

## **CHAPTER FOUR**

### **DATA ANALYSIS**

#### **4.1 Introduction**

As discussed in Chapter One, the aim of this research is to investigate the relationship among the theoretical constructs of push motivations (PUSM), pull motivations (PULM), overall tourist satisfaction (OTS), Islamic attributes of destination (IAD), and destination loyalty (DEL). This chapter reports the results of analysing the collected data in accordance with the analysis techniques presented in Chapter Three. Section 4.2 first presents the qualitative results from the focus groups and interviews. Then, the results of developing Islamic attributes of destination (IAD) measures are presented in section 4.3. Next, section 4.4 presents the survey results; findings of exploratory factor analysis, confirmatory factor analysis, partial least square and hypotheses testing.

#### **4.2 Focus Groups and Interviews Results**

The results of the two FGDs indicate that there are differences in attitudes between males and females. The women focused more on privacy and segregation of gender and entertainment centres while men focus more on worship facilities and Halal issues. Nine participants (FGDs & Interviews) were secular, twenty-two participants were mildly religious, twenty-six were religious and eleven were very religious. According to the demographic profile of the interviewees, thirty of them were males, and twenty-three were females. Twenty-two interviewees were between 18 and 29 years old, nineteen interviewees were between 30 and 39 years old and twelve were above 40 years old. Thirty-nine of the interviewees were married and fourteen were single. Regarding

educational level, six interviewees were intermediate, thirty-one interviewees were university degree holders, and sixteen were postgraduate.

The results of the analysis were categorized into two major aspects, which are tangible and intangible aspects.

#### **4.2.1 The Tangible Aspects**

The tangible aspect consists of Islamic religious facilities such as worship facilities and Halal food:

##### **4.2.1.1 Prayer facilities**

###### **4.2.1.1.1 Mosque**

All interviewees were concerned about the availability of mosques (Masjid) or prayer rooms for their tourist destination. Easy access to a mosque/prayer room is considered a vital aspect for Muslim tourists and should not be ignored by tourism planners but should be considered a necessary service. This can be shown in the following response:

“... Masjid or prayer room must be available in the streets and public places. In other words, a prayer room should be available in all the places that I may visit in the destination such as hotels, shopping malls, and airports. Even in the airplane to destination, it should allocate a place for prayer.” (FGD No. 1)

“Masjid is available in most of the places in the destination during my journey, in shopping malls, highways... and of course in the hotel.” (Int. No.1, USA)

It is noticed from the previous responses that Muslim tourists expect easy access to a Masjid and/or prayer room as a primary requirement in Muslim countries. They also highlighted that they expect to find prayer facilities readily accessible during tourist activities.

#### **4.2.1.1.2 Islamic call (Azan) for prayer**

Thirty-one interviewees were concerned about the need for public calling of the Azan (prayer time). Destination operators should provide information about Muslim prayer times. Seventeen interviewees recommended a prayer time call during flights or journeys to their destinations, hotels, shopping malls and parks. Some also requested prayer time clocks (which ring with each prayer time) or a prayer timetable in the hotel room.

“... I also need Prayer time call in the airplane, airport, hotel or at least a prayer timetable in the hotel room.” (Int. No.2, Canada).

“... Prayer timetable or Alfajr clock (Prayer time clock brand) should be found in hotel rooms.” (Int. No.4, Saudi Arabia).

In Islam, Muslims should pray five times daily but they are permitted to merge and shorten the prayers while travelling according to the length of the journey and other Islamic legal rules and requirements. As such, the participants preferred that they be reminded about prayer times in order that they may choose between praying at the usual times or merging their prayers.

#### **4.2.1.1.3 Holy Qur'an and Qibla direction pointer**

All interviewees emphasized the importance of providing a Holy Qur'an and Qibla direction pointers in hotel rooms. Some proposed that one or two simple Islamic books also be provided in hotel rooms and in aeroplane seat pockets.

“...It will be fine if I find the Holy Qur'an in the hotel room, some Islamic leaflets in the airplane seat pocket, Makkah direction pointer, Sejjada for prayer (prayer mat), simple Islamic book in hotel room ...” (FGD No. 1).

“...I need the Holy Qur'an book inside the hotel room, some Islamic books which I can read; I do not want any statue or sculpture like a Buddhist. I found that in India when I was there. Also the direction of Qibla is important to me...” (Int. No.15, Djibouti).

The Qur'an is the Holy Book for Muslims. Muslims are requested to read the Holy Qur'an. Although some conservative Muslims have a soft copy of the Holy Qur'an on their mobile phones, the hard copy represents the preferable option for reading. Moreover, the Makkah direction pointer is a basic demand of Muslims as they perform their prayers even though in public places. Some hotel industry practitioners, even some hotels in non-Muslim countries, already provide Qibla pointers inside their hotel rooms, however, some participants report that they did not find it in some hotels in Muslim countries.

#### **4.2.1.1.4 Muslim compliant toilets**

Thirty-six interviewees who have travelled to western destinations complained about the bathrooms because they could not perform ablutions (Muslim mandatory washing

before performing prayers). There is no such facility inside airport toilets and hotels. Therefore, they requested Muslim-compliant toilets and washrooms be provided in all airports, hotels and public places.

“Muslim toilets are very important in airports because the regular toilets only provide tissue. As Muslims, we need a water supply inside the toilet. It should be found in public places because in the hotel you can find water but in public places it is difficult.” (Int. No.14, Thailand).

“I will be very happy if I find ... and a Bidet in the bathroom” (Int. No.2, Canada).

Muslim followers must perform ablutions before prayers. They are required to clean themselves with water when using the toilet. Some countries adopt modern toilet designs providing only tissue, which do not enable users to wash themselves using water. However, some Muslim countries have modified this style and have adopted a Muslim design for their bathrooms, which provide water. From previous participant responses, they find it satisfying when water facilities are made available in toilets.

#### **4.2.1.2 Halal food**

All interviewees reported that the availability of Halal food is a basic need for all destinations. It is noticed that all interviewees need Halal meals in flights to their destination. Moreover, they recommended that hotels and restaurants in the destination should provide Halal meals free from pork and alcohol. Some of them were worried about the preparation of Halal meals. Seven interviewees highlighted that the kitchen should also

be Halal, which means that Halal and non-Halal foods cannot be cooked together in the same kitchen and with the same utensils.

“... I need Halal food to be available. The mosques and Halal food restaurants, mostly they are close to each other. Last week, I was in Cambodia. Once I was close to the Masjid I found Halal restaurants.” (Int. No.13, Turkey).

“... Some hotels, at breakfast they provide Halal food and non-Halal food from the same kitchen. That means the Halal and non-Halal food are cooked together using the same facilities. I need a Halal kitchen. Moreover, some Arabian tourists cannot read English so they eat non-Halal meat.” (Int. No.12, Egypt).

The travel experiences of some participants highlighted that easy-to-find Halal food is one factor in choosing their vacation destination. Some are very sensitive regarding Halal issues and go well beyond Halal labels. They want to ensure that the meat and ingredients used in cooking are Halal and usually ask the service providers. On top of this they also ask whether the kitchen is Halal or not. In response to this some hotels in Malaysia allocate two kitchens –Halal and non-Halal.

#### **4.2.2 The Intangible Aspects**

Sometimes, the intangible aspects relating to the general environment experienced by tourists cannot be helped. However, interviewees appreciate if there is an Islamic environment in their tourist destination, meaning an environment that pays attention to

Islamic entertainment, lack of consumption of alcoholic drinks, compliance with Islamic dress codes, and observation of Islamic morality.

#### **4.2.2.1 Islamic entertainment**

Thirty-nine interviewees gave high priority to finding Islamic-oriented recreation such as segregation of men and women's beaches, segregated swimming pools and gyms. Some female interviewees reported that they cannot enjoy swimming because sometimes the rules require that they wear swimming attire not conforming to Islamic teachings and culture. Some proposed different time sessions for the exclusive use of the swimming pool of either men or women. In fact, twenty-six interviewees preferred not to take their families to beaches or swimming pools where women wear bikinis. Twenty-one interviewees opted for the banning of adult video channels in hotel entertainment.

“... As a Muslim, I need a men-only beach and a women-only beach. I visited Turkey before. They build walls with rocks. So if you swim on the men's side of the beach, you cannot see the women's side. Separate swimming pools for me as a woman. I would like to enjoy myself but I also want to make sure men cannot see me.” (Int. No.10, Libya).

“I need ... strictly covered swimming pool for my wife and the same with the gym also.” (Int. No.4, Saudi Arabia).

“I will be happy if I find ... beaches with separate areas for women and men” (Int. No.1, USA).

“...When I was in Jakarta, I found porn channels on the hotel TV. It is not suitable for me as a Muslim nor for my family.” (Int. No.24, Kuwait).

“In Muslim countries, I want the taxis to provide a female driver’s service for female passengers and for family. We have this service in my country if the client so requests.” (Int. No.20, Emirates).

The reason for the previous responses may be interpreted in light of the issue of the mixing of the sexes in Islam. Free mixing of the sexes along with inappropriate and revealing attire is strictly prohibited in the Islamic teachings. These acts are prohibited because they are among the causes of *Fitnah* (temptation or trial, which implies evil consequences), the arousal of desires, committing indecent acts and false practices. Among the many proofs of the prohibition of the meeting and mixing of men and women in the Holy Qur’an is: “*...And when ye ask (his ladies) for anything ye want, ask them from before a screen; that makes for greater purity for your hearts and for theirs...*” (Holy-Qur’an, 33:53). In line with the issue of the mixing of the sexes, the service provider for Muslim tourists may assign female staff for women and male staff for men.

Another reason may be the cultural factor. Some Muslims, especially Arabian tourists, are highly conservative. They want to enjoy the services provided but at the same time they want to follow their Islamic culture. Some of them are very strict about not exposing their family members to others, especially non-family members and this may be related to traditions and customs.



#### **4.2.2.2 Lack of consumption of alcoholic drinks**

Twenty-eight interviewees prefer not to see the consumption of alcoholic drinks in tourism sites, shopping malls, hotels and parks. They are not happy if they see someone drinking alcohol in Muslim destinations. Some proposed that airline operators designate non-drinking sections in aeroplanes. Five interviewees were concerned about the safety of their children when they are around alcohol drinkers and the fear that their children may not be capable of distinguishing between alcoholic and non-alcoholic beverages.

“When I was in Australia, one of my kids opened the refrigerator in the hotel room and took a can of alcohol and asked me to open it. I was shocked because he cannot differentiate between the Coca-Cola can from the beer can. So the hotel should not sell alcohol.” (Int. No.7, Morocco).

“...In the flight, one thing that really disturbed me was that they served alcohol. It is not because people are drinking alcohol in my environment. It is not only that. It is also because I too paid for the alcohol. How? They calculate the average for people who may drink alcohol and put that in the ticket cost. So my contribution will go to another person who is drinking alcohol. So I do not need alcohol for two reasons: the environment and my contribution to those who are drinking” (Int. No.8, Nigeria).

#### **4.2.2.3 Islamic dress codes**

Twenty-six interviewees reported that they prefer it if the Islamic dress code was prevalent in their desired destination. They prefer waitresses wearing Hijab and not short skirts. Most interviewees said that they appreciate it when the female hotel staff wear Hijab.

However, these suggestions may be difficult to apply in those Muslim countries that are more liberal such as Turkey where the wearing of Hijab is not allowed in some public areas (e.g., universities and government buildings). In these countries, Hijab-clad female employees may have to work in specially designated areas. Moreover, some interviewees proposed that it will be better if employees were Muslims.

“...Actually, a waitress should dress Hijab and not tight clothes. They have to serve me only.” (Int. No.3, Iraq).

“... I appreciate it if there are no pictures of naked people in advertisements especially bill boards. Hijabs are the dominant dress in the destination and no free shows (naked or semi-naked bodies) in public places.” (Int. No.5, Algeria).

“...I have travelled to European countries but I did not feel comfortable in some issues. For example, I hope that the hotel employees are friendly to Muslims because sometimes they do not respect Muslim women who are wearing Nikab (Hijab with covered face). So it will be better if they (the employees) are Muslim.” (Int. No.20, Emirates).

#### **4.2.2.4 Islamic morality**

Thirty-one interviewees highly appreciated tourism operators who control exposure to indecent behaviour. The interviewees prefer not to expose themselves and their families to indecent public conduct, which is contrary to Islamic teachings such as public kissing, prostitution and the public showing of affection between sexes.

“...In the hotel, I will appreciate it if there is no sexual interaction near my room. I do not want such exposure. It is a shame that some hotels supply prostitutes, especially in Muslim countries.” (Int.No.6, Egypt).

“... The most important thing is regarding the couple, boy friend and girl friend and prostitute. Sometimes, they have interaction in public. They are showing affection. If you have kids, it will affect the ethics of your children. To be honest, it cannot be controlled. I know it is very hard to control. At least give advance information if the places have such things.” (Int. No. 19, Turkey).

“I would like to see good morality in public spaces and parks in terms of relationship between sexes, such as no public kissing.” (Int. No.23, Saudi Arabia).

### **4.3 Developing of Islamic Attributes of Destination (IAD) Construct**

As discussed in section 3.12.2, Chapter Three, this study followed the sequences of steps that should be performed in developing measures of constructs suggested by Churchill (1979), Malhotra (2007, p. 274), and Chen and Paulraj (2004). These steps are performed and discussed as follows:

#### **4.3.1 Specify Domain of the Construct**

The study specified two general domains of the IAD construct by conducting a thorough review of the literature –the religious facilities and the religious environment. The religious facilities include worship facilities and Halal food. The religious environment

includes an alcohol-and-gambling-free environment, control of sexual permissiveness, and adherence to the Islamic dress code.

