



Drivers of Muslim interest in Islamic medical tourism destinations in Indonesia

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Abstract

Objective – This study examines how religiosity influences Muslim tourists' intention to choose Islamic medical tourism destinations (IMTD) in Indonesia by investigating the mediating roles of attitude and motivation of piety.

Methodology – A quantitative research design was employed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0. Data were collected from 200 Muslim tourists who were aware of the IMTD. Four constructs—religiosity, attitude, behavioral intention, and motivation of piety—were measured, and the proposed direct and indirect relationships were tested using the bootstrapping procedure at a 5% significance level.

Findings – The results reveal that religiosity has a significant positive effect on both attitudes and behavioral intentions. Religiosity also enhances the motivation for piety directly and indirectly through behavioral intention. However, attitude is negatively associated with motivation of piety, suggesting the presence of cognitive–spiritual dissonance in tourists' decision making. Furthermore, behavioral intention serves as a stronger mediating mechanism than attitude in explaining the influence of religiosity on the motivation of piety.

Implications – The findings suggest that IMTD managers and policymakers should prioritize strategies that strengthen Muslim tourists' behavioral intentions by integrating religious values into destination branding, service design, and promotional activities, rather than relying solely on favorable attitudes.

Originality – This study extends the Islamic medical tourism literature by demonstrating that religiosity shapes tourists' motivation for piety through distinct psychological pathways. It further identifies behavioral intention as a more influential mediating mechanism than attitude, offering new insights into Muslim tourists' destination-choice behavior.

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Introduction

The growth of global medical tourism has encouraged the development of Islamic medical tourism destinations (IMTD), which combine healthcare services with Islamic values, including halal services, gender-sensitive care, and religious facilities (Alfarajat, 2024; Hassani & Moghavvemi, 2020). The global medical tourism market demands differentiated value propositions, while the growing religiosity among Muslim travelers emphasizes halal assurance, spiritual experience, and faith-based service quality as essential decision factors (Meng et al., 2023; Suban et al., 2023). For Muslim

travelers, healthcare choices increasingly consider both medical quality and compliance with Islamic values, making Islamic medical tourism a growing sector in countries such as Indonesia.

Indonesia has strong potential for IMTD development because of its large Muslim population and growing halal tourism sector. However, the factors shaping Muslim tourists' interest in choosing Islamic medical tourism destinations remain underexplored, highlighting the need to understand how religious values influence destination preference. The theory of planned behavior (TPB) explains behavioral intention through attitude, subjective norms, and perceived behavioral control (Ajzen, 1991). Although the TPB has been widely applied in tourism and healthcare research, scholars argue that religious contexts require additional explanatory factors because spiritual values can influence individual evaluations and behavioral decisions (Melissa Tsai, 2021; Gohary et al., 2022). In Islamic tourism, religiosity has been identified as an important determinant of attitudes and behavioral intentions among Muslim consumers ((Ajzen, 1991; Ibrahim et al., 2025).

Recent studies have shown that religiosity positively influences preferences for halal products, Islamic tourism services, and faith-based consumption (Ajzen, 1991; Meng et al., 2023; Ibrahim et al., 2025). However, findings regarding the mechanisms through which religiosity translates into behavioral interests remain inconclusive. Some studies suggest that attitude mediates this relationship, while others indicate that religious values are more strongly reflected through behavioral commitment than cognitive evaluation (Ajzen, 1991; Hassani & Moghavvemi, 2020; Kruk & Aboul-Enein, 2024). These inconsistencies indicate the need to examine alternative pathways.

One construct that has received limited attention in IMTD research is the motivation of piety, which reflects an individual's desire to fulfill religious obligations and strengthen spiritual commitment through behavioral choices. While this construct has been discussed in studies of religious consumption and Islamic lifestyles, its role in medical tourism decision-making remains largely unexamined.

Accordingly, this study addresses three research gaps: First, prior studies have focused predominantly on the direct effect of religiosity on behavioral intention, with limited examination of the mediating mechanisms. Second, the motivation of piety has rarely been investigated in the context of Islamic medical tourism. Third, existing TPB applications have largely overlooked spirituality-based motivational factors that may influence healthcare tourism decisions among Muslim consumers.

The novelty of this study lies in integrating religiosity and motivation for piety into the TPB framework and examining the mediating roles of attitude and behavioral interest in the context of IMTD. By incorporating a spirituality-based construct, this study extends the TPB and provides a more comprehensive explanation of Muslim tourists' destination preferences. Therefore, this study aims to (1) examine the effect of religiosity on attitude, behavioral interest, and motivation of piety; (2) investigate the mediating roles of attitude and behavioral interest in the relationship between religiosity and motivation of piety; and (3) provide theoretical and practical insights for the development of IMTD in Indonesia (Ajzen, 1991; Hashim et al., 2025; Kruk & Aboul-Enein, 2024).

Literature Review

Religiosity

Religiosity refers to the extent to which individuals adhere to, practice, and are committed to their religious beliefs and values (Kruk & Aboul-Enein, 2024). It plays a crucial role in shaping Muslims' lifestyles, decision-making processes, and consumption patterns, including their travel preferences. Research by Alfaraaj (2024) shows that religiosity strongly influences Muslim consumers' evaluation of service authenticity and their perception of halal compliance in healthcare tourism. Similarly, Padlee et al. (2025) found that religiosity significantly affects expectations of halal-friendly medical facilities, encouraging tourists to seek destinations that align with their faith.

In Islamic tourism, religiosity functions not only as a spiritual belief but also as a behavioral guide that influences how Muslim tourists interpret and engage with services that reflect their moral values (Ibrahim et al., 2025; Suban et al., 2023). The dimensions and measurements of religiosity often consist of: (1) belief, the level of faith and conviction in Islamic principles; (2) practice, the

degree of adherence to religious rituals such as prayer and halal observance; and (3) knowledge, the understanding of Islamic rules guiding moral and consumption behavior (Rahman et al., 2023; Hassani & Moghavvemi, 2020). Therefore, religiosity becomes a fundamental antecedent of tourists' interest in Islamic medical destinations.

Attitude

Attitude is defined as an individual's evaluative orientation toward a behavior, object, or phenomenon, reflecting how positively or negatively they perceive it (Ajzen, 1991). Within the context of Islamic medical tourism, attitude represents Muslim tourists' cognitive and affective evaluation of the benefits and appropriateness of IMTD services (Melissa Tsai, 2021). Previous studies have demonstrated that attitude significantly influences tourists' behavioral intentions toward visiting Islamic destinations, particularly when supported by positive perceptions of service quality, hygiene, and religious compatibility (Gohary et al., 2022; Rahman et al., 2023).

However, the relationship between attitude and spiritual motivation may not always be linear in nature. Some research indicates that when attitudes are formed primarily based on rational or utilitarian evaluations, they may conflict with intrinsic spiritual motivations, leading to value dissonance (Meng et al., 2023). The parameters and indicators of attitude typically consist of: (1) cognitive belief about the usefulness and reliability of the service, (2) affective response involving emotional attraction or attachment to the service, and (3) behavioral tendency indicating readiness to act or purchase (Karimi et al., 2022). In IMTD, attitude bridges the gap between rational service evaluation and faith-based commitment, although the relationship can be ambivalent depending on internal religiosity.

Motivation of piety

Motivation of piety refers to the internal drive of Muslims to engage in behaviors consistent with religious values and spiritual fulfillment (Hassani & Moghavvemi, 2020). It embodies a person's desire to maintain spiritual well-being through everyday decisions, including travel and healthcare choices (Kruk & Aboul-Enein, 2024). In Islamic medical tourism, the motivation of piety influences how travelers prioritize destinations that uphold religious obligations, such as gender-segregated services, halal-certified treatments, and prayer facilities (Padlee et al., 2025; Rahman et al., 2023).

