

Islamic Attributes of Destination: Construct Development and Measurement Validation, and Their Impact on Tourist Satisfaction

MOHAMED BATTOUR^{1*}, MOUSTAFA BATTOR² and MUHAMMAD AWAIS BHATTI³

¹Faculty of Commerce, Tanta University, Tanta, Egypt

²Middlesex University, London, UK and Faculty of Commerce, Tanta University, Egypt

³University Utara Malaysia, college of business, Sintok Kedah, Malaysia

ABSTRACT

The objectives of the paper are to first develop a measurement scale for Islamic attributes of destination and then to investigate the influence of Islamic attributes on overall tourist satisfaction. This study followed the sequence of steps that should be performed in developing measures of constructs. The measurement was tested and found to be both reliable and valid. The study found positive relationship between Islamic attributes of destination and overall tourist satisfaction. Important marketing implications are also presented. Copyright © 2013 John Wiley & Sons, Ltd.

Received 20 November 2011; Revised 04 February 2013; Accepted 09 February 2013

KEY WORDS Islamic attributes; tourist satisfaction; destination marketing; construct development

INTRODUCTION

The tourism industry, just like any other industry, is always on the lookout for ways to expand. One of these is to incorporate new market segments. Examples of how this has been achieved in the last decade include the incorporation of special needs groups, such as elderly, disabled and gay tourists. Another group that can be included in this category of 'special needs' tourists is the 'religious tourist' group (Weidenfeld, 2006). This is because some religions teach their followers codes of behaviour, which may encourage or discourage them from being customers of the tourism industry. For example, some people, because of their religious beliefs, find public alcohol consumption to be highly offensive. Therefore, tourism industry operators should be aware of this fact and know how to overcome it to attract this type of tourist. In other words, tourism industry operators need to know the religious needs of tourists and also be able to cater to these needs to ensure the expansion of the industry.

Since the Muslim population constitutes an international market of 1.82 billion possible customers (Muslim population worldwide, 2009) and religion plays an important part in their decision-making process with regard to travel destinations (Delener, 1990; Essoo and Dibb, 2004), it is important to understand Islamic attributes of destination (IADs). In addition, the absence of Islamic attributes at the destination may be a source of worry to these potential travellers and to those with whom they interact (Syed, 2001).

The availability of Islamic attributes is considered very important when a Muslim decides to travel abroad (WTM, 2007). The Muslim tourist may not select a particular destination if these attributes are absent (Battour *et al.*, 2011). Islamic

attributes represent the availability of Islamic norms and practices, which are relevant to tourism at the destination.

In recent years, there seems to have been a growing interest in new concepts, such as 'Halal' tourism', 'Halal hospitality', and 'Halal friendly travel'. This study may contribute to efforts to further understand the real meaning of such terms. Moreover, there is limited empirical research addressed to IADs; only qualitative studies have been conducted in this research area (Battour *et al.*, 2011). To fill this gap, the first objective of the study is to develop a measuring scale for IADs. Furthermore, no empirical research has been done to test the relationship between IADs and tourist satisfaction. To fill this gap, the second objective is to investigate the impact of IADs on overall tourist satisfaction.

LITERATURE REVIEW

Religion and tourism

The link between religion and consumer behaviour has been recognized both theoretically and empirically. Previous studies have shown the impact of religion on behaviour and purchasing decisions (Hirschman, 1981; Delener, 1990; Weaver and Agle, 2002; Fam *et al.*, 2004). A range of studies have investigated religion's impact on tourist habits, attitudes, people's values and shopping behaviour. For example, Essoo and Dibb (2004) found that religion influences shopping behaviour among Hindus, Muslims and Catholics. Weidenfeld and Ron (2008) found that religion also influences choice of destination, tourist product favourites, and the selection of religious opportunities and facilities offered. Meng *et al.* (2008) found that tourists select destinations that they will best fulfil their internal desires or preferred destination attributes.

Although destination attributes have been addressed in destination marketing literature, this area of tourism has not

*Correspondence to: Mohamed Battour, Faculty of Commerce, Tanta University, Said Street 31515, Tanta, Egypt.
E-mail: mohamedbattour@gmail.com

been adequately addressed in the context of Islam. When it comes to the relationship between tourism and Islam, the shortage of literature is more noticeable, especially regarding Islamic attributes and their impact on tourist needs (Battour *et al.*, 2011). Research that explores the relationships between religion, behaviour and tourist destination choice remains greatly limited (Din, 1989; Rinschede, 1992; Fleischer, 2000; Howe, 2001; Poria *et al.*, 2003; Weidenfeld, 2006; Weidenfeld and Ron, 2008).

Islam and destination attributes

If the destination marketers understand and are aware of the preferred destination attributes of Muslim tourists, they may be able to launch successful marketing campaigns that are developed on the basis of tourist motivation. Bogari *et al.* (2004) claim that destination attributes and issues related to Islamic culture have not been sufficiently explored by researchers. Chiang and Jogaratnam (2006) maintain that travel motivation studies frequently give more attention to the general population. Thus, instead of heterogeneous marketing by focusing on specific groups, researchers should now try and discover the desires of smaller, homogeneous ones. However, research into Muslim travel motivation has not received the same level of attention given to identifying secular travel motives, even though the Muslim population has emerged as a global market in recent years. This may be demonstrated by empirical studies conducted in relation to the religious needs of Muslim tourists.