#### **4.3.2 Generate Sample of Items**

The study generated items by conducting qualitative research (two FGDs & 53 interviews) and reviewing the literature. The combination between FGDs and interviews is to first identify a wide range of Islamic attributes by FGD and then use these attributes as a base to explore in-depth by the interviews. Twenty-three items were generated from content analysis to capture Islamic attributes of destination. These attributes cover worship facilities, Halal food, Islamic entertainments, alcohol and gambling free, Islamic dress codes, and Islamic morality.

Table 4.1 shows the items generated to measure Islamic attributes of destination. Some items are similar with that already mentioned in the literature review, and the others are completely derived from qualitative analysis. The proposed items were sent to scholars and academicians, as discussed in Chapter Three, section 3.12.2.2, to validate the questionnaires, and then a pre-test was done through giving the questionnaire to some respondents to ensure that the questions are clear and understandable; some words were changed and some modifications were also done. No items were dropped during this stage. Once the content validity was established by the judgment of a panel of experts during this stage, the items should go to the next step for item purification by quantitative technique.

### **4.3.3 Purify the Measures**

The best way to purify the measures in this stage is by collecting data and test reliability. All the items in a measure are drawn from the domain of a single construct; responses to those items should be highly intercorrelated. Coefficient alpha is recommended to measure the internal consistency of a set of items and should be the first measure one calculates to assess the quality of the instrument. Once a satisfactory Cronbach's alpha coefficient is achieved, a continuous improved cycle can then be used.

#### **4.3.3.1 Cronbach's alpha test results**

Sixty usable questionnaires were used to calculate the Coefficient alpha for the proposed dimensions. Table 4.2 shows Cronbach's alpha results for six proposed dimensions. The Islamic attributes of the destination (IAD) construct consists of six components: worship facilities (WO), Halal food (HAL), Islamic entertainment (IE), alcohol and gambling free (AL), Islamic dress code (IDC), and Islamic morality (MOR). Worship facilities were measured by eight measurement items, Halal food by two items, Islamic entertainment by four items, alcohol and gambling free by three items, Islamic dress code by two items, and Islamic morality by four items.

As shown in Table 4.2, the initial Cronbach's alpha coefficients of four components – worship facilities (.646), Islamic entertainments (.664), alcohol& gambling free (.527) and Islamic morality (.580) – are below the .70 threshold recommended by Nunnally and Bernstein (1994). Cronbach's alpha of Halal food and Islamic dress codes are higher than .70.

**Table 4.1: Islamic Attributes of Destination Items**

Islamic attributes	Reference	Key words	Questions
1-worship facilities      Mosque	(Al-Hamarneh & Steiner, 2004; Syed, 2001)	The mosque (a Muslim house of worship) or prayer room is considered a crucial facility for Muslims.	WO1: Availability of Mosque (Masjid)  WO2: Availability of prayer facilities/room at tourism sites, airport, shopping malls, hotels, conference halls, parks, etc.  WO3: Provision of maps which indicate locations of mosques/prayer facilities. (In tourism information centre, airport, hotel, parks, etc.)
	(Weidenfeld, 2006)	The proximity to a house of prayer such as mosque or church may influence tourist preferences when making hotel reservations.	
	(Mohsin, 2005)	The respondents are concerned about availability of places of worship such as Mosque and Hindu or Chinese temple.	
	(WTM, 2007)	It is also suggested that it is crucial for Middle Eastern countries to take concrete steps to develop Halal tourism internally such as having prayer rooms at tourism sites.	
	(Henderson, 2003)	The mosque by itself may be considered as a tourist attraction such as the quality of a mosque in the Terengganu tourism publication.	
	FGD & Interviews (2009)	All the interviewees are concerned about the availability of a Mosque (Masjid) or prayer room at the destination. Moreover, some of them are concerned about maps, which indicate locations of mosques/prayer.	
Islamic call (Azan) for prayer	FGD & Interviews (2009)	Thirty-one interviewees were concerned about the need for public calling of the Azan (prayer time). Destination operators should provide information about Muslim prayer times. Seventeen interviewees recommended a prayer time call during flights or journeys to their destinations, hotels, shopping malls and parks. Some	WO4: Presence of loud public pronouncement of Azan to indicate prayer time.

		also requested prayer time clocks (which ring with each prayer time) or a prayer timetable in the hotel room.	WO5: Providing prayer timetable (In tourism information centre, airport, hotel, parks, etc.)
Holy Qur'an book and Makkah direction pointer	(Mansfeld et al. ,2000)	Mansfeld et al. give explicit recommendations such as placing 'Qibla stickers' (Qibla stickers are stickers with ornamented arrows pointing towards Mecca in Saudi Arabia) city in every room when occupied by Muslims as well as placing a copy of the Holy Qur'an in every room.	WO6: Placement of Qibla stickers/direction (Qibla stickers/direction point towards Makkah city) in your hotel room
	(Syed, 2001)	The Muslim visitor need to know the direction of the prayer	
	(Din, 1989)	All first class hotels must provide prayer rooms fully equipped with prayer mats, the Holy Qur'an, Suruh Yasin, and Tasbih, plus an arrow on the ceiling of every room pointing the direction of the Qibla (facing Makkah).	WO7: Provision of a copy of the Holy Qur'an in each hotel room
	FGD & Interviews (2009)	All interviewees emphasized the importance of the provision of the Holy Qur'an and Qibla direction pointers in hotel rooms. Some proposed that one or two simple Islamic books should be provided in hotel rooms and in aeroplane seat pockets.	
Muslim toilet	FGD & Interviews (2009)	Most of interviewees who travelled to western destinations complained about the bathroom because they could not perform ablutions (Muslims must perform ablution before performing prayer) as there is no water supply inside some airport and hotel toilets. Therefore, they requested Muslim toilets as facility in the airport, hotels, public places.	WO8: Availability of water supply in toilets at tourism sites, airport, shopping mall, hotel, parks, etc.
2-Halal food	(Weidenfeld, 2006; Weidenfeld & Ron, 2008;	The availability of Halal food is very important for Muslims when they choose a tourism destination.	HAL1: Availability of Halal food at tourism sites, airport, shopping malls, hotels, parks, etc.

	Mohsin, 2005; Mohsin & Ryan, 1997; Syed, 2001)		HAL2: Availability of segregated Halal kitchen in hotels and restaurants
	(Mansfeld et al., 2000)	Mansfeld et al. (2000) give explicit recommendations for providing food, which complies with Muslim Shariah laws.	
	FGD & Interviews (2009)	All interviewees reported that the availability of Halal food is a basic need for all destinations. It is noticed that all interviewees need Halal meals during flights to their destination. Moreover, they recommended that hotels and restaurants in the destination should provide Halal meals free from pork and alcohol. Some of them were worried about the preparation of Halal meals. Seven interviewees highlighted that the kitchen should also be Halal, which means that Halal and non-Halal foods cannot be cooked together in the same kitchen and with the same utensils.	
3-Islamic entertainments	(Al-Hamarneh & Steiner, 2004; Henderson, 2003; Timothy & Iverson, 2006).	As Muslims avoid free mixing, hotels could offer separate swimming pool and recreational facilities.	IE1: Availability of segregated areas for women at beaches  IE2: Availability of hotels with segregated swimming pools and gymnasium for men and women
	FGD & Interviews (2009)	Thirty-nine interviewees gave high priority to finding Islamic-oriented recreation such as segregation of men and women's beaches, segregated swimming pools and gyms. Some female interviewees reported that they cannot enjoy swimming because sometimes the rules require that they wear swimming attire not conforming to Islamic teachings and culture. Some proposed different time sessions for the exclusive use of the swimming pool of either men or women. Twenty-six interviewees preferred not to take their families to	IE3: Availability of taxis with female drivers' service for female passengers



		beaches or swimming pools where women wear bikinis, while 21 interviewees opted for the banning of adult video channels in hotel entertainment.	IE4: Banning of sex channels on hotel entertainment system
4-Alcohol and gambling free	(Al-Hamarneh & Steiner, 2004; Din, 1989; Hashim et al., 2007a; Henderson, 2003, 2008a)	Some Muslims are worried about visiting places of corruption, where alcohol is consumed and gambling is practiced.	AL1: Banning of alcoholic drinks by the authority at public places (such as tourism sites, hotels, parks, etc.)  AL2: Alcoholic beverages are not provided in the hotel room refrigerator
	(Dugan, 1994).	The major religion in a community will affect local alcohol use and the decisions of the local alcohol licensing board.	
	(Din, 1989)	Some Muslim countries implement a severe policy related to the sale of alcohol and gambling. For example, Malaysian licensing policy restricts the sale of liquor as well as restrictions placed on gambling, such as the city of Kuantan in which alcoholic drinks cannot be conspicuously displayed.	AL3: Banning of gambling activities by the authority at public places (such as tourism sites, hotels, parks, etc.)
	(Henderson, 2003)	In Terengganu city, the awarding of licenses to sell alcohol is extremely restricted. Hotels and resorts do sell beer, but spirits are not easily available. According to the Malaysian government, it desires to earn revenue only from Halal sources and not depend on the sale of alcohol.	
	FGD & Interviews (2009)	Twenty-eight interviewees prefer not to see the consumption of alcohol in tourism sites, shopping malls, hotels and parks. They are not happy if they see someone drinking alcohol in Muslim destinations. Some proposed that airline operators designate non-drinking sections in aeroplanes. Five interviewees were concerned	

		about the safety of their children when they are around alcohol drinkers and the fear that their children may not be capable to distinguish between alcoholic and non-alcoholic beverages.	
5-Islamic dress codes	(Hashim et al, 2007a)	Malaysian Tourist Destination Websites seemed to respect Islam by not showing prohibited acts. The Islamic dress code was the most prevalent; Women with headscarves were on two websites, those of Kedah and Terengganu. Men wearing a Songkok – a black rimless hat Malay men wear, usually for praying – were depicted on the Johor and Perlis homepages. Some Malaysian states obligate dress code to discourage tourists from wearing revealing clothes such as bikinis.	<p>IDC1: Observation of Islamic dress code by hotel and restaurant staff</p> <p>IDC2: Prevalence of Islamic dress code (e.g. Hijab) at public places</p>
	(Henderson, 2003)	Western tourists have to dress in Islamic attire when they visit religious places like a mosque.	
	(Al-Hamarneh and Steiner ,2004)	The religious-conservative concepts may be very important in Islamic destinations and the dress code should be strictly respected and controlled.	
	Weidenfeld & Ron (2008)	Cultural characteristics are needed in Islamic destinations such as staff dress code.	
	FGD & Interviews (2009)	Twenty-six interviewees reported that they prefer it if the Islamic dress code was prevalent in their desired destination. They prefer waitresses to wear Hijab and not a short skirt. Most interviewees said that they appreciate it if female hotel staff wear Hijab.	
6- Islamic morality	(Din, 1989; Henderson,	Most Muslim countries prohibit adultery including Malaysia. The Malaysian licensing policy prohibits prostitution and certain forms of tourist behaviour such as physical displays of affection and making	MOR1: Banning by the authority of prostitution

	2003, 2008a)	love in public places.	
	(Mohammad et al., 2001)	The promotion technique must not use sexual appeal in international marketing.	MOR2: Banning by the authority of indecent display of affection between sexes at public places (such as kissing etc.)
	(Henderson, 2003)	Female images would not be featured in tourism promotion in some Malaysian states such as Terengganu because the use of women and sex as well as other hedonistic influences are against Islamic Shariah.	MOR3: Banning by the authority of pictures of scantily dressed women on billboards/outdoor advertisements
	(Mohsin, 2005)	Using sexy images of young bikini clad girls to promote a destination will not help among Muslim tourists as it is considered inappropriate in their culture.	MOR4: Censorship by the authority of adult scenes in movies shown on TV
	FGD, Interviews (2009)	Thirty-one interviewees highly appreciated tourism operators who control exposure to indecent behaviour. The interviewees prefer not to expose themselves and their families to indecent public conduct which is contrary to Islamic teachings like public kissing, prostitution and the public showing of affection between sexes.	

In order 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 alcohol and gambling free component, the second item (Al2) was dropped. For Islamic morality, the third item (Mor3) was dropped. After excluding unreliable items, the item-total correlations were greater than .50. The revised items demonstrated coefficient alpha values of .868 (worship facilities), .908 (Islamic entertainments), .895 (alcohol and gambling free), and .808 (Islamic morality), all within the acceptable range.

#### **4.3.4 Continuous Improvement Cycle Results**

The statistical techniques used in this stage were discussed in Chapter Three, section 3.12.2.4. This study first started to assess reliability and validity using the EFA approach to validate the IAD measures by using 153 true questionnaires and then the CFA approach.

##### **4.3.4.1 Assessment of reliability and validity by EFA approach**

In this stage, exploratory factor analysis was used to test the construct validity and Cronbach's alpha was applied to test the internal consistency. Factor analysis was used 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).