Studies show that the motivation of piety is closely associated with religiosity and behavioral interest; it can mediate the effect of faith on action, transforming abstract religious conviction into tangible tourism behavior (Padlee et al., 2025; Suban et al., 2023). The dimensions of piety motivation include: (1) spiritual drive, which reflects the intention to gain religious merit (pahala); (2) moral discipline, emphasizing self-control in maintaining halal behavior; and (3) religious identity expression, where individuals demonstrate their faith through lifestyle choices (Hashim et al., 2025; Gohary et al., 2022). Thus, the motivation of piety forms the moral-psychological foundation that explains why Muslim tourists prefer Islamic medical tourism over secular alternatives.

Interest in choosing Islamic medical tourism destinations (IMTD)

Interest in choosing IMTD refers to the degree of behavioral intention and curiosity shown by Muslim tourists toward visiting healthcare destinations that integrate Islamic values (Meng et al., 2023). It reflects tourists' readiness to act based on their perceptions of service quality, religious compatibility, and overall trust in a destination's adherence to Islamic principles (Alimusa et al., 2024; Rahman et al., 2023). The study by Padlee et al. (2025) emphasizes that interest is a key behavioral outcome of religiosity, translating internal beliefs into observable choices.

In practice, IMTD interest depends on several elements: (1) halal assurance, such as food and treatment compliance; (2) religious convenience, including prayer facilities and same-gender treatment options; and (3) spiritual experience, combining healthcare and religious well-being (Alfarajat, 2024; Suban et al., 2023). As the Islamic tourism industry evolves, this interest becomes a strategic focus for destinations seeking to attract Muslim travelers by merging health, spirituality, and cultural authenticity (Kruk & Aboul-Enein, 2024; Hassani & Moghavvemi, 2020). Therefore, the development of interest in IMTD embodies both practical decision-making and the manifestation of faith-based behavior.

Conceptual relationship among religiosity, attitude, motivation of piety, and interest

This study integrates religiosity and the theory of planned behavior (TPB) to explain Muslim tourists' interest in choosing Islamic medical tourism destinations (IMTD). While TPB suggests that attitudes influence behavioral intentions (Ajzen, 1991), the decision-making process in faith-based tourism may involve additional spiritual mechanisms that are not explicitly addressed in the original framework. In Islamic contexts, religiosity serves as a fundamental value system that shapes both cognitive evaluations and behavioral preferences. However, religious commitment does not necessarily translate into behavioral outcomes. Instead, its influence may operate through attitudinal assessments and spirituality-driven motivation.

Previous studies have reported mixed findings regarding the role of attitudes in religious consumption behavior. Some scholars argue that favorable attitudes toward halal and Islamic services increase behavioral intention, while others suggest that religious actions are more strongly driven by intrinsic spiritual motivations than by cognitive evaluations alone (Gohary et al., 2022; Meng et al., 2023). These inconsistencies indicate that the motivation of piety may act as an important explanatory mechanism linking religiosity and destination choice.

Accordingly, this study proposes an integrated framework in which religiosity simultaneously influences attitude, interest, and motivation of piety. Attitude represents the cognitive pathway through which individuals evaluate Islamic medical tourism services, whereas the motivation of piety represents the spiritual pathway through which religious values are internalized into behavioral decisions. By examining both pathways simultaneously, this study provides a more comprehensive understanding of Muslim tourists' decision-making processes in Islamic medical tourism.

Hypotheses Development

Religiosity and attitude

Religiosity reflects an individual's commitment to religious beliefs and values that guide their perceptions, judgments, and behavior (Kruk & Aboul-Enein, 2024). Within the theory of planned behavior (TPB), attitude refers to an individual's positive or negative evaluation of a particular behavior or object (Ajzen, 1991). Religious values serve as an internal reference system that influences how individuals evaluate products and services. In the context of IMTD, individuals with higher levels of religiosity are more likely to perceive destinations that comply with Islamic principles as desirable and consistent with their personal beliefs. Such alignment between religious values and destination attributes is expected to generate more favorable attitudes toward the IMTD. Previous studies on halal consumption and Islamic tourism have also reported a positive association between religiosity and attitude (Meng et al., 2023; Alfarajat, 2024; Padlee et al., 2025; Ibrahim et al., 2025). Therefore, higher religiosity is expected to strengthen positive attitudes toward Islamic medical tourism destinations.

H₁: There is a positive relationship between religiosity and attitude.

Religiosity and interest in choosing IMTD

Interest in choosing Islamic medical tourism destinations (IMTD) reflects an individual's intention to select healthcare tourism services that are consistent with Islamic values and principles. (Gohary et al., 2022). According to the theory of planned behavior (Ajzen, 1991), behavioral intention is influenced by personal beliefs and value systems that guide decision-making. Religiosity functions as an internal value orientation that shapes individuals' preferences and encourages them to choose products and services that align with their religious commitments. In the context of IMTD, highly religious Muslim consumers are more likely to prefer destinations that provide halal healthcare services, religious facilities, and spiritually supportive environments. Consequently, stronger religiosity is expected to increase the interest in choosing IMTD. This argument is supported by previous studies showing that religiosity positively influences Muslim tourists' behavioral intentions toward halal tourism and faith-based services (Hashim et al., 2025; Suban et al., 2023; Hassani & Moghavvemi, 2020; Alzarooni, 2025).

H₂: There is a positive relationship between religiosity and interest in choosing Islamic medical tourism destinations.

Religiosity and motivation of piety

Motivation of piety refers to an individual's intrinsic desire to fulfill religious obligations and strengthen their spiritual commitment through daily behaviors and consumption choices. Religiosity provides a foundation of beliefs, values, and religious practices that shape moral responsibility and spiritual awareness. From a behavioral perspective, individuals with stronger religiosity are more likely to internalize religious teachings and translate them into motivations that encourage actions consistent with their faith. In the context of Islamic medical tourism destinations (IMTD), religiosity may stimulate a stronger motivation to seek healthcare services that comply with Islamic principles and support spiritual well-being. Therefore, higher levels of religiosity are expected to strengthen the motivation for piety. This argument is supported by previous studies that have demonstrated that religiosity promotes spiritual consciousness, ethical responsibility, and piety-oriented motivation (Padlee et al., 2025; Kruk & Aboul-Enein, 2024).

H₃: There is a positive relationship between religiosity and motivation of piety.

Attitude and interest in choosing IMTD

According to the theory of planned behavior (Ajzen, 1991), attitude is a key determinant of behavioral intention. Attitude reflects an individual's overall evaluation of a behavior or object, whereas behavioral intention represents the willingness to perform that behavior. In the context of Islamic medical tourism destinations (IMTD), individuals who hold favorable evaluations of Islamic-compliant healthcare services are more likely to develop a stronger intention to choose such destinations. Positive attitudes may arise from perceptions of religious compatibility, service quality, and spiritual comfort, which encourage greater interest in selecting an IMTD. Previous studies have also reported that favorable attitudes significantly enhance behavioral intentions in Islamic tourism and halal-related contexts (Meng et al., 2023; Gohary et al., 2022; Hashim et al., 2025).

H₄: Attitude positively influences interest in choosing Islamic medical tourism destinations.

Motivation of piety and attitude

Motivation of piety reflects an individual's intrinsic desire to fulfill religious obligations and strengthen their spiritual commitment through daily decisions and behaviors. Individuals with strong piety motivation tend to evaluate products and services based on their consistency with Islamic values and principles. In the context of IMTD, consumers motivated to maintain religious compliance are more likely to perceive Islamic compliant healthcare services favorably. This is because such destinations not only address healthcare needs but also support the fulfillment of spiritual and religious expectations of patients. Therefore, a stronger motivation of piety is expected to foster more positive attitudes toward the IMTD. Previous studies have suggested that spirituality-based motivations influence individuals' evaluations and preferences for halal products, Islamic tourism, and faith-based services (Padlee et al., 2025; Hassani & Moghavvemi, 2020). In healthcare-related decisions, consumers may evaluate service quality positively, while their motivation for piety is influenced primarily by religious commitment rather than attitudinal assessments. These contrasting perspectives justify further examination of the relationship between attitude and motivation for piety within the context of IMTD.

