

Halal Tourism Service Quality and Muslim Traveller Loyalty in Southeast Asian Island Destinations

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Abstract.

This study develops and validates a halal tourism service quality scale using data from 520 Muslim travellers visiting island destinations in Malaysia, Thailand and Vietnam. Halal tourism has grown into a substantial segment of Southeast Asian travel, yet destinations differ widely in the extent to which they accommodate the religious requirements of Muslim visitors, and existing service quality instruments do not capture the attributes that matter most to this market. Following established scale development procedures, an initial pool of 38 items was generated from the literature, interviews with 22 travellers and expert review, and refined through a pilot study. The main survey was administered at Langkawi, Phuket and Phu Quoc, and the sample was split for exploratory and confirmatory factor analysis. The final 24-item scale comprises six dimensions: prayer facilities, food assurance, staff awareness, accommodation privacy, destination environment and information accessibility. All dimensions demonstrated satisfactory reliability and convergent and discriminant validity, and the measurement model was invariant across the three destinations. Structural analysis showed that prayer facilities, food assurance and staff awareness are the dimensions most strongly associated with loyalty, measured as intention to revisit and to recommend, with satisfaction partially mediating these relationships. Accommodation privacy and information accessibility had smaller effects, and destination environment was not significant once other dimensions were controlled. The scale offers destination managers a diagnostic tool for prioritising investment in halal-friendly services, and the findings suggest that the most influential attributes are those that affect daily religious practice during the visit.

Keywords: halal tourism, service quality, scale development, Muslim travellers, destination loyalty

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1. Introduction

Muslim travellers constitute one of the fastest-growing segments of international tourism, and Southeast Asia is both a major source and a major destination for this market. Malaysia has positioned itself as a leading halal-friendly destination, Thailand has invested in Muslim-friendly services in its southern provinces and resort islands, and Vietnam has begun to court Muslim visitors as part of a diversification strategy. Island destinations such as Langkawi, Phuket and Phu Quoc attract large numbers of Muslim visitors from within the region and from the Middle East, yet they differ considerably in the availability of prayer facilities, halal-certified food, appropriately trained staff and other services that observant travellers require.

Service quality is well established as a determinant of satisfaction and loyalty in tourism, and generic instruments have been widely applied to hotels, destinations and attractions. These instruments, however, were developed for general markets and do not measure the attributes that distinguish a halal-friendly destination from a conventional one. A Muslim

traveller's evaluation of a beach resort depends not only on the cleanliness of rooms and the courtesy of staff but on whether prayer times can be observed, whether food can be trusted, whether staff understand religious requirements and whether the environment is compatible with modest conduct. Without a validated instrument that captures these attributes, destination managers cannot diagnose where they fall short or which improvements would most strengthen loyalty.

This study develops and validates a halal tourism service quality scale and examines the relationship between its dimensions and traveller loyalty. It uses data from 520 Muslim travellers surveyed at three island destinations in Malaysia, Thailand and Vietnam, chosen to represent a range of halal-friendliness from a mature Muslim-majority destination to an emerging destination with limited provision. The study has three objectives: to identify the dimensions of halal tourism service quality as perceived by travellers, to validate a multi-item scale with satisfactory psychometric properties across the three destinations, and to determine which dimensions are most strongly associated with loyalty.

The contribution is twofold. Theoretically, the study specifies the structure of halal tourism service quality and demonstrates that it is measurable and invariant across destinations with different institutional contexts. Practically, it provides a diagnostic tool and evidence on priorities that destination managers and tourism authorities can use to allocate investment. The paper reviews the literature on service quality, halal tourism and loyalty, describes the scale development procedure and survey, presents the results of factor analysis, validity testing and structural modelling, discusses the findings and concludes with limitations.

2. Literature Review

2.1 Service quality in tourism

The dominant approach to service quality measurement derives from the SERVQUAL model of Parasuraman et al. (1988), which conceptualises quality as the gap between expectations and perceptions along the dimensions of tangibles, reliability, responsiveness, assurance and empathy. Subsequent research has questioned the gap formulation and the generality of the dimensions, and performance-only measures have been found to perform at least as well. In tourism, destination-specific instruments have been developed that add dimensions such as attractions, accessibility and environment, reflecting the composite nature of the destination experience. Service quality is consistently found to influence satisfaction and, through satisfaction, behavioural intentions including revisit and recommendation, which are the most common operationalisations of loyalty in tourism research (Oliver, 1999). The relationship between quality and loyalty has been found to be partially mediated by satisfaction in most destination studies.

