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Facultat d' Economia



Religious Tourism and Subjective Well Being
An Empirical Analysis in Hajj Pilgrimage

DOCTORAL DISSERTATION
Doctorado en Economía Internacional y Turismo

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September 2018

Acknowledgement and Gratitude

First, I would like hereby to extend my profound acknowledgement and gratitude to Ministry of Higher Education in Saudi Arabia for granting the scholarship to pursue my PhD thesis at the University of Valencia in Spain. I would also like to extend my deep acknowledgement and gratitude to the Faculty of Economics at the University of Valencia for creating the opportunity for me to prepare this PhD thesis. Also, I would like to thank the institute of economics for all effort that gave me during my study.

Then I would like to extend my sincere appreciation and thanks to my supervisors Dr. Salvador del Saz Salazar and Dr. Amparo CerveraTaubet for their remarkable advices, critical comments and guidance and support throughout my work on this thesis. Without these two professors I imagine the fruits of this work would have never come forth. Indeed, I have the honour to have been working with and supported by them. Their guidance has always put me on the right track and contributed a lot to the success of this dissertation.

I would also like to extend my deepest gratitude and thanks to Dr. Gloria Berenguer Contri, the coordinator of the doctoral program for her valuable information, priceless directions and advices about how to deal with the various steps of the course of the PhD program and helped me to surmount all obstacles that may have cropped up.

Most importantly I am deeply indebted to my parents for their endless love, prayers and encouragement, and their support to help me achieve my goals. I am likewise indebted to my brothers and sisters for their continuous support and encouragement.

Last but not least, my heartiest gratitude to my wife and lovely son Mohammed and daughter Nourah. Thanks for your immense love, support and encouragement during my study, and for sharing my difficulties and hardships with you. This work is duly dedicated to you with love.

Abstract

This study entitled “Religious Tourism and Subjective Well-Being (SWB): An Empirical Analysis in Hajj Pilgrimage” investigated the influence of religious tourism on subjective well-being (SWB) in the case of Hajj pilgrims. The primary aim of the study was to investigate the geographic, demographic and socio-economic factors that may have considerable effects on the Hajj pilgrims’ well-being and life satisfaction.

The study is conducted through an analytical methodology in which a sheer quantitative method was used involving an extensive questionnaire administered to a pool of 500 pilgrims from three continents, namely Asia, Africa and Europe in addition to pilgrims from the Gulf Cooperation Council countries in order to achieve the above-stated primary aim.

The study is conducted in order to fulfil three main objectives, the first of which aims to reveal the multifaceted relationships between religiosity, and life satisfaction of the Hajj pilgrims. The second objective is to estimate the monetary value that pilgrims attach to non-market characteristics of their religious beliefs. The third objective is to investigate the heterogeneity effects of the Hajj pilgrims on their life satisfaction.

The most important finding of this study involves the major factors that had significant and positive effects on life satisfaction and well-being of the pilgrims which were found to include personal relationships, memorable and challenging experiences about the Hajj trip, health status and personal incomes.

The study recommended that the policy makers in Saudi Arabia, the ultimate destination of Hajj pilgrims, and those of other countries from where Hajj pilgrims set out to perform Hajj, take the findings of this study into consideration in order to improve and enrich the experience of Hajj pilgrims, and make it contribute to their life satisfaction, happiness, peace, and tranquillity.

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Introduction

Religious tourism is among the oldest types of travel and is unique as being motivated by spiritual commitment (Sharpley, 2009). When studying it, it is set apart from other types of tourism because it results from obligation and duty rather than quest for pleasure (Swarbrooke and Horner, 2007). Religiousness itself is a kind of trust in a holy belief and reverence of an experience that is thought to bring happiness in this life and the hereafter (Beit-Hallahmi, 1975). Living the religious experience is supposed to ensure the individual's religious certainty and is followed by relief that an obligation has been fulfilled. Religiousness has been examined because it is strongly related to the individual's thinking, attitude, affective and physiological well-being. Moreover, religious travel is related to well-being in that it is potentially a cause of healing experience (Chamberlain and Zika, 1992).

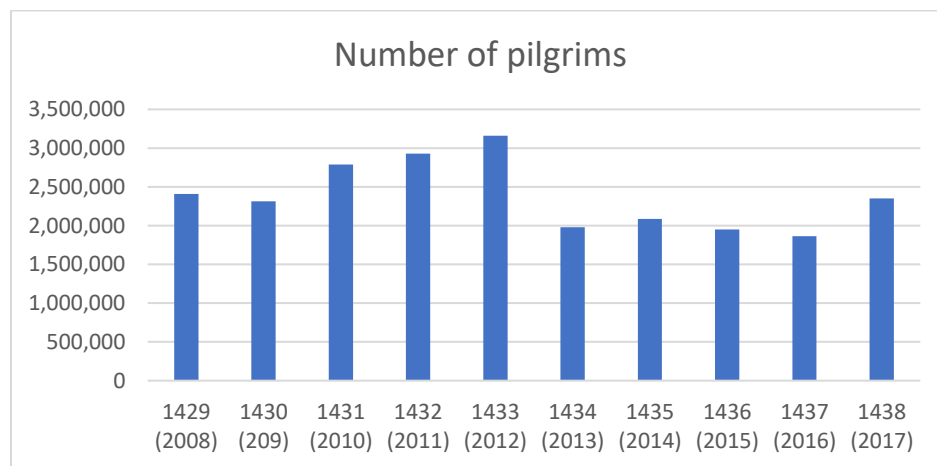
The Hajj to the Holy Shrines that lie in Mecca in Saudi Arabia and its precincts, and the visit to Medina that follow the accomplishment of Hajj rituals in the Holy Shrines is central to Islamic religion. All financially and physically capable adult Muslims must take the Hajj journey to Mecca and perform the Hajj rituals at least once in their lifetime, unless some compelling circumstances compel them not to do so, while for children and those who have performed it before, it is optional but encouraged (Henderson, 2011).

Hajj pilgrimage represents the fifth pillar of Islam, the others being Shahadah (attesting that there is no god except Allah, and Mohammed is the Messenger of Allah), Salat (performance of five prayers daily), Zakat (payment of obligatory alms) and Sawm (fasting the month of Ramadan). Hajj pilgrimage rituals to Mecca are organized on annual basis for all Muslims as a mandatory act and are regarded with much awe and respect. In

general Arabic language the verb “Hajja” means “he intended to make a journey”. However, in religious language it means the intention to take the trip to Mecca in order to perform the Hajj rituals in the Holy Shrines of Mecca.

In contemporary Hajj, religious obligation along with the sizeable growth of global Muslim population manifests itself nowadays during the Hajj season in mass movements of people travelling to and within the Kingdom of Saudi Arabia, in order to seek relief and life satisfaction after accomplishing a major feat by performing the fifth pillar of Islam (Henderson, 2011). According to the Saudi General Authority for Statistics (2017) the total number of Hajj pilgrims of the Hijri year 1438H corresponding to the Calendar year 2017 was 2,352,122 of whom 600,108 were internal Hajj pilgrims (from Saudi regions) and 1,752,014 were external Hajj pilgrims (from abroad). Of the external Hajj pilgrims, 940,369 were male and 811,645 were female Hajj pilgrims. Figure 0.1 shows the total number of Hajj pilgrims in the ten years of 1429H-1438H corresponding to the Calendar years 2008-2017.

Figure 0.1 Total number of Hajj pilgrims in the ten years of 1429H-1438H corresponding to the Calendar years 2008-2017.



Source: Saudi General Authority for Statistics (2017).

Traditional pilgrimage, in its own right, is a clear manifestation of the interaction between religion and tourism; and this interaction has quite a long history (Coleman and Elsner, 1995). It was essentially manifested in activities and movements directed by religion (Stoddard and Morinis, 1997). All major world faiths of Judaism (Cohen and Ioannides, 2006), Christianity (Collins-Kreiner and Kliot, 2000), Buddhism (Proser, 2010), 2006) and Hinduism (Sharpley and Sundaram, 2005) inspired and continue to inspire pilgrimage and hence tourism. Islam, as will be considered in this thesis in detail, also inspired pilgrimage and tourism. In recent times the travel to the holy sites has been made easier by modern transport, which increased accessibility and generated new passages of pilgrimage hitherto not of much importance.

