CHAPTER IV DATA ANALYSIS

4.0 Introduction

The methodology of gathering data is discussed in the previous chapter. This chapter presents data analysis process and findings.

First section provides summary of the preliminary procedures before further analysis is conducted. This section includes data screening, normality testing, factor analysis and reliability testing. This is followed by demographic characteristics of the respondents. Subsequently, a Chi-square test is run to deepen the understanding towards hotel selection behavior of Muslim travelers. In the third part, hypotheses are tested.

SPSS version 16 is used to analysis the collected data; the applied SPSS tests are Descriptive analysis, Factor Analysis, Normality test, Reliability, Chi-square, Pearson Correlation and T-test.

4.1 Preliminary Procedures

4.1.1 Data Screening

Prior to conducting data analysis, it is necessary to "screen" the data which is checking through the data careful to identify and correct errors. It includes checking for error, finding the error in the data file and correcting the error (Pallant, 2005). Making mistakes in entering data waste time and money, meanwhile it affects analysis result (Coakes & Steed, 2007). The obtained data of this study is screened carefully and no missing data is found.

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Hotel Selection	296	69.00	150.00	110.8277	17.46301
Religiosity	296	78.00	125.00	102.9088	12.52314

Table 4.1 shows the result of the data screening that no error is found in the data set. The mean, minimum and maximum of the variables, Hotel Selection and Religiosity, are within the expected range.

4.1.2 Normality Test

The normality test is used to determine whether a data set is well-modeled by a normal distribution or not, or to compute how likely an underlying random variable is to be normally distributed. The assumption of normality is a pre-requisite for most statistical tests. There are several ways to explore normality by graphically and

statistically, one way is to observe values of Skewness and Kurtosis. According to Peat and Barton (2005), if Skewness and Kurtosis values of variables are between -1 and +1, the data can be assumed normally distributed. The **Table 4.2** indicates Skewness and Kurtosis values of both, Hotel Selection and Religiosity, are within the limits of a normal distribution.

Table 4.2 Descriptives for Normality

			Statistic	Std. Error
Hotel Selection	Mean		110.8277	1.01502
	95% Confidence Interval for Mean	Lower Bound	108.8301	
		Upper Bound	112.8253	
	5% Trimmed Mean		110.8123	
	Median		111.0000	
	Variance		304.957	
	Std. Deviation		17.46301	
	Minimum		69.00	
	Maximum		150.00	
	Range		81.00	
	Interquartile Range		26.00	
	Skewness		-.034	.142
	Kurtosis		-.568	.282
Religiosity	Mean		101.0507	.93146
	95% Confidence Interval for Mean	Lower Bound	99.2175	
		Upper Bound	102.8838	
	5% Trimmed Mean		101.7177	
	Median		105.0000	
	Variance		256.814	
	Std. Deviation		16.02543	
	Minimum		56.00	
	Maximum		125.00	
	Range		69.00	
	Interquartile Range		25.00	
	Skewness		-.567	.142
	Kurtosis		-.468	.282

4.1.3 Factor Analysis

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables.

There are two main issues to consider in determining whether a particular data set is suitable for factor analysis (Pallant, 2005). First one is sample size. According to Coakes and Steed (2007), a sample of one hundred subjects is acceptable for factor analysis. Therefore, the first assumption is fulfilled with the sample size of 296. The second assumption is and the strength of the relationship among the variables or items, the correlation matrix should show at least some correlations of 0.3 or greater. The SPSS output of the data showed existence of many coefficient of 0.3 and above for both, Religiosity and Hotel Selection.

To confirm factorability of data, the Kaiser-Meyer-Olkin value should be 0.6 or above and the Bartlett's Test of Sphericity should be statistically significant (Pallant, 2005). As shown in **Table 4.3** and **Table 4.4** the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value is 0.917 for Religiosity and 0.857 for Hotel Selection. The Barlett's Test of Sphericity values of both variables are significant.

Table 4.3 KMO and Bartlett's Test for Religiosity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.917
Bartlett's Test of Sphericity	Approx. Chi-Square	5487.761
	Df	300
	Sig.	.000

Table 4.4 KMO and Bartlett's Test for Hotel Selection

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.857
Bartlett's Test of Sphericity	Approx. Chi-Square	4674.387
	Df	435
	Sig.	.000

As a result, testing assumptions indicates that the data suitable to proceed with the factor analysis.

According to Pallant (2005), there are two most quoted techniques that can be used to determine the numbers of the factor. One is using Kaiser's criterion. The Kaiser's criterion is about retaining only components that have an eigenvalue of 1.0 or more. Another one is the Catell's scree test. This involves plotting each of the eigenvalues of the factors and inspecting the plot to find a point at which the shape of the curve changes direction and becomes horizontal. Catell recommends retaining all factors above the elbow, or break in the plot, as these factors contribute the most to the explanation of the variance in the data set.