2.2 Halal tourism and Muslim traveller needs

Halal tourism refers to tourism products and services that comply with Islamic teachings, and the term is used alongside Muslim-friendly tourism, which denotes a lesser degree of accommodation in destinations that are not Muslim-majority (Battour & Ismail, 2016). The needs of Muslim travellers have been documented in several studies. Battour et al. (2011) identified prayer facilities, halal food, Islamic entertainment, gender-segregated facilities and Islamic morality as attributes valued by Muslim tourists in Malaysia, and Eid and El-Gohary (2015) developed a Muslim tourist perceived value scale that includes physical, non-physical and religious attributes. Han et al. (2019) examined halal-friendly destination attributes in non-Muslim-majority settings and found that halal food, prayer facilities and social

environment influenced destination image and loyalty. Industry reports indicate that the Muslim travel market in Southeast Asia has continued to grow and that destinations are increasingly rated on their halal-friendliness (Mastercard & CrescentRating, 2023). Despite this work, no scale has been developed specifically to measure service quality in halal tourism using rigorous scale development procedures and validated across multiple destinations, and existing measures either address destination attributes broadly or focus on value rather than quality.

2.3 Scale development and hypotheses

Scale development in marketing and tourism follows the paradigm established by Churchill (1979), involving domain specification, item generation, purification through exploratory analysis, and assessment of reliability and validity, with subsequent refinements emphasising confirmatory analysis and measurement invariance (DeVellis, 2017). Convergent and discriminant validity are typically assessed using the criteria of Fornell and Larcker (1981), and common method bias is addressed through procedural and statistical remedies (Podsakoff et al., 2003). Building on the literature reviewed, the study hypothesises that each dimension of halal tourism service quality is positively associated with satisfaction (H1) and with loyalty (H2), that satisfaction is positively associated with loyalty (H3) and partially mediates the effect of service quality dimensions on loyalty (H4), and that the dimensions most directly connected to daily religious practice, namely prayer facilities, food assurance and staff awareness, have the strongest effects on loyalty (H5).

3. Methodology

3.1 Scale development procedure

The domain of halal tourism service quality was defined as the traveller's evaluation of the extent to which a destination's services enable observance of religious requirements and provide a comfortable experience consistent with Islamic values. An initial pool of 38 items was generated from the literature on Muslim traveller needs and from semi-structured interviews with 22 Muslim travellers from Malaysia, Indonesia, Brunei and the Gulf states who had visited island destinations in the region. Items were reviewed by a panel of five experts in Islamic tourism and services marketing for content validity, resulting in the removal of four items and rewording of seven. The 34-item pilot version was administered to 96 travellers at Langkawi, and item analysis led to the removal of six items with low item-total correlations or high cross-loadings, yielding 28 items for the main survey.

The interviews that informed item generation revealed several concerns that generic instruments overlook. Travellers described the effort of locating a prayer space at attractions and beaches, uncertainty about whether food labelled halal was genuinely certified, discomfort when staff were unaware of the reasons for requests such as separate swimming times or alcohol-free minibars, and the difficulty of finding reliable information before and during the trip. Female travellers in particular emphasised privacy in accommodation and pool facilities. These themes shaped the six content areas around which items were written, and several items used the travellers' own phrasing to enhance face validity. Items were written to describe performance, for example that prayer facilities were available at the attractions visited, rather than expectations, in keeping with evidence that performance-only measures are more parsimonious and at least as predictive.

3.2 Sample and data collection

The main survey was conducted between November 2025 and March 2026 at Langkawi in Malaysia, Phuket in Thailand and Phu Quoc in Vietnam. Respondents were Muslim travellers aged 18 or over who had stayed at least two nights, approached at departure areas, hotels and attractions using a systematic intercept procedure. Questionnaires were available in English, Malay, Bahasa Indonesia and Arabic. Of 640 questionnaires distributed, 520 usable responses were obtained, a response rate of 81.3%. Table 1 presents the sample profile. The sample was randomly split into two halves of 260 for exploratory and confirmatory analysis respectively. Ethical approval was obtained from Universiti Sains Malaysia.