Issues as carrying capacity (Sati, 2018), socioeconomic impact (Dafuleya et al., 2017), motives and activities performed (Liutikas, 2015), profane and sacred dimensions of the pilgrimage experience (Kim et al., 2016), souvenir purchase behavior of the pilgrims (Khanna and Khajuria, 2015) have been approached by the academic literature.

Religious and spiritual tourism such as Hajj journeys have been found to have a confirmed relationship with the tourists' subjective well-being or life satisfaction¹, albeit complex (Hassan et al., 2014). As spiritual travellers always seek spiritual fulfilment rather than pleasure. Well-being of such travellers before, during and after the travel, usually results from the time they spend and efforts they exert in planning the journey and preparing themselves for it, which usually motivates them and raises their morale (Hassan et al., 2014).

¹Some researchers use the constructs of 'happiness', 'life satisfaction', and 'well-being' as separate terms, and exert efforts to define them precisely, and even try to distinguish between them. However, these terms are used interchangeably in most of the literature of the field (Veenhoven, 2012).

The relationship between religiosity and life satisfaction is a topic that is gaining momentum in the tourism literature. To this respect, Heller et al. (2006) found that the complexity of this relationship and the difficulty of its study may be due to the fluctuation in the results of relationship and may also be due to the differences of life satisfaction among individuals, and hence may need to be controlled for some other variables. These authors assume that these other variables may include the individual's economic resources (employment and personal and household income), as well as personal variables that may include age and gender as well as marital status, number of family members and number of children under 21 (Lea et al., 1993). To this respect, Frey (2008) emphasizes the role that happiness research can play in economics, which in our case would impact the traveller and the destination he heads to, i.e. happiness as an important issue in economics that would affect the tourist product as is the case with all other products and services.

Happiness research exerts efforts to determine in a quantitative manner the relative importance of the demographic, economic, political, and cultural factors as well as the genetic and personality factors in explaining the individual's well-being, although the last two are largely beyond the scope of economics. However, some research endeavours (e.g. Helliwell, 2006) found that the effects of the demographic and economic factors on happiness, though mediated by personality differences, are much greater than these differences, and hence demographic and economic factors can be considered as the major issues that should be studied.

Recent research shows that individuals enjoying high subjective well-being usually possess a positive temperament, are very adaptive, have little tendency to ruminate over negative experiences of the past, societies where they live are economically developed,

enjoy good social relationships and have adequate resources to carry on in their lives and achieve their goals (Diener et al., 1999).

Although, psychologists have dominated the research of subjective well-being, the last decade has witnessed an interest from the part of economists in the area (Boyce, 2009). Economists thought that questions that relate to the concept of utility, especially the satisfaction that comes from consuming goods, can be answered by findings from the area of subjective well-being. In fact, there is a strong tendency in individuals to increase their utilities by choosing the best goods that live up to this goal. When an individual buys one set of goods rather than another, it must be because he expected more utility from the ones he bought (Boyce, 2009).

When subjective well-being is analyzed economically, it allows us to define how people value and see goods and services, not only the material ones, but also goods and services with non-material value such as familial social relations along with the social conditions surrounding them. On the other hand, people do not get utility only from outcomes, but also from processes.

In addition to their use value, religious activities possess non-use values, as people may get an improvement in their well-being after knowing that some of the religious activities they do will be passed down to be enjoyed by the future generations (bequest value), or to be enjoyed by others (altruistic value), or simply because they believe in the worth of their own existence (existence value). These values are characterized by a non-market nature which entails the need for tools and techniques that can produce meaningful monetary measures in order to assist decision-making related to religious tourism policy

such as the case of the life satisfaction approach (LSA), which is also referred as to subjective well-being approach (SWBA) (Del Saz-Salazar et al., 2017).

LSA is a survey method that uses self-reported data on life satisfaction in order to describe the well-being of the individual in the form of a function of his income and other socio-demographic variables such as age, gender, etc. and, in our particular case, also including variables related to the individual's religiosity and spirituality. In fact, the use of data on self-reported life satisfaction is gaining considerable momentum in the field of economics as a new tool used for valuing public goods in monetary terms such as health (Van den Berg and Ferreri-Carbonell, 2007) environmental quality (Welsch and Kühling, 2009; Welsch, 2009) and safety (Brenig and Proeger, 2016). So, in this study, for the first time ever in the tourism literature, this technique is used to estimate the monetary value that people attach to religiosity and spirituality through the calculation of the marginal rate of substitution (MRS) between these religiosity and spiritual variables of interest and the individual's personal income.

LSA proponents believe that LSA has, at least, three main advantages over other non-market valuation approaches such as the stated preference methods (Haab and McConnell, 2002), namely: (1) it does not depend on the respondent's ability to consider all the changes in religious activities (Del Saz-Salazar et al., 2017), (2) it circumvents strategic behaviours that result from other stated surveys (Frey et al., 2009), and (3) there is no need for assuming equilibrium in markets (Welsch, 2006).

From the above, we can see that this thesis is advancing three main objectives:

- The first objective is to reveal the multifaceted relationships between religiosity, life satisfaction or subjective well-being of the traveller after completing his or her

religious journey. This is done through the estimation of a micro-economic life satisfaction function, which uses the elicited self-reported life satisfaction proxy for pilgrims' utility. The survey instrument asks the participants about their life satisfaction and the extent to which they participate in religious activities, beside other socio-economic and demographic data. These functions are estimated using STATA econometric package.

- Second, as mentioned above, we estimate the monetary value (marginal rate of substitution) that pilgrims attach to non-market characteristics of their religious beliefs, i.e. the bequest value, altruistic value, and existence value.
- Third, as Hajj pilgrimage draws huge masses of people from different countries with vastly different features, we assume a high degree of heterogeneity due to the Hajj pilgrimage different demographic characteristics and socio-economic backgrounds. Such heterogeneity is addressed in this thesis using a latent class analysis (LCA) model that takes into account these different demographic characteristics and socio-economic backgrounds. LCA analysis allows the researcher to analyze the relationships of the data in such a heterogeneity setting in cases where some variables are hidden or unobserved. In this way, the analysis of the unobserved variables allows the segmentation of the original dataset into a number of exhaustive subsets or latent classes. For this purpose, we use Latent Gold software package (Finkbeiner and Waters, 2008) to carry out a latent class cluster analysis.

This software package is used in latent class modelling to find groups or clusters of Hajj pilgrims in multivariate data, and then extract some new variables in order to see how

they depend on other established variables. In this case we may look for discrete Hajj clusters categorized based on their degree of education such as intellectuals, semi-educated and laymen either in one country or across countries and see how life satisfaction or subjective well-being of each cluster depends on their degree of religiosity or on some demographic factor.

To accomplish these three objectives, we used the data of a survey instrument in which pilgrims were required to answer items about their life satisfaction and socio-economic information related to them. Hence a questionnaire was designed especially for this purpose. The questionnaire was divided into three different but related sections, of which the first section included questions about the geographic and demographic information of the respondents. The second section consisted of questions that inquire about satisfaction with life, health status, and personal relationships as well as questions about quality of the trip experience, subjective well-being (SWB), life satisfaction and religiosity. The third section consisted of questions about education, current employment status, personal income, household income, money spent in the Holy Places, and satisfaction after the visit.

Based on the above three objectives, the following research questions are formulated:

1. What are the factors that mediate the relationship between religiosity and life satisfaction or subjective well-being of the Hajj pilgrim before, during and after completing his or her religious journey?
2. What are the monetary values that pilgrims attach to the non-market characteristics of their religious beliefs?