Studies conducted in the area of Islamic attributes of destination include Battour *et al.* (2010) who discuss the development of Islamic-oriented tourism standards, such as alcohol- and gambling-free zones and the availability of Halal food. The study also recommends that future research is needed to explore religious attributes of destination, which may satisfy Muslim tourists. Another qualitative study conducted by Battour *et al.* (2011) identifies IADs that may attract Muslim tourists, such as the inclusion of prayer facilities, Halal food, Islamic entertainment, Islamic dress codes, general Islamic morality and the Islamic call to prayer. This study recommends that IAD measures should be developed for the purpose of empirical research.

Destination attributes and tourist satisfaction

Religion and religiosity are recognized factors influencing behaviour in various social settings (Battour *et al.*, 2011). Therefore, there has been a recommendation to study the effect of catering for the religious needs of tourists to gain a high level of satisfaction, which could in turn affect future behaviour: tourist product preferences and repeat visits (Fleischer, 2000; Weidenfeld and Ron, 2008). Tourist satisfaction is important to the success of market destinations (Yoon and Uysal, 2005; Devesa *et al.*, 2010; Zabkar *et al.*, 2010) because it is directly linked to destination choice, product/service consumption and repeat visits (Metin and Mike, 2000). Meng *et al.* (2008) report that measuring tourist satisfaction presents information related to how well a destination matches the tourists' needs, which may help destination marketers to improve the quality of products and services that interest tourists. Correia *et al.* (2007) point out

that perceptions are predicted by push and pull motivations. Qu and Ping (1999) also claim that the satisfaction level of tourists is significantly connected to their travel needs. Thus, it is important to obtain a clear picture of motivation, which responds to different levels of satisfaction.

Empirically, some studies have found relationships between destination attributes and tourist satisfaction. For example, Devesa *et al.* (2010) confirm that destination attributes influence the level of tourist satisfaction. Zabkar *et al.* (2010) have found that the pull factors of 'destination attributes' affect the perceived quality of tourist offerings, which are positively linked to satisfaction. Chi and Qu (2008) also agree that satisfaction with destination attributes has a positive impact on overall tourist satisfaction. Moreover, Meng *et al.* (2008) report that the importance of attributes, performance and motivation are a function of measuring tourists' overall satisfaction. Yoon and Uysal (2005), in their study, have explored theoretical and empirical evidence in the causal relationships between push and pull motivation and satisfaction. The study found a significant relationship between destination attributes and overall tourist satisfaction.

To sum up, the tourism literature suggests that Islamic teachings influence Muslim tourist behaviour. However, research that addresses the relationship between Islamic attributes of destination and tourist destination choice is limited. Therefore, developing Islamic attributes of destination measures was recommended. Moreover, the tourism literature supports that destination attributes have a positive impact on overall tourist satisfaction, which is linked to destination choice. Thus, it was recommended to investigate the relationship between Islamic attributes of destination and overall tourist satisfaction.

RESEARCH METHODS

This study follows the sequence of steps that should be applied in developing measures of constructs, as suggested by Churchill (1979), Malhotra (2007, p. 274) and Chen and Paulraj (2004). Four stages are suggested for developing IAD measures. Stage 1 includes determining the domain by conducting a thorough review of the literature where the variable is used and should present a detailed statement of reasons and evidence (Din, 1989; Dugan, 1994; Mohsin and Ryan, 1997; Mansfeld *et al.*, 2000; Saeed *et al.*, 2001; Syed, 2001; Henderson, 2003, 2008; Al-Hamarneh and Steiner, 2004; Mohsin, 2005; Timothy and Iverson, 2006; Weidenfeld, 2006; Hashim *et al.*, 2007; WTM, 2007; Weidenfeld and Ron, 2008).

Stage 2 includes generating items that capture the domain as specified in Stage 1. The items were generated by conducting qualitative research (2 FGDs and 53 interviews) and reviewing the literature. The period of qualitative data collection dated from June to October 2009. The FGD and interview participants were selected following a convenience sampling approach. For the FGDs, this was carried out by contacting international PhD students from different universities in Kuala Lumpur. All of them were Muslims with

overseas travel experience for various purposes. For the interviews, two researchers approached as many Muslim tourists as possible in Kuala Lumpur around the 'Golden Triangle Area' where many international chain hotels are located.

The participants of FGD1 consisted of eight male subjects. The duration was one and a half hours. The participants of FGD 2 consisted of seven female subjects. The duration was one hour and 15 minutes. The duration of the interviews was between 35 and 45 minutes. The digital recordings of the FGDs and interviews were transcribed into text. The data were organized for easy categorization and systematic data analysis. This study aimed to discontinue conducting in-depth interviews when no additional information was provided by the participants. Table 1 shows the interview guideline questions designed according to the knowledge gained from the two FGDs.

Stage 3 involved the refining of the measures by a panel of experts using quantitative techniques. The proposed items were sent to six academics to validate the questionnaires, and then, a pre-test was carried out by giving the questionnaire to several respondents and ensuring that the questions were clear and understandable. To further improve the IAD measurement, a pilot test was conducted at Stage 3 by using 60 usable questionnaires with international students to calculate the coefficient alpha for the proposed dimensions.

Stage 4 included the continuous improvement cycle in the instrument development process suggested by Chen and Paulraj (2004). It covered the following: the refining of the measure through exploratory factor analysis, the assessing of reliability with new data and the evaluating of the construct validity. By using 153 usable questionnaires collected from tourists, the EFA approach was applied first to establish construct validity, and this was followed by the CFA approach. Once the internal consistency and construct validity were found to be satisfactory, the measures were considered to be valid and reliable. In other words, the reliability and

validity of the IAD measurement scale were determined, and the IAD instruments could be used for further analysis.