For total explained variance, there is no general rule or criteria (Adaileh & Abu-alganam, 2010). Stevens (2002) states any decent model should have at least 50% of the variance in the variables explained by factors.

Factor analysis is conducted for 25 items of Religiosity. Four factors with eigenvalues exceeding 1 are extracted for Religiosity by using Kaiser's criterion (refer Appendix 1). The four components explain a total of 67.12 % of the variance. The screeplot, **Chart 4.1,** reveals a clear break after the second component and another one is

after fourth component. **Table 4.5** shows that total explained variance for two factors is 37.24% and for four factors is 67.12 %. The higher the percentage of total variance explained, the better the factor analysis does in accounting for the variance in the variables being analyzed (Tinsley & Tinsley, 1987). Therefore, it is decided to retain four factors.

Chart 4.1 Scree Plot for Religiosity

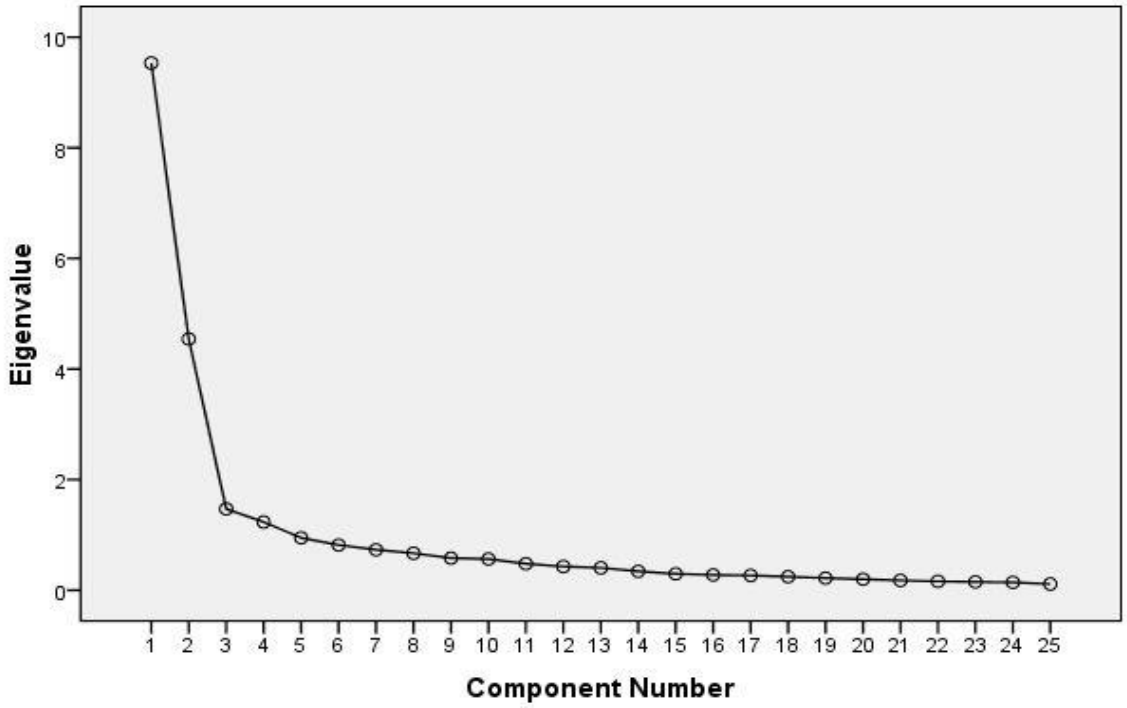

Table 4.5 Total Variance Explained for Religiosity

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.086	20.344	20.344
2	4.223	16.893	37.237
3	4.174	16.694	53.931
4	3.298	13.190	67.121

Extraction Method: Principal Component Analysis.

Table 4.6 explains that first factor includes eight items with loadings from 0.46 to 0.87. Second factor comprises six items; range from 0.55 to 0.85. Third factor contains six items; loadings are from 0.53 to 0.86. Forth factor is grouped from five items, loadings range from 0.82 to 0.55.

