

Exploring the Role of Environment Service Quality in Enhancing Customer Satisfaction During Umrah in Malaysia

Khadijah Abdul Talib¹, Amran Harun², Noor Aslinda binti Abu Seman^{3*}

¹ *Johor Skills Development Centre,
81700 Pasir Gudang, Johor, MALAYSIA*

² *Faculty of Technology Management and Business,
Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, MALAYSIA*

³ *Johor Business School,
Universiti Tun Hussein Onn Malaysia, 86400 Batu Pahat, Johor, MALAYSIA*

*Corresponding Author: naslinda@uthm.edu.my

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Abstract

The Umrah industry in Malaysia faces numerous challenges, particularly fraud, which leads to high customer dissatisfaction with the services offered by Umrah operators. Environmental service quality difficulties in Umrah refer to the challenges of cleanliness, sustainability, and infrastructure that impact pilgrims' experiences and contentment. To address this, the study examines the relationship between environmental service quality (focused on airline service, hotel service, transportation service, and ambient) and customer satisfaction during the Umrah. This study employed a quantitative, cross-sectional approach, with 219 Umrah pilgrims aged 28 to 58 being the most significant sample of travellers. Respondents are chosen using convenience sampling. Data is gathered via online questionnaires and direct participation at airports like KLIA and KLIA 2. The research objective was achieved via descriptive analysis and multiple regression. This study also helps to understand customer satisfaction and demands, which is essentially the degree to which customers are satisfied with services, particularly those provided by airlines, hotels, transportation, and the environment, which can contribute to people's satisfaction while performing Umrah.

1. Introduction

Regarding spirituality, Umrah is thought to purify the soul, pardon transgressions, and improve a person's relationship with God. For many Muslims, it is a transformative experience and a means of spiritual cleansing before the Hajj, a once-in-a-lifetime duty for those who can afford it (Farooq, 2022). Umrah holds a special position in Muslim culture as well. It unites people from all around the world by bringing them together with a common experience and faith. The pilgrimage emphasizes the solidarity of the Muslim Ummah (community) and is not only a solo excursion. Despite the Hajj, which has set dates based on the Islamic lunar calendar, the Umrah is an Islamic pilgrimage to Makkah, Saudi Arabia, that Muslims can do at any time of the year (Bashir et al., 2017).

Umrah performance customs have changed dramatically since the COVID-19 outbreak. Due to the pandemic's effects on international travel, particularly the temporary suspension of Umrah pilgrimages, Malaysians' trends

toward the pilgrimage and how the travel business functions have changed. The trends have also impacted Malaysia a lot since the reopening of the borders. More than 300,000 pilgrims from Malaysia have performed Umrah since the Umrah season began in July 2022, said Saudi Arabia's Minister of Hajj and Umrah, Dr Tawfiq Fawzan Al-Rabiah (Berita Harian Online, 2023). As the number of pilgrims increased, there was a significant shift in the level of satisfaction that people experienced. In examining religious tourism, specific categories of experiences linked to religion are founded on individual emotions and spirituality (Kim & Kim, 2019). In other words, the structural change in the improvement of the plans of Umrah travel agents allows them to become more competitive in the marketplace (Othman et al., 2019).

In the past few years, several Umrah pilgrims have faced many issues in performing the Umrah, such as scams and fraud, high costs and poor service from the agencies (Ardani, 2022). For example, police have arrested the owners of a travel agency in connection with an alleged Umrah scam. Investigations revealed that the company began operations in 2022 but relocated to three-story premises in Sepang, Selangor, in October 2024 (Mahari, 2025). The suspect's modus operandi involved advertising Umrah packages on the TikTok platform and engaging with agents appointed by the company to deceive victims (Mahari, 2025). The Malaysian Association of Travel Agencies (MATA) asserts that from the perspective of rotating the best approach from the congregation's point of view, the Haji Fund's (TH) continued weakness and inefficiency lead to fraud and strandings of pilgrims who were duped by various schemes and Hajj packages in Malaysia (Mokhtar, 2022).

Since many travel agencies have registered to provide Umrah services, issues with the package can significantly impact pilgrims' satisfaction. The common problem is the lack of flexibility in accommodation and transport, fixed schedule, location, and pricing. Therefore, Umrah providers may face difficulties due to a lack of understanding among their clients (Ashdaq et al., 2015). As a result, a comprehensive understanding of how the parts of the marketing mix affect tourists could be beneficial for Umrah trip operators to enhance their techniques and strategies to maximise tourist pleasure and profitability (Huang, 2019). Therefore, service quality (SQ) is one of the most essential aspects and outcome-oriented methods for meeting customer wants and persuading them to become loyal customers (Othman, 2019).

Many pilgrims are dissatisfied with Umrah services despite their growing demand because of subpar service, limited customisation, and inefficient travel arrangements (Rajaratnam et al., 2014). In the last three years, COVID-19 has severely impacted the world, causing many tourism organisations, including Umrah travel companies, to cease operations owing to movement control orders (MCO) (Mahmad & Ismail, 2021). Small and Medium-Sized Businesses (SMES) own Umrah agencies in Malaysia. SMEs performance is crucial for developing countries because they are the most significant economic contributors. Hence, the MCO during the pandemic had a substantial impact on SMEs. Now is the most excellent opportunity for them to recover their financial losses and contribute to the Malaysian economy's growth and the industry's sustainability (Auzzir & Haigh, 2018). Customers have frequently complained to the Umrah industry, mainly regarding their discontent with the Umrah packages. The Ministry of Tourism, Arts, and Culture (MOTAC) has reported a growing number of complaints from dissatisfied Umrah patrons each year, mainly due to service providers' standardised, one-size-fits-all packages (Rahman, 2019). Despite pilgrims' diverse needs and expectations, these providers continue to provide uniform packages, failing to accommodate varying preferences, which increases dissatisfaction.