H₅: There is a positive significant relationship between motivation of piety on attitude.

Motivation of piety and interest in choosing IMTD

The motivation of piety reflects an individual's intrinsic desire to fulfill religious obligations and maintain spiritual commitment in daily life. In consumer decision-making, spirituality-driven motivation can influence preferences and behavioral intentions toward products and services that align with religious values. In the context of IMTD, individuals with a stronger motivation for piety are more likely to seek healthcare services that provide halal-compliant practices, religious facilities,

and environments that support spiritual well-being. Consequently, piety-based motivation may strengthen individuals' interest in choosing IMTD because such destinations enable them to satisfy both healthcare needs and religious expectations. Previous studies have also suggested that spiritual motivation plays an important role in shaping preferences and intentions toward Islamic tourism and faith-based services (Suban et al., 2023; Hashim et al., 2025). The behavioral pathway from interest to piety motivation reflects the internalization of religious intention into action.

H₆: There is a positive relationship between the motivation of piety and interest in choosing the IMTD.

Mediating relationships

Religiosity, attitude, and interest in choosing Islamic medical tourism destinations (IMTD)

According to the theory of planned behavior (Ajzen, 1991), attitude serves as an important mechanism through which personal values influence behavioral intention. Religiosity represents a value-based orientation that shapes how individuals evaluate products and services concerning their religious beliefs. When a destination offers healthcare services that comply with Islamic principles, highly religious individuals are more likely to develop favorable evaluations of that destination. These positive evaluations subsequently increase tourists' intentions to choose a destination. In the context of Islamic medical tourism destinations (IMTD), attitude is expected to act as a psychological pathway through which religiosity influences destination choice. Previous studies have reported that religiosity contributes to positive attitudes toward halal tourism and Islamic services, which in turn strengthens behavioral intentions and destination preferences (Moritz et al., 2024; Rahmiati & Fajarsari, 2020; Maesaroh et al., 2024; Rahman et al., 2023). Therefore, attitude is expected to mediate the relationship between religiosity and interest in choosing an IMTD.

H₇: Attitude mediates the relationship between religiosity and interest in choosing IMTD.

Motivation of piety, attitude and interest in choosing IMTD

Motivation of piety reflects an individual's intrinsic desire to fulfill religious obligations and maintain a spiritual commitment in daily life. This motivation influences how individuals evaluate products, services, and destinations that align with their religious beliefs. In the context of IMTD, individuals with stronger piety motivation are more likely to perceive Islamic healthcare services positively because such services support both their healthcare needs and spiritual aspirations. These favorable evaluations can subsequently strengthen their interest in choosing the IMTD. From a behavioral perspective, attitude serves as a cognitive mechanism that translates spirituality-driven motivation into behavioral intentions. Therefore, attitude is expected to mediate the relationship between motivation of piety and interest in choosing the IMTD. Previous studies have also suggested that religious motivation influences attitudes toward Islamic products and services, which, in turn, shape behavioral intentions and destination preferences (Hashim et al., 2025; Hassani & Moghavvemi, 2020; Padlee et al., 2025; Kruk & Aboul-Enein, 2024; Maesaroh et al., 2024).

H₈: Attitude mediates the relationship between the motivation of piety and interest in choosing IMTD.

Religiosity, motivation of piety and interest in choosing IMTD

Religiosity often acts as a foundational antecedent of piety motivation (Ajzen, 1991; Padlee et al., 2025). A highly religious person tends to internalize values that nurture spiritual motivation, which in turn influences behavioral intentions such as visiting Sharia-compliant medical facilities (Kruk & Aboul-Enein, 2024; Hashim et al., 2025; Moritz et al., 2024). In the IMTD context, religiosity enhances the motivation of piety, leading to greater interest in Islamic-based medical destinations (Hassani & Moghavvemi, 2020; Maesaroh et al., 2024). While previous studies have confirmed that religiosity strengthens spiritual motivation and that piety-related motivation influences Islamic consumption behavior, limited research has examined whether the motivation of piety serves as a mediating mechanism between religiosity and interest in Islamic medical tourism destinations. Most prior studies have focused on direct relationships, leaving indirect psychological processes largely unexplored. Investigating this mediating role is important because it may explain how religious values are translated into actual destination preferences through spiritual motivation.

H₉: The motivation of piety mediates the relationship between religiosity and interest in choosing the IMTD.

Religiosity, motivation of piety and attitude

Religious commitment does not merely affect interest directly but also shapes the internal motivation that influences one's evaluative attitude toward Islamic medical destinations (Ajzen, 1991; Hashim et al., 2025). Highly pious individuals often develop attitudes grounded not only in service quality perceptions but also in spiritual alignment with Sharia principles. Thus, religiosity first enhances the motivation for piety, which subsequently leads to a positive attitude toward IMTD (Padlee et al., 2025; Kruk & Aboul-Enein, 2024).

H₁₀: Motivation of piety mediates the relationship between religiosity and attitude toward IMTD.

Religiosity, attitude, motivation of piety and interest in choosing IMTD

This integrated model proposes a sequential mediation pathway. Religiosity shapes attitudes, which in turn strengthens piety motivation and enhances interest in IMTD (Ajzen, 1991; Hashim et al., 2025). Empirical findings indicate that religiosity positively affects attitude, interest, and motivation of piety, while the combined indirect paths through attitude and interest show varying degrees of influence (Kruk & Aboul-Enein, 2024; Maesaroh et al., 2024; Moritz et al., 2024). Hence, the sequential path highlights how religiosity guides cognitive (attitude) and affective-spiritual (motivation) mechanisms toward forming behavioral intention to choose the IMTD.

H₁₁: The attitude and motivation of piety sequentially mediate the relationship between religiosity and interest in choosing an IMTD.

Figure 1 presents the conceptual framework that illustrates the proposed hypothesis. It depicts the hypothesized relationships among religiosity, attitude, motivation of piety, and interest in choosing Islamic medical tourism destinations, serving as the basis for empirical hypothesis testing.

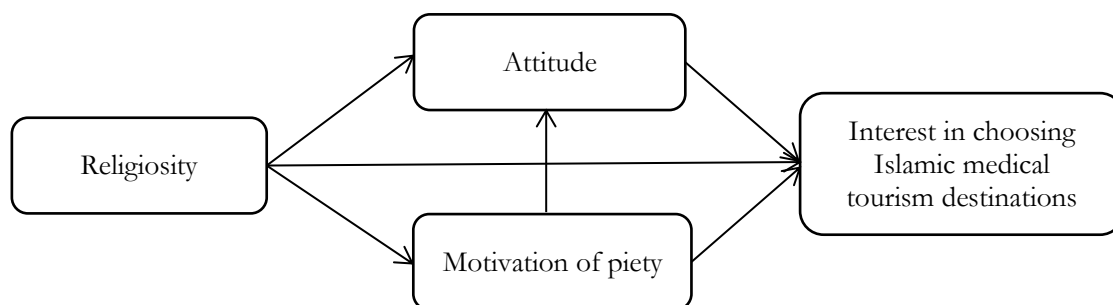


Figure 1. Conceptual framework
Source: Authors' own elaboration

Methods

Research design

This study employed a quantitative explanatory research design to examine the relationships among religiosity, attitude, motivation of piety, and interest in choosing Islamic Medical Tourism Destinations (IMTD). Quantitative explanatory research is appropriate for testing causal relationships among latent constructs and validating theoretical models (Hair et al., 2022; Creswell & Creswell, 2018). A cross-sectional survey was conducted to collect data at a single point in time and test the proposed hypotheses (Sekaran & Bougie, 2019).

Research subject and object

The research subjects were Muslim individuals who were potential or actual users of Islamic medical tourism services in Indonesia and Malaysia. The research object focused on four key

constructs: religiosity, attitude, motivation of piety, and interest in choosing the IMTD. Respondents were selected using a purposive sampling technique because the study required participants who possessed specific knowledge relevant to the research objectives. (Etikan et al., 2016). The inclusion criteria required respondents to self-identify as Muslims and to have prior awareness of Islamic medical tourism services.