Table 4.6 Rotated Component Matrix for Religiosity

Factor1: Recommended Practices	
I regularly perform my qiamullail (such as praying/reciting Quran/dua' after midnight).	.866
I regularly perform my recommended prayer (i.e. sembahyang sunat such as Isra', Dhuha and Rawatib).	.831
I often fast outside the month of Ramadan.	.828
I perform my daily prayers in the mosque regularly.	.728
I regularly spend some amount from my monthly income for charity/sadaqah.	.700
I read the Quran every day.	.668
I consider myself as a religious person.	.628
I read the Quran for inspiration and motivation.	.462
Factor2: Mandatory Obligations	
I perform the obligation of zakat maal (asset/income) annually.	.854
I perform the obligation of zakat fitrah annually.	.852
I pray five times a day.	.680
Performing hajj will be my priority the moment I've fulfilled all the necessary conditions.	.660
I fast the whole month of Ramadan.	.603
I performed Friday Prayer regularly.	.550
Factor3: Attitude	
The supplication (dua') helps me.	.864
The five prayers help me a lot.	.813
Muhammad (peace be upon him) provided a good standard of conduct for me.	.800
Saying my prayers helps me a lot.	.734
Quran is relevant and applicable to modern day.	.611
I will continuously seek to learn about Allah.	.534
Factor4: Belief	
I believe that Allah helps people.	.818
I believe that Allah listens to prayers.	.787
Islam helps me lead a better life.	.762
I believe that Allah helps me.	.691
I believe beyond a shadow of doubt that Islam is God's religion and that Prophet Muhammad is His Messenger.	.549

Out of 30 items of Hotel Selection four items are eliminated, it is conducted factor analysis with 26 items**.** The screeplot, **Chart 4.2,** shows one break after the second component, another one clear break after third component, a small break after fifth component which indicates either two, three or five factors can be extracted. By using Kaiser's criterion, five factors revealed higher than 1 eigenvalues with 60.64 % total variance explained (refer Appendix 2). However, the fifth factor is represented by only one item and it is difficult to find same characteristics among items in the rest of factors; therefore, the factor analysis is rerun by fixing the factor number to three following the first elbow in the scree plot as evidenced in the chart.

Chart 4.2 Scree Plot for Hotel Selection

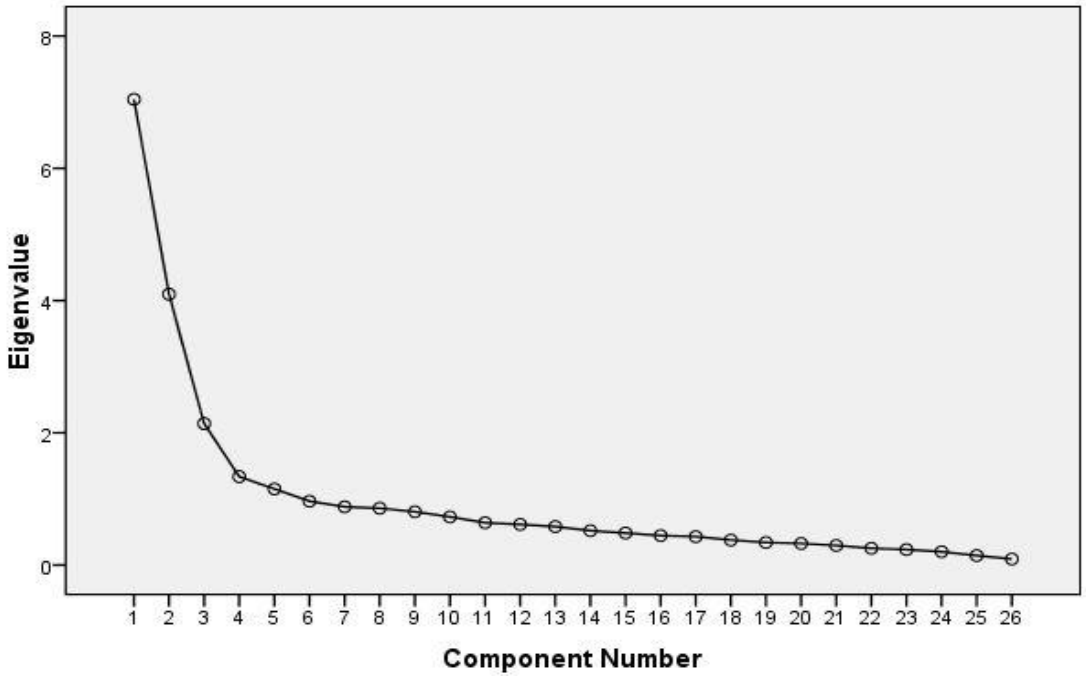

Table 4.7 highlights the total explained variance for the extracted three factors. As given in the **Table 4.8,** the first factor includes ten items, mainly hotel attributes for

religious needs, with loadings from 0.38 to 0.91; second factor comprises ten items; range from 0.433 to 0.76; third factor contains six items; loadings are from 0.58 to 0.69.

Table 4.7 Total Variance Explained for Hotel Selection

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.654	21.746	21.746
2	4.198	16.147	37.893
3	3.425	13.175	51.068

Extraction Method: Principal Component Analysis.