Despite the spiritual significance of the Umrah pilgrimage, environmental service quality in Umrah services is often disregarded. Many Umrah operators prioritise pricing strategies (Othman, 2019). A key element in developing a successful operations strategy is providing its customers with increased costs following additional benefits with or through lower prices by providing greater benefits and services (Wandiga et al., 2017). Researchers haven't investigated the link between environmental service quality factors and the satisfaction of Umrah tourists very much (Othman, 2019). Research hasn't been done on how airlines, hotels, transportation, and the atmosphere of the journey affect the satisfaction of people of all ages, nationalities, and budgets who go on the Umrah. But every year, tourists have the same complaints about the service regarding things like where they stay, how to get there, how to communicate, and problems with transportation (Othman, 2020). The degree of client satisfaction with the services received is a measure of service quality (Othman, 2020). The endeavour to satisfy customer requirements and wishes to balance consumer expectations and assume that the service obtained or perceived by the customer is as expected is known as service quality (Ali, 2021).

Based on the above discussion, this study explores the relationship between environmental service quality, focusing on airline service, hotel service, transportation service, ambience, and customer satisfaction during Umrah. The paper is organised into six sections: Section 1 introduces the topic, Section 2 reviews relevant literature, Section 3 explains the methodology, Section 4 presents the results, Section 5 discusses the findings, and the final section concludes the study while addressing its limitations and offering suggestions for future research.

2. Literature Review

2.1 Service Quality

Scholars in service marketing have focused on service quality in their work. Service quality was described as the adaptation to client expectations in providing a good or service (Ahmad & Papastathopoulos, 2019). Service quality was defined as the result of a client's total evaluation of the quality of a service provider by comparing what the client wanted and what they thought they got (Norman Steve, 2024). The model determines the overall client experience by focusing on five key factors: tangibles, assurance, responsiveness, empathy, and reliability (Bestoon, 2019). Assist companies in determining their service delivery's strong points and potential areas for development (Parasuraman et al., 1988).

The assessment of Umrah's service quality can be effectively categorised into five dimensions based on SERVQUAL by Parasuraman et al. (1988), including tangibility, reliability, responsiveness, assurance, and empathy. Tangibility refers to the physical aspects of service delivery that customers perceive, which allows them to form judgments about the quality of the service provider before consumption, especially in an industry characterised by intangible offerings (Othman & Harun, 2021; Subhan et al., 2023).

Reliability is critical as it enables customers to gauge the service provider's dependability concerning timely service delivery (Othman et al., 2019). Regarding responsiveness, customers evaluate the staff's willingness and capacity to assist promptly, reflecting the organisation's commitment to customer service (Othman & Harun, 2021; Saputra, 2023). Assurance encompasses the professionalism and courtesy of the employees, which fosters trust and confidence among customers, a vital element in service industries (Mursid & Wu, 2021; Adwimurti et al., 2023). Finally, empathy represents the personalised attention service providers extend to their clients, highlighting the importance of understanding and catering to individual customer needs (Ridha & Harris, 2020; Othman et al., 2020). Understanding these dimensions is essential for improving service quality and customer satisfaction in Umrah travel services.

2.2 Environment Service Quality in Tourism

Environmental Service Quality (ESQ) significantly shapes consumers' perceptions of service offerings within the tourism sector. It includes attributes such as cleanliness, maintenance, accessibility, ambience, and overall aesthetic appeal of the environment (Bhat, 2012). In the tourism context, ESQ encompasses the quality of various services, including airlines, hotels, and transportation, as well as the environmental conditions experienced by tourists during their travels (Martelo et al., 2018). This concept emphasises that consumers evaluate ESQ based on their perceptions of service quality and organisational performance. Furthermore, maintaining high ESQ is critical for airlines' sustainability, indicating that strong collaborative relationships between tourism operators and airlines are essential for delivering quality service to passengers (Dedeoğlu & Demirer, 2015; Tang, 2015). A nuanced understanding of ESQ enhances customer satisfaction and reinforces the competitive advantage of service providers in the tourism industry.

When Umrah operators and airline companies provide satisfactory customer service, they receive positive feedback (Park et al., 2017). Next, according to Singgalen (2024), the primary aspects influencing consumers' ratings of hotel quality include cleanliness of rooms, comfort of mattresses, tranquillity of stay, safety and security, and location, as assessed by a measurement method. Transportation is an example of entry quality because it should make it easy and quick for people to get where they need to go. People who run Umrah services should ensure that their customers who go to Mecca, Saudi Arabia, have the best transportation options (Alharbi et al., 2022). Atmosphere is the intentional utilisation of space to generate specific effects that enhance the probability of a client making a purchase, for example, prayer facilities, halal food, the Holy Quran in the hotel room and Shari'ah-compliant toilets (Hussain et al., 2021).

2.3 Customer Satisfaction in Religious Tourism

The Umrah travel and tour packages offered by the travel and tourism industry are selected by pilgrims for various reasons, including leisure, religious education, and health services. Their anticipations for the excursion's intended purpose unquestionably affect the joy they experience when the journey does not correspond to the itinerary. In religious tourism, various variables can influence satisfaction, including attaining spiritual fulfilment. Many people travel for religious reasons to either bolster their religion or establish a connection with their spiritual path. Individuals' spiritual fulfilment due to participation in religious rituals or visits to sacred sites is a crucial component that plays a role in their decision (Matheson et al., 2020). It is essential to provide visitors with easy access to holy sites, including transportation and infrastructure, to guarantee they can reach their selected locations without experiencing excessive difficulty.