Sample size determination

The target population of this study consisted of Muslim individuals who were familiar with the concept of IMTD and had either considered or sought information regarding healthcare services that integrated Islamic principles. Respondents were recruited using a purposive sampling approach because the study required participants with relevant knowledge and awareness of Islamic medical tourism. To ensure eligibility, a screening question was included at the beginning of the questionnaire asking whether respondents were aware of or had previously obtained information about Islamic medical tourism services. Only respondents who met this criterion were allowed to proceed with the survey.

Data were collected through an online questionnaire distributed via social media platforms, professional networks, community groups, and educational networks in several regions of Indonesia. Online surveys have been widely recognized as an effective approach for reaching geographically dispersed respondents while maintaining data collection efficiency (Evans & Mathur, 2018).

Regarding sample size adequacy, recent methodological literature recommends the use of statistical power analysis rather than relying solely on the traditional “10-times rule” (Hair & Alamer, 2022). Following the recommendations of Hair and Alamer (2022), and Kock and Hadaya (2018), a minimum sample size for PLS-SEM should be sufficient to detect medium effect sizes with adequate statistical power. Considering the complexity of the proposed model, which includes four latent constructs and multiple structural relationships, a minimum sample exceeding 150 respondents was considered adequate to achieve a statistical power of 0.80 at a significance level of 0.05. Accordingly, 200 valid responses were collected and analyzed, providing sufficient statistical power and ensuring the robustness and stability of SEM-PLS estimation.

Research instrument

The data collection instrument was a self-administered online questionnaire structured into four parts: Demographic Information (age, gender, education, and travel experience). Religiosity Scale: adapted from Worthington et al. (2003) and operationalized through four indicators capturing belief, knowledge, experience, and ethical commitment. Attitude and Motivation of Piety: measured using items adapted from Hashim et al. (2025), reflecting spiritual motivation, religious consciousness, and evaluative responses toward the IMTD. Interest in choosing IMTD: operationalized through intention-based items referring to behavioral interest in selecting Islamic medical tourism services. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Data analysis method

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) implemented in SmartPLS 4.0, following the analytical procedures recommended by Hair and Alamer (2022). The analysis comprised two stages: (1) measurement model assessment to evaluate construct validity and reliability based on indicator loadings (> 0.70), composite reliability (> 0.70), and average variance extracted (AVE > 0.50); and (2) structural model assessment to examine the significance and strength of the hypothesized relationships using path coefficients, coefficients of determination (R^2), effect sizes (f^2), and bootstrapping with 5,000 resamples to assess both direct and mediation effects. This systematic procedure ensured that the measurement and structural models satisfied the required standards of reliability, validity and predictive relevance.

Table 1. Measurement variables

Variable	Code	Item measurement	Source
Religiosity	RO1	I believe that religious teachings guide my daily life.	(Worthington et al., 2003)
	RO2	I regularly perform religious practices such as prayer and worship.	
	RO3	I continuously seek to increase my knowledge of religion.	
	RO4	My ethical decisions are influenced by my faith.	
Motivation of piety	MP1	I am motivated to choose IMTD to strengthen my spiritual values.	(Hashim et al., 2025)
	MP2	I want my healthcare experience to support my religious growth	
	MP3	I am inspired by my faith to seek medical treatment in a halal environment	
Attitude	MP4	My motivation to use IMTD comes from my commitment to piety	(Hashim et al., 2025)
	AT1	I believe Islamic medical tourism provides valuable and ethical healthcare.	
	AT2	I feel positive about choosing an Islamic-based medical tourism service.	
	AT3	I think that IMTD reflects my religious and moral values.	
	AT4	Choosing IMTD would make me feel spiritually satisfied	
Interest in choosing IMTD	AT5	Using IMTD is a good decision aligned with Islamic principles.	(Moritz et al., 2024)
	IC1	I intend to use Islamic medical tourism services in the future.	
	IC2	I prefer IMTD over conventional medical tourism destinations.	
	IC3	I am interested in recommending IMTD to others.	
	IC4	I will actively seek information about IMTD for my health needs.	

Source: Adapted by the authors from Worthington et al. (2003), Hashim et al. (2025), and Moritz et al. (2024)

Result

Table 2 presents the distribution of the 200 valid respondents who participated in the survey. In terms of gender, the majority were male (63.5%), while females accounted for 36.5% of the total. Regarding age, most respondents (82%) were 26 years or older, suggesting that the majority of participants were mature adults with established professional or personal experiences, potentially influencing their decision-making in health-related tourism. Regarding educational background, 66% of respondents held a Diploma or Bachelor's degree, followed by 18% with a Senior High School education and 16% with a master's or doctoral degree. This indicates that the sample primarily consisted of educated individuals capable of evaluating complex information regarding Islamic medical tourism services.

Table 2. Respondent demographics

Category	Possible Answer	Frequency	Percent
Gender	Male	127	63.5
	Female	73	36.5
Age	17–20 years old	8	4.0
	21–25 years old	28	14.0
	≥26 years old	164	82.0
Education level	Senior high school	36	18.0
	Diploma/Bachelor's degree	132	66.0
	Master's/Doctoral degree	32	16.0
Occupation	Student	45	22.5
	Private employee	78	39.0
	Civil servant/Professional	41	20.5
	Entrepreneur/Freelancer	36	18.0
Preference for using IMTD	Have used IMTD services	48	24.0
	Interested but not yet used	124	62.0
	Not interested	28	14.0

Source: Authors' processing of primary data

In terms of occupation, 39% of respondents were private employees, 22.5% were students, 20.5% were civil servants or professionals, and 18% were entrepreneurs or freelancers. This

occupational diversity reflects a broad representation of socioeconomic backgrounds relevant to the potential market for Islamic medical tourism in Malaysia. Finally, concerning preferences for using IMTD, 62% of respondents expressed interest but had not yet used IMTD services, 24% had already used such services, and 14% reported no interest in using IMTD services. These findings suggest that a large potential market segment with latent interest could be activated through effective marketing and awareness strategies promoting IMTD as a religiously compliant healthcare alternative.

Model measurement test results

Table 3 demonstrates that the Religiosity construct shows satisfactory reliability and validity, with outer loadings ranging from 0.735 to 0.846 and an average variance extracted (AVE) of 0.606. The Cronbach's alpha (0.843) and composite reliability (0.875) values both exceed the recommended threshold of 0.70, indicating strong internal consistency (Hair & Alamer, 2022). These results confirm that the religiosity indicators belief, practice, knowledge, and ethical commitment reliably capture the underlying construct.

The Motivation of Piety variable exhibited very high outer loading values, ranging from 0.834 to 0.914, with an AVE of 0.783, Cronbach's alpha of 0.908, and composite reliability of 0.910. These values suggest that the items used to measure the spiritual motivation and religious consciousness of respondents have excellent convergent validity and internal consistency; (Hashim et al., 2025). hence, the motivation of piety is well represented by its observed indicators.

For the Attitude construct, the outer loadings ranged from 0.749 to 0.836, with an AVE value of 0.633, a Cronbach's alpha of 0.819, and a composite reliability of 0.898. This indicates that respondents' evaluative perceptions of Islamic Medical Tourism Destinations (IMTD) are measured with good reliability and convergent validity. (Moritz et al., 2024a). The Interest in Choosing IMTD construct also demonstrates acceptable psychometric properties, with outer loading values between 0.730 and 0.879, an AVE of 0.641, Cronbach's alpha of 0.815, and composite reliability of 0.818. These results indicate that the behavioral interest in selecting Islamic medical tourism services is a consistent and reliable construct (Hashim et al., 2025 Maesaroh et al., 2024).