**Table 4.2: 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		0.844	
	Wo2	0.444		0.584	
	Wo3	-0.111		Dropped	
	Wo4	0.442		.539	
	Wo5	0.006		Dropped	
	Wo6	0.541		0.636	
	Wo7	0.741		0.888	
	Wo8	0.556		0.569	
	<b>WO</b>		<b>.646</b>		<b>.868</b>
Halal food	Hal1	0.713			
	Hal2	0.713			
	<b>HAL</b>		<b>.823</b>		
Islamic entertainment	Ie1	0.773		0.911	
	Ie2	0.696		0.825	
	Ie3	-0.027		Dropped	
	Ie4	0.582		0.718	
	<b>IE</b>		<b>.664</b>		<b>.908</b>
Alcohol & gambling free	A11	0.572		0.753	
	A12	0.053		Dropped	
	A13	0.524		0.753	
	<b>AL</b>		<b>.527</b>		<b>.859</b>
Dress codes	Idc1	0.766			
	Idc2	0.766			
	<b>IDC</b>		<b>0.866</b>		
Morality	Mor1	0.485		0.714	
	Mor2	0.633		0.557	
	Mor3	0.057		Dropped	
	Mor4	0.476		0.728	
	<b>MOR</b>		<b>.580</b>		<b>.808</b>

Like any statistical method, EFA requires a number of assumptions. These assumptions should be met to ensure trustworthy results. One basic assumption is that the variables should be quantitative at the interval level. Using a 5-point Likert scale in the survey questionnaire fulfilled this requirement. In the marketing literature, many researchers have treated the Likert scale format as an interval scale (Hair et al., 2010). The

second important assumption is that the sample size must be equal or greater than five times the number of items of any scale (Pallant, 2005). This requirement is met, as five items were eliminated as having an unsatisfactory Cronbach's alpha in the last stage, the Islamic attributes of destination has 18 item statements, and the sample size used in this stage equals 153 true questionnaires.

#### 4.3.4.1.1 Test of Sphericity and measure of sampling adequacy

According to Tabachnick and Fidell (2007), data is factorable when the Bartlett's test of sphericity is significant ( $p$ -value  $< .05$ ) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is at least 0.50. Table 4.3 presents the results of the Bartlett's test of sphericity and the KMO measure of sampling adequacy. The score of the KMO measure of sampling adequacy of Islamic attributes of destination is higher than the cut-off value of 0.50. The Islamic attributes of destination construct achieved a significant  $p$ -value, less than .001. The results of Bartlett's test of sphericity suggest that the items of the construct are sufficiently correlated, indicating that the data are suitable for factor analysis.

**Table 4.3: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.876
Bartlett's Test of Sphericity	Approx. Chi-Square
	2228.908
	df
	153
	Sig.
	.000

#### 4.3.4.1.2 Factor extraction

Tabachnick and Fidell (2007) suggest that if a researcher is interested in an empirical summary rather than a theoretical solution, principal components analysis (PCA) is a better

choice. In addition, PCA is appropriate when a researcher is concerned about the minimum factors needed to account for the maximum portion of variance represented in the original set of variables (Hair et al., 2010). For these reasons, the PCA method was used in this study for factor extraction.

Factor extraction results using Principal Component Analysis (PCA) are given in Table 4.4. The results show that the factor analysis of Islamic attributes of destination items provided four distinct principal components. The total percent of variance accounted for by the four factors was 76.218 % (44.363%, 13.230%, 10.680%, and 7.945%, respectively).

**Table 4.4: Principal Component Analysis Extraction Results**

<b>Component</b>	<b>Variance Explained (%)</b>	<b>Cumulative Variance (%)</b>
1	44.363	44.363
2	13.230	57.593
3	10.680	68.273
4	7.945	76.218

#### **4.3.4.1.3 Factor rotation and factor loading**

The main purpose of factor rotation is to obtain a simple structure of factors. Varimax is considered the most popular orthogonal rotation scheme. Therefore, Varimax rotation was used throughout this study. Hair et al. (2010, p. 138) suggest that a factor loading higher than 0.50 is considered statistically significant at an alpha level of .05. Thus, the item loading, which is more than 0.50, was considered to be significant in this research.

Table 4.5 show the results of the varimax method, and Cronbach's alpha coefficients. Four factors were extracted. Some factors from Table 4.2 were integrated with other factors. For instance, 'Islamic dress code' and 'Islamic morality' were loaded on the same factor (factor 2). Factor 2 consists of five items and was labelled 'general Islamic morality'. Considering Islamic dress code is a source of Islamic morality, this integration is logically accepted. Similarly, factor 3 consists of five items and was loaded under 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 on six items reflecting worship facilities scale. Factor 4 was loaded on two items and was labelled 'Alcohol and gambling free'.

Table 4.5 shows that the coefficient alpha values of .92 for worship facilities, .91 for general Islamic morality, .89 for Halalness, and .87 for Alcohol and gambling free, all fall within the acceptable range and all item-to-total correlations 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.



**Table 4.5: Varimax Rotated Factor Loadings for IAD Scale**

Islamic attributes of destination Items	Rotated Factor Loading			
	Factor 1	Factor 2	Factor 3	Factor 4
WO1 Availability of Mosque (Masjid)	.919			
WO2 Availability of prayer facilities at tourism sites, airport, shopping malls, hotels, conference halls, parks, etc.	.813			
WO4 Presence of loud public pronouncement of Azan to indicate prayer time.	.825			
WO6 Placement of Qibla direction (Qibla stickers/direction point towards Makkah city) in your hotel room	.739			
WO7 Provision of a copy of the Holy Qur'an in each hotel room	.717			
WO8 Availability of water supply in toilets at tourism sites, airport, shopping mall, hotel, parks, etc.	.760			
HAL1 Availability of Halal food at tourism sites, airport, shopping malls, hotels, parks, etc.			.804	
HAL2 Availability of segregated Halal kitchen in hotels and restaurants			.712	
IE1 Availability of segregated areas for women at beaches			.904	
IE2 Availability of hotels with segregated swimming pools and gymnasium for men and women			.787	
IE4 Banning of sex channels on hotel entertainment system			.782	
AL1 Banning of alcoholic drinks by the authority at public places (such as tourism sites, hotels, parks, etc.)				.879
AL3 Banning of gambling activities by the authority at public places (such as tourism sites, hotels, parks, etc.)				.899

**Table4.5 (Continued)**

Islamic attributes of destination Items		Rotated Factor Loading			
		Factor 1	Factor 2	Factor 3	Factor 4
IDC1	Observation of Islamic dress code by hotel and restaurant staff		.800		
IDC2	Prevalence of Islamic dress code (e.g. Hijab) at public places		.787		
MOR1	Banning by the authority of prostitution		.917		
MOR2	Banning by the authority of indecent displays of affection between sexes at public places (such as kissing etc.)		.800		
MOR4	Censorship by the authority of adult scenes in movies shown on TV		.850		
<b>Cronbach's alpha coefficients</b>		.92	.91	.89	.87

#### 4.3.4.2 Assessment of reliability and validity by CFA approach

Confirmatory factor analysis (CFA) is used to validate the results of the EFA. This approach is commonly used in the continuous improvement cycles in the measurement instrument development processes (Chen & Paulraj, 2004). By using 153 true questionnaires, the sample size requirement is satisfactory to run confirmatory factor analysis (CFA), as discussed in Chapter Three, Section 3.10.2. Composite reliability (CR) was first examined in CFA. The rule of thumb of CR is .70 or higher indicating good reliability (Hair et al., 2010, p. 710). Table 4.6 shows that the composite reliability of all dimensions of Islamic attributes of destination was found to be larger than .70 indicating good reliability.

In the CFA results, all the regression weights (0.65 to 0.98; with their significant *t*-values) are also  $\geq 0.5$ , 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 recommend by Fornell and Larcker (1981). Table 4.6 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 average variance extracted (AVE) for each construct is greater than the values for the correlations between the given construct and each of the other constructs. Table 4.7 shows that the bold number in the diagonal of the table, the square root of the average variance extracted (AVE), is always greater than the correlation values indicating acceptable discriminant validity.

**Table 4.6: Composite Reliability and AVE**

<b>Dimensions</b>	<b>Composite reliability</b>	<b>AVE</b>
Worship facilities	.92	0.69
Halalness	.90	0.65
General Islamic morality	.91	0.70
Alcoholic drinks & gambling free	.88	0.79

The structure of the model of IAD is presented in Figure 4.1 and the overall fit of the IAD model assessment is shown in Table 4.8. Although previous techniques indicated that the measurement scale developed for Islamic attributes of destination achieved acceptable

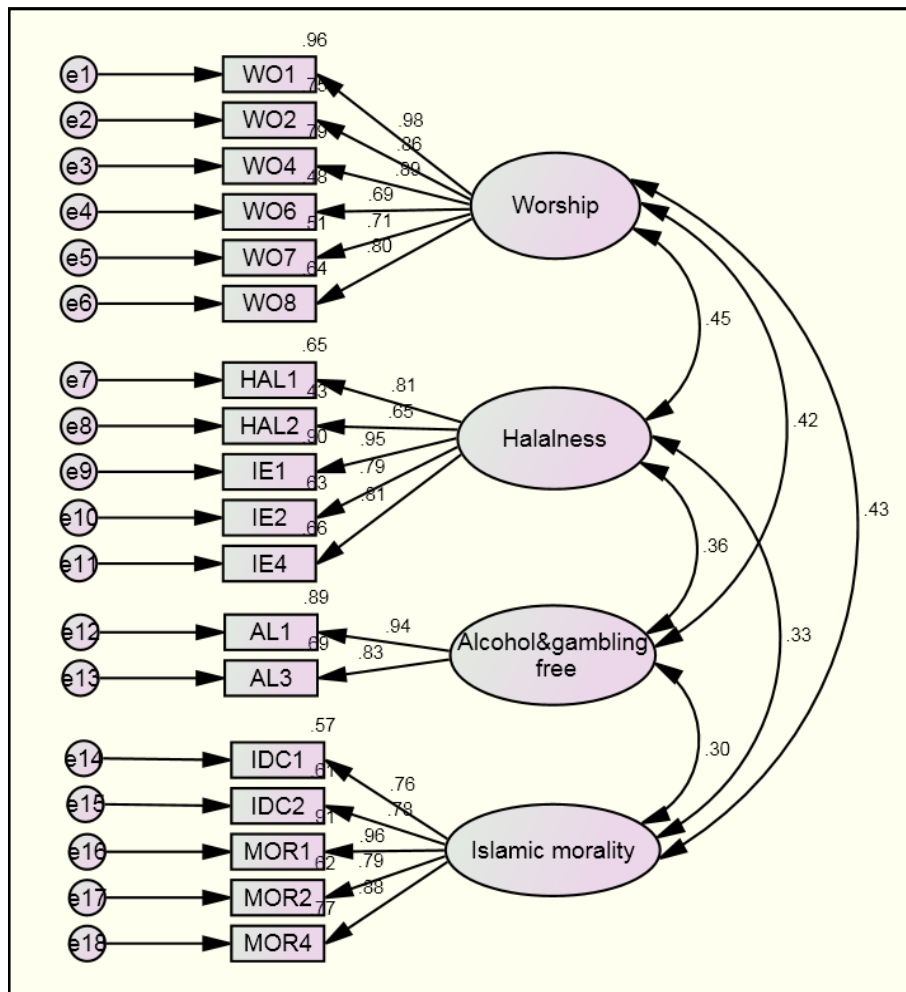
reliability and validity, some of the fit measures for the CFA Model did not meet the acceptable level. This could be explained as one of the factors (alcoholic drinks & gambling free) has only two items, which need at least a sample size of 300, as recommended by Hair et al. (2010, p. 662). It should be noted that CFA for IAD is performed with actual data from the survey and discussed in detail in section 4.4.5.3.

**Table 4.7: Correlation between Factors**

	Worship facilities	Halalness	General Islamic morality	Alcoholic drinks & gambling free
Worship facilities	<b>.83</b>			
Halalness	.45	<b>.80</b>		
General Islamic morality	.43	.33	<b>.84</b>	
Alcoholic drinks & gambling free	.42	.36	.30	<b>.88</b>

**Table 4.8: CFA Fit Measures of the IAD Scale**

Fit Indices	Estimates	Acceptable level
Chi-square	288.592	
Degree of freedom (df)	129	
<i>p</i>	.000	>0.05
Normed Chi-square (CMIN/DF)	2.237	< 3.00
Goodness-of-fit Index (GFI)	.829	≥ 0.90
Adjusted Goodness-of-fit Index (AGFI)	.773	≥ 0.90
Tucker-Lewis Index (TLI)	.913	≥ 0.90
Comparative Fit Index (CFI)	.927	≥ 0.90
Root Mean Square of Error of Estimation (RMSEA)	.09	≤ 0.08



**Figure 4.1: Islamic attributes of Destination CFA**

#### 4.4 Survey Results

This section presents the data analysis for the survey in accordance with the analysis techniques presented in Chapter Three. After developing the IAD construct, the content and face validity of the questionnaire was ascertained, as discussed in section 3.11.2. A six-page questionnaire was used to measure the theoretical constructs. The researcher conducted the fieldwork by distributing the questionnaires to tourists. The data were prepared by coding, editing, and cleaning. In the following sections, the collected data are analysed.

#### **4.4.1 Data Preparation**

The process of converting information from a questionnaire so that a computer can read it is referred to as data preparation. The purpose of the data preparation process is to ensure that the basic data is complete and accurate and there are no problems in the data such as problems with coding, outliers, missing values, non-normal distributions, and/or errors inputting the data (Churchill, 1999; Hair et al., 2010). This process normally contains many steps beginning with editing and coding of the data, then data entry, followed by error detection, and data cleaning and screening (Hair et al., 2003).