According to Bestoon et al. (2019), the quality of services, which includes accommodations, meals, and local aids, can impact the reliability of overall satisfaction. The positive experiences with these services make the visit

more enjoyable, which in turn makes the visit more enjoyable. Without a doubt, it would appear that religious considerations play significant roles in the formation of the consumer experiences of tourists. For instance, religious labels have significantly contributed to the tourists' perceptions of value (Jamal & Sharifuddin, 2015). The concept of perceived value is highly subjective and is influenced by the experiences that individuals have. When travellers visit various religious locations, they experience a variety of interpretations of the present values. According to Eid (2015), Eid and El-Gohary (2015), Isa et al. (2018), and Zulkharnain and Jamal (2012), the majority of the research that has been conducted on the topic of perceived value in religious tourism has concentrated on Muslim clients. This study investigates the impact of Muslim tourists' perceived value (including pricing, quality, emotional, social, and Islamic value) on customer satisfaction and employee loyalty. Nevertheless, individuals affiliated with religious groups are not the only ones visiting religious locations. Research on the factors that motivate religious tourism revealed that those without religious ties would also go on religious vacations.

2.4 Hypothesis Development

2.4.1 Airlines Services

Pilgrims' satisfaction is greatly affected by the quality of airline services, including punctuality, comfort, and hospitality, which are essential for their travel experience (Azhar et al., 2018). Making the journey to and from sacred places smooth and stress-free improves their overall experience and reduces travel worries. Consequently, airlines are not solely concentrated on in-flight services; they are now dedicating significant attention to client experiences before and after the journey. (Yas, 2022). Li-Jun et al. (2019) examine the significance of service levels in airline operations, positing that upholding suitable service levels is essential for customer satisfaction and operational profitability.

Furthermore, Elhatab's findings indicate that passengers who endorse a particular airline report higher satisfaction level when service quality improves, highlighting the impact of brand perception on customer experiences (Elhatab, 2022). Research by Fananiar et al. (2020) also establishes a connection between customer satisfaction, positive word of mouth, and recommendations for airlines, indicating that satisfied customers enhance the airline's reputation and operational success. Additionally, problems that can occur are the process of performing Umrah or delays from airlines and several other technical problems that sometimes cause discrepancies with travel plans, affecting the satisfaction of performing the Umrah (Subhan et al., 2023). Thus, it can be hypothesised that:

H1: There is a significant relationship between airline services and satisfaction in performing Umrah.

2.4.2 Hotel Services

According to the research conducted by Rauch et al. (2015), the essential criteria customers should consider while evaluating hotel quality encompass room cleanliness, mattress comfort, stay tranquillity, safety and security measures, and hotel location. Guest satisfaction is closely linked to their overall experience, leading to positive evaluations of hotel quality, especially among Umrah pilgrims. The quality of accommodations plays a crucial role in ensuring the satisfaction of these pilgrims, as it directly influences their comfort and peace of mind during their spiritual journey (Othman et al., 2019; Othman & Harun, 2021).

Studies demonstrate that elements such as hygiene, the hotel's closeness to the Holy Mosque, comfort, and the calibre of services, including room service and religious facilities, substantially affect the pilgrimage experience. For example, Singh and Alhamad (2022) established that cleanliness and health and safety protocols are essential for enhancing customer satisfaction, especially in the COVID-19 pandemic, where the perception of hygiene has become vital for customer retention. These findings align with assertions that service quality is a determinant of customer satisfaction, making the salient attributes of hotel accommodations fundamentally necessary for pilgrims seeking a comfortable environment during their spiritual journeys.

The literature also consistently supports the assertion that hotel cleanliness, comfort, safety, and quality of service are fundamental in shaping the satisfaction levels of guests (Ervina et al., 2023; Singh et al., 2023). Reasonable hotel accommodations are crucial for Umrah pilgrims who expect a peaceful environment in which to carry out their spiritual duties. Guests who are happy with their stay give positive reviews about the hotel's quality, highlighting the need for high service standards in religious tourism hotels (Hassan et al., 2022). In the case of spiritual tourism, it has also been discovered that hotels are affecting the environments at religious destinations in different ways, such as air pollution, water pollution, soil pollution, etc, that have changed the face of these areas in the last few years (Patange et al., 2023). Thus, it can be hypothesised that:

H2: A significant relationship exists between hotel services and satisfaction in performing Umrah.

2.4.3 Transportation Services

Travellers to Umrah need access to transportation, notably public transit or buses, which they have chartered. It is possible for people to become frustrated due to delays, traffic, or poor service; yet, transportation that is well-organised, prompt, and secure can considerably improve their experience. For Umrah service providers, providing their customers with the most convenient transportation methods when travelling to Mecca, Saudi Arabia, is essential. It is of the utmost importance for Umrah transportation companies to offer their clients the most convenient modes of transportation when travelling to Mecca in Saudi Arabia.

Suryawan et al. (2024) indicate that service brand image significantly impacts travellers' satisfaction, suggesting that well-organised transport services can enhance the perceived value of the overall experience for Umrah pilgrims. Wu and Mursid (2019) also highlight that the perceived value encompasses various aspects of service, including efficient transportation, which is particularly important for Umrah travellers. Transport logistics are complex in religious tourism; hence, Othman and Harun (2021) argue that optimised service quality in transportation can directly affect customer satisfaction and loyalty, reinforcing the importance of transport as a critical component of the Umrah travel package. Hajj and Umrah pilgrims expect excellent service to meet their physical and spiritual needs, requiring specialised care, good tour guides, and proper transportation to ensure a peaceful worship experience (Sikumbang et al., 2022). Thus, it can be hypothesised that:

H3: There is a significant relationship between transportation services and satisfaction with performing Umrah.

