and Education Open*, 5. https://doi.org/10.1016/j.caeo.2023.100146
- Van Tongeren, D. R., & DeWall, C. N. (2023). Disbelief, disengagement, discontinuance, and disaffiliation: An integrative framework for the study of religious deidentification. *Psychology of Religion and Spirituality*, 15(4), 515. https://doi.org/10.1037/rel0000434
- Voci, A., Bosetti, G. L., & Veneziani, C. A. (2017). Measuring religion as end, means, and quest: The Religious Life and Orientation Scale. *TPM:* testing, psychometrics, methodology in applied psychology, 24(1). https://doi.org/10.4473/TPM24.1.5
- Wilson, M. L., Huggins-Manley, A. C., Ritzhaupt, A. D., & Ruggles, K. (2023). Development of the Abbreviated Technology Anxiety Scale (ATAS). *Behav Res Methods*, *55*(1), 185-199. https://doi.org/10.3758/s13428-022-01820-9
- Yana, H. H., Andrianto, D., Nawawi, M. L., Sudrajat, W., Kurniawan, W., & Khusnia, U. (2024). MODERATED COEXISTENCE: EXPLORING RELIGIOUS TENSIONS THROUGH THE LENS OF PEACE, JUSTICE, AND HUMAN RIGHTS. Raudhah Proud To Be Professionals: Jurnal

Tarbiyah Islamiyah, *9*(1), 68-82. https://doi.org/10.48094/raudhah.v9i1.605

- Zhao, H., & Khaliq, N. (2024). In quest of perceived risk determinants affecting intention to use fintech: Moderating effects of situational factors. *Technological forecasting and social change*, *207*, 123599. https://doi.org/https://doi.org/10.1016/j.techfore.2024.123599
- Zhou, W., Cleaver, C. J., Dunant, C. F., Allwood, J. M., & Lin, J. (2023). Cost, range anxiety and future electricity supply: A review of how today's technology trends may influence the future uptake of BEVs. *Renewable and Sustainable Energy Reviews*, 173. https://doi.org/10.1016/j.rser.2022.113074