**Data coding** involves assigning numerical values to responses to the questions contained in the survey instrument. Coding the data was done by assigning a code to each individual response for each question within the survey (Hair et al., 2003). Coding was relatively simple because there were no-open ended questions. All questions in the research questionnaire were pre-coded. The only exception was in the last section of the questionnaire that was left free for the respondent's comments.

**Data editing** is the process whereby the raw data are checked for mistakes, such as blank pages or missing data for key items that must be completed for questionnaires to be usable. This process acted as a quality screen by ensuring the raw data collected with the questionnaires met acceptable standards. Once data were collected, they were edited. Raw data were edited for the purpose of detecting any errors and omissions, for correction where possible, and certifying that the minimum data quality standards were achieved (Churchill, 1999; Hair et al., 2003). Then, the variables were given unique labels and the answers were entered into the SPSS software.

**Data cleaning and screening.** After the raw data were transferred and edited into a computer file, errors were checked through data cleaning and screening. This process was to ensure that data had been transcribed accurately by identifying inconsistent responses, missing data and outliers (Malhotra, 2007). Failure to do that may create potential problems that may affect the results of the statistical tests (Hair et al., 2010). In this research, data were checked for accuracy and edited for appropriate treatment of missing values. Frequency distributions were run using SPSS 18 for each variable to check for outlier responses and missing data. Two cases with illegal responses were noted and corrected. In addition, 43 cases of the completed questionnaires were found to be unusable because of missing responses. An inspection of the data set revealed that there were incomplete responses in questions pertaining to push motivations and overall tourist satisfaction. Hence, these missing responses were discarded immediately, which resulted in 508 usable responses.

Having treated missing responses, the next step was to examine outliers. An outlier is a score lying far outside the normal range of a distribution of scores. In other words, outliers can be defined as individual responses that probably are valid responses, but quite different from the rest of the responses to a particular question (Hair et al., 2010). These unusual values that are quite different from the rest of the data can have potentially dramatic effects on distribution. Outliers can occur from incorrect data entry. In this research eleven cases of these errors were noted and corrected.

#### 4.4.2 The Response Rate

The questionnaires were distributed in international hotels and tourism sites in four Malaysian cities: Kuala Lumpur, Kula Terengganu, Penang, and Johor Bahru. Out of 1,300 questionnaires, 551 were filled in and returned. This represented an effective response rate of 42.3%. Table 4.9 shows the number of questionnaires distributed in each city and the response rate.

**Table 4.9: Response Rate**

The city	Distributed questionnaire	%	Returned questionnaires	%
Kuala Lumpur	400	30.8	165	30.0
Kula Terengganu	350	26.9	135	24.5
Penang	300	23.1	150	27.2
Johor Bahru	250	19.2	101	18.3
Total	1300	100	551	100

The results from the survey conducted using 508 questionnaires are presented. The analyses were performed using the SPSS Version 18 program, while the AMOS Version 18 program was used for conducting CFA, and the structural model was performed by smartPLS software.

#### 4.4.3 Respondent Profiles

This section focuses on providing general information about respondents. The aim is to present a brief account of the profile of the sample in the study. Frequency analysis is used to distribute the respondents according to the following aspects: (a) gender, (b) marital status, (c) age, (d) educational level, (e) monthly income, (f) level of religiosity, and (g) country of origin.



Table 4.10 shows the respondents' country of origin. Seven out of 508 respondents do not record their nationalities. Twenty-nine nationalities represent the respondents' country of origin. In terms of gender, Table 4.11 shows that 58.7% of the respondents are male and 41.3% are female. The categorization of sample by marital status shows that 69.5% are married, 28.3% are single, and 2.2% are divorced. By age, 77.2% are above 25 years old. By education level, 56.3% of the sample have a university degree/are postgraduates, and the remaining are in primary (or less), secondary and intermediate. In terms of monthly income, 1% of respondents earn less than USD1,000, 4.5% earn between USD1,000 to USD1,999, 23.6% earn between USD2,000 to USD2,999, 42.3% earn between USD3,000 to USD4,999, and 28.5% earn USD5,000 and above. In terms of religiosity, 15.4% categorized themselves as secular, 22.8% as mildly religious, 34.8% as religious, and 27% as very religious.

**Table 4.10: Respondents' Country of Origin**

<b>Country</b>	<b>Respondents</b>	<b>Country</b>	<b>Respondents</b>
Egypt	29	Oman	33
Thailand	16	Australia	19
Indonesia	22	UK	29
USA	25	Jordan	18
Philippines	14	South Africa	5
India	29	Bangladesh	7
Canada	21	Saudi Arabia	35
Turkey	3	Sri Lanka	15
Iran	18	France	5
UAE	27	Yemen	23
Syria	18	Pakistan	12
Iraq	13	Sudan	16
Algeria	16	Netherlands	2
Brunei	20	China	3
New Zealand	8	<b>Total</b>	<b>501</b>

**Table 4.11: Respondents Profile**

<b>Profile</b>	<b>Frequency</b>	<b>Percentage</b>
<b>By gender</b>		
Male	298	58.7
Female	210	41.3
<b>By marital status</b>		
Single	144	28.3
Married without children	154	30.3
Married with children	199	39.2
Divorced	11	2.2
<b>By age</b>		
Under 25	116	22.8
25-34	158	31.1
35-44	167	32.9
45 or over	67	13.2
<b>By education level</b>		
Primary (or less)	22	4.3
Secondary	65	12.8
Intermediate	135	26.6
University	181	35.6
Post Graduate	105	20.7
<b>By income</b>		
Less than 1000 USD	5	1.0
1000 – 1999 USD	23	4.5
2000 – 2999 USD	120	23.6
3000 – 4999 USD	215	42.3
5000 USD and over	145	28.5
<b>By religiosity</b>		
Secular	78	15.4
Mildly religious	116	22.8
Religious	177	34.8
Very religious	137	27.0

#### **4.4.4 Exploratory Factor Analysis (EFA) results**

Since the research adopted items from various authors, as well as developing new items, it is necessary to use exploratory factor analysis (EFA) to determine the underlying structure of the proposed variables. Tests on the suitability of the data set were performed for conducting EFA including the determination of outliers, linearity and the normality. The outliers issue was discussed in section 4.4.1. To check the linear relationship of variables, as suggested by Hair et al. (2010), the P-P plots were verified. This study used average values calculated for each set of items in a second order variable to be representative of all items in the corresponding second order variable. A visual check of the P-P plots in appendix D indicates that the items from exogenous variables are linearly related to those from endogenous variables. The variance inflating factor (VIF) is used to check multicollinearity. The calculated values of VIF are presented in appendix D. Visual assessment of these results indicates that the problem of multicollinearity is not found as VIF values are less than 10.

This study examined the skewness and kurtosis values to evaluate the assumption of normality. The full range of values for skewness, and kurtosis are presented in Appendix E. The skewness values for measurement items ranges from -0.903 to +0.877, much within the recommended range from -1 to +1 (Hair et al., 2010). Kurtosis ranges from 0.767 to +0.954, and are well within the recommended limit from -2.0 to +2.0 (Coakes & Steed, 2003).

Suitability of the data set was also examined by the KMO index and Bartlett's test of sphericity. The data were divided into three different groups (according to the second order

latent variables). Table 4.12 shows that All KMO indices are higher than 0.5 as recommended by Hair et al. (2010), while in all Bartlett's test of sphericity, the results are significant ( $p = 0.000$ ). These results confirm the suitability of the data for EFA.

**Table 4.12: Results of Examination of Variables for EFA Suitability**

<b>Variable</b>	<b>No. of items</b>	<b>KMO Index</b>	<b><i>p</i>- Value (Bartlett's Test of Sphericity)</b>	<b>Remark</b>
PUSM	30	.926	.000	Suitable
PULM	24	.888	.000	Suitable
IAD	18	.943	.000	Suitable

#### **4.4.4.1 Push motivation factors**

After confirming that the data were suitable in the previous stage, all the 30 items were factor analysed using principal component analysis (PCA). Table 4.13 shows the results of the PCA and Varimax results. Six factors were extracted and were labelled according to the commonality of the items loading on each factor as follows: achievement, exciting and adventure, family togetherness, knowledge/education, escape, and sports. The total per cent of variance accounted for by the six factors was 62.61%. The Cronbach's alpha was also calculated to test the reliability of each factor. The alpha coefficients for five factors were above .70 as recommended by Nunnally and Bernstein (1994), except factor six.

From Table 4.13, factor 1, achievement explained 35.58 per cent of the variance with an eigenvalue of 10.67. All motives included under that factor reflected the desire to expose the prestige and bragging about the trip as labelled by previous studies (Cha et al.,1995;

Kau & Lim, 2005; Kim et al., 2007; Kim & Jogaratnam, 2002; Jamrozy & Uysal, 1994; Lee et al., 2002; Turnbull & Uysal, 1995; Yuan & McDonald, 1990).

**Table 4.13: Push Factors**

<b>Push factors</b>	<b>Loading</b>	<b>Variance explained</b>	<b>Cronbach alpha</b>
<b>Factor 1: Achievement</b>		35.58	.950
Meeting new people	.808		
Going places friends have not been	.862		
Talking about the trip	.858		
Indulging in luxury	.829		
<b>Factor 2: Exciting and adventure</b>		7.42	.839
Finding thrills and excitement	.727		
Being entertained and having fun	.755		
Being daring and adventuresome.	.779		
Being free to act how I feel	.608		
<b>Factor 3: Family togetherness</b>		5.60	.942
Visiting places my family came from	.812		
Visiting friends and relatives	.774		
Being together as a family	.801		
Seeing as much as possible	.714		
<b>Factor 4: Knowledge/education</b>		5.43	.850
Learning new things or increasing knowledge	.721		
Experiencing new/different	.682		
Seeing and experiencing a foreign destination	.708		
Visiting historical places	.759		
<b>Factor 5: Escape</b>		4.828	.871
Getting away from the demands at home	.836		
Getting a change from a busy job	.828		
Feeling at home away from home	.664		
Experiencing a simpler lifestyle	.771		
<b>Factor 6: Sports</b>		3.728	.555
Participating in sports	.787		
Desire to watch sports events	.603		
Participate in physical activity	.758		
<b>Total variance explained</b>	<b>62.61</b>		

The Cronbach's alpha of factor 1 is .950, which is considered very high compared with previous studies. Factor 2, exciting and adventure explained 7.42 per cent of the variance with an eigenvalue of 2.22. The items loaded under this factor reflected the

thrilling and novelty of the journey as reported by previous studies (Cha et al., 1995; Hanqin & Lam, 1999; Jamrozy & Uysal, 1994; Jang & Cai, 2002; Kim & Lee, 2002; Kim et al., 2003, 2006; Kau & Lim, 2005; Lee et al., 2002; Yuan & McDonald, 1990). The Cronbach's alpha of this factor is .839.

Factor 3, family togetherness, explained 5.60 per cent of the variance with an eigenvalue of 1.68. All the items included under this factor are associated with socialization and were reported by some previous studies (Cha et al., 1995; Correia et al., 2007; Jamrozy & Uysal, 1994; Jang & Cai, 2002; Jang & Wu, 2006; Kau & Lim, 2005; Kim & Jogaratnam, 2002; Kim et al., 2006, 2007; Lee et al., 2002; Turnbull & Uysal, 1995). The Cronbach's alpha of this factor is .942, which is considered very high.

Factor 4, knowledge/education, accounted for 5.43 per cent of variance with an eigenvalue of 1.63. The items loaded under this factor were associated with increasing knowledge related to historical places and foreign destination. The Cronbach's alpha of this factor is .850. This factor was reported by previous studies (Beh & Bruyere, 2007; Bogari et al., 2004; Cha et al., 1995; Correia et al., 2007; Hanqin & Lam, 1999; Jang & Cai, 2002; Jang & Wu, 2006; Kau & Lim, 2005; Kim et al., 2006).

Factor 5, escape, accounted for 5.43 per cent of variance with an eigenvalue of 1.44. All items included in this factor reflected the desire to get away from home and experience a change from routine. The Cronbach's alpha of this factor is .871. Previous studies labelled this factor as 'escape' or/and 'relaxation' (Bogari et al., 2004; Kim & Lee, 2002; Kim et al., 2003, 2006; Hanqin & Lam, 1999; Jang & Cai, 2002; Lee et al., 2002; Uysal & Jurowski, 1994; Yoon & Uysal, 2005; Yuan & McDonald, 1990).

Factor 6, sports, explained 3.72 per cent of the variance with an eigenvalue of 1.08. All items loaded under this factor related to sport activities. The Cronbach's alpha of this factor is .55, which is considered low. This factor was reported by previous studies (such as Cha et al., 1995; Kozak, 2002; Turnbull & Uysal, 1995; Uysal & Jurowski, 1994; Yoon & Uysal, 2005).

#### **4.4.4.2 Pull motivation factors**

The 24 pull items were factor analysed using the principal component analysis (PCA). Table 4.14 shows the results of PCA and Varimax results. Five factors were extracted and labelled: natural scenery, wide space & activities, cleanness & shopping, modern atmosphere, and different culture. The total per cent of variance accounted for by the five factors was 62.46%. Cronbach's alpha was also calculated to test the reliability of each factor. The alpha coefficients for the five factors were above .70 as recommended by Nunnally and Bernstein (1994).

From Table 4.14, factor 1, natural scenery, explained 35.71 per cent of the variance with an eigenvalue of 8.57. The pull motives that were included under that factor reflected the desire to explore mountainous areas, ecological sites, and wilderness and undisturbed nature. The Cronbach's alpha of this factor is .884, which is considered acceptable. This factor was reported by most of the tourism motivations studies (Bigné et al., 2005; Chi & Qu, 2008; Correia et al., 2007; Del Bosque & Martín, 2008; Jang & Wu, 2006). Factor 2, wide space & activities, explained 8.45 per cent of the variance with an eigenvalue of 2.02. The Cronbach's alpha of this factor is .875, which is also acceptable.