Table 4.8 Rotated Component Matrix for Hotel Selection

Factor 1: Muslim-friendly Attributes	
Prayer Mat in the Room	.908
Prayer Timetable in the Room	.905
Prayer Room in the Hotel	.854
Quran in the Room	.829
Qibla Direction Sign in the Room	.807
Mosque Near to the Hotel	.788
Muslim Staffs	.630
Free Local Telephone	.499
No Smoking Rooms	.439
Halal Certification on the Food Serve	.383
Factor 2: Hotel Environment	
Cleanliness of the Hotel	.763
Friendly Service by the Hotel Staff	.726
Efficient - Quick Service	.706
Comfortable Mattress & Pillow	.694
Well-maintained Furnishings	.662
Good Reputation of the Hotel	.586
Safety and Security of the Hotel	.576
Room Services	.541
Convenient to Downtown	.459
Family Restaurants (mid-price menu items, no liquors)	.433
Factor 3: Additional Service and Facilities	
Laundry Services in the Hotel	.694
In-room Minibar in the Room	.664
Hair Dryer in the Room	.654
Copy Machine in the Hotel	.634
Hotel Frequent Travel Program	.621
Travel Agent's Recommendation	.580

4.1.4 Reliability

According to Pallant (2005), reliability of scale indicates how free it is from random error. It measures consistency that how well the items in a set are positively correlated to one another (Sekaran, 2003). There are numbers of different reliability coefficients. Cronbach's alpha is the most commonly used one, its value is between 0 to 1. The higher the percentage means the greater the reliability of the scale, the Cronbach's alpha coefficient of a scale should be above 0.7 (Pallant, 2005).

In the current study, the reliability statistics, as presented in **Table 4.9** and **Table 4.10**, portray that the Cronbach's alpha coefficients for the four factors of Religiosity and the three factors of Hotel Selection are all above 0.7 which indicates good internal consistency.

Table 4.9 Reliability Statistics for Religiosity

Factors	Cronbach's Alpha	N of Items
1	.927	8
2	.868	6
3	.892	6
4	.838	5

Table 4.10 Reliability Statistics for Hotel Selection

Factors	Cronbach's Alpha	N of Items
1	.904	10
2	.832	10
3	.775	6

4.2 Respondents' Profile Analysis

4.2.1 Demographic Profile

It is important to obtain respondents' demographic profile as it provides a background for the analysis that follows. The demographic profile analysis for this study that shows the frequency distributions for all respondents is given in **Table 4.11**,

161 of the 296 participants are male, accounting 54.4% of the total respondents and 135 are female, representing 45.6% of the total respondents. The questionnaire was well distributed among different genders. 141 Malaysians (47.6 %) and 155 non-Malaysians (52.4%) participate to this study. Among non-Malaysians, there are 59 tourists, 89 students and 7 employees.

16 (5.4 %) of the respondents are under 25 years old, 155 (52.4 %) of them are 25 to 34, 82 (27.7 %) respondents are between 35 to 44 years, 43 (14.5 %) of them from 45 to 54. The majority of the respondents are between the ages of 25 to 34. The education backgrounds of the respondents are mainly graduate college degree, 55.4 %, 164 respondents, the rest are high school, diploma and college degree holders, respectively, 6.1 %, 18 and 38.5 %, 114. Respondents' income range is 0 to RM 25,000.

In terms of hotel lodging selection, mid-price or standard lodging is most preferred, 56.1%, compare to other two lodging options, 15.5 % for luxury or up-scale and 28.4 % for budget economy. For the hotel category selection, local hotels are selected more than international hotels, 54.7% for local hotels and 42.3% for international hotel, 3 % of the respondents did not show clear stand, indicated that either of the categories is acceptable.

Table 4.11 Frequency of Demographic Information

Demographic Information		Frequency	Percent
Gender	Male	161	54.4
	Female	135	45.6
	Total	*296*	*100.0*
Marital Status	Single	106	35.8
	Married	190	64.2
	Total	*296*	*100.0*
Nationality	Malaysian	141	47.6
	Non-Malaysian	155	52.4
	Total	*296*	*100.0*
Non-Malaysian	Tourist	59	19.9
	Further Studying	89	30.1
	Working	7	2.4
	Total	*155*	*52.4*
Age	under 25	16	5.4
	25-34	155	52.4
	35-44	82	27.7
	45-54	43	14.5
	Total	*296*	*100.0*
Education	High School	18	6.1
	College Degree	114	38.5
	Graduate College	164	55.4
	Total	*296*	*100.0*
Lodging	Luxury/Up-scale	46	15.5
	Mid-Price	166	56.1
	Budget Economy	84	28.4
	Total	*296*	*100.0*
Hotel Categories	International Hotel	125	42.2
	Malaysian Hotel	162	54.7
	Both	9	3.0
	Total	*296*	*100.0*
Purpose	Working Related Trip	81	27.4
	Business Trip	33	11.1
	Holiday Trip	157	53.0
	Others	25	8.4
	Total	*296*	*100.0*

4.2.2 Religiosity Profile

A general rule of 33% (low), 33% (medium) and 33% (high) split is used based on respondents' score on religiosity scale. For the purpose of group comparison, the scale was classified highly religious, mildly religious and less religious. Then the three groups were tabulated using frequency analysis.