2.4.4 Atmosphere

According to Kotler (1973), atmosphere is the deliberate layout of a room to produce particular effects that raise the possibility that a client would make a purchase. Various factors significantly influence the satisfaction of pilgrims during their Umrah experience. Providing high-quality environmental services fosters a conducive atmosphere that allows pilgrims to focus on their religious obligations, leading to enhanced spiritual development; conversely, a lack of hygiene can negatively impact this experience (Wu & Mursid, 2019; Othman et al., 2019). Additionally, Umrah operators must ensure the availability of halal food, prayer facilities, the Holy Quran in hotel rooms, and Shariah-compliant restrooms, as these elements play a role in enhancing customer satisfaction and positively influencing evaluations of the services provided (Saputra, 2023).

Kotler asserts that the atmospheric elements within hospitality settings are closely linked to customer satisfaction, particularly in enhancing the spiritual experience of pilgrims (Hassan et al., 2023). Saputra (2023) emphasizes that a conducive environment characterised by cleanliness, accessibility to halal food, proper prayer facilities, and the provision of religious items is essential to fostering a positive atmosphere conducive to worship and reflection during the Umrah pilgrimage. Such offerings meet the basic expectations of pilgrims and align with their spiritual needs, significantly contributing to their overall satisfaction (Rahayu, 2023). Moreover, the importance of an inviting and serene atmosphere is underscored in studies by Mursid and Wu, where the authors reveal that customer engagement and value co-creation in enhancing the Umrah journey heavily rely on the perceived quality of the environment (Mursid & Wu, 2021). Therefore, we can suggest that:

H4: There is a significant relationship between atmosphere and satisfaction to perform Umrah.

2.5 Research Conceptual Framework

The conceptual framework for this study is illustrated in Figure 1, which shows the relationship between various service-related factors and overall Umrah satisfaction. It is designed to explore how different aspects of the pilgrimage experience contribute to the level of satisfaction among pilgrims. In this framework, four independent variables, airline service, hotel service, transportation, and atmosphere, are expected to influence Umrah satisfaction. Airline services greatly affect pilgrims' travel experience through flight schedules, in-flight amenities, and customer service. Hotels also play a key role by offering comfortable accommodations, cleanliness, and being close to religious sites. Transportation is essential too, as easy and efficient travel within the pilgrimage area reduces stress and helps pilgrims move smoothly between sites. Finally, the overall atmosphere, such as the spiritual feeling, crowd control, and safety, strongly influences pilgrims' emotional and spiritual experience. Each of these independent variables is expected to impact Umrah satisfaction directly. When airline services are well-organised, hotel accommodations are comfortable, transportation is efficient, and the atmosphere is conducive to a peaceful pilgrimage, pilgrims are more likely to have a fulfilling and satisfying experience. By analysing these relationships, this framework provides a structured approach to understanding the key factors contributing to Umrah satisfaction. It offers insights that can help service providers and policymakers improve the overall experience of pilgrims, ensuring that their journey is both convenient and spiritually enriching.

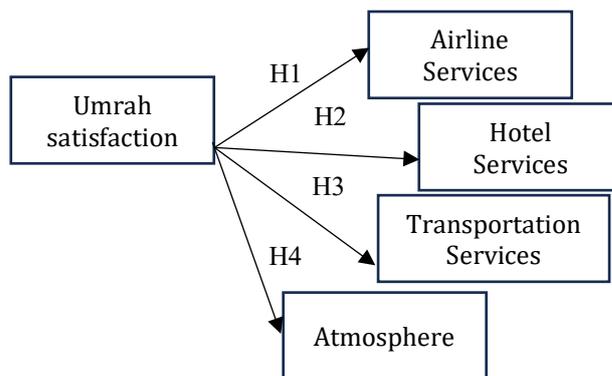


Fig. 1 Research conceptual framework

3. Methodology

This study employed a quantitative research approach to examine the correlation between environmental service quality (airlines, transportation, hotels, and atmosphere) and the satisfaction of pilgrims undertaking Umrah. The study population comprises 300,000 pilgrims. (Bernama, 2023), with a sample selected using convenience sampling to ensure representativeness and minimise bias. A total of 219 pilgrims were involved in the data collection, which was collected online through a Facebook group dedicated to Umrah pilgrims and physically at Kuala Lumpur International Airport Terminal 1 (KLIA1) and Terminal 2 (KLIA2), located in Sepang, Selangor.

The questionnaire consisted of two sections: Section A gathered demographic information, while Section B assessed environmental service quality and customer satisfaction using a 5-point Likert scale (1 = Very Unsatisfied, 5 = Very Satisfied). The questionnaire items were adapted from Harun et al. (2020) to suit the study context. Ethical approval and informed consent were obtained before data collection, ensuring participant anonymity and voluntary participation. Data analysis began with a normality test to determine data distribution, followed by multiple regression analysis using IBM SPSS Statistics Version 29 to test hypotheses, evaluate the impact of each service quality factor on satisfaction, and identify the most significant predictors. The study aims to clarify the relationship between environmental service quality and pilgrim satisfaction, highlighting the service factor with the most critical influence.

4. Result

4.1 Demographic Profile

From Table 1, most pilgrims are female, with 53.4%. Next, people aged 30 to 43 mainly perform Umrah, with 44.3%. People who work in the private sector make up the most significant number of pilgrims, with 39.3%. Next, pilgrims who perform Umrah mostly have a salary range of RM1,000 – RM4,000, with 42.0%. The highest marital status that performs Umrah is married people, with 75.3%. Pilgrims also come from people with the most tertiary education, a Diploma and above, with 66.7%.