The ‘cleanness and shopping’ factor explained 7.74 per cent of the variance with an eigenvalue of 1.86. The Cronbach’s alpha of this factor is .939, which is considered very high. Factor 4, modern atmosphere, explained 5.48 per cent of the variance with an eigenvalue of 1.31. The Cronbach’s alpha of this factor is .784, which is satisfactory. Factor 5, different culture, explained 5.06 per cent of the variance with an eigenvalue of 1.21. The Cronbach’s alpha of this factor is .722, which is also satisfactory.

**Table 4.14: Pull Factors**

<b>Pull factors</b>	<b>Loading</b>	<b>Variance explained</b>	<b>Cronbach’s alpha</b>
<b>Factor 1: Natural scenery</b>		35.71	.884
Outstanding scenery	.601		
Mountainous areas	.868		
Natural ecological sites	.867		
Wilderness and undisturbed nature	.839		
<b>Factor 2: Wide space &amp; activities</b>		8.45	.875
Wide spaces to get away from crowds	.842		
Variety of activities to see	.604		
Water sports	.812		
Personal safety	.835		
<b>Factor 3: Cleanness &amp; shopping</b>		7.74	.939
Standards of hygiene and cleanness	.754		
Shopping facilities	.810		
Reliance/privacy	.749		
High quality restaurants	.796		
<b>Factor 4: Modern atmosphere</b>		5.48	.784
Modern cities	.770		
Exotic atmosphere	.671		
First class hotels	.784		
Reliable weather	.749		
<b>Factor 5: Different culture</b>		5.06	.722
Interesting and friendly local people	.661		
Different culture from my own	.678		
Historic old cities	.734		
Interesting town/village	.750		
<b>Total variance explained</b>	<b>62.46</b>		



#### **4.4.4.3 Islamic attributes of destination factors**

The Islamic attributes of destination measures (18 items) developed in section 4.3.4 were subjected to data analysis techniques similar to other constructs, as shown in the research process flow chart (see Figure 3.1, Chapter Three). In this section, EFA is used again to confirm the results of continuous improvement cycles and to ensure the underlying structure of the proposed items are determined well.

Table 4.15 shows the results of PCA and Varimax results. Four Factors were extracted and labelled; worship facilities, Halalness, general Islamic morality, alcoholic drinks and gambling free. The Total per cent of variance accounted for by the four factors was 72.18%. The alpha coefficients for four factors were above .70 as recommended by Nunnally and Bernstein (1994).

Factor 1, worship facilities, explained 52.43 per cent of the variance with an eigenvalue of 9.43. This factor was made up of six items with a satisfactory Cronbach's alpha coefficient (.883). Factor 2, Halalness, explained 7.57 per cent of the variance with an eigenvalue of 1.36. Five items were extracted under this factor with a suitable Cronbach's alpha coefficient (.893). Factor 3, general Islamic morality, explained 6.46 per cent of the variance with an eigenvalue of 1.16. This factor contains five items with an acceptable Cronbach's alpha coefficient (.889). Factor 4, alcoholic drinks and gambling free, explained 5.7 per cent of the variance with an eigenvalue of 1.02. This factor includes two items with a high Cronbach's alpha coefficient (.918).

**Table 4.15: IAD Factors**

<b>IAD factors</b>	<b>Loading</b>	<b>Variance explained</b>	<b>Cronbach's alpha</b>
<b>Factor 1: Worship facilities</b>		52.43	.883
Availability of Mosque (Masjid)	.752		
Availability of prayer facilities at tourism sites, airport, shopping malls, hotels, conference halls, parks, etc.	.726		
Presence of loud public pronouncement of Azan to indicate prayer time.	.761		
Placement of Qibla direction (Qibla stickers/direction point towards Makkah city) in your hotel room	.642		
Provision of a copy of the Holy Qur'an in each hotel room	.727		
Availability of water supply in toilets at tourism sites, airport, shopping mall, hotel, parks, etc.	.648		
<b>Factor 2: Halalness</b>		7.57	.893
Availability of Halal food at tourism sites, airport, shopping malls, hotels, parks, etc.	.708		
Availability of segregated Halal kitchen in hotels and restaurants	.714		
Availability of segregated areas for women at beaches	.753		
Availability of hotels with segregated swimming pools and gymnasium for men and women	.697		
Banning of sex channels in hotel entertainment system	.747		
<b>Factor 3: General Islamic morality</b>		6.46	.889
Observation of Islamic dress code by hotel and restaurant staff	.624		
Prevalence of Islamic dress code (e.g. Hijab) at public places	.670		
Banning by the authority of prostitution	.779		
Banning by the authority of indecent display of affection between sexes at public places (such as kissing etc.)	.649		
Censorship by the authority of adult scenes in movies shown on TV	.745		
<b>Factor 4: Alcoholic drinks and gambling free</b>		5.70	.918
Banning of alcoholic drinks by the authority at public places (such as tourism sites, hotels, parks, etc.)	.857		
Banning of gambling activities by the authority at public places (such as tourism sites, hotels, parks, etc.)	.862		
<b>Total variance explained</b>	<b>72.18</b>		

Table 4.16 shows the summary of items dropped in exploratory factor analysis. Seven items were dropped from push motives, while four items were dropped from pull motives and no items were dropped from IAD. In the following section, the properties of the extracted constructs were ascertained using CFA.

**Table 4.16: Summary of Items Dropped in Exploratory Factor Analysis**

<b>Variable</b>	<b>Original No. of items</b>	<b>No. of items dropped</b>	<b>Description of Items Dropped in EFA</b>
PUSM	30	7	Rediscovering past good times
			Rediscovering myself
			Feeling safe and secure
			Trying new food
			Escaping from the ordinary
			Adventure of reduced air fares
			Doing nothing at all
PULM	24	4	Seaside
			Budget accommodation
			Quality beach
			Manageable size to see every thing

#### 4.4.5 Confirmatory Factor Analysis (CFA) Results

The validity of the measures was initially assessed by conducting an exploratory factor analysis and examining the reliability of the constructs. After this initial analysis, the measures were subjected to confirmatory factor analysis using AMOS software.

The purification of items for the purpose of searching for model specifications (Hair et al., 2010) was performed following the procedures discussed in 3.12.3.2, Chapter Three.

The model diagnostics outlined in Table 3.6 were used in the process, in line with Table 3.7. The modification index ( $MI \geq 4$ ); standard residuals ( $< |4.0|$ ); squared multiple correlations ( $SMC \geq 0.3$ ); path estimates ( $\lambda \geq 0.5$ ); were used as suggested by Hair et al., (2010).

#### **4.4.5.1 Confirmatory factor analysis for push motivations**

Push motivations were estimated by six latent variables as the result of EFA. The first-order push motivation CFA was performed with the initially suggested latent variables. In the process, one first order construct (sport) was dropped due to a negative covariance in a variable. Four items were dropped (see Table 4.20) from further analysis, as they could not survive in the model diagnostic procedure (see Table 3.6). The structure of the modified model of push motivations is presented in Figure 4.2 and the results of the confirmatory factor analysis of the modified model of the push motivation scale are summarized in Table 4.17.

The modified first-order push motivations show that all modified model fit statistics were well above the acceptable levels indicating a good fit for the model. The only exception was the  $p$  value, which was found to be significant (Chi-square = 203.582,  $df = 94$ ,  $p = .000$ ) and this could be explained because the Chi-square value is very sensitive to the sample size. When the sample size becomes large enough, an insignificant chi-square ( $p < .05$ ) is difficult to find for any specific model (Hair et al., 2010; p. 666). The fit statistics with Normed Chi-square (CMIN/DF) = 2.166. No value exceeded 2.58 (in absolute) in the standardized residual covariance matrix, Goodness-of-fit Index (GFI) = 0.953, Adjusted Goodness-of-fit Index (AGFI) = 0.932, Tucker-Lewis Index (TLI) = 0.981, Comparative

Fit Index (CFI) = 0.985, Root Mean Square of Error of Estimation (RMSEA) =.048 indicating an adequate level of fit. All standardized regression weights for push motivation scale are greater than .70. Standardized regression weights indicated a reasonably good measurement of push motivation and provide evidence of convergent validity. All squared multiple correlations (range from .579 to .898) are greater than .30 indicating adequate reliability.

**Table 4.17: Fit Measures for the CFA Model of Push Motivations Scale**

<b>Fit Indexes</b>	<b>Estimates</b>	<b>Acceptable level</b>
Chi-square	203.582	
Degree of freedom (df)	94	
<i>p</i>	0.000	>0.05
Normed Chi-square (CMIN/DF)	2.166	< 3.00
Goodness-of-fit Index (GFI)	0.953	≥ 0.90
Adjusted Goodness-of-fit Index (AGFI)	0.932	≥ 0.90
Tucker-Lewis Index (TLI)	0.981	≥ 0.90
Comparative Fit Index (CFI)	0.985	≥ 0.90
Root Mean Square of Error of Estimation (RMSEA)	0.048	≤ 0.08

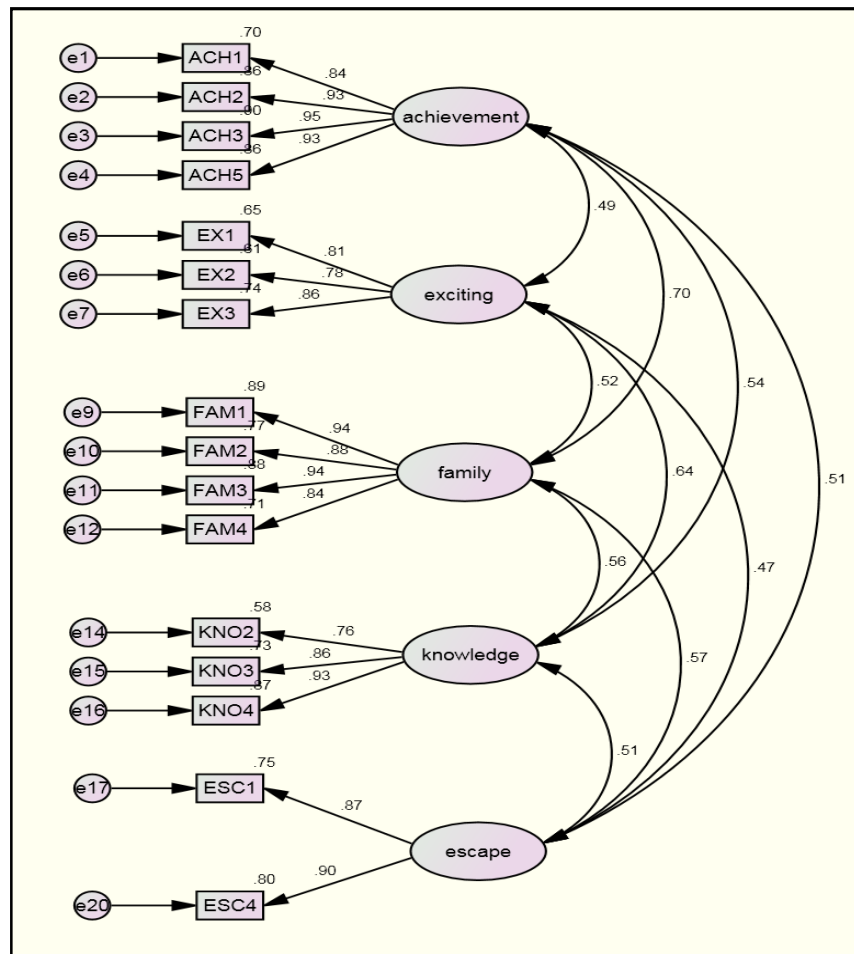


Figure 4.2: First Order Push Motivations CFA

#### 4.4.5.2 Confirmatory factor analysis for pull motivations

Pull motivations were estimated by five latent variables as the result of EFA. The first-order push motivation CFA was performed with initially suggested latent variables. In the process, eight items were dropped (see Table 4.20) from further analysis, as they could not survive the model diagnostic procedure. The structure of the modified model of pull motivations is presented in Figure 4.3 and the results of the confirmatory factor analysis of the modified model of the pull motivation scale are summarized in Table 4.18.