3. What is the degree of heterogeneity among Hajj pilgrims, and how does it affect their life satisfaction or subjective wellbeing?

The major findings of this thesis include the fact that the most important factors that have significant and positive effects on life satisfaction or well-being of the pilgrims in the Holy Places include “personal income”, “personal relationships”, “health status”, “my experience with this trip was memorable” and “I am being challenged in some way with this trip”.

With respect to the satisfaction with the Hajj trip, the study revealed that “personal income”, “personal relationships”, “life is close to my ideal”, “education”, “satisfaction with community”, “choice of the trip”, “this experience is exciting for me” and “feeling happy upon return from the trip” make up the most important factors that affect satisfaction with the trip.

The study also measured the pilgrims’ degree of religiosity in terms of the extent to which they perform their Islamic commitments by means of four Islamic variables which included “Islamic beliefs”, reading the “Quran”, fasting in “Ramadan”, and reciting “Duaa”, and revealed that Islamic beliefs represented the most important factor in pilgrims’ life satisfaction, followed by reading the “Quran”, “fasting in Ramadan”, and reciting “Duaa”.

In order to measure the degree in which pilgrims are willing to pay more to fulfil their Islamic commitments that included the above four Islamic variables, the study used the marginal rate of substitution (MRS). The value of these four variables ranged between a minimum value of 856.8\$ in the case of reciting “Duaa” and a maximum value of USD 2.291 in the case of “Islamic beliefs”.

Latent class analysis (LCA) was used in the study to address the issue of heterogeneity. Thus, using five variables related to the Islamic religiosity, LCA was performed. Using the standard criteria of model selection, namely AIC and BIC, the model that best fitted our data was found to be a 3-class model. Therefore, we were able to distinguish three classes, namely: class 1 (medium degree of religiosity), class 2 (strong degree of religiosity) and class 3 (weak degree of religiosity). Then for each class we estimated both the life satisfaction function and the trip satisfaction function.

Finally, the findings of this thesis are expected to enlighten the policy makers in Saudi Arabia, the ultimate destination of Hajj pilgrims, and policy makers in other countries from where Hajj pilgrims set out to perform Hajj, concerning how to improve and enrich the experience of Hajj pilgrims before, during, and after the Hajj, and make efforts to make it an experience that will increase their satisfaction, happiness, peace, and tranquillity in their life thereafter. This same recommendation should guide future research in terms of how to make the Hajj pilgrimage a journey that will boost the happiness and subjective well-being, not only of the Hajj pilgrims, but also of their dependents, friends and communities at large.

Chapter 1

Subjective Well-Being Research in Economics

1.1. Introduction

In the eyes of many people, happiness is the ultimate goal of life, since everyone wants to be happy. The American Colonies' Declaration of Independence regarded the "pursuit of happiness" as an "inalienable right" just like the right to live and be free. The king of Bhutan declared in the 1980s that "Gross National Happiness" is the key guiding principle in his country (Ura and Galay, 2004).

Our modern society considers happiness as a main goal as most people are in search of happy life, and as people typically endorse policies that seek greater happiness for the greatest number of people. Hence, there is an increasing demand for better knowledge about happiness, and for this reason policy makers are busy collecting information about the social conditions that can promote happiness. Researchers are also busy conducting comparative studies about happiness in order to respond to this demand. The research into this field began as early as 1965 with a book authored by Hadley Cantril under the title of "The Pattern of Human Concerns". In the next forty years, or a bit more, comparative research about happiness grew into a full-fledged research field and almost all countries of the world participated in conducting studies about happiness. According to (Veenhoven, 2012b) about 4500 findings from surveys about happiness have accumulated from different nations in a world happiness, and this vast collection about happiness is now available in about 500 scientific publications (Veenhoven, 2012c).

Despite this huge number of surveys and their findings in comparative studies about happiness, all this vast amount of reported results led but to doubt and uncertainty. One

problem is about the validity of meaningfully comparing happiness across nations, since measures tend to be influenced by cultural bias. Another problem is the strong dependence of happiness on the variable cultural concepts of good life, and for this reason research that aims to create universal conditions of happiness might thus be pointless.

Some researchers use the constructs of ‘happiness’, ‘life satisfaction’, and ‘well-being’ as separate terms, and exert efforts to define them precisely, and even try to distinguish between them. However, these terms are used interchangeably in most of the literature of the field (Frey et al., 2008).

1.2. Happiness and Subjective Well-Being

Perhaps subjective well-being research can be traced back to the 1960s when Wilson (1967) described the happy individual and his characteristics and remarked about the few theoretical advances that took place about the happy life of the individual since the time of the ancient Greeks. If we take Wilson’s ruling as true, then we can definitely say that research about the individual happy human being has thereafter considerably thrived. Researchers are now accustomed to use self-reported statements about the individual’s well-being as measures of human happiness. However, the research of subjective well-being, involves much more than the mere study of the emotions of transitory happiness. The term “subjective well-being” reflects, in fact, both the affective and cognitive evaluations and assessments of the aspects of the individual’s physical and mental well-being. Such evaluations and assessments have been found to include distinctive separate characterizations and their own sets of dimensions and correlates that can be analysed to produce meaningful results and findings (Lucas et al., 1996). The main advantage of the data of subjective well-being, is that they give researchers the opportunity to perform

empirical tests about many of the well-being hypotheses that they have advanced. Thus, there are now significant advances in the investigation of human well-being following perhaps some interruption after the time of ancient Greeks (Diener et al., 1999). Frey (2008) introduced happiness research to economics which he regarded it as a revolution. He stressed happiness as an important issue in economics and showed how it can be measured. He also identified issues that relate happiness to economics, namely: unemployment, income, inflation and inequality. According to him unemployment has the most adverse impact on happiness, even when controlled for other variables. However, he regarded the effect of modest inflation on happiness as meagre, relative to unemployment which according to him leads to dramatic reduction in happiness. The main contribution of happiness research to economics, according to Frey (2008), is the exchange between inflation effects and unemployment. Nevertheless, social norms interfere with the adverse effects of unemployment especially when living with welfare is socially acceptable.

Frey (2008) enumerated other contributions of happiness research to economics:

- Happiness research can be used to measure subjective well-being.
- Happiness research can be used to suggest some hitherto disregarded aspects, such as calculation of optimal prices for commodities offered by the public sector, development of optimal policies to control tax evasion, and evaluation of economic growth as a support for sustainable happiness.
- Happiness research can be used to reconcile conflicting phenomena in economics, such as when unemployment is curbed, inflation would rise.

- Happiness research can be used to study cause-effect relationships between happiness and some life situations such as self-employment, volunteers work and marriage.

According to Diener (1984) subjective well-being (SWB) consists of several components foremost among which are: life satisfaction, and general high or positive feelings, and low or negative feelings. According to this author, life satisfaction is the subjective judgment of all aspects of life; while the positive and negative affective feelings cover the positive and negative life experiences that the individual lived. While each component of these is distinct and necessary for the description of the domain of SWB, they are not self-exclusive and may interact and overlap (Lucas et al., 1996).

1.3. Subjective Well-Being Research in Economics and Psychology

Subjective well-being research may be regarded as constituting one part of what is called positive psychology movement (Seligman and Csikszentmihalyi, 2000). The movement of positive psychology is a kind of psychology that focuses on the positive components of human experiences. It has to do with human thriving and is similar in meaning to the Greek word “eudaimonia”. In simple terms the movement is concerned about how to understand the manner in which the individuals manipulate their lives in order to make it more satisfying and fulfilling. Attempts to understand the positive elements of human experience came as a reaction to the discipline of negative life experiences that emerged after the Second World War, and which had largely been pre-occupied with the understanding of the psychological aspects of mental illness aetiology and treatment. Although the early psychologists, including Maslow (1954) and Rogers (1959), looked at mental health within the continuum of psychological pathology and advanced theories on

the manner by which to improve individual mental and health functioning, it is only recently that psychology has adopted the study of the research of positive subjective well-being as an important element of this discipline, in an attempt to understand the manner in which individuals manipulate the benign life conditions to gain happiness and better quality of life (Seligman and Csikszentmihalyi, 2000).