To measure overall tourist satisfaction, the instruments developed by Bigné *et al.* (2005); Chi and Qu (2008); Del Bosque and Martín (2008), and Yoon and Uysal (2005) were adopted. The five-point Likert scale was used to capture tourist satisfaction; this includes item statements relevant to each variable from 1 to 5. A five-point Likert scale was also used to measure IADs, 1 indicating 'not at all important' and 5 indicating 'very important'. The questionnaire consists of three parts. Part 1 covers Islamic attributes of destination (IADs), which include 18 items. Part 2 covers overall tourist satisfaction (OTS), which includes four items. Part 3 includes eight general information questions, such as gender and income, and open-ended questions.

A total of 1300 questionnaires were distributed (administered from February to May 2010) in international hotels and tourist sites in four Malaysian cities: Kuala Lumpur, Kuala Terengganu, Penang and Johor Bahru. The questionnaires were handed out in these cities because of the availability of many hotels and tourist sites and because most of the tourists visiting Malaysia take tours of these cities. The selected hotels consisted of three-, four-, and five-star establishments. After obtaining permission from the hotel, the questionnaires were distributed to tourists, who were then instructed to leave the completed questionnaires at the hotel reception counter. The tourist spots were selected according to the famous sites of each city that the tourists normally visit, such as shopping malls, parks and resorts. The questionnaires were collected directly after the tourist had completed them at the tourist site. There was a scanning question on the cover page of the questionnaire to determine whether the tourist was Muslim. If the tourist was a Muslim, he/she was invited to proceed to fill out the questionnaire. Out of 1300 questionnaires, 551 were filled in and returned. This represents an effective response rate of 42.3%. After data cleaning, the final sample size was 508.

Table 1. Interview semi structured questions

Interview guideline questions	
Islamic attributes	In your opinion, which Islamic attributes in the destination do you need when you travel for tourism? If you are planning to visit a Muslim country, which Islamic attributes or aspects of this country are important to you as a Muslim? (Probing; facilities, food, places of worship, environment, behaviour, entertainment, dress, etc.)
Worship	Can you tell me in detail what worship facilities in your travel are important to you?
Hotels	Can you tell me in detail what Islamic aspects of hotels in your travel are important to you? (Probing; food, prayer facilities, entertainment, etc.)
Transportation	What Islamic aspects of transportation to/in the destination are important to you?
General environment	What Islamic aspects of the general environment if you visit a Muslim country are important to you? (Probing; alcohol, gambling, behaviour, dress code, prostitution, etc.)
Religious motives	What are the most likely Islamic attributes that influence your decision to choose the destinations you will visit?

FINDINGS

Figure 1 summarizes the stages applied to developing the IAD construct and the sample size for each stage. The results of applying these stages are as follows:

In Stage 1, two general domains of the IAD were specified: the religious facilities and the religious environment. The religious facilities included worship facilities and Halal food. The religious environment included an alcohol- and gambling-free environment, control of sexual permissiveness and adherence to the Islamic dress code. In Stage 2, 23 items were generated from two FGDs and 53 interviews to capture the Islamic attributes of destination. These attributes covered worship facilities, Halal food, Islamic entertainments, alcohol- and gambling-free zones, Islamic dress codes and Islamic morality.

In Stage 3: purifying the measures by a panel of experts, no items were dropped, some words were changed and some modifications were also made by giving the questionnaire to certain respondents. For further purification, Cronbach's

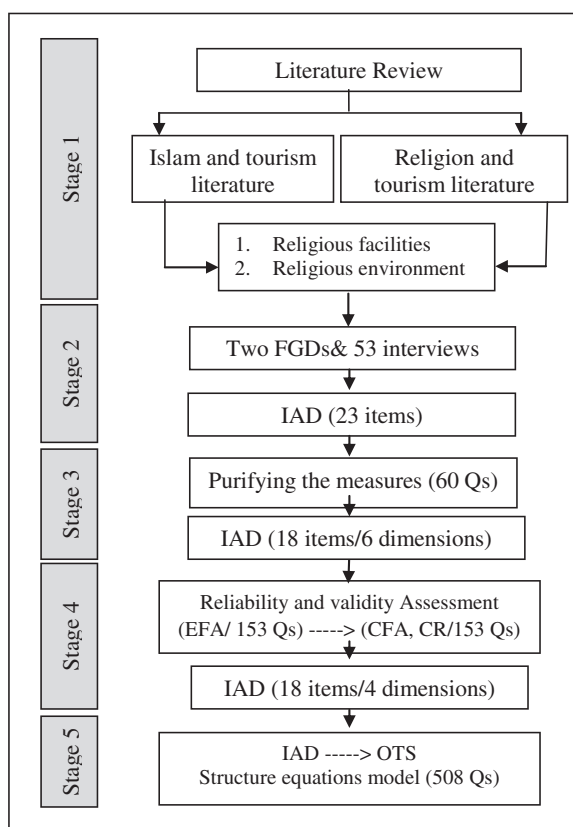


Figure 1. Islamic attributes of destination (IAD) construct development.

alpha was calculated using 60 usable questionnaires at this stage. Table 2 shows the Cronbach’s alpha results for six proposed dimensions. The IAD is constructed with six components: worship facilities, Halal food, Islamic entertainment, alcohol- and gambling-free zones, Islamic dress code and Islamic morality. Worship facilities were measured with eight measurement items, Halal food with two items, Islamic entertainment with four items, alcohol- and gambling-free zones with three items, Islamic dress code with two items and Islamic morality with four items. As shown in Table 2, the initial Cronbach’s alpha coefficients of four components – worship facilities (0.646), Islamic entertainments (0.664), alcohol- and gambling-free zones (0.527) and Islamic morality (0.580) – are below the 0.70 threshold recommended by Nunnally and Bernstein (1994). The Cronbach’s alpha of Halal food and Islamic dress codes exceeds 0.70.