Table 4.12 Statistics for Religiosity Profile

N	Valid	296
	Missing	0
Percentiles	33	96.0000
	66	111.0000

Table 4.12 shows the derivation of 33% percentile in religiosity scale, respondents with and above 111 were labeled as highly religious, those between 96 to 111 considered as mildly religious, and other respondents with and below 96 were considered less religious.

According to frequency distributions, **Table 4.13**, 102 respondents are highly religious, 91 respondents are mildly religious and 103 respondents are less religious.

Table 4.13 Frequency Religiosity Profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less Religious	103	34.8	34.8	34.8
	Mildly Religious	91	30.7	30.7	65.5
	Highly Religious	102	34.5	34.5	100.0
	Total	*296*	*100.0*	*100.0*	

4.3 Chi-square

A chi-square test is used when the researcher wants to see if there is a relationship between two categorical variables. Generally, it is useful in testing for differences in relationships among variables; it assists to determine whether a systematic association exists between the two variables. In this research chi-square test is conducted to examine relationship between consumers' choice of hotel lodging and religiosity. **Table 4.14** is result of the Chi-Square test for lodging and religiosity. According to the table, Pearson Chi-Square has significant p value, $p<0.05$ which indicates that Muslim travelers' preferences for hotel lodging criteria may depend on their religiosity.

Table 4.14 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.397[a]	4	**.000**
Likelihood Ratio	30.940	4	**.000**
Linear-by-Linear Association	28.901	1	**.000**
N of Valid Cases	296		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.14.

Table 4.15 Lodging * Religiosity Cross-tabulation

			Religiosity			Total
			Less Religious	Mildly Religious	Highly Religious	
Lodging	Luxury/Up-scale	Count	**27**	14	**5**	46
		% of Total	**9.1%**	4.7%	**1.7%**	15.5%
	Mid-Price or Standard	Count	60	53	53	166
		% of Total	20.3%	17.9%	17.9%	56.1%
	Budget Economy	Count	**16**	24	**44**	84
		% of Total	**5.4%**	8.1%	**14.9%**	28.4%
Total		Count	103	91	102	296
		% of Total	34.8%	30.7%	34.5%	100.0%

Table 4.15 shows detailed results that both groups, highly religious and less religious, travelers prefer mid-price hotel rooms. Furthermore, less religious travelers are seen more frequently in selecting luxury rooms, 27 times, whereas, highly religious travelers appear only 5 times. In selecting budget Economy rooms, highly religious travelers have high frequency than less religious, 44 times and 16 times, respectively.

4.4 Hypothesis Testing

4.4.1 Pearson Correlation

The Pearson's correlation is used to find a correlation between at least two continuous variables. According to Pallant (2005), the value of the Pearson's correlation (r) indicates the strength of the relationship between the two variables. The range of the value is from -1.00 to 1.00, the negative or positive sign refers to the direction of the relationships. Cohen (1988) suggests the following instructions to determine the strength of the relationship: r= ±.10 to ±.29 small; r= ±.30 to ±.49 medium; r=±.50 to ±1.0 large.

Table 4.16 Correlations for Hypothesis 1

		Religiosity	Hotel Selection
Religiosity	Pearson Correlation	1	**.557****
	Sig. (2-tailed)		**.000**
	N	296	**296**
Hotel Selection	Pearson Correlation	**.557****	1
	Sig. (2-tailed)	**.000**	
	N	**296**	296

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson's correlation is run for testing H1 to examine if there is a relationship between religiosity and hotel selection behavior of Muslim traveler. **Table 4.16** presents the test result that the Pearsons' Correlation value (r) is 0.557 and the p value is less than

0.01. The result indicates that there is a strong, positive relationship between religiosity and hotel selection (r=.557, p< .01), **HI is accepted**.

To find out relationships between factors of the two variables, Pearson's correlation is used for the three factors of Hotel Selection and the four factors of Religiosity. The test result is given in **Table 4.17**.