Thus, the research of subjective well-being met with a good deal of progress in the few recent decades, which were initiated by extensive reviews by Wilson (1967) and continued by Diener (1984) and later by Diener et al. (1999). The research started with how to determine the individual features that correlate highly with strong feelings of well-being. Wilson (1967), from his literature coverage found that happy individuals are most likely young, healthy, rich, educated, optimistic, extrovert or even pushing, without worry, married, religious and have high self-esteem, but with modest aspirations. However, many of these first findings, which were mostly demographic in nature, have been abandoned thereafter, and psychologists are increasingly focusing now more on psychological factors, including personality, striving for goal achievement, adaptation and coping strategies. There is new emerging evidence that suggests that individuals with a positive temperament may have high subjective well-being, because they don't ruminate much over bad events, they can share the benefits of economically developed societies, they harbour strong social feelings towards others, and they possess sufficient resources that help them achieve their goals (Diener et al., 1999).

1.3.1. Subjective Well-being: Paradigm Shift in Economics

Income has been taken for a long time as a suitable proxy for human happiness. However, happiness research has found that subjective well-being is a much better measure for the individual's welfare. Subjective well-being is a term often used in psychology to express the individual's evaluation of his positive and negative experiences, the extent to which she is happy or satisfied with life. Although these constructs are separate in meaning, and researchers often try to use the precise terminology in their specific empirical research, in general, however, the terms 'happiness', 'life satisfaction', and 'well-being' are used interchangeably in most of the literature of the field (Frey et al., 2008).

Even though economists and psychologists, are nowadays, researching subjective well-being with equal rigour, still there are many differences between economists and psychologists in the manner in which they deal with the topic. This is partially due to the basic research questions with which the two disciplines approach this topic. Moreover, researchers of subjective well-being are sometimes unaware about the progress that has been made in other fields. However, the manner in which well-being relates to income as well as how it relates to the employment status of the individual has been extensively researched in several disciplines, and the differences and gaps between disciplines will be dealt with here, since the disciplinary divide about this matter is beneficial to both economists and psychologists, as both are keen to get a better understanding about human happiness (Boyce, 2009).

Over the past few decades, economists have started to exert great efforts to broaden the conceptions of welfare and go beyond the simple income-based roots of well-being. Both economists and psychologists paid a lot of attention to the manner in which income

relates to well-being. We need first to discuss the evidence, if any, that may associate income with well-being. Indeed, new facets of income now feature in the literature as of central importance in subjective well-being and happiness research, which will be discussed in the following sections.

1.3.2. Income and Well-Being

Although, income still features as a major issue in well-being, it is no longer regarded as an absolute indicator of happiness or subjective well-being. To start with, the relationship between income and well-being can be approached in several ways. These include levels of satiation where extra income has no effect on well-being, inequalities within the same nation (also researched as relative income), comparison between income over time at the individuals level, and comparisons of income across nations (Boyce, 2009).

1.3.2.1. Level of Sufficiency in Income

The existence of a sufficiency level in income where extra income has no or only little effect on well-being has been recently research widely, but without a valid formal statistical evidence to determine it anywhere or at any point of time. For instance Diener and Seligman (2004, p. 5) indicated that “there are only small increases in well-being” beyond a certain point of income. Confirming this claim, Clark et al. (2008, p.123) indicated that “greater economic prosperity at some point ceases to buy more happiness.” A third claim by Di Tella and MacCulloch (2006, p.17) also confirm this as it states that “once basic needs have been satisfied, there is full adaptation to further economic growth.”

Nevertheless, some efforts have been exerted to determine this point in income numerically. For example, Layard (2005, p. 17) argued that “once a country has over

\$15,000 per head, its level of happiness appears to be independent of its income.” He further indicated that an extra income up to the level of \$20,000 has an additional meagre effect on well-being (Layard, 2005 p. 32-33). To sum up, Frey and Stutzer (2002a, p. 416) indicated that “income provides happiness at low levels of development but once a threshold (around \$10,000) is reached, the average income level in a country has little effect on average subjective well-being.”

1.3.2.2. The Income Link to Well-Being over Time

Among the most important and earliest studies that investigated the link between income and well-being was one conducted in 1974 by an economist by the name of Richard Easterlin, many years before the extensive attention paid to subjective well-being by economist. Easterlin (1974) wondered if economic growth would improve the human wellbeing. He did not look for an objective answer to the questions he raised such as productivity data or indexes of standard of living but used instead the proportion of random samples of subjects who believed that they were “very happy” in their lives. He managed to show through subjective data, at least in the developed countries, that economic growth is not the one that improved human wellbeing. He found that when a country achieves a particular level of economic progress, more progress was only associated with just a little increase in the national average of well-being. Although some researchers doubted this finding (e.g. Hagerty and Veenhoven, 2003), this very same finding came out from several other studies conducted by both psychologists and economists (e.g. Easterlin, 1995). Such a finding may make one wonder whether economic progress should remain a priority in these developed countries.

1.3.2.3. The Income Link to Well-Being within One Country

But can one, as an individual, buy happiness by means of money? If we just observe the behaviours of people, we will find that one surely can. In terms of utility, spending money to buy goods and services; implies that money allows people to buy more goods and services, and thereby bring them extra utility. Early research about how income relates to well-being within one country was carried out in most cases by psychologists (Diener, 1984), and has often shown that at the level of the country, individuals who have higher incomes are more likely to have higher well-being. Using longitudinal data, economists have also demonstrated that such relationship may truly hold (Gardner and Oswald, 2007).

1.3.2.4. The Income Link to Well-Being across Countries

Easterlin (1974) also wondered whether rich countries can be happier than poorer countries. He presented evidence that indicates that they were not happier. However, Hagerty and Veenhoven (2003) pointed out that several issues exist in his original research. Easterlin updated his research in Easterlin (1995) and as he reiterated in several occasions, his work points to positive relationships between the incomes of countries and the well-being of their people (e.g. Diener et al., 1993; Hagerty and Veenhoven, 2003). However, it appears that this positive relationship holds up to about \$10,000, and the average income over this amount has very little or no effect on the average well-being (Frey and Stutzer, 2002a). This means that any relationship that exists across countries between income and well-being is not very reliable. Not only the cultural differences between countries that make the comparisons of subjective well-being across countries difficult, but there are many other factors that go along with high per capita income to make this effect, such as elements of democracy (Inglehart et al., 2008), health and basic human rights (Frey and

Stutzer, 2002a) which may have had a role in the higher happiness levels witnessed in some countries.

1.3.2.5. Relative Income Effects on Well-Being

The fact that within one country a correlation was found between income and well-being coupled with the finding that economic growth has little or no role in increasing national well-being confused the economists who were bent on researching subjective well-being (Clark et al., 2008). The dilemma here is how can extra income improve the individual's utility without increasing the total societal utility? These two conflicting findings became known as the "Easterlin paradox" and now make up the foundation of a big part of economic research about well-being. Among the most acceptable explanations that were advanced to solve the Easterlin paradox is the fact that people are much not concerned about the absolute income but pay more attention to their income as compared to their peers. The reason here is that income will not improve the individual's well-being unless it rises faster than others people's income. Hence, if the proportion of increase in income of everyone is the same, then nobody would be better off than others because relative income positions remain the same.

1.3.2.6. Relative Income Effects in Economics

Some debate broke out after psychologists used simple cross-sectional data over whether income has a relative or absolute effect on people's wellbeing (Diener et al., 1993; Hagerty and Veenhoven, 2003). Evidence for the relative effect, has always been based on cross-sectional observations alone and was often regarded as circumstantial. One cannot depend on simple correlations to conclusively prove that individuals pay much attention to relative income. However, economists did not rely on this circumstantial evidence, and

attempted instead to demonstrate that relative income of an individual can predict well-being. For instance, they used relative income variables to demonstrate that they can predict the different measures of well-being to a great extent (Clark and Oswald, 1996). Furthermore, economists have also demonstrated the presence of a causative link pointing to an increase in relative income of the individual contributing to an increase in his well-being (e.g. Luttmer, 2005). It can now be assumed that the finding that people do pay more attention to their income relative to the people around them can be taken as a reliable finding.