Table 1 Demographic profile

Demographic information	Category	Frequency	(%)
Gender	Male	102	46.6%
	Female	117	53.4%
Age	18 years old – 29 years old	35	16%
	30 years old – 43 years old	97	44.3%
	44 years old – 57 years old	74	38.8%
	58 years old – 77 years old	13	5.9%
Occupation	Self employed	46	21.0%
	Retired	20	9.1%
	Government	67	30.6%
	Private	86	39.3%
Income	RM 1000 – RM 4000	92	42.0%
	RM 4001 – RM 7000	89	40.6%

	RM 7001 – RM 10,000	20	9.1%
	RM 10,000 & above	18	8.2%
Marital status	Single	49	22.4%
	Married	165	75.3%
	Others	4	1.8
Education	Primary	2	0.9%
	Secondary	71	32.4%
	Tertiary	146	66.7%

4.2 Normality Test

The Shapiro-Wilk test determined the data's normality. The test gives a statistical value between 0 and 1, with values closer to 1 favouring normal distribution. A threshold of 0.05 is used to interpret this test's p-value, which determines normalcy. If the p-value exceeds 0.05, the null hypothesis is not rejected, indicating normal data. If the p-value is below 0.05, the data deviates significantly from normalcy. The Shapiro-Wilk test produced 0.950 in the airline dataset, close to 1. Assuming a p-value over 0.05, the data is likely regularly distributed. The Hotel dataset had a Shapiro-Wilk statistic of 0.911, and the Atmosphere dataset was 0.890. Both numbers imply normal data if the p-value surpasses 0.05. Compared to the other variables, the Transportation dataset has a low Shapiro-Wilk score of 0.840. Data may not be normally distributed. A p-value below 0.05 indicates that the dataset deviates considerably from normalcy. The Umrah Satisfaction dataset had a Shapiro-Wilk statistic of 0.867, below 0.90. This suggests a deviation from normality, especially if $p < 0.05$.

Table 2 Normality test

Variables	Shapiro – Wilk	Kolmogorov- Smirnov
Airlines	0.950	0.148
Transportation	0.840	0.241
Hotel	0.911	0.148
Atmosphere	0.890	0.130
Umrah satisfaction	0.867	0.180

4.3 Multiple Regression Analysis

The multiple regression analysis examined the relationship between airline, hotel, atmosphere, and transportation with Umrah satisfaction. The results provide essential insights into the factors that significantly contribute to the overall experience of Umrah pilgrims.

Table 3 shows the model summary. The value of R is 0.464, representing the strength and direction of the relationship between the independent variables, airline, hotel, transportation and atmosphere and the dependent variable, Umrah satisfaction. It suggests a moderate positive correlation since it's between 0 and 1. R Square is the Coefficient of Determination. The value 0.216 means that 21.6% of the variance in Umrah satisfaction can be explained by independent variables: airline, hotel, atmosphere, and transportation. The remaining 78.4% is explained by other factors not included in this model. The adjusted R Square, 0.201, is slightly lower than the R Square, which means that adding more dependent variables did not significantly improve the model. Next, the standard error of 0.54966 suggests a fair amount of unexplained variation exists.

Table 3 Model summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	0.464 ^a	0.216	0.201	0.54966

The ANOVA findings in Table 4 reveal that the regression model is statistically significant, showing an F-value of 14.699. This indicates that at least one of the independent variables, such as airline, hotel, atmosphere, or transportation, significantly affects Umrah satisfaction. The Sum of Squares for Regression, which is 17.764, reflects the variation accounted for by the independent variables. At the same time, the Sum of Squares for Residual, at 64.654, indicates the unexplained variation. The Mean Square for Regression, calculated as 4.441, is derived by dividing the sum of squares by the degrees of freedom ($df = 4$). Meanwhile, the Mean Square for Residual, which is 0.302, is found by dividing the residual sum of squares by its degrees of freedom ($df = 214$).

The F-statistic of 14.699 represents the Mean Square for Regression ratio to the Mean Square for Residual, demonstrating how well the model fits the data. The very low p-value of 0.000 reinforces the idea that independent variables significantly influence variations in Umrah satisfaction. These results underscore the importance of airline services, hotel standards, the overall atmosphere, and transportation options in shaping the satisfaction levels of Umrah pilgrims.

Table 4 ANOVA

	Sum of square	df	Mean square	F	Sig
Regression	17.764	4	4.441	14.699	0.000 ^b
Residual	64.654	214	0.302		
Total	82.418	218			

Table 5 Coefficient

Unstandardised Coefficients	Standardise Coefficients				
Model	β	Std Error	Beta	t-value	Sig.
Constant	2.226	0.404		5.507	0.000
Airline	-0.166	0.114	-0.116	-1.449	0.149
Transportation	0.007	0.075	0.008	0.095	0.925
Hotel	0.225	0.095	0.186	2.385	0.018
Facilities / Atmosphere	0.416	0.073	0.407	5.668	0.000

The findings in Table 5 indicate that facilities/atmosphere and hotel are significant predictors of Umrah satisfaction, while airline and transportation satisfaction do not have a meaningful impact. The strongest predictor of Umrah satisfaction was facilities/atmosphere, with a statistically significant positive relationship ($B = 0.416, p = 0.000$). Similarly, hotel satisfaction was also a significant predictor ($B = 0.225, p = 0.018$). Thus, the hypothesis of hotel and atmosphere is accepted. Therefore, the H2 and H4 is accepted

On the other hand, airline satisfaction ($B = -0.166, p = 0.149$) and transportation satisfaction ($B = 0.007, p = 0.925$) were statistically insignificant, indicating that these factors do not directly influence Umrah satisfaction. Thus, we reject H1 and H3. Model.

5. Discussion

This study examined the relationship between airlines, hotels, atmosphere, and transportation related to Umrah satisfaction. The facilities/atmosphere had a statistically significant positive connection ($B = 0.416, p = 0.000$), making it the model's most important predictor. This finding underscores environmental factors' critical role in enhancing customer satisfaction in various service contexts, including hospitality and retail. Recent studies highlight that a well-designed atmosphere attracts customers and significantly influences their satisfaction.