Table 4.17 Correlations between Factors of Hotel Selection & Religiosity

		Religiosity Factor 1	Religiosity Factor 2	Religiosity Factor 3	Religiosity Factor 4
Hotel Selection Factor 1	Pearson Correlation	**.727****	**.649****	**.304****	**.172****
	Sig. (2-tailed)	**.000**	**.000**	**.000**	**.003**
	N	**296**	**296**	**296**	**296**
Hotel Selection Factor 2	Pearson Correlation	.015	-.019	**.235****	**.194****
	Sig. (2-tailed)	.796	.749	**.000**	**.001**
	N	296	296	**296**	**296**
Hotel Selection Factor 3	Pearson Correlation	**.289****	**.149***	.069	-.004
	Sig. (2-tailed)	**.000**	**.010**	.237	.949
	N	**296**	**296**	296	296

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

From the table, it is revealed that the Hotel Selection Factor 1 (Muslim-friendly Attributes) has significant relationship with all four factors of Religiosity. The strength of the relationships is strong with Factor 1 (Recommended Practices) and Factor 2 (Mandatory Obligations) according to value of the r, 0.727 and 0.649; it is medium with Factor 3 (Attitude), r = 0.304, and weak with Factor 4 (Belief), r= 0.172. The result indicates that there is very high possibility that the travelers' who scored high on Religiosity Factor 1 (Recommended Practices) and Factor 2 (Mandatory Obligations) may prefer to select hotels providing Hotel Selection Factor 1 (Muslim-friendly

Attributes). The likelihood exists, yet, it is smaller for those who scored high on Religiosity Factor 3 (Attitude) and Religiosity Factor 4 (Belief).

It is shown that Hotel Selection Factor 2 (Hotel Environment) has significant relationship with two factors of Religiosity, Factor 3 (Attitude) and Factor 4 (Belief). The strength of the relationships is weak for both factors; r values are 0.235 and 0.194. There is no relationship found between Hotel Selection Factor 2 and Religiosity Factors 1 (Recommended Practices) and 2 (Mandatory Obligations). It means that the travelers' who scored high on Religiosity Factor 3 (Attitude) and Factor 4 (Belief) may select hotels providing Hotel Selection Factor 2 (Hotel Environment), but the possibility is smaller. The travelers who scored high on Religiosity Factor 1 (Recommended Practices) and Religiosity Factor 2 (Mandatory Obligations) may or may not consider those attributes are important.

Weak relationships are found between Hotel Selection Factor 3 (Additional Service and Facilities) and two factors of Religiosity, Factor 1 (Recommended Practices) and Factor 2 (Mandatory Obligations), the r values are 0.289 and 0.149, respectively. There is no relationship found between Hotel Selection Factor 3 and the rest two factors of Religiosity, Factor 3 (Attitude) and Factor 4 (Belief). It reveals that the travelers' who scored high on Religiosity Factor 1 (Recommended Practices) and Factor 2 (Mandatory Obligations) may think the attributes, Hotel Selection Factor 3 (Additional Service and Facilities), important as they select hotel, but the likelihood is smaller. However, Hotel Selection Factor 3 (Additional Service and Facilities) may not have influences on hotel

selection behavior of those scored high on Religiosity Factor 3 (Attitude) and Factor 4 (Belief).

Table 4.18 Correlations Matrix for Religiosity and Items on Hotel Selection

Items for Hotel Selection		Religiosity	
		r	Sig. (2-tailed)
1	Comfortable Mattress & Pillow	-.029	.614
2	Well-maintained Furnishings	.048	.415
3	Friendly Service by the Hotel Staff	.101	.084
4	Cleanliness of the Hotel	.048	.411
5	Good Reputation of the Hotel	.093	.109
6	Safety and Security of the Hotel	.000	.994
7	**Hotel Frequent Travel Program**	**.308****	**.000**
8	Travel Agent's Recommendation	.040	.491
9	Convenient to Downtown	-.036	.540
10	**Copy Machine in the Hotel**	**.325****	**.000**
11	**Hair Dryer in the Room**	**.164****	**.005**
12	In-room Minibar in the Room	.055	.343
13	Laundry Services in the Hotel	.051	.386
14	Room Services	.015	.797
15	**Free Local Telephone**	**.354****	**.000**
16	**Family Restaurants (mid-price menu items, no liquors)**	**.140***	**.016**
17	**No Smoking Rooms**	**.326****	**.000**
18	Efficient - Quick Service	.079	.177
19	**Halal Certification on the Food Serve**	**.140***	**.016**
20	**Quran in the Room**	**.626****	**.000**
21	**Qibla Direction Sign in the Room**	**.644****	**.000**
22	**Prayer Mat in the Room**	**.703****	**.000**
23	**Prayer Timetable in the Room**	**.697****	**.000**
24	**Prayer Room in the Hotel**	**.627****	**.000**
25	**Mosque Near to the Hotel**	**.589****	**.000**
26	**Muslim Staffs**	**.425****	**.000**

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

With the intention of clarifying the relationship between travelers' religiosity and hotel selection behavior according to the each given hotel attributes, Pearsons' Correlation is conducted for Religiosity and each items of Hotel Selection (**Table 4.18**). The result revealed that 14 items have significant positive relationship with Religiosity. It indicates that the higher the religiosity of the travelers, the 14 hotel attributes are the more important to them.