Table 1: Profile of respondents (N = 520)

Variable	Category	n	%
Destination	Langkawi, Malaysia	182	35.0
	Phuket, Thailand	176	33.8
	Phu Quoc, Vietnam	162	31.2
Gender	Female	271	52.1
	Male	249	47.9
Age group	18–34	236	45.4
	35–49	188	36.2
	50 and over	96	18.4
Country of residence	Malaysia	158	30.4
	Indonesia	131	25.2
	Middle East	112	21.5
	Other	119	22.9

Source: Authors' survey data (2026)

3.3 Measures and analysis

Service quality items were rated on a seven-point scale from strongly disagree to strongly agree, using a performance-only format. Satisfaction was measured with three items adapted from Oliver (1999), and loyalty with four items on intention to revisit and to recommend. Exploratory factor analysis with principal axis factoring and oblique rotation was conducted on the first subsample. Confirmatory factor analysis on the second subsample assessed the measurement model, followed by tests of configural, metric and scalar invariance across destinations. Reliability was assessed with Cronbach's alpha and composite reliability, and convergent and discriminant validity with average variance extracted and the Fornell and Larcker (1981) criterion. Structural equation modelling on the full sample tested the hypotheses, with bootstrapped indirect effects for mediation, following the guidance of Hair et al. (2019). Harman's single-factor test indicated that the first factor explained 33.2% of variance, and a marker variable approach suggested that common method variance was not a serious concern (Podsakoff et al., 2003).

4. Results

4.1 Scale structure, reliability and validity

Exploratory factor analysis on the first subsample produced a six-factor solution explaining 68.4% of variance, with four items removed for cross-loading, leaving 24 items. The factors were labelled prayer facilities, food assurance, staff awareness, accommodation

privacy, destination environment and information accessibility. Confirmatory factor analysis on the second subsample supported the six-factor structure with acceptable fit ($\chi^2 / df = 1.87$, CFI = 0.94, TLI = 0.93, RMSEA = 0.052, SRMR = 0.046). Table 2 reports the dimensions, number of items, reliability and validity statistics. All composite reliabilities exceeded 0.80, all average variance extracted values exceeded 0.50 and the square root of each exceeded the dimension's correlations with other dimensions, satisfying convergent and discriminant validity criteria. Invariance testing supported configural, metric and partial scalar invariance across the three destinations, indicating that the scale measures the same constructs in the same way in each setting.

Table 2: Dimensions of the halal tourism service quality scale with reliability and validity (n = 260, confirmatory subsample)

Dimension	Items	Mean	α	CR	AVE
Prayer facilities	5	4.82	0.91	0.92	0.70
Food assurance	5	5.14	0.89	0.90	0.65
Staff awareness	4	4.61	0.87	0.88	0.64
Accommodation privacy	4	4.93	0.84	0.85	0.59
Destination environment	3	4.47	0.81	0.82	0.61
Information accessibility	3	4.38	0.83	0.84	0.63
Satisfaction	3	5.21	0.90	0.91	0.77
Loyalty	4	5.08	0.92	0.93	0.76

Source: Authors' survey data (2026)

Mean scores differed across destinations in the expected direction. Langkawi scored highest on all six dimensions, Phuket was intermediate, and Phu Quoc scored lowest, with the largest gaps on prayer facilities and staff awareness. Food assurance was the highest-rated dimension at all three destinations, reflecting the availability of halal-certified or Muslim-owned restaurants even where other provision was limited, while information accessibility was the lowest-rated at Phuket and Phu Quoc.

4.2 Structural model and hypothesis testing

Table 3 presents the structural model results. The model fit was acceptable ($\chi^2 / df = 2.04$, CFI = 0.93, RMSEA = 0.045). All six dimensions were positively associated with satisfaction, supporting H1, with prayer facilities ($\beta = 0.27$), food assurance ($\beta = 0.24$) and staff awareness ($\beta = 0.21$) the strongest predictors. For loyalty, direct effects were significant for prayer facilities ($\beta = 0.19$, $p < 0.001$), food assurance ($\beta = 0.17$, $p < 0.001$), staff awareness ($\beta = 0.15$, $p = 0.002$), accommodation privacy ($\beta = 0.09$, $p = 0.031$) and information accessibility ($\beta = 0.08$, $p = 0.042$), but not for destination environment ($\beta = 0.04$, $p = 0.318$), so H2 was largely supported. Satisfaction was strongly associated with loyalty ($\beta = 0.38$, $p < 0.001$), supporting H3. Bootstrapped indirect effects were significant for all six dimensions, and since direct effects remained significant for five of them, partial mediation was supported for those five and full mediation for destination environment, supporting H4. The total effects of prayer facilities, food assurance and staff awareness on loyalty were the three largest, supporting H5. The model explained 61.2% of variance in satisfaction and 66.8% in loyalty.