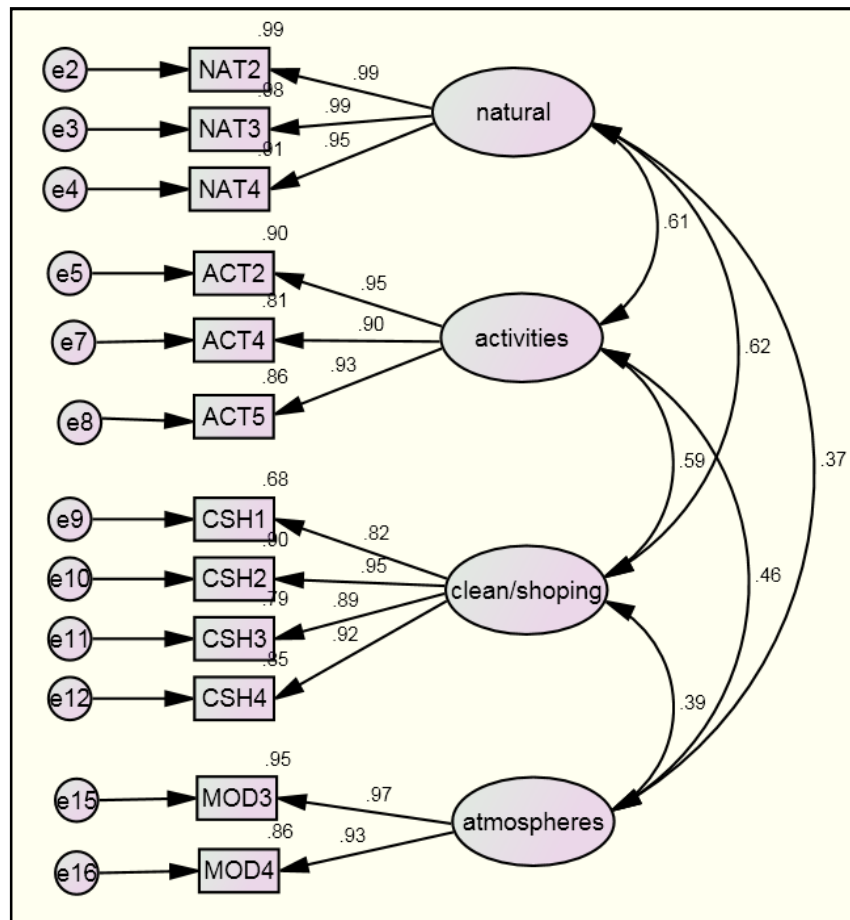


Figure 4.3: First Order Pull Motivations CFA

Table 4.18: Fit Measures for the CFA Model of Pull Motivations Scale

Fit Indexes	Estimates	Acceptable level
Chi-square	95.886	
Degree of freedom (df)	48	
<i>p</i>	0.000	>0.05
Normed Chi-square (CMIN/DF)	1.998	< 3.00
Goodness-of-fit Index (GFI)	0.970	≥ 0.90
Adjusted Goodness-of-fit Index (AGFI)	0.951	≥ 0.90
Tucker-Lewis Index (TLI)	0.992	≥ 0.90
Comparative Fit Index (CFI)	0.994	≥ 0.90
Root Mean Square of Error of Estimation (RMSEA)	.044	≤ 0.08

The modified first-order pull motivations shows that all modified model fit statistics were well above the acceptable levels indicating a good fit for the model. The only exception was the  $p$  value, which was found to be significant (Chi-square = 95.886,  $df = 48$ ,  $p = .000$ ). The fit statistics with Normed Chi-square (CMIN/DF) = 1.998. No value exceeded 2.58 (in absolute) in the standardized residual covariance matrix, Goodness-of-fit Index (GFI) = 0.970, Adjusted Goodness-of-fit Index (AGFI) = 0.951, Tucker-Lewis Index (TLI) = 0.992, Comparative Fit Index (CFI) = 0.994, and Root Mean Square of Error of Estimation (RMSEA) = .044, indicating an adequate level of fit. All standardized regression weights for pull motivation scale are greater than 0.50 indicating a reasonably good measurement of pull motivation and providing evidence of convergent validity. All squared multiple correlations are greater than 0.30 indicating adequate reliability.

#### **4.4.5.3 Confirmatory factor analysis for IAD**

Islamic attributes of destination (IAD) were estimated by four latent variables as the result of EFA. The first-order Islamic attributes of destination CFA was performed with initially suggested latent variables. The structure of the model of IAD is presented in Figure 4.4 and the results of the confirmatory factor analysis of the measurement model are summarized in Table 4.19. The overall fit of the IAD model was assessed. The fit statistics with Chi-square = 304.933 at  $p$ -value = .000, Degree of Freedom = 129, Normed Chi-square (CMIN/DF) = 2.364, Goodness-of-fit Index (GFI) = 0.938, Adjusted Goodness-of-fit Index (AGFI) = 0.918, Tucker-Lewis Index (TLI) = 0.968, Comparative Fit Index (CFI) = 0.993, and Root Mean Square of Error of Estimation (RMSEA) = 0.052, indicating an adequate level of fit. All standardized regression weights for IAD are greater than 0.50



indicating a reasonably good measurement of IAD and providing evidence of convergent validity.

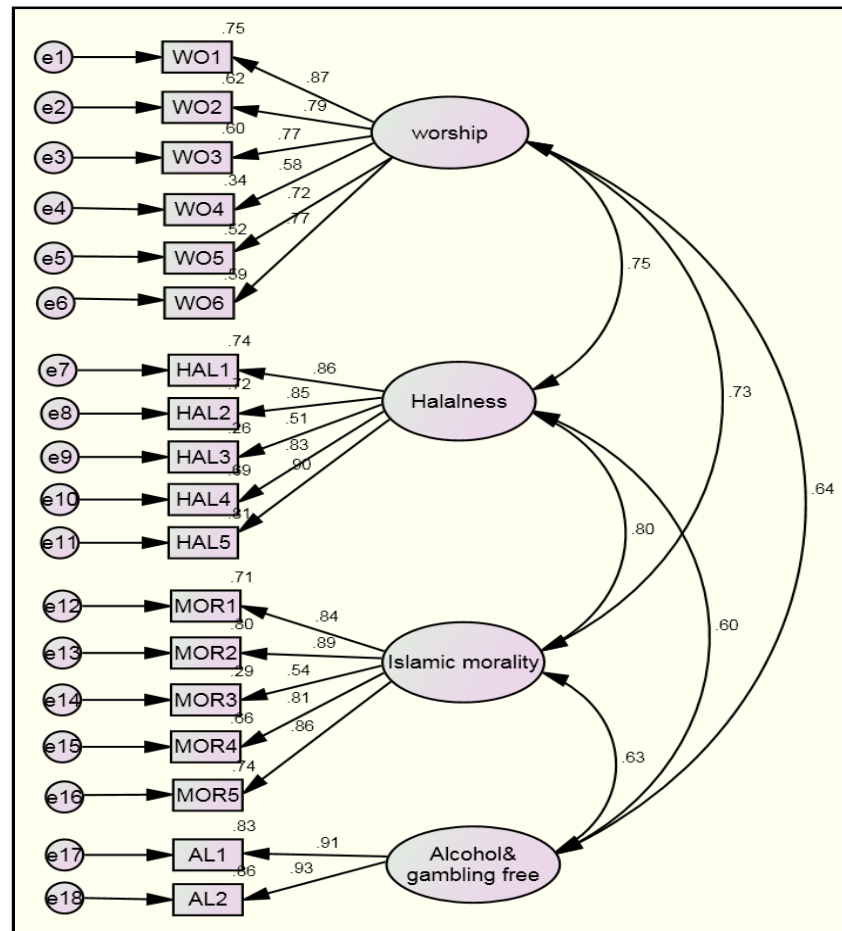


Figure 4.4: First Order Islamic Attributes of Destination CFA

Table 4.19: Fit Measures for the CFA Model of IAD Scale

Fit Indexes	Estimates	Acceptable level
Chi-square	304.933	
Degree of freedom (df)	129	
<i>p</i>	0.000	>0.05
Normed Chi-square (CMIN/DF)	2.364	< 3.00
Goodness-of-fit Index (GFI)	0.938	≥ 0.90
Adjusted Goodness-of-fit Index (AGFI)	0.918	≥ 0.90
Tucker-Lewis Index (TLI)	0.968	≥ 0.90
Comparative Fit Index (CFI)	0.973	≥ 0.90
Root Mean Square of Error of Estimation (RMSEA)	0.052	≤ 0.08

**Table 4.20: Summary of Items Dropped in CFA**

<b>1<sup>st</sup> order Variable</b>	<b>Original No. of items</b>	<b>No. of items dropped</b>	<b>Description of Items Dropped in CFA</b>
Sport	3	3	Participating in sports
			Desire to watch sports events
			Participate in physical activity
Escape	4	2	Getting a change from a busy job
			Feeling at home away from home
Knowledge	4	1	Learning new things or increasing knowledge
Exciting	4	1	Being free to act how I feel
Natural scenery	4	1	Outstanding scenery
Activities	4	1	Water sports
Modern atmospheres	4	2	First class hotels
			Reliable weather
Different culture	4	4	Interesting and friendly local people
			Different culture from my own
			Historic old cities
			Interesting town/village

#### **4.4.6 Measurement Model**

The properties of the measurement model are evaluated by assessment of construct validity –content/face validity, unidimensionality, reliability, convergent validity, and discriminant validity. The procedures for performing the assessment of construct validity are discussed in Chapter Three, Section 3.12.3.3. In this study, content/face validity has been discussed in Chapter Three on how it has been performed to enhance the validity of the survey questionnaires. Therefore, in this section, only procedures requiring statistical techniques are discussed.

#### **4.4.6.1 Unidimensionality**

To assess unidimensionality in this study, the items should be significantly associated with an underlying construct, in addition, each item must be associated with one, and only one latent variable. It was found that the items in EFA have loadings  $\geq 0.5$  (0.601 to 0.868), and in the CFA results, all the regression weights (0.51 to 0.99; with their significant *t*-values) are also greater than 0.5, the threshold recommended by Hair et al. (2010). These results verified that the items used in this research are associated with their underlying constructs. Therefore, the existence of unidimensionality is established in this study. All results of the unidimensionality assessment are shown in Table 4.21.

#### **4.4.6.2 Reliability**

Reliability is the extent to which a scale generates consistent results if repeated measurements are made (Malhotra, 2007, p. 276). To achieve good reliability, the recommended procedure in section 3.12.3.3.2 was followed by using Cronbach's alpha value and composite reliability. Table 4.21 shows that alpha ranges in EFA are 0.55 to 0.95. In these results, it is noted that one alpha value (PUSM) falls below the threshold of 0.7 as recommended by Hair et al. (2010). The value is still above 0.5, the threshold recommended by Nunnally (1978), thus, it is still acceptable. The composite reliability values calculated from the CFA results indicate high reliability, as all the alpha values are above the recommended threshold of 0.7.

It should be noted that the Cronbach's alpha and Composite Reliability values for some factors in PUSM and PULM are very high, this may be explained as mentioned

earlier in section 4.3.4.1.3 because most of the respondents may have selected the same answers from five Likert scales in the push and pull motivations sections.

**Table 4.21: Results of Unidimensionality and Reliability Assessment**

Constructs	Unidimensionality			Reliability	
	EFA	CFA		EFA	CFA
	Factor loading	Regression weight	Critical Ratio	Cronbach's Alpha	Composite Reliability
PUSM	0.603-0.862	0.76-0.95	18-40	0.55-0.95	0.87-0.94
PULM	0.601-0.868	0.82-0.99	23-65	0.72-0.93	0.95-0.98
IAD	0.624-0.860	0.51-0.93	12-26	0.88-0.91	0.88-0.91
OTS	-	-	-	0.870	-
DEL	-	-	-	0.804	-
<b>Acceptable level</b>	<b>±0.3 to ±0.4; ideally ±0.5</b>	<b>λ≥0.50</b>	<b>t ≥ 1.96 at α= .05</b>	<b>α≥0.7</b>	<b>CR≥0.7</b>

#### 4.4.6.3 Convergent validity

To assess the convergent validity in this research, the average variance extracted (AVE) is examined by running smartPLS for the entire measurement model. AVE is the amount of variance captured by the construct in relation to the amount of variance attributed to measurement error. According to Fornell and Larcker, (1981), if the AVE is lower than 0.50, the variance arising from measurement error exceeds the variance captured by the construct; thus, the validity of the individual indicators, including the construct, can be questioned.

Convergent validity is established if the AVE for each construct accounts for 0.50 or more of the total variance as applied by Battor and Battour (2010c), and recommended by

Fornell and Larcker (1981). Table 4.22 shows that the AVE of the measures exceeds the recommended level of 0.50 for push motivation (0.530), pull motivation (0.591), overall tourist satisfaction (0.737), Islamic destination of attributes (0.542), and destination loyalty (0.639), providing evidence for convergent validity.

Moreover, the loading paths of all items are statistically significant and exceed 0.50 (Hair et al., 2010, p. 709). These results suggest acceptable convergent validity for the study measures.

**Table 4.22: Average Variance Extracted**

<b>Construct</b>	<b>AVE</b>
PUSM	0.530
PULM	0.591
IAD	0.542
OTS	0.737
DEL	0.639

#### **4.4.6.4 Discriminant validity**

The discriminant validity was examined using the procedure recommended by Fornell and Larcker (1981). They suggest that discriminant validity is established if the square root of the average variance extracted (AVE) for each construct is greater than the values for the correlations between the given construct and each of the other constructs. In other methods, the AVE of the construct is larger than its shared variance with any other construct. Table 4.23 shows that the bold number in the diagonal of the table, the square

root of the average variance extracted (AVE), is always greater than the correlation values. These results suggest acceptable discriminant validity for the study measures.

**Table 4.23: Correlation between Constructs**

	PUSM	PULM	IAD	OTS	DEL
PUSM	<b>0.728</b>				
PULM	0.305	<b>0.768</b>			
IAD	0.353	0.501	<b>0.736</b>		
OTS	0.402	0.626	0.723	<b>0.858</b>	
DEL	0.289	0.398	0.453	0.595	<b>0.799</b>

To sum up, these measurement model results are satisfactory and suggest that it is suitable to proceed with the evaluation of the structural model.

#### **4.4.7 Analysis of the Structural Model and Testing of Hypotheses**

The development of the measurement model in the last section has reduced data and obtained a manageable number of valid, more reliable, composite variables, which can be used in the final step for evaluating structural models. The procedures for performing the assessment of the structural model as well as testing the hypotheses were discussed in Chapter Three, Section 3.12.3.4. The hypothesized relationships were based on the theoretical framework developed in Chapter Three. Table 4.24 outlined the hypothesized relationships posited in this study.