To gain the highest possible reliability coefficient, the components were purified by dropping items with the lowest item-to-total correlation. For the worship facilities, two items (Wo3 and Wo5) were deleted due to a low item-total correlation. For Islamic entertainment, one item (Ie3) was dropped. For the alcohol- and gambling-free components, the second item (AI2) was dropped. For Islamic morality, the third item (Mor3) was dropped. After excluding unreliable items, the item-total correlations were greater than 0.50. The revised items demonstrated coefficient alpha values of 0.868 (worship facilities), 0.908 (Islamic entertainments), 0.895 (alcohol and gambling-free) and 0.808 (Islamic morality), all within an acceptable range.

Table 2. Reliability analysis for proposed dimensions

Dimensions	Items	Initial reliability		Revised reliability	
		Item total correlation	Cronbach alpha	Item total correlation	Cronbach alpha
Worship Facilities	Wo1	0.699	0.646	0.844	0.868
	Wo2	0.444		0.584	
	Wo3	-0.111		Dropped	
	Wo4	0.442		0.539	
	Wo5	0.006		Dropped	
	Wo6	0.541		0.636	
	Wo7	0.741		0.888	
	Wo8	0.556		0.569	
Halal food	Hal1	0.713	0.823		0.823
	Hal2	0.713			
Islamic entertainment	Ie1	0.773	0.664	0.911	0.908
	Ie2	0.696		0.825	
	Ie3	-0.027		Dropped	
	Ie4	0.582		0.718	
Alcohol & gambling free	AI1	0.572	0.527	0.753	0.859
	AI2	0.053		Dropped	
	AI3	0.524		0.753	
Dress codes	Idc1	0.766	0.866		0.866
	Idc2	0.766			
Morality	Mor1	0.485	0.580	0.714	0.808
	Mor2	0.633		0.557	
	Mor3	0.057		Dropped	
	Mor4	0.476		0.728	

In Stage 4, this study first started to assess reliability and validity using the EFA approach to validating IAD measures, using 153 usable questionnaires and then the CFA approach. Exploratory factor analysis was used to test the construct validity, and Cronbach’s alpha was applied to test internal consistency. Factor analysis was applied to confirm whether the number of dimensions conceptualized could be verified empirically. Moreover, exploratory factor analysis (EFA) is often considered to be more appropriate in the early stages of scale development (Churchill, 1979).

The results of factor analysis show that the IAD items provided four distinct principal components. The total percentage of variance accounted for by these four factors was 76.218% (44.363%, 13.230%, 10.680% and 7.945% respectively). Table 3 shows the results of the Varimax method and Cronbach’s alpha coefficients. Four factors were extracted. Some factors from Table 2 were integrated with other factors. For instance, ‘Islamic dress code’ and ‘Islamic morality’ were loaded as the same factor (Factor 2). Factor 2 consists of five items and was labelled ‘general Islamic morality’. Considering that Islamic dress code is a source of Islamic morality, this integration is logically accepted. Similarly, Factor 3 consists of five items and was loaded as two components – ‘Halal food’ and ‘Islamic entertainment’. This integration could also be explained by Halal issue integration, which is also understandable. Therefore, Factor 3 was labelled ‘Halalness’. Factor 1 was loaded as six items reflecting a worship facilities scale. Factor 4 was loaded as two items and was labelled ‘alcohol- and gambling-free’.

Table 3 shows that the coefficient alpha values of 0.92 for worship facilities, 0.91 for general Islamic morality, 0.89 for Halalness and 0.87 for alcohol- and gambling-free, all fall within the acceptable range, and all item-to-total correlations

Table 3. Varimax rotated factor loadings for IAD scale

Islamic attributes of destination Items	Rotated factor loading			
	Factor 1	Factor 2	Factor 3	Factor 4
Availability of Mosque (Masjid)	0.919			
Availability of prayer facilities at tourism sites, airport, shopping malls, hotels, conference halls, parks, etc.	0.813			
Presence of loud public pronouncement of Azan to indicate prayer time.	0.825			
Placement of Qibla direction (Qibla stickers/direction point towards Makkah city) in your hotel room	0.739			
Provision of a copy of the Holy Qur'an in each hotel room	0.717			
Availability of water supply in toilets at tourism sites, airport, shopping mall, hotel, parks, etc.	0.760			
Availability of Halal food at tourism sites, airport, shopping malls, hotels, parks, etc.		0.804		
Availability of segregated Halal kitchen in hotels and restaurants		0.712		
Availability of segregated areas for women at beaches		0.904		
Availability of hotels with segregated swimming pools and gymnasium for men and women		0.787		
Banning of sex channels on hotel entertainment system		0.782		
Banning of alcoholic drinks by the authority at public places (such as tourism sites, hotels, parks, etc.)				0.879
Banning of gambling activities by the authority at public places (such as tourism sites, hotels, parks, etc.)				0.899
Observation of Islamic dress code by hotel and restaurant staff		0.800		
Prevalence of Islamic dress code (e.g. Hijab) at public places		0.787		
Banning by the authority of prostitution		0.917		
Banning by the authority of indecent displays of affection between sexes at public places (such as kissing, etc.)		0.800		
Censorship by the authority of adult scenes in movies shown on TV		0.850		
Cronbach's alpha coefficients	0.92	0.91	0.89	0.87

were greater than 0.5. These coefficient alpha values are very high compared with common results in other tourism motivation studies; this may be explained by the closeness of the respondents' answers in the questionnaires.