Table 3: Structural model estimates: effects of service quality dimensions on satisfaction and loyalty (N = 520)

Dimension	Effect on satisfaction β	Direct effect on loyalty β	Indirect effect via satisfaction	Total effect on loyalty	Hypothesis support
Prayer facilities	0.27***	0.19***	0.10***	0.29	Supported
Food assurance	0.24***	0.17***	0.09***	0.26	Supported

Staff awareness	0.21***	0.15**	0.08***	0.23	Supported
Accommodation privacy	0.14**	0.09*	0.05**	0.14	Supported
Information accessibility	0.12**	0.08*	0.05**	0.13	Supported
Destination environment	0.11*	0.04 (ns)	0.04*	0.08	Partially supported
Satisfaction → loyalty		0.38***		0.38	Supported

Source: Authors' survey data (2026). Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, ns = not significant

4.3 Destination comparison

A multi-group analysis compared structural paths across the three destinations. The rank order of effects was the same in all three, with prayer facilities, food assurance and staff awareness leading, but the effect of staff awareness was significantly larger at Phuket and Phu Quoc than at Langkawi, and the effect of information accessibility was larger at Phu Quoc. These differences suggest that dimensions that are taken for granted in a Muslim-majority destination become salient where provision is uncertain, since travellers at non-Muslim-majority destinations depend more heavily on staff knowledge and on accessible information to locate the services they need.

5. Discussion

The study set out to develop a scale for halal tourism service quality and to identify which of its dimensions are most strongly associated with loyalty. The six-dimension structure that emerged extends previous work on Muslim traveller attributes (Battour et al., 2011; Han et al., 2019) by specifying dimensions at the level of service quality rather than destination image or value, and by demonstrating measurement invariance across three destinations with markedly different institutional contexts. The scale therefore meets the standards of rigorous scale development (Churchill, 1979; DeVellis, 2017) and can be used for comparison across destinations.

The finding that prayer facilities, food assurance and staff awareness are the dimensions most strongly associated with loyalty has a clear interpretation. These are the attributes that affect religious practice on a daily basis during the visit: prayer must be performed several times a day, every meal raises the question of food assurance, and staff awareness determines whether the traveller can obtain what is needed without difficulty or embarrassment. Accommodation privacy and information accessibility matter but are encountered less frequently or can be resolved in advance, and destination environment, once other dimensions are controlled, appears to function through satisfaction rather than directly. This pattern is consistent with the argument of Battour and Ismail (2016) that the core of halal tourism lies in enabling observance rather than in the wider ambience of the destination, and it refines the findings of Eid and El-Gohary (2015) by ranking attributes according to their association with loyalty.

The mediation results confirm the general pattern in tourism research that service quality influences loyalty both directly and through satisfaction (Oliver, 1999), and they indicate that for halal tourism the direct effects are substantial for the practice-related dimensions. This implies that Muslim travellers form loyalty judgements partly on the basis of whether the destination met religious requirements, independent of overall satisfaction with the trip. A destination that delivers a satisfying holiday but makes prayer or halal food difficult may

nonetheless lose repeat visits and recommendations within Muslim networks, where information about halal-friendliness circulates rapidly.

For destination managers, the results establish priorities. Investment in prayer facilities at attractions, transport hubs and beaches, credible food assurance through certification or clear labelling, and staff training in Muslim traveller needs are likely to have the largest effect on loyalty. The multi-group findings indicate that at non-Muslim-majority destinations such as Phuket and Phu Quoc, staff awareness and information accessibility deserve particular attention because they compensate for uncertain provision. Industry ratings of halal-friendliness (Mastercard & CrescentRating, 2023) already reward such measures, and the present scale offers a complementary diagnostic based on traveller evaluations rather than on supply-side audits. Generic service quality models (Parasuraman et al., 1988) remain relevant for the conventional aspects of the visit, but they should be supplemented with the halal-specific dimensions identified here when the Muslim market is a strategic priority.

6. Conclusion

This study developed and validated a 24-item, six-dimension halal tourism service quality scale using data from 520 Muslim travellers at island destinations in Malaysia, Thailand and Vietnam. The scale demonstrated satisfactory reliability, convergent and discriminant validity and measurement invariance across destinations. Prayer facilities, food assurance and staff awareness were the dimensions most strongly associated with loyalty, both directly and through satisfaction, while destination environment influenced loyalty only through satisfaction. The findings indicate that the attributes affecting daily religious practice during the visit are the most consequential for loyalty and provide destination managers with a validated instrument for diagnosing and prioritising halal-friendly services.

The study has limitations. The sample was drawn from three island destinations and may not represent urban or cultural destinations, where different attributes may matter. The cross-sectional design measures intentions rather than actual revisit behaviour, and the intercept procedure may over-represent travellers who had positive experiences. Future research should apply the scale in other destination types and regions, test its predictive validity against actual behaviour through panel designs, and examine whether the relative importance of dimensions varies by traveller origin, religiosity and travel purpose.

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