Table 3. Measurement model

Variable	Indicator	OL	AVE	CA	CR
Religiosity	RO1	0,778	0,606	0,843	0,875
	RO2	0,846			
	RO3	0,735			
	RO4	0,839			
Motivation of Piety	MP1	0,893	0,783	0,908	0,910
	MP2	0,897			
	MP3	0,914			
	MP4	0,834			
Attitude	At1	0,749	0,633	0,819	0,898
	At2	0,759			
	At3	0,765			
	At4	0,782			
	At5	0,836			
Interest in Choosing IMTD	IC1	0,879	0,641	0,815	0,818
	IC2	0,829			
	IC3	0,730			
	IC4	0,734			

Note. OL= outer loading; AVE= average variance extracted; CA= Cronbach's alpha; CR= composite reliability

Source: Authors' processing of primary data.

Overall, all constructs surpassed the minimum recommended criteria of outer loading > 0.70, AVE > 0.50, Cronbach's alpha > 0.70, and composite reliability > 0.70, (Hair, 2018) confirming strong reliability and convergent validity across the measurement model. The high AVE

values of motivation of piety (0.783) and religiosity (0.606) suggest that these constructs explain a large proportion of the variance in their respective indicators, thus reinforcing the robustness of the reflective measurement model.

Table 4. Fornell-Larcker criterion

Construct	RO	ATT	MP	IC
Religiosity	0.778	0.737	0.726	0.476
Attitude	0.737	0.796	-0.013	-0.161
Motivation of piety	0.726	-0.013	0.885	0.458
Interest in choosing IMTD	0.476	-0.161	0.458	0.801

Source: Authors' processing of primary data

As presented in Table 4, the Fornell–Larcker criterion indicates satisfactory discriminant validity. The square root of the AVE for religiosity (0.778), attitude (0.796), motivation of piety (0.885), and interest in choosing Islamic medical tourism destinations (0.801) exceeded the corresponding inter-construct correlations. These findings indicate that each construct shares more variance with its indicators than with other constructs, thereby confirming adequate discriminant validity and supporting the distinctiveness of the latent variables.

Analysis model structure

Figure 2 presents a structural equation model (SEM) that illustrates the relationships among four latent variables: Religiosity, Attitude, Motivation of Piety, and Interest in Choosing IMTD. Each latent variable is measured by multiple observed indicators, represented by yellow rectangles, whereas the latent constructs are shown as blue circles. The model revealed that religiosity plays a central role, significantly influencing both attitude (path coefficient: 0.737) and motivation of piety (0.835), and directly affecting interest in choosing IMTD (0.458). Interestingly, Motivation of Piety emerged as the strongest predictor of interest in choosing IMTD, with a path coefficient of 0.874, suggesting that internal religious motivation is a key driver of decision-making. In contrast, attitude showed a negative relationship with interest (-0.161), indicating a more complex or possibly counterintuitive dynamic that may warrant further investigation.

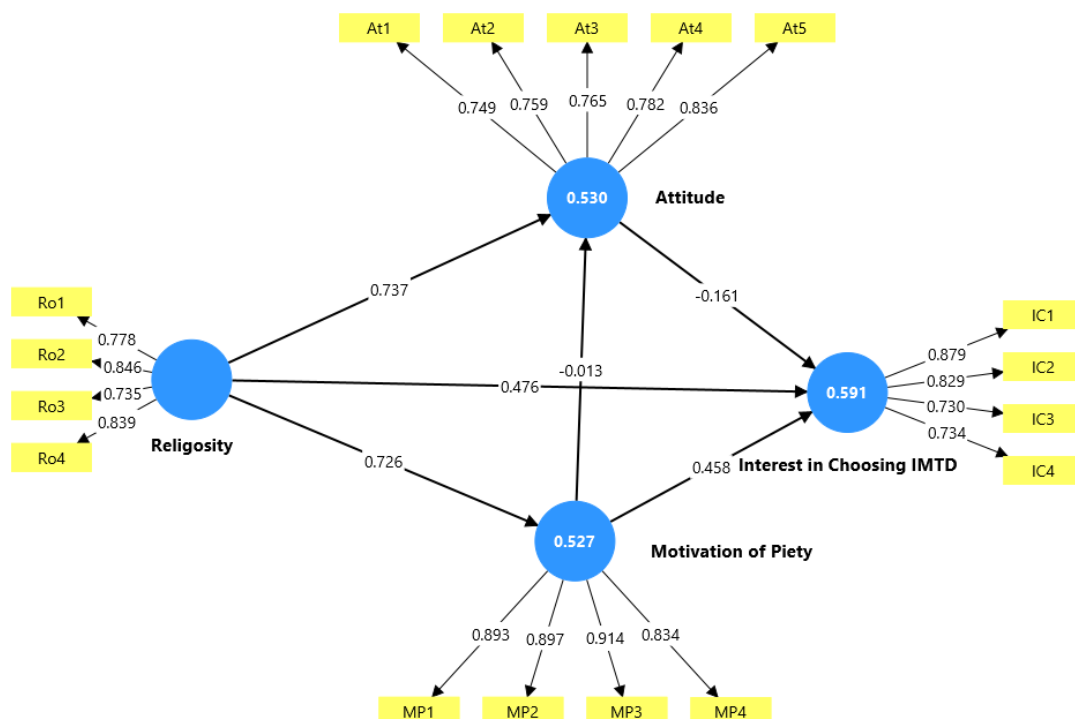


Figure 2. Path analysis output

Source: Authors' processing of primary data

The strength of each latent variable is supported by high factor loadings from their respective indicators, and the model's explanatory power is reflected in the R^2 values: Religiosity (0.778), attitude (0.530), motivation of piety (0.527), and interest in choosing IMTD (0.591). These values indicate that the model accounts for a substantial portion of the variance in each construct. Overall, the SEM provides a clear and quantifiable framework for understanding how religiosity and related psychological factors influence individuals' interest in choosing the IMTD, offering valuable insights for researchers and educators in religious and educational contexts.

When the R-squared value exceeds 0.67, it is classified as strong (Rachmania et al., 2025). However, in this study, the R-square values for the endogenous variables attitude (0.530), Motivation of Piety (0.591), and interest in choosing IMTD (0.527) fall within the moderate category, indicating that the model can explain between 52.7% and 59.1% of the variance in these constructs. The adjusted R-squared values remained consistent, ranging from 0.525 to 0.587, suggesting that the explanatory power of the model was stable even when accounting for the number of predictors.

These findings demonstrate that the structural model provides a clear explanation of the relationships among the examined variables. Specifically, religiosity strongly influences both the motivation of piety and attitude, which in turn contributes to the interest in choosing IMTD. The data used in this analysis were systematically processed to ensure the reliability and validity of the results. The F-value of this study further supports the significance of the model, confirming that the proposed relationships are statistically meaningful and relevant to the context of religious motivation and educational choices.

The F-square values indicate the effect size of each exogenous latent variable on the endogenous constructs within the structural model. According to Cohen's guidelines, an F-square value of 0.02 is considered small, 0.15 is medium, and 0.35 or above is large. The results show that religiosity has a large effect on interest in choosing IMTD ($F^2 = 1.113$), a medium effect on attitude ($F^2 = 0.548$), and a small effect on motivation of piety ($F^2 = 0.169$). Meanwhile, motivation of piety contributes moderately to interest in choosing IMTD ($F^2 = 0.243$), and Attitude has a minimal effect ($F^2 = 0.030$). These findings suggest that religiosity is the most influential factor in shaping interest in choosing IMTD, both directly and indirectly through other psychological constructs. The model demonstrated meaningful effect sizes, reinforcing the relevance of religiosity and piety motivation in educational decision-making.

Table 5 presents the model fit indices obtained from PLS-SEM analysis. The results show that the standardized root mean square residual (SRMR) is 0.062 for both the saturated and estimated models, which is below the recommended threshold of 0.08, indicating an acceptable overall model fit. The discrepancy measures ($d_{ULS} = 4.005$) were reported for both models and were primarily used as descriptive fit statistics, with lower values indicating a better model fit. Meanwhile, d_G and the normed fit index (NFI) were not available (n/a), and the chi-square statistic was reported as infinite, which is not uncommon in variance-based PLS-SEM owing to its estimation procedure. Overall, the proposed model provides an adequate representation of the observed data and demonstrates a satisfactory model fit.