To sum up, the validity of the IAD measures was initially assessed by examining the reliability of the construct and conducting an exploratory factor analysis. Since reliability and construct validity are established by the EFA approach, validating IAD measures using the confirmatory factor analysis approach can be applied.

Confirmatory factor analysis (CFA) is used to validate the results of the EFA. This approach is commonly used in the continuous improvement cycles in measurement instrument development processes (Chen and Paulraj, 2004). By using 153 usable questionnaires, composite reliability (CR) was first examined in CFA. The rule of thumb of CR is 0.70 or higher, indicating good reliability (Hair *et al.*, 2010, p. 710). Table 4 shows that the composite reliability of all dimensions of Islamic attributes of destination was found to be higher than 0.70, indicating good reliability.

Among the CFA results, all the regression weights (0.65–0.98; with their significant *t*-values) are ≥ 0.5 , the threshold recommended by Hair *et al.* (2010), indicating the presence of unidimensionality in the set of items used in IAD measures. To establish acceptable convergent validity, the AVE for each factor should account for 0.50 or more of the total variance, as recommended by Fornell and Larcker (1981, 1981). Table 4 shows that the AVE of the IAD measures exceeds the recommended level of 0.50, hence suggesting acceptable convergent validity.

The discriminant validity was also examined using the procedure suggested by Fornell and Larcker (1981). They suggest that discriminant validity is established if the square root of the AVE for each construct is greater than the values for the correlations between the given construct and each of

the other constructs. Table 5 shows that the bold number in the diagonal of the table, the square root of the AVE, is always greater than the correlation values, indicating acceptable discriminant validity.

The structure of the model of first order IAD is presented in Figure 2, using AMOS 18. The overall fit of the IAD model assessment is shown in Table 6. Although previous techniques indicate that the measurement scale developed for IADs achieves acceptable reliability and validity, some of the fit measures for the CFA model do not meet an acceptable level. This could be explained as one of the factors (alcoholic- and gambling-free zones) has only two items, which need a sample size of at least 300, as recommended by Hair *et al.* (2010, p. 662).

During the final stage, to test the effect of IADs on overall tourist satisfaction as one of the study objectives, a structural model with a path from Islamic attributes of destination to overall tourist satisfaction was tested (Figure 2). By using 508 usable questionnaires, the overall fit of the model was assessed, based on the EFA and CFA results from the previous stage. The fit statistics with chi-squared = 491.88 at *p*-value = 0.000, degree of freedom = 204, normed chi-squared (CMIN/DF) = 2.05, goodness-of-fit index (GFI) = 0.931, adjusted goodness-of-fit index (AGFI) = 0.915, Tucker-Lewis index (TLI) = 0.97, comparative fit index (CFI) = 0.973 and root mean square of error of estimation (RMSEA) = 0.046 indicate an adequate level of fit.

Table 4. Composite reliability and AVE

Dimensions	Composite reliability	AVE
Worship facilities	0.92	0.69
Halalness	0.90	0.65
General Islamic morality	0.91	0.70
Alcoholic drinks and gambling free	0.88	0.79

Table 5. Correlation between factors

	Worship facilities	Halalness	General Islamic morality	Alcoholic drinks and gambling free
Worship facilities	0.83			
Halalness	0.45	0.80		
General Islamic morality	0.43	0.33	0.84	
Alcoholic drinks and gambling free	0.42	0.36	0.30	0.88

To evaluate how Islamic attributes of destination contribute to overall tourist satisfaction, the path coefficient (β) was used, and the variance of overall tourist satisfaction was examined using an R^2 . The AMOS results reveal that IADs have a statistically significant positive influence on overall tourist satisfaction ($\beta = 0.89$, $t = 17.14$, $p < 0.000$) and account for a 67.7% variance in overall tourist satisfaction. Furthermore, by using standardized coefficients, it was found that ‘Islamic morality’ contributed the most to overall tourist satisfaction ($\beta = 0.898$), followed by ‘Halalness’ ($\beta = 0.885$), ‘worship facilities’ ($\beta = 0.841$) and ‘alcohol- and gambling-free zones’ ($\beta = 0.703$) (Figure 3).

DISCUSSIONS AND IMPLICATIONS

This study has developed instruments to gauge IADs as recommended by Battour *et al.* (2010) and Battour *et al.* (2011). The construct was developed by following the

procedures recommended by Churchill (1979); Malhotra (2007, p. 274) and Chen and Paulraj (2004). The final scale was deemed to be both reliable and valid. The measures developed may help further research related to push and pull motivation studies. Moreover, the process of developing such measures may be considered as a contribution to methodology, which may provide guidelines for its use in destination marketing and tourism management research. The identified IADs and their corresponding items can be used in advancing the study on IAD pertaining to Muslim countries similar to that of Malaysia and enabling comparative studies in other countries.

According to the second objective of the study, a positive relationship was found between IADs and overall tourist satisfaction. This indicates that the availability of these Islamic attributes, along with conventional destination attributes, could delight Muslim tourists when they spend a vacation at a particular destination. This result supports Battour *et al.*'s (2011) study result, which reveals that the availability of Islamic attributes of destination is a source of satisfaction for the Muslim tourist.