One should not be surprised to see that relative income has such effects. In fact, the relative attention paid to social comparisons has deep roots throughout economics history, and has occupied a special place in the studies of Adam Smith (1776) and those of Karl Marx (1852). Veblen (1899) introduced the term “conspicuous consumption” to mean a kind of consumption, which is not necessarily a key issue in the individual’s survival, but all people are in pursuit of it because it symbolizes their standings in their communities. Duesenberry (1949) discussed people’s concerns about the future relative to the current standing of their savings. Although people are often worried about this, they still will sacrifice some of their savings in order to secure self esteem by consuming more goods to show up as equals against other people around them. This so called “luxury fever” or “keeping up with the Joneses”, as Frank (1999) refers to it, may go beyond the actual needs of the individual to the extent of exerting great efforts and buying things which they are not in need of at the time. However, this matter is controversial, and it cannot be easily determined whether such a behaviour can be motivated by absolute or relative effects. Neumark and Postlewaite (1998) have shown that the rush by women to enter the

workforce, may be partly the result of taking employment decisions after comparing their status with that of their sisters or sister-in-laws. However, Luttmer (2005) stipulates a proxy for utility such as data of subjective well-being, in order to be able to distinguish between the effects of absolute or relative income. One cannot prove the significance of the individual's attention he pays for relative performance unless it is included in his utility function (Clark and Oswald, 1998).

1.3.2.7. Relative Judgment Models

Extensive research has been carried out by psychologists, and a good part of it suggests that people make relative judgments in response to the stimuli they are exposed to, and based on this finding they believe that the individual's utility depends on his relative income. They have shown in their experimental works that judgments are most often made as a result of some kind of relative concern (Stewart et al., 2005). Helson (1964) introduced what he called Adaptation Level Theory (ALT), which he used to model the manner in which people subjectively assess the objective stimulus they are attracted to from a set of stimuli. For example, they may use a scale of stimuli of weights between 1 = "very light" and 10 = "very heavy".

Data in psychology support another model about how people make subjective assessments in certain circumstances. The Range-Frequency Theory (RFT) (Parducci, 1995) suggests that the individual assesses the situation, in which he finds himself pushed in, by weighting the rank or frequency of the stimulus and its cardinal place relative to some high and low values (range) of a stimuli set. An assessment based on RFT is usually made on a rank which is uniformly distributed and anchored between two extremes. RFT has been found useful when used to model subjective assessments within a collection of

stimuli. However, in economics, it has been found applicable in modelling assessments of both income (Brown et al., 2008) and price (Qian and Brown, 2007). RFT has also demonstrated applicability in social comparisons (Smith et al., 1989).

1.4. Life Satisfaction Approach (LSA)

1.4.1. Determinants of Happiness

A question often asked, is why do people feel happy and satisfied with the life they are leading? The literature of the field has covered main determinants of happiness. The most important task is how to isolate the determinants which have the most influence on people's happiness. The literature by now emphasizes that the determinants of happiness are not confined to the economic factors, and the non-material aspects of the individual's life, such as social relations are also important.

Thus, happiness research attempts to quantify the relative significance of the various determinants of happiness, including economic, personality, cultural, socio-demographic, and political factors. For the most part of it, the personality factors that influence subjective well-being lie outside the domain of economics, although they are important. On the other hand, research such as that of Helliwell (2006), points to the fact that economic, demographic, and political factors are not much modified by personality differences. Furthermore, the determinants vary among cultures (Uchida et al, 2004), and one determinant in one culture may not be much influential in another. The same applies to the different possible interpretations of numerical measures for different societies.

1.4.2. The Nature of Happiness

Everything may be questioned even the importance of happiness itself. The axiom that happiness is the ultimate goal in the life of everyone itself is questioned. For example,

the Social Production Function Theory (Lindenberg and Frey, 1993) identifies physical well-being first and then social well-being, as the two ultimate goals that people want to fulfil, and these two goals are achieved by another five instrumental goals, which are stimulation, behavioural confirmation, status, comfort, and affection. Other authors such as Ryff (1989) and Lane (2000) regard values such as responsibility, purpose in life, personal growth, control on one's surroundings, and self-directedness, as the most important. Some scholars equalize happiness with other higher-order commodities, such as health, nutrition and entertainment. Liberal thinkers regard personal freedom as even more significant than happiness, and that individuals should sacrifice their happiness in their struggle for freedom, and as such, unhappiness may be pursued by some in order to achieve other more important goals such as more production (Kimball and Willis, 2006).

Happiness is a dynamic state of mind, and individuals cannot attain it by just aspiring to it. It is a result and consequence of an experience of "good life" (civil happiness, as Aristotle explained) that produce satisfaction in the long run. Individuals who run after happiness purposively are unlikely to achieve lasting happiness. According to the evolutionary theory, human beings did not evolve just to attain happiness, but first to survive and then to reproduce (Rayo and Becker, 2007).

However, despite all the uncertainties explained above, there is no doubt that happiness is a principal goal that everybody wants to attain. But different individuals will seek to attain happiness through different ways, to different extents, and using different types of knowledge. Nettle (2005) distinguished three levels or concepts of happiness: the first is momentary feelings of pleasure and cheerfulness, which are known in psychology as the positive and negative effects, and are often called the feelings of happiness; the

second is contentment with life on the whole, which is often called “life satisfaction”; and the third is the quality of life which is attained by fulfilling one’s potential, and is often called “good life” or eudaimonia.

Another issue poses itself here, and that is whether self-reported instantaneous happiness can be used to measure well-being. That is to raise the question of whether people’s hedonic experiences are the same as their explicit reflective appraisals of such experiences when they report them as a kind of subjective well-being? This is because people may experience some flow of instantaneous happiness, but when they are asked later to evaluate these experiences, they do so in a different way (Csikszentmihalyi, 1990). This suggests that there is a limit to the measurement of instantaneous happiness as a utility. We might gain more insights when we have a better fix about the correlation between subjective well-being as reported by subjects and the measures of their physiological well-being. By using correlations as time goes by and across individuals, we can then use various frames of reference in order to study people.

Economics happiness research can be successful if the findings that emerge from the research can be integrated to generate meaningful economic theory. Research on happiness can contribute to the hub of economics if the utility is fully understood; and if the theory is tested by valid means. Using well-being proxy measures, experimental and econometric research methods, can inform economics on concepts of utility enriched with psychological content, which will be more akin to the individuals’ well-being than their observed behaviours.

1.4.3. Life Satisfaction as a Proxy Utility

Happiness economics posits that the concepts of life satisfaction or happiness that can be measured may be used as a proxy for the theoretical concepts of utility. These new developments may be considered as “revolutionary” because they change the manner in which economics looks at the society (Frey, 2008). The economics of happiness is potentially capable of changing economics to a great extent in the future, both in terms of analysis of the problems of economics and the recommendations that may be made within the policies of the country (Frey and Stutzer, 2008).

Utility, as it is used in economics as a term, represents the relative life satisfaction gained more from pursuing one particular course of action relative to another. It also captures the benefits that people obtain when they consume goods or services. Now life satisfaction is the opposite of what was regarded in the 1930s, when Sir John Hicks and others denied the measurability of utility. Their approach was useful in applying microeconomics to tackle economic issues (Benesch et al., 2010). But after the 1930s psychologists started to measure subjective well-being and thereby gave life a concept of utility.