Table 5. Model fit assessment

Model fit index	Saturated model	Estimated model	Recommended value
SRMR	0.062	0.062	< 0.08
d_{ULS}	4.005	4.005	Lower is better
d_G	n/a	n/a	Lower is better
Chi-Square	Infinite	Infinite	Descriptive
NFI	n/a	n/a	> 0.90

Source: Authors' processing of primary data

Predictive relevance was assessed using the Stone-Geisser Q^2 statistic obtained through a blindfolding procedure. All endogenous constructs exhibited positive Q^2 values (Attitude = 0.001; interest in choosing IMTD = 0.001; Motivation of Piety = 0.003). According to Hair et al. (2022),

Q^2 values greater than zero indicate that the model has predictive relevance. Although the magnitude of predictive relevance is relatively weak, the results confirm that the structural model retains the predictive capability for the endogenous constructs.

Before testing the hypotheses, the structural model was evaluated through collinearity assessment, model fit, and predictive relevance analyses. The VIF values ranged from 1.000 to 4.851, which are below the recommended threshold of 5.00, indicating the absence of multicollinearity issues among the predictor variables. Furthermore, the model fit assessment revealed an SRMR value of 0.062, satisfying the recommended criterion of less than 0.08 and indicating an acceptable model fit. Predictive relevance was evaluated using the Stone-Geisser Q^2 statistic obtained through blindfolding. The Q^2 values for attitude (0.001), interest in choosing IMTD (0.001), and motivation of piety (0.003) were all greater than zero, demonstrating that the model possessed predictive relevance, although the predictive strength remained relatively weak. Overall, these results support the adequacy of the structural model for subsequent hypothesis testing.

Table 6 presents the results of the structural model and the hypothesis testing. The findings indicate that religiosity exerts a strong positive influence on attitude ($\beta = 0.737$, $t = 11.135$, $p < 0.001$), motivation of piety ($\beta = 0.476$, $t = 6.823$, $p < 0.001$), and interest in choosing IMTD ($\beta = 0.726$, $t = 29.468$, $p < 0.001$). In addition, the motivation of piety significantly enhances the interest in choosing IMTD ($\beta = 0.458$, $t = 8.914$, $p < 0.001$). Conversely, the motivation of piety had a significant negative effect on attitude ($\beta = -0.161$, $t = 2.787$, $p = 0.005$), while the direct effect of attitude on interest in choosing IMTD was not statistically significant ($\beta = -0.013$, $t = 0.163$, $p = 0.870$). These findings suggest that religiosity directly strengthens both piety motivation and behavioral interest, whereas attitude is not a significant determinant of destination choice.

Table 6. Hypothesis testing

Causality path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
Motivation of piety → Attitude	-0.161	-0.164	0.058	2.787	0.005
Attitude → Interest in choosing IMTD	-0.013	-0.015	0.077	0.163	0.870
Motivation of piety → Interest in choosing IMTD	0.458	0.458	0.051	8.914	0.000
Religiosity → Attitude	0.737	0.740	0.066	11.135	0.000
Religiosity → Interest in choosing IMTD	0.726	0.727	0.025	29.468	0.000
Religiosity → Motivation of piety	0.476	0.479	0.070	6.823	0.000
Religiosity → Attitude → Interest in choosing IMTD	-0.009	-0.011	0.056	0.162	0.871
Motivation of Piety → Attitude → Interest in choosing IMTD	0.002	0.004	0.014	0.147	0.883
Religiosity → Motivation of piety → Interest in choosing IMTD	0.333	0.333	0.040	8.280	0.000
Religiosity → Motivation of piety → Attitude	-0.119	-0.122	0.047	2.497	0.013
Religiosity → Attitude → Motivation of piety → Interest in choosing IMTD	0.001	0.003	0.010	0.146	0.884

Source: Authors' processing of primary data

The mediation analysis further revealed that the motivation of piety significantly mediated the relationship between religiosity and interest in choosing IMTD ($\beta = 0.333$, $t = 8.280$, $p < 0.001$), indicating a complementary indirect mechanism through which religiosity promotes behavioral interest. Furthermore, the sequential indirect effect of religiosity → motivation of piety → attitude was significant and negative ($\beta = -0.119$, $t = 2.497$, $p = 0.013$), reflecting the negative association between motivation of piety and attitude. In contrast, the indirect effects of religiosity → attitude → interest in choosing IMTD ($\beta = -0.009$, $p = 0.871$), motivation of piety → attitude → interest in choosing IMTD ($\beta = 0.002$, $p = 0.883$), and the serial mediation path religiosity → attitude → motivation of piety → interest in choosing IMTD ($\beta = 0.001$, $p = 0.884$) were not

statistically significant. Overall, these results demonstrate that the motivation of piety serves as the primary mechanism linking religiosity to interest in choosing Islamic medical tourism destinations, whereas attitude does not play a meaningful mediating role in the proposed model.

Discussion

This study provides important insights into the behavioral mechanisms underlying Muslim tourists' interest in Islamic medical tourism destinations (IMTD). The findings demonstrate that religiosity serves as the primary antecedent influencing attitude, motivation for piety, and interest in the IMTD. These results support the view that religious commitment functions as a foundational value system that guides Muslim consumers' healthcare-related tourism decisions. Consistent with studies conducted in Islamic tourism and halal consumption contexts, individuals with stronger religious beliefs are more likely to seek services and destinations that align with Islamic principles and facilitate the fulfillment of their religious obligations; (Chang & Amalina, 2025; Muhamad et al., 2022). in the context of medical tourism, where trust, personal well-being, and ethical considerations are particularly salient, religiosity appears to play an even more prominent role in shaping destination preferences.

One of the most notable findings is the strong positive relationship between religiosity and the motivation of piety. This result suggests that religiosity does not merely influence behavioral decisions directly but also strengthens individuals' internal and spiritual motivations. This finding supports the argument that religious values are operationalized through piety-oriented motivations, which subsequently influence behavioral choices. This mechanism is particularly relevant in Islamic medical tourism because healthcare decisions are often perceived as economic or practical choices and opportunities to maintain religious compliance and spiritual well-being. The results extend previous studies by demonstrating that the motivation of piety functions as a distinct psychological construct linking religious commitment to healthcare tourism behavior (Ihalauw et al., 2022).

The findings further reveal that the motivation of piety positively influences the interest in choosing IMTD. This result confirms that spiritual motivations play an important role in transforming religious values into actual behavioral preferences. Muslim tourists who perceive IMTD as facilitating religious observance and spiritual fulfillment tend to express a stronger interest in utilizing such services. This finding is consistent with previous research suggesting that religiously motivated consumers prefer products and services that reinforce their religious identity and provide opportunities for faith-based experiences (Hamdy et al., 2024). More importantly, the results highlight that behavioral interest is not driven solely by perceptions of service quality or destination attractiveness but is also shaped by deeper spiritual aspirations (Sarac et al., 2025).

A particularly interesting finding is the negative relationship between the motivation of piety and attitude. At first glance, this result appears counterintuitive because individuals with stronger spiritual motivations are generally expected to develop more favorable attitudes toward products and services that align with their religious values (Ajzen, 1991; Kruk & Aboul-Enein, 2024). However, this finding may reflect a distinction between spiritual expectations and cognitive evaluations. Previous studies suggest that highly religious individuals often evaluate products and services based on functional attributes and perceived compliance with religious principles and ethical standards (Gohary et al., 2022; Meng et al., 2023). In the context of Islamic medical tourism, individuals with stronger piety motivation may hold higher expectations regarding Sharia compliance, ethical conduct, halal assurance, and religious authenticity in healthcare services. (Hassani & Moghavvemi, 2020; Padlee et al., 2025). Consequently, stronger piety motivation may lead respondents to assess existing IMTD offerings more critically rather than more positively. This interpretation is consistent with research indicating that highly religious consumers tend to scrutinize products and services that claim religious legitimacy, particularly when there is uncertainty regarding the authenticity of religious attributes (Kruk & Aboul-Enein, 2024). Therefore, the observed negative relationship may reflect heightened expectations and critical evaluations rather than a rejection of Islamic medical tourism.