This study also has important marketing implications. For example, it may help destination marketers to understand ‘Islamic tourism’ and so to develop marketing strategies to attract Muslim tourists and encourage repeat purchases. A destination can improve the chance of its selection by identifying and marketing its ability to meet Muslim tourist needs. Furthermore, this study could offer some useful and practical guidelines for tourist organizations and other types of business wishing to successfully satisfy Muslim customers. Destination marketers need to embrace the identified IADs to

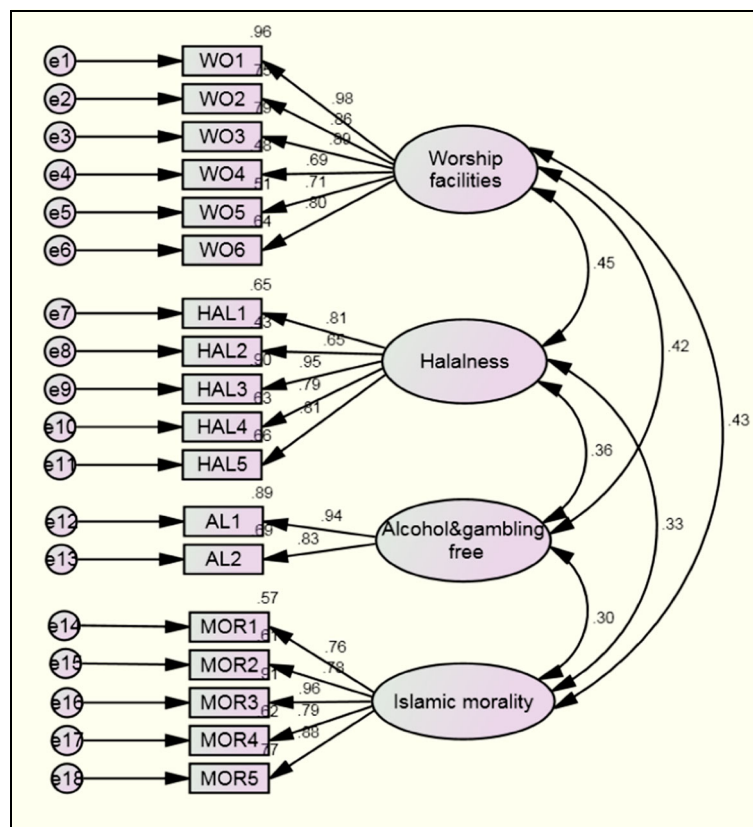


Figure 2. First-order Islamic attributes of destination CFA.

Table 6. CFA fit measures of the IAD scale

Fit indices	Estimates	Acceptable level
Chi-square	288.592	
Degree of freedom (d.f.)	129	
<i>P</i>	0.000	>0.05
Normed chi-squared (CMIN/DF)	2.237	<3.00
Goodness-of-fit index (GFI)	0.829	≥0.90
Adjusted goodness-of-fit index (AGFI)	0.773	≥0.90
Tucker-Lewis index (TLI)	0.913	≥0.90
Comparative Fit index (CFI)	0.927	≥0.90
Root mean square of error of estimation (RMSEA)	0.09	≤0.08

attract Muslim tourists for the purpose of achieving greater tourist satisfaction. For example, ‘Islamic morality’ was found to be the most important Islamic attribute, indicating that travel agents could select hotels for Muslims, which are located far from red-light districts. Tourist guides should also avoid visiting these places on tour programmes.

An additional implication related to ‘Halalness’, which was found to be the second most important Islamic attribute, could help destination marketers to satisfy Muslim tourists. By providing Halal ‘Islamic’ products/services, a specific destination may be able to differentiate itself from other destinations. For example, the availability of Halal food in hotels and restaurants could represent a high priority for Muslim tourists in destination selection. Therefore, when marketers promote a destination to Muslim tourists, promotional campaigns should focus more on the availability of Halal food. Furthermore, the availability of segregated entertainments,

such as segregated swimming pools and the banning of adult channels in hotel entertainment, could delight Muslim tourists. Muslims tourists may not be happy if their children are exposed to such things.

It is known that Muslim customers constitute a broad market, which has special requirements and culture and which cannot be ignored. In response to these, ‘worship facilities’, represent important factors identified by the current study and thus could be used by destination marketers as a tool to satisfy Muslim tourist needs on their vacation. For example, the provision of maps indicating the locations of mosques/prayer facilities could be made available in key areas, such as tourist information centres, airports, hotels and parks to please and satisfy Muslim tourists. Providing worship facilities for Muslim tourists may encourage them to travel to a specific destination.

The last factor: ‘alcohol- and gambling-free zones’ identified by this study might represent a challenge to destination marketers in Muslim countries, which, at the same time, are also trying to satisfy the non-Muslim tourist’s needs. Therefore, managers might be encouraged to design creative programmes to harness the unique characteristics of tourist products to satisfy this attribute. For example, the hotel might allocate a special section for those wishing to drink alcohol because Muslims prefer there not to be any public consumption of alcoholic drinks and gambling activities. Furthermore, Muslim tourists prefer alcoholic drinks not to be provided in the hotel room refrigerator, unless requested.