Subjective well-being analyzed economically helps define how people value and see goods and services, and the social conditions surrounding them. This applies, especially to the impacts of income and unemployment, and other economic factors, on life quality and well-being. The new insights from the economic analysis of subjective well-being are beyond economics, as they include non-material values, e.g. the value of familial social relations or the value of autonomy. On the other hand, people do not get utility only from outcomes, but also from processes. For example, they become more satisfied when a court

decision is ruled in their favor, even when they do not get much benefit for it (Frey et al., 2004). But economic activity is not an end, unless it contributes to happiness and self-satisfaction.

The economic study of happiness of individuals is often derived from the subjective views of utility of such individuals, since the views of individuals about happiness and good life vary based on the manner in which they perceive them. Fortunately, there are other ways to capture subjective well-being beside the observed behavior. The most suitable way to capture subjective well-being in economics is to use the judgment of the individuals involved by asking them about the extent to which they are satisfied with their lives and then analyze their answers. This is because people are often the best judges of their overall quality of life, which is a clear and direct strategy (Diener et al., 1999). Happiness and life satisfaction measurable concepts allow us to generate proxies for the concepts of utility or what is also known as individual welfare. Utility as it was used in economics represents the relative satisfaction that is derived from a certain course of action. The actual purpose is often to find what will people get from the consumption of goods and services. The purpose of life satisfaction measurement now is to disprove the claim that utility cannot be measured or need not be. This approach created the chance for a meaningful application of microeconomics on macroeconomic issues, and thereafter to issues that lie beyond economics. However, since the 1930s, the situation changed radically. Since then, psychologists taught people about the measurement of subjective well-being and thereby gave a new lease of life to utility and its concepts (Frey and Stutzer, 2002b).

When we are able to measure happiness, the next step will be to apply economic theory to new areas. For example, we will be able to analyze any biases in decision-making. By means of standard economic theory we can equate the utility expected from different decisions between alternative actions or between consumption packages (e.g., between spending a holiday in a mountainous region or on a beach seaside) with the experienced utility when developing the plan or consuming the package. Happiness research imply that individuals sometimes make biased decisions when they choose between alternatives (Stutzer and Frey, 2007). Consequent to these judgment biases, people find themselves dissatisfied with the life they are leading based on their own evaluation. In the same way, the utility of individuals will be poorer when they subject themselves to considerable self-control problems. For instance, they may perform activities (such as consuming more food) which they find themselves inclined to, but later they find that it was a short run utility only. Soon they realize that it would have been healthier if they have resisted the temptation to eat more (Stutzer, 2009). Happiness research allows much more than acknowledging these facets of human behaviour by enabling us to analyze and examine them empirically, and by doing so manage to evaluate their significance in explaining human behaviour.

By economically analyzing subjective well-being we learn the manner in which goods and services are valued by human beings, as well as the manner in which social conditions are valued by them. This applies specifically to the positive effects of income, and the negative ones of unemployment on well-being in addition to other economic factors. There are other insights beyond economics such as non-material values, like the value of autonomy and social family relations. Besides, people get utility from processes

and not only from outcomes. On the other hand, economic activities are not ends in their own right, but they do contribute to human happiness.

1.4.4. LSA: Cardinal or Ordinal

1.4.4.1. Ordinal Comparability

Life satisfaction approach may be measured by ordinal or cardinal comparability. In ordinal comparability we assume that if Ali had a score of 5 in his subjective wellbeing reporting yesterday and scored 6 today when tested by the same items, then it will be reasonable to say that his subjective wellbeing, as a utility, has increased. However, one will not be certain to assume that Ahmed whose score of today is 7 has a better subjective well-being than Ali's subjective well-being of today as a utility. This causes a problem of ambiguity in our measurement (Blanton and Jaccard, 2006). Although there are positive relationships between the different individuals' reporting subjective wellbeing instances and other types of psychological wellbeing, there is no way that we can compare the scores of people at different points on a scale (Miller, 1956).

1.4.4.2. Cardinal Comparability

In the cardinal comparability of scores of subjective wellbeing we assume that the difference between a score of 5 points and 6 points, equals that between a score of 6 points and 7 points, and that between a score of 7 points and 8 points, and so on. Although this may not be always true, it has been observed that the subjects, and even researchers assume that cardinality is always true, and in the case of subjective wellbeing people often provide responses based on their cardinal understanding of the scores (Parducci, 1995). Intelligence, for example, and many other latent psychological concepts, are often treated as cardinal, along with the assumption that actual wellbeing and true utility are also

cardinal. However, Ng (1996) claimed that subjects when alerted to differences in cardinality, they can report well-being based on varying intervals, and sometimes they can report it based on ratio quality.

The increasing use of numerical scales for measuring life satisfaction, appears to convey some intention of cardinality. This latter requires the existence of a unique and linear relationship between the true utility, that is unknown, and the measured happiness obtained using the numerical scale. But whether to choose ordinal or cardinal modelling for life satisfaction has been found of little importance, as most psychological researchers use the Ordinary Least Squares (OLS) to measure it, thus assuming life satisfaction cardinality, especially when self-reported data are collected. In fact, in many studies it has been shown that the results are practically unchanged irrespective of whether happiness is modelled as a cardinal variable by using OLS for it, or as an ordinal variable by using some kind of ordered categorical estimator (Ferrerri-Carbonell and Frijters, 2004).

1.4.5. Life Satisfaction Approach as a Technique

The life satisfaction approach (LSA) is a new emerging technique among the options that have been found capable of being used to measure utility effects of life satisfaction and well-being. This is because life satisfaction can come from many activities including efforts to improve the environment and other well-being effects using the more traditional non-market approaches (Ambrey and Fleming, 2011).

LSA is based on the emerging findings of happiness and well-being research in economics (Helliwell, 2006). The LSA can be used to measure life satisfaction based on public interests, income and activities that bring about relief such as improvement in the

air quality. The LSA also allows the direct testing of the hedonic basic assumptions and assess their departure from these assumptions (Luechinger, 2007).

A lot of empirical research about life satisfaction, quality of life or happiness has recently appeared, review of which has been made by Clark et al. (2008). Among these a considerable body of research suggests that the natural environment has a key impact on life satisfaction (Ambrey and Fleming, 2011).

However, LSA is not without limitations. The approach uses the subject's self-report of life satisfaction as a proxy to his utility. While this is accepted by many it is criticised by other many authors (e.g. Smith, 2008) as robust and unsupported.

The following are some examples adapted from (Dolan et al., 2008) showing how LSA was used to measure overall life satisfaction in studies conducted in USA, Britain and Canada, Europe and Germany.

Table: 1.1 Single-item measures for happiness/life satisfaction

Survey	Details	Questions	Response scale
American's Changing Lives (ACL)	US Multistage stratified area probability sample.	Now thinking about your life as a whole how satisfied are you with it?	Completely satisfied, Very satisfied, Somewhat satisfied, Not at all satisfied
	Wave 1, 1986 (n = 3617)	Wave 1: My life could be happier than it is right now	Strongly agree, Agree, Disagree, Strongly disagree
	Wave 2, 1989 (n = 2867)	Wave 2: Taking all things together, how would say things are these days?	Very happy, Pretty happy, Not too happy
British Household Panel Survey (BHPS)	Began in 1991 and is a multi-purpose study.	Would you say that you are more satisfied with life, less satisfied, or feel about the same as you did a year ago?	1 = not satisfied at all, 7 = completely satisfied
Canadian General Social Survey (CGSS)	Established in 1985, Continued until 1998,	Presently, would you describe yourself as	Very happy?, Somewhat happy?, Somewhat unhappy?, Very unhappy?
		Please rate your feelings about them (Including)Your life as a whole right now?	Very satisfied, Somewhat satisfied, Somewhat dissatisfied, Very dissatisfied
European Social Survey (ESS)	Nationally representative cross section in over 20 European countries	"All things considered, how satisfied are you with your life as a whole nowadays?"	1 "Dissatisfied", 10 "Satisfied"
German Socio-Economic Panel Survey (GSOEP)	Households selected using multistage random sampling, all members of household asked to participate. Annual face to face interviews. The entire sample is over 24,000 respondents who participated in a least one of the 1-15 waves	"How satisfied are you at present with your life as a whole?" "How happy are you at present with your life as a whole? "	0 = "Completely dissatisfied", 10 = "Completely satisfied" 0 = "Completely unhappy", 10 = "Completely happy"
World Values Survey (WVS)	WVS was first carried out by the UK representative of the European Values Survey group (EVS). It was made up of samples of about 1000 subjectis examine in 1998 and 1999 by Mori and Gallup.	"All things considered, how satisfied are you with your life as a whole these days?"	1 "Dissatisfied", 10 "Satisfied", "Very happy", "Quite happy", "Not very happy", "Not at all happy".
Fourth World Happiness Report (WHR) 2016.	Preparation of the report started from 2015 and continued till the end of 2016.	Two questions were asked "How satisfied are you with your life? and How happy are you with your life?"	Both were measured by 0 – 10 scales and responses were then averaged.