For instance, Kusuma et al. (2023) illustrated that the atmosphere of a store, along with product and service quality, positively impacts customer satisfaction, indicating that environmental elements drive consumer experiences and perceptions. Similarly, Eliza (2023) confirmed that complete facilities and a comfortable environment are essential in meeting customer expectations and improving overall satisfaction. In a related domain, Rafika and Yulhendri (2020) noted that the ambience provided by a store directly affects customer satisfaction and subsequently loyalty. Thus, this evidence collectively supports the assertion that facilities and atmosphere are paramount predictors of satisfaction, reinforcing the significant relationship demonstrated by the findings.

Besides, the findings confirmed the relationship between hotel environment service and Umrah satisfaction is positive and significant ($B=0.025, p=0.018$). This finding supports the understanding that the physical and service environments of hospitality settings significantly influence pilgrims' overall experiences. Othman and Harun (2021) highlight that the quality of service and the physical attributes of accommodation are crucial determinants of customer satisfaction in Umrah travel services. Their research underscores the importance of perceived service quality, which encompasses the cleanliness, comfort, and religious compliance of the hotel facilities provided to pilgrims. However, it should be noted that the findings of the referenced study focus on the broader aspects of customer satisfaction rather than explicitly quantifying the impact of physical and service environments on Umrah satisfaction.

Hassan et al. (2022) also explored motivations as predictors of religious tourism satisfaction, indicating that the availability and quality of accommodations impact visitor satisfaction in spiritual tourism. This aligns with the broader tourism literature emphasising the importance of hotel environments, characterised by amenities and ambience, in enhancing guest experiences and satisfaction levels (Hassan et al., 2022). Therefore, the positive

relationship identified in this study highlights the need for Umrah service providers to prioritise the quality of their hospitality offerings to ensure high satisfaction levels among pilgrims.

However, this study found that airline and transportation were statistically insignificant to Umrah satisfaction, indicating no appreciable effect on overall Umrah pleasure. This finding suggests that the quality of airlines and transportation services provided to pilgrims does not significantly influence their overall satisfaction during the Umrah experience. This outcome may reflect that, although transportation is an essential element of the pilgrimage, other factors may play a more critical role in shaping pilgrims' emotional and spiritual fulfilment. Research by Awan and Memon (2020) supports this perspective, suggesting that the emphasis on transportation quality may be overshadowed by the significance of religious and spiritual experiences encountered onsite during the pilgrimage.

Additionally, Khan et al. (2021) highlight that the satisfaction of Umrah pilgrims is heavily influenced by factors such as accommodation quality, spiritual engagement, and the overall atmosphere at religious sites, rather than the transportation environment itself. Furthermore, Zahi and Zhao (2021) examined the role of convenience and comfort in transportation services within religious travel, indicating that while adequate transportation is essential, its quality may not be prioritised by pilgrims compared to their spiritual objectives and the significance of the pilgrimage experience. As a result, this indicates that Umrah organisers and service providers should focus on enhancing the on-ground experience for pilgrims, ensuring that religious significance, comfort at accommodations, and spiritual fulfilment are the primary targets for strengthening overall satisfaction, rather than concentrating solely on transportation services.

6. Limitations of the Study and Future Research

Interpreting the study's findings requires considering numerous limitations. Primarily, convenience sampling was used to select readily available respondents. The results may be limited by bias and a lack of Umrah pilgrim diversity. The study has 219 responses, an acceptable sample size, but future research could increase it to improve reliability and generalisability. Third, the study only included Malaysian pilgrims. Thus, its findings may not apply to pilgrims from other nations or regions with different cultural settings or service expectations. In addition, the study's cross-sectional approach makes it difficult to observe changes over time and understand how Umrah service satisfaction may change with the travel environment.

The study only considered environmental service quality, such as airlines, transportation, hotels, and atmosphere, not personal service quality or the religious aspects of Umrah, which could also affect pilgrims' satisfaction. These research suggestions aim to improve Umrah pilgrimage knowledge and service quality. For generalisability and greater representation of pilgrims' experiences, future studies should include a larger and more diverse sample from a broader population. Random sampling instead of convenience sampling would reduce bias and boost sample representativeness, increasing the study's external validity. Third, longitudinal studies could observe customer happiness over time and evaluate the long-term effects of service quality changes on Umrah.

Future research should also examine other areas of service quality, such as worker relationships and religious fulfilment during Umrah, to further understand satisfaction. The effects of age and culture on Umrah pilgrims' pleasure could also be studied. Future research may study how mobile apps, online booking, and virtual services affect pilgrims' experiences and happiness as the tourism sector increasingly uses digital tools. Finally, examining individual service providers like flights, hotels, and transportation firms would help determine how they affect consumer happiness and how they might better serve pilgrims.

7. Conclusion

The findings suggest that transportation and airline satisfaction do not significantly impact overall Umrah satisfaction, while hotel and atmosphere have a significant relationship with Umrah satisfaction. This indicates that while these factors contribute to the overall travel experience, they are not the primary determinants of pilgrims' satisfaction. Instead, other aspects, such as hotel services, the religious atmosphere, and the overall pilgrimage experience, may play a more substantial role in shaping satisfaction levels.

Given these results, industry stakeholders should focus more on the key factors influencing satisfaction. While maintaining service quality in transportation and airline services remains important, allocating resources to improve accommodations, pilgrimage facilities, and religious site experiences may yield greater benefits. Tourism boards, service providers, and policymakers should emphasise enhancing hospitality and ensuring a seamless and comfortable pilgrimage journey beyond just the transportation aspect.

Additionally, future research should explore whether transportation and airline services indirectly affect satisfaction through variables such as convenience, stress reduction, or time efficiency. Understanding these relationships could provide a more comprehensive perspective on the factors shaping the Umrah experience. By prioritising improvements in areas that have the most significant impact on satisfaction, service providers and policymakers can better cater to the needs and expectations of Umrah pilgrims.