Another important finding concerns the non-significant role of attitude in influencing interest in IMTD. This result differs from the traditional assumptions of the TPB, which posits

that attitude is one of the primary determinants of behavioral intention (Ajzen, 1991). While numerous studies in tourism and consumer behavior have confirmed the importance of attitude in predicting intention, the present findings suggest that this relationship may be weaker in contexts characterized by strong religious motivations. One possible explanation is that healthcare-related decisions involve moral, spiritual, and personal considerations that extend beyond cognitive evaluations of destination attributes (Battour et al., 2014; Rahman, 2025). In such circumstances, behavioral decisions may be guided more strongly by religious commitment and spiritual motivation than by attitudinal assessments. Consequently, favorable attitudes alone may be insufficient to generate behavioral interest when individuals perceive religious considerations as the primary basis for decision-making.

This finding contributes to the ongoing discussion regarding the applicability of the TPB in religious consumption. Although TPB has demonstrated strong explanatory power across various consumer behavior settings (Ajzen, 1991), several scholars have argued that the model may require contextual extensions when applied to religiously driven decisions, because spiritual values often influence behavioral choices beyond traditional cognitive determinants (Melissa Tsai, 2021; Gohary et al., 2022). The current findings suggest that spirituality-based motivations may complement, or in some cases, exert a stronger influence than attitudes in explaining faith-based behavioral intentions. This result supports recent studies advocating the integration of religiosity and spiritual constructs into behavioral models to better capture the unique characteristics of religious decision-making (Kruk & Aboul-Enein, 2024; Ibrahim et al., 2025). In the context of Islamic medical tourism, the motivation of piety appears to represent a particularly important mechanism linking religious values to behavioral outcomes.

The mediation analysis further supports this interpretation. Among the indirect pathways examined, the relationship between religiosity and interest through the motivation of piety emerged as the strongest mechanism. This finding indicates that religiosity may influence destination preferences primarily by strengthening internal spiritual motivation rather than solely through cognitive evaluations. Similar arguments have been advanced in studies of Islamic tourism and halal consumption, which emphasize the role of religious commitment and spiritual aspirations in shaping behavioral intentions (Hassani & Moghavvemi, 2020; Meng et al., 2023; Padlee et al., 2025). By identifying the motivation of piety as a key mediating variable, this study extends previous research that has largely focused on the direct effects of religiosity on behavioral intention (Suban et al., 2023; Hashim et al., 2025). Therefore, the findings contribute to the literature by demonstrating that the influence of religiosity on healthcare tourism behavior operates not only through direct effects or attitudinal processes but also through spirituality-driven motivational mechanisms.

From a practical perspective, the findings suggest that managers of Islamic Medical Tourism Destinations should focus not only on communicating functional service attributes but also on strengthening the spiritual value proposition of their offerings. Efforts to enhance halal assurance, Sharia-compliant healthcare practices, the availability of religious facilities, and transparent ethical standards may be particularly effective in attracting highly religious consumers. Given that the motivation of piety emerged as a stronger predictor of interest than attitude, promotional strategies should emphasize spiritual fulfillment, religious authenticity, and faith-based healthcare experiences rather than relying exclusively on conventional marketing appeals. This approach may better align with the decision-making processes of Muslim tourists and enhance the competitiveness of Islamic medical tourism destinations (Chua et al., 2022; Oktadiana & Agarwal, 2022).

Conclusion

This study examined the relationships among religiosity, attitude, motivation of piety, and interest in choosing Islamic medical tourism destinations (IMTD) by extending the theory of planned behavior (TPB). The findings demonstrate that religiosity significantly influences attitude, motivation of piety, and interest in choosing IMTD, with motivation of piety emerging as the strongest explanatory mechanism linking religiosity to behavioral interest. Religiosity affects interest in IMTD both directly and indirectly, primarily through motivation of piety, indicating that

religious values are translated into behavioral intentions through internalized spiritual motivation. In contrast, attitude plays a limited role in explaining behavioral interest and does not function as a significant mediator. These findings suggest that, within the context of faith-based healthcare tourism, spiritual motivation exerts a stronger influence on behavioral decision-making than cognitive evaluation. Consequently, the study extends the TPB by demonstrating the importance of incorporating spirituality-based constructs to better explain Muslim consumers' interest in Islamic medical tourism.

The findings also provide important practical implications for healthcare providers, tourism managers, and policymakers involved in developing Islamic medical tourism destinations. Since religiosity and motivation of piety are the strongest drivers of behavioral interest, IMTD providers should strengthen the religious authenticity of their services by ensuring halal-certified healthcare processes, providing adequate worship facilities, implementing Sharia-compliant service standards, and communicating these features transparently to prospective customers. In addition, marketing strategies should move beyond conventional promotional approaches by emphasizing spiritual value, religious compliance, ethical healthcare practices, spiritual comfort, and faith-based patient experiences, as these attributes are likely to be more persuasive for Muslim consumers than messages focusing solely on service quality or destination attractiveness. Policymakers can further support the growth of Islamic medical tourism by establishing robust certification systems and regulatory frameworks that enhance consumer trust in Sharia-compliant healthcare services.

Despite its contributions, this study has several limitations that provide opportunities for future research. The cross-sectional research design limits causal inference, while the use of purposive sampling and the exclusive focus on Muslim respondents in Indonesia may restrict the generalizability of the findings across different cultural and geographical settings. Moreover, although the proposed model explains important aspects of behavioral intention, its predictive relevance suggests that additional determinants remain to be explored. Future studies should therefore employ longitudinal research designs, conduct cross-country comparative investigations, and incorporate additional constructs such as trust, perceived value, destination image, service quality, religious commitment, halal certification credibility, and perceived healthcare risk to enhance the model's explanatory and predictive power. Furthermore, qualitative or mixed-method approaches could provide richer insights into how Muslim consumers interpret religious values and spiritual motivations when making healthcare tourism decisions, thereby advancing a more comprehensive understanding of the psychological and spiritual dimensions of Islamic medical tourism.

Abbreviation

IMTD: Islamic medical tourism destinations

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Data availability statement

The datasets generated and analyzed during the current study are not publicly available due to research confidentiality considerations but are available from the corresponding author upon reasonable requests.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this manuscript, the authors used Grammar AI (OpenAI) to assist with language refinement, grammatical improvement, and enhancement of readability. After using this tool, the authors carefully reviewed, revised, and edited the content as necessary and took full responsibility for the accuracy, originality, and integrity of the final manuscript.

Conflict of interest statement

The authors declare no conflict of interest regarding the publication of this manuscript.

Ethic approval and consent to participate

This study involved voluntary participation through an online questionnaire survey. Prior to completing the survey, all participants were informed of the purpose of the research and provided their consent to participate. No personal or sensitive information was collected, and respondent anonymity and confidentiality were maintained throughout the study period. In accordance with the institutional guidelines for minimal-risk survey research, formal ethical approval was not required.