Source: (Dolan et al., 2008).

SWB and happiness are measured round the world with 19 major national data sets.

They used one single item that poses a question about the feelings of the survey participant

at the time which is rated in different ways. The above table shows five national surveys measuring SWB and happiness, namely American's Changing Lives (ACL), British Household Panel Survey (BHPS), and Canadian General Social Survey (CGSS), European Social (Values) Survey (ESS) and German Socio-Economic Panel Survey (GSOEP). ACL asks questions about life as a whole, if it could be happier than what it is now, and how things presently look. The British Household Panel Survey (BHPS) asks a single question about overall life satisfaction, which should be rated by the participant by 1= not satisfied at all up to 7 = completely satisfied. Canadian General Social Survey (CGSS) asks the participant to rate himself as either as very happy, somewhat happy, somewhat unhappy, or very unhappy. ESS asks the survey participant a single question about how satisfied nowadays he is with his life as a whole when all things are considered, which is required to be rated by him from 1 = "Dissatisfied" up to 10 = "Satisfied". GSOEP asks two questions: one about how the participant is satisfied with his life as a whole at present, and the other about how happy he is with his life as a whole at present. This is required to be rated by 0 = "Completely dissatisfied" up to 10 = "Completely satisfied", in the case of the first question; and 0 = "Completely unhappy" up to, 10 = "Completely happy", in the case of the second question.

The World Values Surveys (WVS) was the brain child of the European Values Survey (EVS) group presided over of Jan Kerkhofs and Ruud de Moor. The EVS conducted surveys first in 10 West European societies, and then replicated in 12 other countries. The findings garnered from these surveys suggest that predictable cultural changes do take place (Inglehart et al., 2008).

The fourth World Happiness Report of the year 2017 gave more attention to the extent in which individuals are unequal in terms of happiness. In this report the world happiness distribution was presented by both regional and global charts. 3,000 respondents from about 150 countries participated in the polls and answered both questions that were related to happiness with life and satisfaction with life. respondents were asked to evaluate their lives at present using a ladder in which 0 represented the worst life or satisfaction level and 10, the best level (Helliwell et al., 2016).

According to Kahneman and Krueger (2006), a way of assessing the validity of the happiness scores is analysing their correlations with other individual's characteristics as well as their predictive power. Thus, in a typical LSA regression, the equation to be estimated reads as follows:

$$SWB_{i,t} = \alpha + \beta Y_{i,t} + \sum_{k=1}^n \gamma_k X_{k,i,t} + \sum_{k=1}^n \delta_k R_{k,i,t} + \varepsilon_{i,t} \quad (2.1)$$

where $SWB_{i,t}$ is the reported subjective well-being or life satisfaction of respondent i at date t , Y is the respondent's income, X_k is a set of explanatory sociodemographic and socioeconomic variables such as age, marital status, number of children in the household, level of education completed, employment status, etc., R_k is a set of variables related to the religious activity of the individual and ε represents the usual error term.

The equation as a whole expresses subjective well-being as a sum of one constant and three terms, namely: the respondent's income, a set of sociodemographic and socioeconomic variables, and a set of variables related to religiosity and spirituality.

1.5. Religiosity and Life Satisfaction

Economists and psychologists have shown a lot of interest in happiness research. (e.g. Oswald, 1997). Subjective well-being (SWB) has often been used as a central measure to assess and explore happiness as it is frequently considered as a cognitive component of happiness, (e.g. Diener, 1984). Life satisfaction, on the other hand, has often been used to measure the relationship between the quality of life of the individual and his preferences (Shin and Johnson, 1978). The two (SWB and life satisfaction) have been utilized to assess this relationship and thereby examine the said happiness cognitive component (Heller et al., 2006).

The literature that is pertinent to the relationship between SWB and religiosity is very rich and has adopted many approaches (Francis et al., 2014). This is because religiosity, in variance with many other human values, has always been an observable phenomenon that has been practiced with much awe and veneration across long periods of time (McDaniel and Burnett, 1990). Despite the fact that about 80% of the 224 studies that examined the relationship between religiosity and SWB in the period 1990-2012 have reported statistically significant results (Koenig et al., 2001), most of them were based either on non-samples or their samples were unrepresentative (Levin, 2014). Subsequent studies were not much better as they perpetuated the practice of using unrepresentative samples, many of which relied on student samples and often examined cases related to Judeo-Christianity (e.g. Francis et al. , 2014) and Islam (e.g., Francis et al., 2016).

Contrary to the studies that reported a linear association of religiosity and SWB, Mochon et al. (2011) have been more inclined towards a quadratic relationship between religiosity and SWB. Their results point to a U-shaped association of religiosity and SWB.

They argue that “while the clear majority of adherents are happier than non-adherents, some adherents – those with low levels of religiosity – might be happier if they stopped believing altogether” (Mochon et al., 2011, p. 10). Mochon et al. (2011) base their study on instituting an idea of the reason that make people abandon their religions, as religiosity, according to them, is often associated with a variety of benefits including less stress levels (Stawbridge et al., 1998) and better physical and mental health (Hackney and Sanders, 2003) along with higher levels of SWB. Although Mochon et al. (2011) contributed a lot to the knowledge about how religiosity relates to SWB, their use of a single religiosity dimensional measure which they borrowed from Blaine and Crocker (1995) prevented them from arriving at a deeper perception of the differences between individuals in terms of SWB. Diener et al. (1999) who asserted the multidimensional character of religiosity did not forget to consider the decision-making component which is often neglected in the literature of SWB (e.g. Szekely et al., 2015).

Religiosity as a behavioural psychological phenomenon may be defined as “the degree to which beliefs in specific religious values and ideals are held and practiced by an individual” (Delener, 1990, p. 27). The phenomenon is regarded as one of the major social forces that shape and form many of the behaviours of the individual (Hyman and Handal, 2006), and as such, it involves many cognitive judgmental processes including SWB (e.g. Francis et al., 2014). The literature abounds with multidimensional measures of religiosity (Allport and Ross, 2011) and the literature of consumer behaviour has also examined how different aspects of religiosity relate to various behaviours (e.g. Pace, 2014). However, the relationship between religiosity and SWB did not meet the same approach of examination in the literature. The literature that examined how religiosity relates to SWB relied mainly

on the religious orientation scale (ROS) of Allport and Ross' (2011) (e.g. Worthington et al., 2003) and the religious commitment inventory (RCI-10) (e.g. Howell et al., 2013). Research that examined how religiosity relates to life satisfaction classified the relationship between them into intrinsic (e.g. Aghababaei and Błachnio, 2014) and extrinsic (e.g. Aghababaei, 2014). However, Genia (1993) offered an empirical evidence that may point to a fear that these scales are also liable to produce imprecise results for the groups that are not Christian. In the same way, McFarland (1984) discovered that those scales that are specifically used to measure Christianity were inadequate to measure Islamic religiosity, and an adaptation of Glock's five dimensions scale (1962) may be more adequate.