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Conflict of Interest

Authors declare that there is no conflict of interest regarding the publication of the paper.

Author Contribution

*The authors confirm contribution to the paper as follows: **study conception and design:** Khadijah Abdul Talib, Amran Harun; **data collection:** Khadijah Abdul Talib; **analysis and interpretation of results:** Khadijah Abdul Talib, Noor Aslinda Abu Seman; **draft manuscript preparation:** Khadijah Abdul Talib. Noor Aslinda Abu Seman reviewed the results and approved the final version of the manuscript.*

References

- Ahmad, S. & Papastathopoulos, A. . (2019). Measuring Service Quality and Customer Satisfaction of the Small and Medium Sized Hotels (SMSHs) Industry: Lessons from United Arab Emirates (UAE).
<http://dx.doi.org/10.29322/IJSRP.11.08.2021.p11644>
- Alharbi, A., Alsaikhan, R., Alghofaili, R., Alkhalifa, R., Alkathiri, F., Aldowish, N. & Alturise, F. (2022). Identifying Key Challenges and Issues in Crowd Management During Hajj Event in Saudi Arabia. *The Journal of Modern Project Management*.
- Ardani, M. &. (2022). A Tale of Umrah Pilgrims Fraud in Indonesia: a Narrative Review Indicating and Anticipating "Fake Bureau. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*. 5(1):94-107
<https://doi.org/10.31538/ijse.v5i1.1702>
- Ashdaq, M., Maupa, H., Amar, M. Y. and Nursyamsi, I. (2015). Analysis of service quality on pilgrims' satisfaction and image of Hajj and Umrah travel agents in South Sulawesi Province, Indonesia. *International Journal of Research In Social Sciences*, 5(6).
- Adwimurti, Y., Selfiani, S., & Prihanto, H. (2023). The effect of service quality and price on the purchase decision of an Umrah tour package. *International Journal of Application on Economics and Business*, 1(4), 2337-2353. <https://doi.org/10.24912/ijaeb.v1i4.2337-2353>
- Azhar, M., Othman, I. B. L., & Ahmad, N. (2018). Investigating customer satisfaction of airline passengers in the aviation sector of Pakistan. *Pakistan Journal of Humanities and Social Sciences*, 6(4).
<https://doi.org/10.52131/pjhss.2018.0604.0064>
- Bashir H, Beigh RA, Rumysa, Bashir S, Bazaz AY. (2017). Experience of Umrah Trip to Saudi Arabia from Kashmir India: Model Study on Management and Facilities to Pilgrims by Custodian of Holy Mosques Kingdom of Saudi Arabia.
- Berita Harian Online . (2023, March 2). Saudi Arabia recorded the arrival of more than 300,000 Malaysian Umrah pilgrims in a period of 8 months. <https://www.bharian.com.my/dunia/asia/2025/05/1394336>
- Bhat, M. A. (2012). Tourism service quality: a dimension-specific assessment of servqual*. *Global Business Review*, 13(2), 327-337. <https://doi.org/10.1177/097215091201300210>
- Bernamea. (2023, March 2). nst online. Retrieved from
<https://www.nst.com.my/news/nation/2023/03/885188/saudi-arabia-records-arrival-over-300000-malaysian-umrah-pilgrims-just-8>
- Bestoon Othmana, A. H. (2019). The impact of Umrah service quality on customer satisfaction towards Umrah travel agents in Malaysia. *Management Science Letters*.
<https://doi.org/10.5267/j.msl.2019.6.014>
- Dedeoğlu, B. B. and Demirer, H. (2015). Differences in service quality perceptions of stakeholders in the hotel industry. *International Journal of Contemporary Hospitality Management*, 27(1), 130-146.
<https://doi.org/10.1108/ijchm-08-2013-0350>
- Eid, R. & El-Gohary, H. (2015). Muslim Tourist Perceived Value in the Hospitality and Tourism Industry. *Journal of Travel Research*, 774-787.
<https://doi.org/10.1177/0047287514532367>