4.4.2 T-test

The independent-samples t-test assesses whether the means of two groups are statistically different from each other (Pallant, 2005). It is the most commonly used method to evaluate the differences in means between two groups. In this research, t-test is applied for tasting H2 to find out if there is any difference between highly religious and less religious Muslims' behavior in hotel selection.

Table 4.19 shows descriptive statistics for the two groups including number, the mean and standard deviation.

Table 4.19 Group Statistics for Hypothesis II

	Religiosity	N	Mean	Std. Deviation	Std. Error Mean
Hotel Selection	Less Religious	103	84.7282	11.18489	1.10208
	Highly Religious	102	103.9412	14.52674	1.43836

Coakes (2005) suggested that if the Levene's Test for Equality of Variances is greater than 0.05, the population variances can be assumed relatively equal, so that the

"**Equal variances assumed**" column is used for interpreting t-test result. **Table 4.20** provides results of the independent t-test and Levene's Test for Equality of Variances. Value of the Levene's Test for Equality of Variances is 0.014, less than 0.05, which means the variances are unequal. Therefore, the "**Equal variances not assumed"** column is referred to obtain t-test result. The two-tail significance is $p < 0.05$, thus is significant. It indicates that the **hypothesis II is accepted**, significant differences exist between highly religious and less religious Muslims' hotel selection behavior, $t(189.669) = -0.603$, $p < 0.05$.

Table 4.20 Independent Samples Test for Hypothesis II

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hotel Selection	Equal variances assumed	6.108	.014	-10.616	203	.000	-19.21302	1.80976	-22.78137	-15.64467
	Equal variances not assumed			**-10.603**	**189.669**	**.000**	**-19.21302**	**1.81203**	**-22.78735**	**-15.63869**

According to Pallant (2005) the magnitude of the differences is commonly measured by eta squared. Eta squared indicates the percentage of variance in the dependent variable which is explained by the independent variable; its value ranges from

0 to 1, 0.01=small effect, 0.06=moderate effect, 0.14=large effect (Cohen, 1988). Following equation is used to calculate eta squared:

$$\text{Eta squared} = \frac{t^2}{t^2 + (N1 + N2 - 2)}$$

$$\text{Eta squared} = \frac{(-10.616)^2}{(-10.616)^2 + (103 + 102 - 2)} \approx 0.357$$

By replacing with the values from the tables above, the eta squared value of this study is 0.357 which is large effect. It expresses that 35.7 % of the variance in the Hotel Selection is explained by the two different level religious groups of the variable Religiosity.

The independent-samples t-test is conducted to observe the differences between highly religious and less religious travelers' preferences according to each factor of Hotel Selection. **Table 4.21** shows descriptive statistics for the two groups in Religiosity and three factors in Hotel Selection. **Table 4.22** presents the t-test result that the highly religious and less religious Muslim travelers' choices are significantly different for two factors of Hotel Selection, factor 1 (Muslim-friendly Attributes) and factor 3 (Additional Service and Facilities), no significant difference is found for factor 2 (Hotel Environment). The Means of the two groups' ranking in **Table 4.21** indicates that highly religious travelers ranked the attributes in factor 1 (Muslim-friendly Attributes) and factor 3 (Additional Service and Facilities) higher than less religious Muslim travelers. Therefore, it can be concluded that highly religious travelers consider the attributes more important than less religious. The two groups of travelers' preferences towards factor 2 (Hotel Environment) may have no difference.

Table 4.21 Group Statistics for Religiosity and Factors in Hotel Selection

Hotel Selection	Religiosity	N	Mean	Std. Deviation	Std. Error Mean
Factor 1	Less Religious	103	26.5922	6.79596	.66963
	Highly Religious	102	42.9216	6.74234	.66759
Factor 2	Less Religious	103	42.6602	5.64393	.55611
	Highly Religious	102	42.8235	5.54087	.54863
Factor 3	Less Religious	103	15.4757	3.76216	.37070
	Highly Religious	102	18.1961	5.97857	.59197

Table 4.22 Independent Samples Test for Religiosity and Factors in Hotel Selection