In order to examine the relationships between constructs in the proposed model as well as test the hypotheses, two stages of analysis were performed to evaluate the structure model using SmartPLS software; first, the structural model without moderating variable and then the structural model with moderating variable.

**Table 4.24: The Study Hypotheses**

<b>No</b>	<b>Hypothesis</b>
<b>H1</b>	The push motivations (PUSM) positively influence overall tourist satisfaction (OTS).
<b>H2</b>	The pull motivations (PULM) positively influence overall tourist satisfaction (OTS).
<b>H3</b>	Islamic attributes of destination (IAD) moderate the relationship between the push motivations (PUSM) and overall tourist satisfaction (OTS).
<b>H4</b>	Islamic attributes of destination (IAD) moderate the relationship between the pull motivations (PULM) and overall tourist satisfaction (OTS).
<b>H5</b>	The overall tourist satisfaction (OTS) positively influences destination loyalty (DEL).

#### **4.4.7.1 Structure model without IAD**

The objective to test the structural model without IAD is to examine the causal relationship between tourism motivations, overall tourist satisfaction, and destination loyalty. Thus, the overall tourist satisfaction is tested as the mediating variable between tourism motivations (push and pull) and destination loyalty. This issue was investigated by comparing two alternative models to our baseline model (Model 1), as shown in Figure 4.5. In Model 2, overall tourist satisfaction was excluded and tourism motivations were directly linked to destination loyalty. Model 3 includes both the direct and indirect paths from

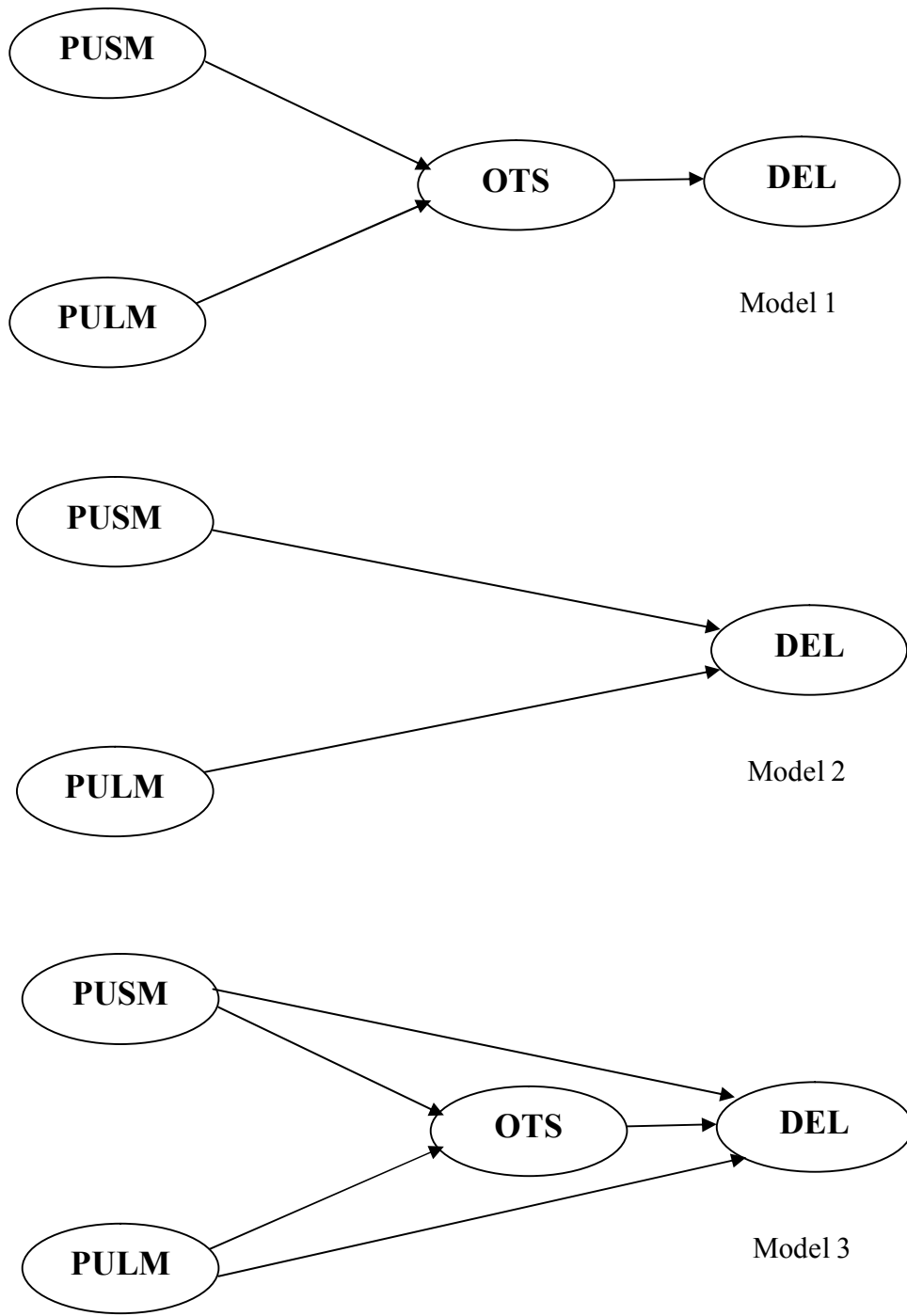
tourism motivations to destination loyalty. The results of Model 1 will be discussed and then compared to those of Model 2 and Model 3.

Table 4.25 shows the standardized parameters for Model1, as a result from bootstrap simulation (Chin, 1998). The *t*-values confirm the relationships between the three constructs because they are greater than 1.64. In other words, the first three hypotheses (H1, H2, and H3) are statistically significant. The path coefficients are 0.23, 0.55, and 0.59, respectively. Table 4.26 shows that the explained variance ( $R^2$ ) is 0.44 for overall tourist satisfaction and 0.35 for destination loyalty. According to the results in Table 4.26, goodness-of-fit for model1 is 0.49, which indicates the model is satisfactory (Tenenhaus et al., 2005). The previous results for model 1 are considered the base for conducting the comparison with other two models –model 2 and model 3.

$$\mathbf{GoF(model\ 1)} = \sqrt{[(\text{average communality}) \times (\text{average } R^2)]}$$

$$\mathbf{GoF(model\ 1)} = \sqrt{[(0.62) \times (0.39)]} = 0.49$$





**Key:** PUSM – Push motivations; PULM – Pull motivations; OTS – overall tourist satisfaction; DEL – destination loyalty; IAD – Islamic attributes of destination

**Figure 4.5: Alternative Models for Testing Mediating Effect**

**Table 4.25: Parameter Estimation of the PLS Models by the Bootstrap Method**

	Model 1		Model 2		Model 3	
	Path coefficient	t-value	Path coefficient	t-value	Path coefficient	t-value
PUSM → OTS	0.23	7.29*	-	-	0.23	6.83*
PULM → OTS	0.55	15.4*	-	-	0.55	14.7*
OTS → DEL	0.59	16.9*	-	-	0.55	12*
PUSM → DEL	-	-	0.18	4.6*	0.05	1.43
PULM → DEL	-	-	0.38	8.6*	0.03	0.89

\*Sig. if above 1.64 for 1-tailed test.

**Table 4.26: Goodness-of-Fit Index for Models 1, 2, 3**

	Model 1			Model 2			Model 3		
	R <sup>2</sup>	C	r	R <sup>2</sup>	C	r	R <sup>2</sup>	C	r
PUSM		0.53			0.53			0.53	
PULM		0.59			0.59			0.59	
OTS	0.44	0.73	0.22		-	0.28	0.44	0.73	0.28
DEL	0.35	0.63	0.28	0.19	0.63	0.09	<b>0.36</b>	0.63	0.29
Average	0.39	0.62	0.25	0.19	0.58	0.18	0.40	0.62	0.28
GoF		0.49			0.33			<b>0.50</b>	

**Key:**

**Model 1:** original model; **Model 2:** model without tourist satisfaction; **Model 3:** full model including direct paths between tourism motivations and destination loyalty

**C:** Communality coefficients are equal to the squared correlations between manifest variables and their associated latent variables.

**r:** Redundancy coefficients reflect the joint predictive power of the inner and outer model relationships.

In the comparison part between model 1 and model 2, Table 4.25, for model 2, shows that the direct path between PUSM and DEL is significant as the  $t$ -value (4.6) is greater than 1.64, the cut-off point for the path to be statistically significant (critical value). The direct path between PULM and DEL is also statistically significant as the  $t$ -value (8.6) is greater than 1.64.

Table 4.26, Model 2, illustrates that  $R^2$  is decreased to 0.19 for destination loyalty (DEL) and GoF is also decreased to 0.33 when the overall tourist satisfaction (OTS) was excluded from Model 1. Table 4.27 shows a similar average CV-communality for both models ( $H^2 = 0.57$ ), which indicates an acceptable level of the measurement model quality for both of them. However, the average CV-redundancy for Model 1 ( $F^2 = 0.26$ ) is higher than Model 2 ( $F^2 = 0.12$ ), which signifies that the structural model quality for model 1 is better than the structural model quality for model 2. These results provide, on average, a better quality of the prediction of destination loyalty for Model 1.

In the comparison part between Model 3 and Model 1, Table 4.25, for Model 3, shows that the direct paths, PUSM to OTS, PULM to OTS, and OTS to DEL, are statistically significant as the  $t$ -values (6.83, 14.7, and 12) are greater than 1.64, whereas the direct path between PUSM and DEL is not significant as the  $t$ -value (1.43) is lower than 1.64. Similarly, the direct path between PULM and DEL is not statistically significant as the  $t$ -value (0.89) is lower than 1.64.

As indicated in Table 4.26, Model 3 shows significant increases in the explained variance for destination loyalty ( $R^2 = 0.36$ ) as well as an increase in goodness of-fit index (GoF=0.50). Furthermore, Table 4.27, Model 3, shows that the average communality of

Model 3 ( $H^2= 0.61$ ) is better than that of Model 1 ( $H^2= 0.57$ ), which indicates a better measurement model and confirms the results of the measurement model in section 4.4.6. Moreover, the average redundancy of Model 3 ( $F^2=0.275$ ), comparing to model 1 ( $F^2=0.26$ ), is better, which signifies that the structural model for Model3 is better than for Model1.

To sum up, the previous results suggest that Model 3 is the best model compared to Model 1 and Model 2 and provides evidence that the overall tourist satisfaction fully mediated the relationship between tourism motivations and destination loyalty. From this point, the analysis can proceed to test the effect of the moderating variable in the proposed model, which will be discussed in detail in the next stage of analysis –Structural Model with IAD.

**Table 4.27: Blindfolding Results**

	<b>Model 1</b>		<b>Model 2</b>		<b>Model 3</b>	
	<b>H<sup>2</sup></b>	<b>F<sup>2</sup></b>	<b>H<sup>2</sup></b>	<b>F<sup>2</sup></b>	<b>H<sup>2</sup></b>	<b>F<sup>2</sup></b>
PUSM	0.51	-	0.51	-	0.51	-
PULM	0.57	-	0.57	-	0.57	-
OTS	0.55	0.31	-	-	0.73	0.32
DEL	0.65	0.22	0.65	0.12	0.65	0.23
Average	0.57	0.26	0.57	0.12	<b>0.61</b>	<b>0.275</b>

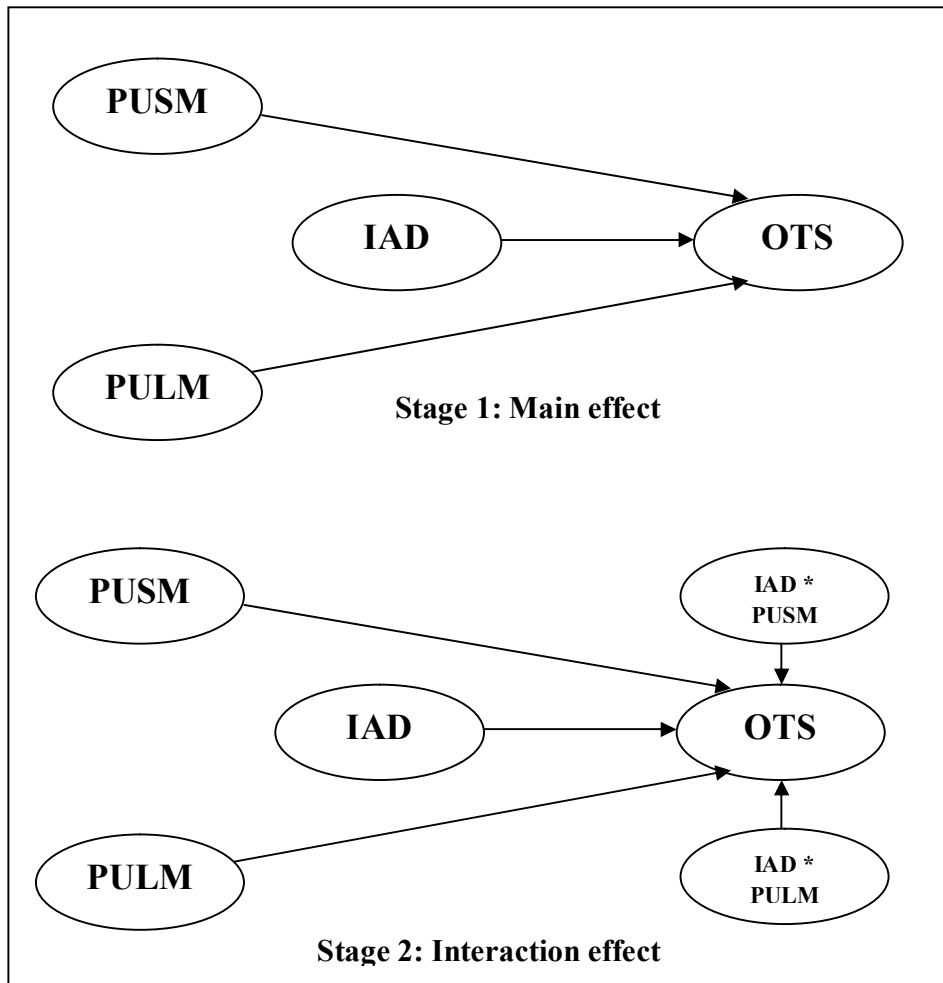
CV-communality:  $H^2$

CV-redundancy:  $F^2$

#### **4.4.7.2 Structural model with IAD**

The first three hypotheses were tested in the previous section and the influence of Islamic attributes of destination (IAD) as a moderating variable is examined in this section.