This study provides some new insights into the impact of IADs on overall tourist satisfaction; however, the results reported here should be interpreted in the light of certain

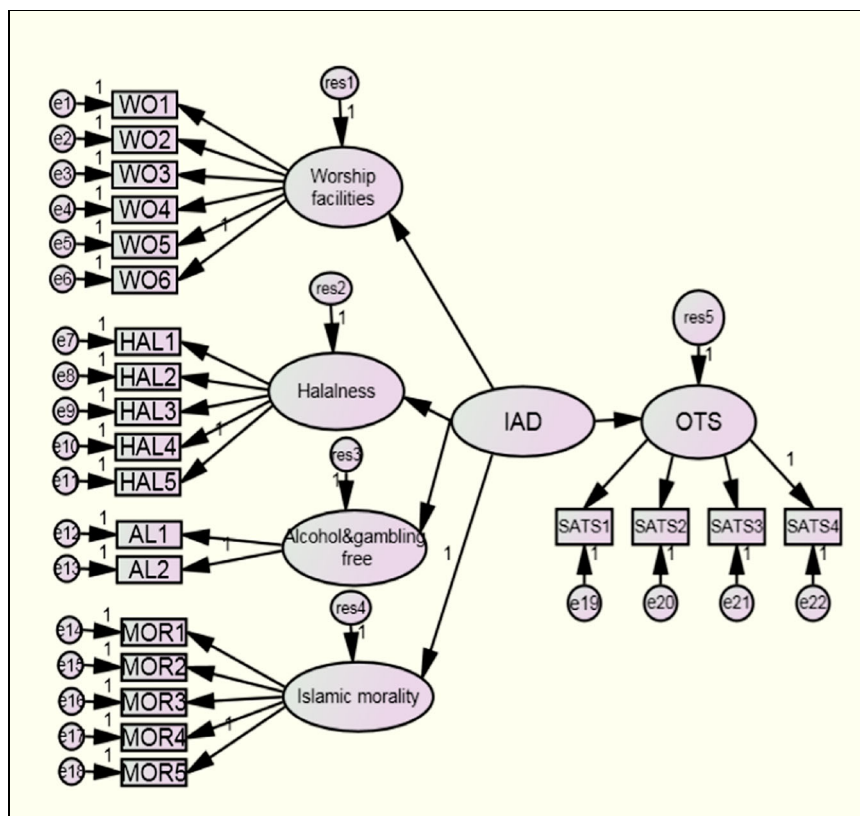


Figure 3. Structure model.

limitations that suggest further possibilities for empirical research. The first limitation concerns the context of the study (Malaysia), which applies constraints on the generalizability of the results to other countries. Therefore, no claim can be made for the generalizability of the findings beyond these contexts. Further research is underway to extend the current work into a number of other countries. However, the use of a country other than Malaysia would increase our understanding of IADs in other contexts and help to demonstrate the universality and global importance of this concept.

Since 67.7% of the variance in overall tourist satisfaction was explained by IADs, future research is needed in this area, focusing on adding other Islamic attributes. Moreover, Islamic attributes with pull motivations should be integrated (destination attributes) in future research, which will give this area more attention and increase our understanding. For example, the moderating role of IADs can be tested between pull motivation factors and overall tourist satisfaction. Future research that replicates this study in other contexts would be welcome and would further improve our understanding of the significance of the impact that IADs have on overall tourist satisfaction. Moreover, future research might investigate distinctive Islamic attributes through comparing specific countries. This research could ascertain whether there are differences in the types of Islamic attributes that generate satisfaction.

APPENDIX A DESCRIPTIVE STATISTICS FOR STUDY ITEMS

Items	Mean score	Standard deviation
IAD1	3.8071	0.66927
IAD2	3.7795	0.67836
IAD3	3.7579	0.66945
IAD4	3.7087	0.71733
IAD5	3.7717	0.63356
IAD6	3.7697	0.66180
IAD7	3.8091	0.62568
IAD8	3.7776	0.63722
IAD9	3.7756	0.64728
IAD10	3.7933	0.66067
IAD11	3.6969	0.60783
IAD12	3.7874	0.65428
IAD13	3.7657	0.63296
IAD14	3.7933	0.67543
IAD15	3.7913	0.65855
IAD16	3.6791	0.71982
IAD17	3.8406	0.66778
IAD18	3.8228	0.65881
OTS1	3.7933	0.64862
OTS2	3.8189	0.65774
OTS3	3.8110	0.68494
OTS4	3.8799	0.63382