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Hotel Selection Factor 1	**Equal variances assumed**	**.069**	**.793**	**-17.269**	**203**	**.000**	**-16.32934**	**.94559**	**-18.19378**	**-14.46489**
	Equal variances not assumed			-17.270	202.999	.000	-16.32934	.94556	-18.19371	-14.46496
Hotel Selection Factor 2	Equal variances assumed	.662	.417	-.209	203	.835	-.16334	.78126	-1.70376	1.37709
	Equal variances not assumed			-.209	202.985	.835	-.16334	.78119	-1.70362	1.37695
Hotel Selection Factor 3	Equal variances assumed	16.726	.000	-3.903	203	.000	-2.72035	.69698	-4.09459	-1.34611
	Equal variances not assumed			**-3.895**	**169.877**	**.000**	**-2.72035**	**.69846**	**-4.09912**	**-1.34158**

The independent samples t-test is performed for each items of Hotel Selection to more deeply investigate differences between highly religious and less religious traveler's hotel selection. **Table 4.23** provides the t-test result. According to the table, highly religious and less religious customers' preferences differ in 14 hotel attributes. By analyzing the means differences (in Appendix 3) for both groups, highly religious and

less religious, it is obtained that highly religious travelers rated all these 14 items higher than less religious which indicates highly religious travelers consider the 14 hotel attributes more important than less religious travelers.

Table 4.23 Independent Samples Test for Each Items of Hotel Selection

Hotel Attributes		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	Sig. (2-tailed)	Mean Difference	Std. Error Difference
1	Comfortable Mattress & Pillow	.484	.487	1.165	.245	.12269	.10528
2	Well-maintained Furnishings	1.022	.313	-.419	.675	-.04959	.11825
3	Friendly Service by the Hotel Staff	2.055	.153	-.803	.423	-.07386	.09194
4	Cleanliness of the Hotel	.123	.726	-.219	.827	-.01713	.07830
5	Good Reputation of the Hotel	.331	.566	-.161	.872	-.02018	.12518
6	Safety and Security of the Hotel	1.437	.232	-.054	.957	-.00543	.10027
7	**Hotel Frequent Travel Program**	**.201**	**.655**	**-5.631**	**.000**	**-.85799**	**.15238**
8	Travel Agent's Recommendation	.131	.718	-.262	.793	-.04055	.15468
9	Convenient to Downtown	1.323	.251	1.502	.135	.21550	.14344
10	**Copy Machine in the Hotel**			**-5.649**	**.000**	**-.93014**	**.16466**
11	**Hair Dryer in the Room**			**-2.753**	**.006**	**-.48239**	**.17521**
12	In-room Minibar in the Room	6.100	.014	-.455	.650	-.08367	.18387
13	Laundry Services in the Hotel	2.670	.104	-1.866	.063	-.32562	.17446
14	Room Services	.345	.558	.444	.658	.06920	.15594
15	**Free Local Telephone**	**.038**	**.846**	**-6.737**	**.000**	**-1.23015**	**.18260**
16	**Family Restaurants**	**.004**	**.953**	**-2.697**	**.008**	**-.39958**	**.14818**
17	**No Smoking Rooms**			**-4.969**	**.000**	**-.94394**	**.18997**
18	Efficient - Quick Service	.293	.589	-.042	.966	-.00495	.11734
19	**Halal Certification**	**3.867**	**.051**	**-2.141**	**.033**	**-.23939**	**.11180**
20	**Quran in the Room**	**.352**	**.554**	**-13.518**	**.000**	**-1.92490**	**.14240**
21	**Qibla Direction Sign in the Room**			**-11.629**	**.000**	**-1.70588**	**.14669**
22	**Prayer Mat in the Room**			**-17.146**	**.000**	**-2.37426**	**.13847**
23	**Prayer Timetable in the Room**	**1.481**	**.225**	**-18.294**	**.000**	**-2.44156**	**.13346**
24	**Prayer Room in the Hotel**	**1.920**	**.167**	**-14.545**	**.000**	**-2.29336**	**.15767**
25	**Mosque Near to the Hotel**	**.392**	**.532**	**-12.869**	**.000**	**-1.97135**	**.15319**
26	**Muslim Staffs**	**.000**	**.991**	**-8.161**	**.000**	**-1.20455**	**.14759**

4.5 Conclusion

This chapter described the data analysis results. It started with preliminary procedures, data screening, normality test and reliability test. Then, profile analysis for the participants was presented.

Lastly, the hypothesis testing was conducted. The first hypothesis, “there is relationship between Muslims’ religiosity level and hotel selection behavior”, was tested by using Pearson Correlation; and the second hypothesis, “there is difference between highly religious and less religious Muslims’ hotel selection behavior”, was examined by conducting T-test. Both hypotheses were accepted.

Next chapter is conclusion of this research. In the chapter the major findings, implications, limitations of the study and recommendations for future research are discussed.