Similar to the previous section, the two-stage approach is followed for evaluating the interaction effects of moderating variables modelled in PLS (Chin et al., 2003; Henseler & Chin, 2010; Sarkar et al., 2001; Walter et al., 2006). This issue was investigated by comparing the baseline model in stage1 with the model in stage 2 (see Figure 4.6).



**Figure 4.6: Testing Moderating Variable**

In stage 1, the model includes only the IAD as the main effect but the model in stage 2 includes IAD as a main effect as well as the interaction effect of IAD on overall tourist satisfaction (Endogenous variable). The interaction effect (IAD\* PUSM, IAD\*PULM) is a

result of multiplying the independent variable (PUSM, PULM) and the moderator variable (IAD), as suggested by Chin et al. (2003). A bootstrapping method of sampling with replacement was used, and standard errors computed on the basis of 500 bootstrapping runs. The effect size,  $f^2$ , is also calculated, which is a measure of the strength of the theoretical relationship found in an analysis, as discussed in section 3.12.3.4, Chapter Three. Values of .02, .15, and .35 are considered small, moderate and large effects, respectively. The comparison of the two stages is presented in Table 4.28.

Results in stage 1 indicate that the direct paths, PUSM to OTS, PULM to OTS, and IAD to OTS, are statistically significant as the  $t$ -values (3.85, 7.56, and 11.14) are greater than 1.64. The explained variance ( $R^2$ ) is 0.54 for overall tourist satisfaction (OTS). The goodness-of-fit (GoF) is 0.56. Whereas results in stage 2, compared with stage 1, show that the  $R^2$  was increased to 0.66 providing evidence of better explained variance.

The effect size ( $f^2$ ) is 0.26 indicating that the Islamic attributes of destination (IAD) have more than a moderate effect ( $0.26 > 0.15$ ) on overall tourist satisfaction (OTS). Using procedures suggested by Tabachnick and Fidell (2007, p.148), the increased  $R^2$  is attributable to the moderating effects and the effect size is statistically significant at 0.05 ( $F_{3, 504} = 129.6 > \text{Critical} = 2.6$ ). The GoF increased from 0.56 to 0.62, indicating a better fit of the Model in stage 2.

$$f^2 = \frac{R^2 (\text{stage 2}) - R^2 (\text{stage 1})}{1 - R^2 (\text{stage 1})}$$

$$f^2 = \frac{0.66 - 0.54}{1 - 0.54} = 0.26$$

**Table 4.28: Tests of PLS Path with Bootstrap for Stage 1 and Stage 2**

	Stage 1		Stage 2	
	Path coefficient	t-value	Path coefficient	t-value
PUSM → OTS	0.11	3.85*	0.14	4.42*
PULM → OTS	0.33	7.56*	0.27	6.04*
IAD → OTS	0.51	11.14*	0.49	10.34*
PUSM*IAD → OTS	-	-	-0.11	1.25
PULM*IAD → OTS	-	-	0.15	5.05*
R <sup>2</sup>	0.54		0.66	
GoF	0.56		0.62	
f <sup>2</sup>	-		0.26	

\*Sig. if above 1.64 for 1-tailed test.

In stage 2, the moderating effect of IAD on the relationship between the pull motivation and overall tourist satisfaction is statistically significant as the t-value of the interaction path (PULM\*IAD to OTS) is 5.05 and higher than 1.64. However, the results show no support for the moderating effects of IAD on the relationship between the push motivation and overall tourist satisfaction as the t-value of this path (PUSM\*IAD to OTS) is 1.25 and less than 1.64. Results for the direct, interaction, and total effects are given in Table 4.29.

**Table 4.29: Direct Effect, Interaction Effect and Total Effect**

	Direct effect	Interaction effect	Total effect
PUSM → OTS	0.14	-0.11	0.03
PULM → OTS	0.27	0.15	0.42
IAD → OTS	0.49	-	0.49

These results suggest that the Model in stage 2 is better than the Model in stage1 and provides evidence that the Islamic attributes of destination (IAD) moderate the relationship between pull motivation (PULM) and the overall tourist satisfaction (OTS). Figure 4.7 shows the final structural model, which indicates the supported relationship between the constructs except the moderating effect between PUSM and OTS. The explained variance ( $R^2$ ) is 0.64 and 0.35 for OTS and DEL, respectively. The goodness-of-fit (GoF) value is satisfactory (0.55). The  $H^2$  value (0.59) provides evidence of a good measurement model and the  $F^2$  value (0.34) also indicates a better structural model.

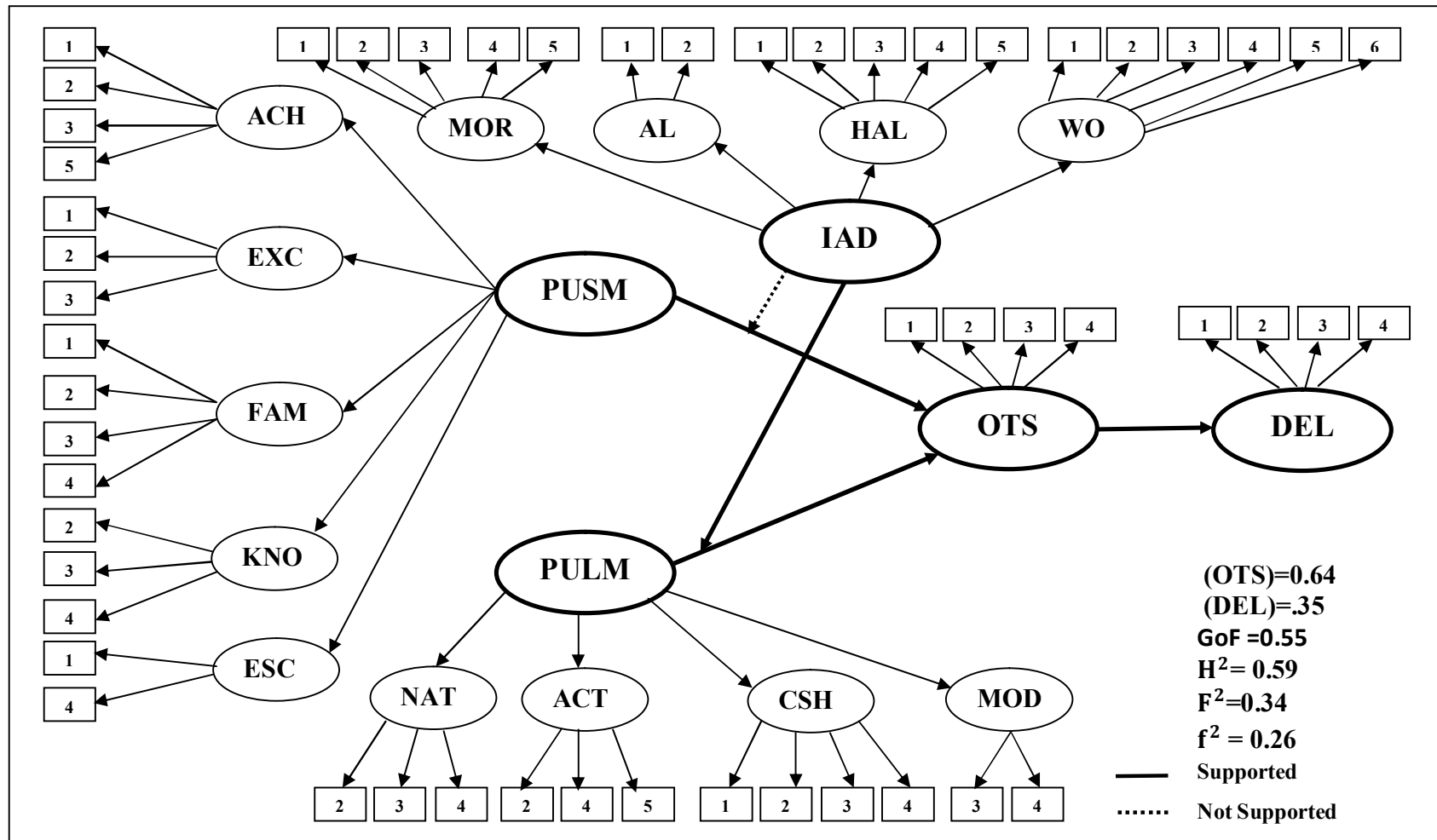
Hypotheses 1 to 5, which examine the relationship between the exogenous variables and endogenous variables, are interpreted in terms of the best Model in stage1 and stage2 – structural model without moderating variable and structural model with moderating variable, respectively. Table 4.30 shows that the results supported hypotheses H1, H2, H4, and H5, as evidenced by the path coefficient and significant  $t$ -value. While hypothesis H3 was not supported meaning that there is no significant moderating relationship between PUSM and OTS by IAD.

**Table 4.30: Results of Hypotheses Testing Using the Structural Model Results**

Hypothesis	Relationship	Path coefficient	$t$ -value	Empirical conclusions
H1	PUSM → OTS	0.23	6.83*	Supported
H2	PULM → OTS	0.55	14.7*	Supported
H3	PUSM*IAD → OTS	-0.11	1.25	Not Supported
H4	PULM*IAD → OTS	0.15	5.05*	Supported
H5	DEL → OTS	0.59	16.9*	Supported

\*Sig. if above 1.64 for 1-tailed test.





**Key:**PUSM – push motivations; PULM – pull motivations; OTS – overall tourist satisfaction; DEL – destination loyalty; IAD – Islamic attributes of destination; ACH – achievement; EXC – exciting; FAM – family togetherness; KNO – knowledge; ESC – escape; NAT – natural scenery; ACT – activities; CSH – clean and shopping; MOD – modern atmospheres; MOR – general Islamic morality; AL – alcoholic drinks and gambling free ; HAL – Halalness; WO – worship facilities.

**Figure 4.7: Final Structure Model**

The previous results support hypothesis H1, which states that the push motivations (PUSM) positively influence overall tourist satisfaction (OTS). The support is demonstrated by the results that show a path coefficient of 0.23, which is statistically significant at the .05 level ( $t$ -value of 6.83 > 1.64). However, the results indicate that the moderate effect of Islamic attributes of destination between the push motivations and overall tourist satisfaction is not significant with an interaction path coefficient of -0.11 at the 0.05 level ( $t$ -value of 1.25 < 1.64), thus, not supporting hypothesis H3, which states that Islamic attributes of destination (IAD) moderate the relationship between the push motivations (PUSM) and overall tourist satisfaction (OTS).

Furthermore, these results supported hypothesis H2, which state that the pull motivations (PULM) positively influence overall tourist satisfaction (OTS). In this case, the path coefficient is 0.55 statistically significant at the .05 level ( $t$ -value of 14.7 > 1.64). The results indicate that the moderate effect of Islamic attributes of destination between the pull motivations and overall tourist satisfaction is significant with a interaction path coefficient of 0.15 at the .05 level ( $t$ -value of 5.05 > 1.64), thus, supporting hypothesis H4, which states that Islamic attributes of destination (IAD) moderate the relationship between the pull motivations (PUSM) and overall tourist satisfaction (OTS). The results further supported hypothesis H5, which states that the overall tourist satisfaction (OTS) positively influences destination loyalty (DEL). For this support, the path coefficient of 0.59 is statistically significant at the .05 level ( $t$ -value of 16.9 > 1.64).

It should be noted that although there are no hypothesized relationships between the push motivations as well as the pull motivations and destination loyalty in this study, these

direct relationships were rejected according to the Model 3 results in the structural model without IAD stage.

#### **4.5 Chapter Summary**

This chapter reported the results of the analysis of both the qualitative and quantitative data. It presented the results of the qualitative part, the procedures for developing IAD measurements, the findings of the exploratory factor analysis, confirmatory factor analysis, partial least square and hypotheses testing, which were used for analytical purposes.

Exploratory factor analysis was conducted to identify potentially problematic items and to have a preliminary indication of unidimensionality, and discriminant and convergent validity. Using the CFA results, all constructs were tested for validity and were proven to possess validity in all tested aspects. Partial least square (PLS) was used to test the validity of the overall model and the relationships between variables hypothesized in the model. A two-stage process was employed whereby the structural model was first evaluated without the moderating variable, followed by an evaluation of the structural relationships with moderating variable. Analysis of the structural relationships supports four out of the five hypotheses.