REFERENCES

- Al-Hamarneh A, Steiner C. 2004. Islamic tourism: rethinking the strategies of tourism development in the arab world after september 11,2001. *Comparative studies of South Asia, Africa and the Middle East* 24(1): 173–182.
- Battour MM, Ismail MN, Battor M. 2010. Toward a Halal Tourism Market. *Tourism Analysis* 15(4): 461–470.
- Battour MM, Ismail MN, Battor M. 2011. The impact of destination attributes on Muslim tourist's choice. *International Journal of Tourism Research* 13(6): 527–540.
- Bigné JE, Andreu L, Gnoth J. 2005. The theme park experience: An analysis of pleasure, arousal and satisfaction. *Tourism Management* 26(6): 833–844.
- Bogari NB, Geoff C, Marr N. 2004. Motivation for domestic tourism: a case study of the Kingdom of Saudi Arabia. *Tourism Analysis* 8(2): 137–141.
- del Bosque IR, Martín HS. 2008. Tourist satisfaction a cognitive-affective model. *Annals of Tourism Research*, 35(2): 551–573.
- Chen IJ, Paulraj A. 2004. Towards a theory of supply chain management: the constructs and measurements. *Journal of Operations Management* 22(2): 119–150.
- Chi CG-Q, Qu H. 2008. Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management* 29(4): 624–636.
- Chiang C-Y, Jogaratnam G. 2006. Why do women travel solo for purposes of leisure? *Journal of Vacation Marketing* 12(1): 59.
- Churchill, GA, Jr. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research* 16(1): 64–73.
- Correia A, Oom do Valle P, Moço C. 2007. Modeling motivations and perceptions of Portuguese tourists. *Journal of Business Research* 60(1): 76–80.
- Delener N 1990. The effects of religious factors on perceived risk in durable goods purchase decisions. *Journal of Consumer Marketing* 7(3): 27.
- Devesa M, Laguna M, Palacios A. 2010. The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. *Tourism Management* 31(4): 547–552.
- Din KH. 1989. Islam and tourism: Patterns, issues, and options. *Annals of Tourism Research* 16(4): 542–563.
- Dugan B 1994. Religion and food service. *The Cornell Hotel and Restaurant Administration Quarterly* 35(6): 80–85.
- Essoo N, Dibb S. 2004. Religious Influences on Shopping Behaviour: An Exploratory Study. *Journal of Marketing Management* 20(7): 683–712.
- Fam KS, Waller DS, Erdogan BZ. 2004. The influence of religion on attitudes towards the advertising of controversial products. *European Journal of Marketing* 38(5/6): 537–555.
- Fleischer A 2000. The tourist behind the pilgrim in the Holy Land. *International Journal of Hospitality Management* 19(3): 311–326.
- Fornell C, Larcker D. 1981a. Structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(3): 39–50.
- Fornell C, Larcker DF. 1981b. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1): 39–50.
- Hair JFJ, Black WC, Babin BJ, Anderson RE. 2010. *Multivariate Data Analysis*. Pearson education: New Jersey.
- Hashim NH, Murphy J, Muhamad Hashim N. 2007. Islam and on-line imagery on Malaysian tourist destination websites. *Journal of Computer-Mediated Communication* 12(3): 1082–1102.
- Henderson JC. 2003. Managing Tourism and Islam in Peninsular Malaysia. *Tourism Management* 24(4): 447–456.
- Henderson JC. 2008. Representations of Islam in Official Tourism Promotion. *Tourism Culture & #38; Communication* 8: 135–145.
- Hirschman EC. 1981. American Jewish ethnicity: Its relationship to some selected aspects of consumer behavior. *Journal of Marketing* 45(3): 102–110.
- Howe AC. 2001. Queer pilgrimage: The San Francisco homeland and identity tourism. *Cultural Anthropology* 16(1): 35–61.
- Malhotra N. 2007. *Marketing Research: an applied orientation*. Pearson education: New Jersey.
- Mansfeld Y, Ron A, Gev D. 2000. Muslim Tourism to Israel – Characterization, Trends and Potential. *University of Haifa: Center for Tourism, Pilgrimage, and Recreation Research (in Hebrew)*.

- Meng F, Tepanon Y, Uysal M. 2008. Measuring tourist satisfaction by attribute and motivation: The case of a nature-based resort. *Journal of Vacation Marketing* 14(1): 41–56.
- Metin K, Mike R. 2000. Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination. *Journal of Travel Research* 38(3): 260.
- Mohsin A 2005. Tourist attitudes and destination marketing--the case of Australia's Northern Territory and Malaysia. *Tourism Management* 26(5): 723–732.
- Mohsin A, Ryan C. 1997. Business Visitors to the Northern Territory Expo. *Tourism Recreation Research* 22(2): 67–69.
- Muslim population worldwide. 2009. Retrieved 15 November, 2009, from <http://www.islamicpopulation.com/>
- Nunnally JC, Bernstein IH. 1994. *Psychometric Theory*. McCraw-Hill: New York, NY.
- Poria Y, Butler, R, Airey D. 2003. The core of heritage tourism. *Annals of Tourism Research* 30(1): 238–254.
- Qu H, Ping EWY. 1999. A service performance model of Hong Kong cruise travelers' motivation factors and satisfaction. *Tourism Management* 20(2): 237–244.
- Rinschede, G (1992). Forms of religious tourism. *Annals of Tourism Research*, 19(1), 51–67.
- Saeed M, Ahmed ZU, Mukhtar SM. 2001. International marketing ethics from an Islamic perspective: a value-maximization approach. *Journal of Business Ethics* 32(2): 127–142.
- Syed OA. 2001. Catering to the needs of Muslim travellers. Paper presented at the Second Conference of Ministers from Muslim Countries, Tourism: Challenges and Opportunities, Kuala Lumpur, 10–13 October.
- Timothy D, Iverson T. 2006. Tourism and Islam: Consideration of culture and duty. In D Timothy, D Olsen (eds), *Tourism, Religion and Spiritual Journeys*. Oxon: Routledge Taylor & Francis Group, 186–205.
- Weaver GR, Agle BR. 2002. Religiosity and ethical behavior in organizations: A symbolic interactionist perspective. *The Academy of Management Review* 27(1): 77–97.
- Weidenfeld A 2006. Religious needs in the hospitality industry. *Tourism and Hospitality Research* 6(2): 143–159.
- Weidenfeld A, Ron A. 2008. Religious needs in the tourism industry. *Anatolia:International Journal of Tourism and Hospitality Research* 19(2): 18–22.
- WTM. 2007. *The World Travel Market Global Trend Reports 2007*. World Travel Market: London.
- Yoon Y, Uysal M. 2005. An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism Management* 26(1): 45–56.
- Zabkar V, Brencic MM, Dmitrovic T. 2010. Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management* 31(4): 537–546.