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References

- 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](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alfarajat, L. (2024). Halal food and medical tourism: Muslim patients' experiences and satisfaction in South Korea. *Journal of Religion and Health*, 63(5), 3291–3310. <https://doi.org/10.1007/s10943-022-01727-x>
- Alimusa, L. O., Ratnasari, R. T., Ahmi, A., & Putra, T. W. (2024). Exploring the literature of halal and Islamic tourism: A bibliometric analysis. *Journal of Islamic Accounting and Business Research*. Advance online publication. <https://doi.org/10.1108/JIABR-07-2023-0200>
- Alzarooni, F. (2025). *The impact of a new halal policy on certification bodies: The case of the UAE* [Master's thesis, University College Dublin]. UCD Research Repository. <http://hdl.handle.net/10197/13315>
- Battour, M., Battor, M., & Bhatti, M. A. (2014). Islamic attributes of destination: Construct development and measurement validation, and their impact on tourist satisfaction. *International Journal of Tourism Research*, 16(6), 556–564. <https://doi.org/10.1002/jtr.1947>
- Chang, Y. C., & Amalina, N. S. S. (2025). Halal travel intention of Muslim tourists toward a non-Islamic destination: An integrated framework in Taiwan. *Journal of Islamic Marketing*, 17(4), 1604–1633. <https://doi.org/10.1108/JIMA-01-2025-0027>

- Chua, B.-L., Al-Ansi, A., Han, H., Loureiro, S. M. C., & Guerreiro, J. (2022). An examination of the influence of emotional solidarity on value cocreation with international Muslim travelers. *Journal of Travel Research*, 61(7), 1573–1598. <https://doi.org/10.1177/004728752110333>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Evans, J. R., & Mathur, A. (2018). The value of online surveys. *Internet Research*, 28(4), 854–887. <https://doi.org/10.1108/IntR-03-2018-0089>
- Gohary, A., Shah, A., Hosseini, S. R., Chan, E. Y., & Madani, F. (2022). God salience and tourists' pro-environmental behavior. *Annals of Tourism Research*, 93, Article 103318. <https://doi.org/10.1016/j.annals.2021.103318>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced issues in partial least squares structural equation modeling*. SAGE Publications.
- Hair, J., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), Article 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Hamdy, A., Eid, R., & Gao, X. (2024). Integrating Muslim-friendly tourist destination image, value, satisfaction and Muslim actual visit behaviour in the travel industry. *International Journal of Tourism Research*, 26(5), e2753. <https://doi.org/10.1002/jtr.2753>
- Hashim, A. J. C. M., Abd Aziz, S., Nazri, M. A., Kamarudin, N. S., & Nadzri, W. N. M. (2025). A taste of hospitality: The halal concept dining experience. *I-Iecons e-Proceedings*, 11(1), 447–458. <https://doi.org/10.33102/i-iecons.v11i1.193>
- Hassani, A., & Moghavvemi, S. (2020). Muslims' travel motivations and travel preferences: The impact of motivational factors on Islamic service, hedonic and product preferences. *Journal of Islamic Marketing*, 11(2), 344–367. <https://doi.org/10.1108/JIMA-03-2018-0054>
- Ibrahim, M. H., Khairi, L. I., & Putri, A. L. A. (2025). Linking religiosity and experience: A study of Muslim-friendly tourism intentions—Integration of tourism consumption systems theory and social exchange theory. *Jurnal Keparinwisata Indonesia: Jurnal Penelitian Dan Pengembangan Keparinwisata Indonesia*, 19(1), 33–50. <https://doi.org/10.47608/jki.v19i12025.33-50>
- Ihalauw, J., Kriestian Novi Adhi Nugraha, A., & Kities Andadari, R. (2022). *The role of attitude and motivation of piety as mediation of tourist interest in choosing the of Islamic medical tourism in abroad: Study on Muslim tourists in Indonesia* [Unpublished manuscript]. <https://doi.org/10.5281/zenodo.7472812>
- Karimi, S., Liobikienė, G., & Alitavakoli, F. (2022). The effect of religiosity on pro-environmental behavior based on the theory of planned behavior: A cross-sectional study among Iranian rural female facilitators. *Frontiers in Psychology*, 13, Article 745019. <https://doi.org/10.3389/fpsyg.2022.745019>
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227–261. <https://doi.org/10.1111/isj.12131>

- Kruk, J., & Aboul-Enein, B. H. (2024). Religion- and spirituality-based effects on health-related components with special reference to physical activity: A systematic review. *Religions*, 15(7), Article 835. <https://doi.org/10.3390/rel15070835>
- Maesaroh, I., Dewi, I. J., & Ginting, G. (2024). Tourists' attitudes towards halal tourism: The roles of place attachment and religiosity. *Jurnal Kepariwisata Indonesia: Jurnal Penelitian dan Pengembangan Kepariwisata Indonesia*, 18(1), 61–76. <https://doi.org/10.47608/jki.v18i12024.61-76>
- Melissa Tsai, H.-Y. (2021). Exploring the motivation-based typology of religious tourists: A study of Welcome Royal Lord Festival. *Journal of Destination Marketing & Management*, 21, Article 100623. <https://doi.org/10.1016/j.jdmm.2021.100623>
- Meng, C. K., Piaralal, S. K., Islam, M. A., Yusof, M. F. Bin, & Chowdhury, R. S. (2023). International medical tourists' expectations and behavioral intention towards health resorts in Malaysia. *Heliyon*, 9(9), e19721. <https://doi.org/10.1016/j.heliyon.2023.e19721>
- Moritz, P., Hrivnák, M., Mazúchová, Ľ., & Sándorová, Z. (2024). Who takes part in film tourism? The analysis of determinants of visiting film locations. *International Journal of Tourism Research*, 26(1), e2573. <https://doi.org/10.1002/jtr.2573>
- Muhamad, N., Islam, S., & Leong, V. S. (2022). Social comparison orientation and religious commitment influence on outbound travel intentions. *Asia Pacific Journal of Tourism Research*, 27(11), 1144–1166. <https://doi.org/10.1080/10941665.2023.2166419>
- Oktadiana, H., & Agarwal, M. (2022). Travel career pattern theory of motivation. In D. Gursoy & L. Cai (Eds.), *Routledge handbook of social psychology of tourism* (pp. 76–86). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003161868-8/travel-career-pattern-theory-motivation-hera-oktadiana-manisha-agarwal>
- Padlee, S. F., Ahmad Bustamam, U. S., Nik Mat, N. H., & Hussin, N. Z. I. (2025). The trail of halal services research: The bibliometric analysis using R. *Journal of Islamic Marketing*, 16(5), 1291–1310. <https://doi.org/10.1108/JIMA-05-2023-0151>
- Rachmania, V., Ramadhan, M. I., & Fatimah, S. E. (2025). The impact of scarcity and flash sale techniques on impulse buying of cosmetics. *Journal of Management and Entrepreneurship Research*, 6(2), 113–123. <https://doi.org/10.34001/jmer.2025.6.06.2-64>
- Rahman, M. A. (2025). The significance of religious values in forming sustainable life and economic progress. *International Journal of Scientific Interdisciplinary Research*, 6(1), 60–87. <https://doi.org/10.63125/ev1csz66>
- Rahman, M. K., Zailani, S., & Musa, G. (2017). What travel motivational factors influence Muslim tourists towards MMTD? *Journal of Islamic Marketing*, 8(1), 48–73. <https://doi.org/10.1108/JIMA-05-2015-0030>
- Rahman, M. K., Zainol, N. R., Nawi, N. C., Patwary, A. K., Zulkifli, W. F. W., & Haque, M. M. (2023). Halal healthcare services: Patients' satisfaction and word of mouth lesson from Islamic-friendly hospitals. *Sustainability*, 15(2), Article 1493. <https://doi.org/10.3390/su15021493>
- Rahmiati, F., & Fajarsari, A. R. (2020). The role of religiosity mediating Islamic attributes on tourist preference at Sharia-compliance hotel. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 4(1), 54–63. <https://doi.org/10.24912/jmie.v4i1.7578>
- Sarac, O., Colak, O., Yasarsoy, E., Akpur, A., & Batman, O. (2026). Islamic sensitivities and destination loyalty among halal-sensitive tourists: A parallel mediating role. *Journal of Islamic Marketing*, 17(4), 1518–1546. <https://doi.org/10.1108/JIMA-06-2024-0220>
- Sekaran, U., & Bougie, R. (2019). *Research methods for business: A skill-building approach* (8th ed.). John Wiley & Sons.

- Suban, S. A., Madhan, K., & Shagirbasha, S. (2023). A bibliometric analysis of Halal and Islamic tourism. *International Hospitality Review*, 37(2), 219–242. <https://doi.org/10.1108/ihr-05-2021-0038>
- Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., Schmitt, M. M., Berry, J. T., Bursley, K. H., & O'Connor, L. (2003). The Religious Commitment Inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50(1), 84–96. <https://doi.org/10.1037/0022-0167.50.1.84>