- Farooq, H. (2022). The Spiritual and Practical Benefits of Performing Umrah. Al Habib. <https://doi.org/10.1322/ssj.0167712>.
- Harun, Amran; Muslim, Aini Khalida; Dzail, Dzunnur; and Othman, Bestoon Abdulmaged. (2020). Star Rating Factor for Umrah Service : The perspective of Umrah operators and Consumer. *International Journal of Religious Tourism and Pilgrimage*. <https://doi.org/10.21427/rq15-p355>
- Hassan, T. H., Abdou, A. H., Taha, S., Abdelmoaty, M. A., & Salem, A. E. (2022). Religious tourists' satisfaction with services and their impacts on spirituality in the post-COVID-19 era. *Sustainability*, 14(20), 13335. <https://doi.org/10.3390/su142013335>
- Hussain, A., Jamaluddin, M. A., Hashim, K. S. H. (2021). Study on Muslim Friendly Hotel in Malaysia: *Journal of Halal Industry & Services*. <https://doi.org/10.36877/jhis.a0000240>
- Kim, B., & Kim, S. (2019). The effect of religious tourism experiences on personal values. *Journal of Religious Tourism and Pilgrimage*, 7(2), 85–93. <https://doi.org/10.21427/5gvy-hh90>
- Kotler. (1973). Atmospherics as a Marketing Tool. *Journal of Retailing*, 48-65.
- Li-jun, Z., Hu, R., & Zhang, F. . (2019). Research on robust optimization in airlines' hybrid channel coordination considering service level . *Proceeding of the 2019 International Conference on Modeling Simulation and Big Data Analysis* .
- Mahari, Hakim. (2025). Travel agency owners arrested in connection with alleged umrah scam. *New Straits Times*. <https://www.nst.com.my/news/crime-courts/2025/01/1161494/travel-agency-owners-arrested-connection-alleged-umrah-scam>
- Matheson, C.M., Rimmer, R., & Tinsley, R. (2020). Spiritual attitudes and visitor motivations at the Beltane Fire Festival, Edinburgh. *Tourism Management*, 16-33.
- Muhamad Amar Mahmad, Noor Hanani Ismail . (2021). The impact of the Covid 19 on the management of the Umrah package operation in Malaysia . The impact of the Covid 19 on the management of the Umrah package operation in Malaysia , 43-50.
- Mursid, A. and Wu, C. H. (2021). Customer participation, value co-creation and customer loyalty: evidence from umrah travel agencies in Indonesia. *Journal of Islamic Marketing*, 13(3), 628-648. <https://doi.org/10.1108/jima-06-2020-0190>
- Martelo, R. J., Acevedo, D., & Fong, W. (2018). Definition of strategies for tourism in Cartagena through brainstorming and problem trees. *Contemporary Engineering Sciences*, 11(22), 1051-1058. <https://doi.org/10.12988/ces.2018.8388>
- Mokhtar, N. A. (2022, July 11). *Berita Harian Online*. Retrieved from bhnews@bh.com.my
- Norman, Steve. (2024, October 17). The SERVQUAL Model: Measuring Service Quality by Comparing Expectations with Perception.
- Othman, B., Harun, A., Rashid, W. N., & Ali, R. (2019). The impact of umrah service quality on customer satisfaction towards umrah travel agents in Malaysia. *Management Science Letters*, 1763-1772. <https://doi.org/10.5267/j.msl.2019.6.014>
- Othman, B. and Harun, A. (2021). The influence of service marketing mix and umrah service quality on customer satisfaction and loyalty towards umrah travel agents in Malaysia. *Technium Social Sciences Journal*, 22, 553-618. <https://doi.org/10.47577/tssj.v22i1.4330>
- Othman, B., Harun, A., Almeida, N., & Sadq, Z. M. (2020). The effects on customer satisfaction and customer loyalty by integrating marketing communication and after-sales service into the traditional marketing mix model of Umrah travel services in Malaysia. *Journal of Islamic Marketing*, 12(2), 363-388. <https://doi.org/10.1108/jima-09-2019-0198>
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). servqual: A multiple-item scale for measuring consumer perceptions of service quality.
- Park, Y.A, Gretzel, U. & Sirakaya-Turk, E. (2017). Measuring web site quality for online travel agencies. *Journal of Travel Tourism Marketing*,
- Ridha, M. and Harris, R. (2020). Service quality related to customer satisfaction with umrah worship package preparation at pt. Marco Tour and Travel Jakarta: Spearman's correlation coefficient. *Proceedings of the 3rd International Conference on Vocational Higher Education (ICVHE 2018)*. <https://doi.org/10.2991/assehr.k.200331.113>

- Rahman, W. F. (2019). Consumer Protection Of Umrah Pilgrims In Malaysia. Retrieved From Asia Proceedings of Social Science.
- Rajaratnam, S. D., Munikrishnan, U. T., Sharif, S. P., & Nair, V. (2014). . Service quality and previous experience as a moderator in determining tourists' satisfaction with rural tourism destinations in Malaysia A partial least squares approach. *Procedia-Social and Behavioural Sciences*.
- Rauch, D., Collins, M., Nale, R., & Barr, P. (2015). Measuring Service Quality in Mid-Scale Hotels. *International Journal of Contemporary Hospitality Management*.
- Saputra, Y. M. D. (2023). Service marketing, trust and company image on satisfaction and its impact on the loyalty of Umrah pilgrims in Palembang. *International Journal of Humanities Education and Social Sciences (IJHESS)*, 3(3). <https://doi.org/10.55227/ijhess.v3i3.817>
- Subhan, A., Firdaus, A., & Najib, M. (2023). The influence of islamic service quality and trust on customer satisfaction and intention in reusing the services in the implementation of umrah and special hajj pilgrimage. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 10(3), 275-289. <https://doi.org/10.20473/vol10iss20233pp275-289>
- Sikumbang, A. T., Kholil, S., Rubino, R., & Indra, F. (2022). Communication system in the organisation of the hajj worship in North Sumatra, Indonesia. *Khazanah Sosial*, 4(3), 513-520. <https://doi.org/10.15575/ks.v4i3.17337>
- Singgale, Y. A. (2024). Hotel Customer Satisfaction: A Comprehensive Analysis of Perceived Cleanliness, Location, Service, and Value. *Journal of Business and Economics Research (JBE)*, 352-369.
- Tang, Z. K. (2015). An integrated approach to evaluating the coupling coordination between tourism and the environment. *Tourism Management*, 46, 11-19. <https://doi.org/10.1016/j.tourman.2014.06.001>
- Wu, C. H. and Mursid, A. (2019). Loyalty motivations for religious tourism: indonesian muslim travellers participating in the Umrah pilgrimage to Mecca, Saudi Arabia. *Tourism Review*, 75(2), 466-478. <https://doi.org/10.1108/tr-11-2018-0155>
- Wandiga, Kilika, James R. (2017). Factor Analysis of operation strategy at Umrah & Haj bureaus . *Economic Sustainability and Social Equality in the Technological Era* , 218-227. <https://doi.org/10.1201/9781003534495-20>
- Yas, H. J. (2022). „Impact of Airline Service Quality on Passenger Satisfaction and Loyalty: Moderating Influence of Price Sensitivity and Quality Seekers”. *Transformations in Business & Economic*, 120-150.
- Zairol Azhar Auzzir, Richard Peter Haigh. (2018). Impacts of Disaster to SMEs in Malaysia. 1131-1138. <https://doi.org/10.1016/j.proeng.2018.01.146>
- Zhengwei Huang, X. P. (2019). The influence of consumer perception of perceived value and purchase intention with respect to regional product based on C-A-B Model. 291-228.