Glock (1962) assumed that religious commitment operates from the perspective of three dimensions, namely the cognitive ideological, the behavioural ritualistic, and the peripheral which can be broken down into intellectual, consequential and experiential dimensions. These can be outlined into five dimensions, namely the ideological, ritualistic, intellectual, consequential, and experiential. He used the intellectual, consequential and experiential dimensions to make up the central part of the religious commitment scale, and at the same time to represent the dimensions that have only peripheral significance (Cornwall et al., 1986). In this way Glock's (1962) religiosity multidimensional perspective encompasses five dimensions: (1) the ideological dimension which reflects the religious commitment cognitive component including all the beliefs inherent in religion; (2) the ritualistic dimension which encompasses the activities that the religion prescribes such as prayers, fasting and pilgrimage; (3) the experiential dimension which encompasses the feelings and impressions of the individuals by which they are communicating with the higher being that will accept these activities and redeem them from their sins; (4) the

intellectual dimension which encompasses the individuals' knowledge of the religion and the basic tenets that constitute it such as those found in the sacred texts of the religion, which also assumes that these individuals are knowledgeable about the basic element of the faith; and (5) the consequential dimension which encompasses the individuals behaviours and attitudes towards others in the various contexts of their life, which also provides religious guidance to these individuals and determines the religious norms of their everyday life. In this way the consequential dimension of religious commitment differs from the intellectual dimension in that it is not concerned with the basic tenets of the religion such as the halal and haram or the minor and major sins, but instead regulates the behaviour of the individuals by highlighting the chief facets of morality such as respecting others and keeping away from activities that can hurt them (Cornwall et al., 1986).

1.5.1. Well-being in Religious Tourism

Studies that tapped the topic of well-being and its relationship with religious and spiritual tourism were very few because of the complexity of the relationship that exists between the two. Spiritual travellers always travel for the sake of spiritual renewal and seldom seek pleasure in the travel during the time they spend travelling. Hence, well-being of such travellers before, during and after the travel depends on the time and effort they exert in planning the journey and preparing themselves for it and the information they collect and resources they use to prepare for the journey, which usually motivates them and raises their morale. A large portion of the pleasure is antecedent to the travel, while religious travellers look at the rituals they perform as a duty and obligation, and they become satisfied thereafter because they have accomplished it (Hassan et al., 2014). Following the religious tourism experience, the travellers feel relieved because they have

accomplished the task for which they have set out on the journey. They will feel happy whenever they remember and talk about the rituals they have performed and the feelings that ensued from the experience.

1.5.2. Wellness Dimension in Religious Tourism

As the religious tourism market is growing in an unprecedented way, there appears to be an urgent need to examine the well-being component of religious travellers experience which they live during their religious journey and the manner it affects their quality of life in the wake of the journey (Hassan et al., 2014). Religious tourism is one of the least studied segments of tourism, and it received attention only when modern tourism started to feature as a type of economic development that needs study in terms of the returns it brings to the national economy (Jackowski and Smith, 1992). Travelling is always mentally stimulated, and thereby makes people feel active, which also makes them feel that they are doing something pleasant. On the other hand, religious travel is often accompanied by wellness feelings which often involves physical, social, emotional, and environmental activities. The experience is also enriched by being busy and satisfied to do things that please our Lord while taking the pains and spending money to make the journey comfortable and healthy. Thus, the dimension of wellness during the religious journey includes physical, social, intellectual, emotional, and financial aspects beside the spiritual one. Each of these dimensions is an important component of the efforts exerted by the individual to improve his quality of life as a whole (Hassan et al., 2014).

1.5.3. Antecedents of the Religious Journey

There is also a need to examine how the planning and preparations pilgrims make before the journey affects their life quality, especially when the journey is repeated several

times in a lifetime. The antecedents of the journey enrich the overall experience when pilgrims collect information about how to make the journey most enjoyable and expand their world of knowledge about religious journeys before they set out for the journey. All of these have their impact on the six dimensions of religious tourism which include the physical, social, intellectual, emotional, and financial aspects in addition to the spiritual one. The risk-taking feeling behaviour is also a common antecedent in all types of tourist travels, and in the case of religious journeys it is more rich and full of awe especially when the individual's religiosity is more intense (Hassan et al., 2014).

1.5.4. Experience and Satisfaction during the Religious Journey

Religious journeys like all other types of travel contribute to the economy of all countries and investments are often made in order to make it more enjoyable and comfortable for the travellers (Karar, 2010). However, religious tourism differs from leisure tourism in that it is regarded as a consumption experience much more than any other experience. To make the experience enjoyable and pleasant, service providers need to make both the commodity and religious services appealing to the pilgrims while performing their religious rituals (Chen and Chen, 2010). Despite this fact, religious tourists are well aware of the service commodity they are receiving especially regarding accommodation, eateries and other amenities, all of which are strongly related to their well-being during and after the experience. Although always secondary to the quality of the religious services received by the pilgrims, the services and amenities they receive during the journey are very important in shaping the impression they make of the service provider and the extent to which they will be loyal to him, and repeat the experience with him (Hassan et al., 2014).

1.6. Factors with Potential Effects on Well-Being

The literature concerned with subjective well-being (SWB) identified and considered many potential factor impacts that may have influence on people's well-being. These were considered under seven headings, namely: income, personal characteristics, social characteristics; leisure and free time, attitudes towards self and others, relationships, and the general social, economic and political environment. It is understood that such areas will not be self-limited, but overlapping and even interaction between them is expected. These areas may show different effects and manifestations sometimes in relation to other demographics such as age and gender.

2.6.1. Income

The literature regarded income as a very complex factor in its relationship with SWB. Clark (2007) extensively reviewed the relationship between income and well-being, and some of their results suggest a positive relationship that diminishes with higher income returns. Part of the positive relationship between income and well-being may be in form of higher well-being leading to higher income, not the opposite where higher income leads to higher well-being (Graham et al., 2004), and another part may be due to personal factors and other individual characteristics (Luttmer, 2005).

Some studies found that additional income will not increase SWB if people who belong to the same income group also gained additional income during the observation period, the matter which suggests that the effect is brought about by comparison against other members of the same income group (Luttmer, 2005; Weinzierl, 2005). However, additional income at the nations' level that resulted in a better tax yield, which was then

used to improve public services may also enhance SWB. Alternatively, higher expectations that fall short of a particular income level, may negatively affect SWB (Stutzer, 2004).

It seems that aspirations are generated partly by past income experiences, suggesting that people become depressed if they find themselves unable to catch up with their income group level (Stutzer, 2004). In this way aspirations serve to consolidate the perceptions of others about one's financial status which seems to be a stronger predictor than actual income (Haller and Hadler, 2006; Johnson and Krueger, 2006). These findings suggest that an increase in the income of people who enjoy only humble income levels will not enhance long term well-being if such an increase in income leads to an increase in expectations of more income.

1.6.2. Personal Characteristics

1.6.2.1. Age

Studies have consistently shown that age negatively correlates with well-being, i.e. the older the individual the less he will be satisfied with his life experiences (e.g. Ferreri-Carbonell and Gowdy, 2007). Some studies suggested a U-shaped curve relationship between age and well-being, where well-being feeling is highest at younger and older age, and lowest at middle age, i.e. middle-aged individuals will be the least satisfied with their life. Some studies found that the tips of the arms of the "U" stand at 32 and 50 years, or nearest to these two limits. Easterlin (2006) found that the U-shaped relationship does exist but only when age-related differences in the status of life, such as income, health, and employment, are controlled for. However, he says that this graphic representation tells little about the manner in which SWB at young and old age can be compared to that of middle age.

1.6.2.2. Gender

Women are inclined to report higher levels of happiness (Alesina et al., 2004) than men, but lower scores in the General Health Questionnaire (GHQ) (Clark and Oswald, 1994), with some few studies that did not find any significant gender differences (e.g. Louis and Zhao, 2002) even when they used the same datasets. This may be interpreted to mean that gender does not feature as important in making difference in subjective well-being when different control variables are used. In fact, when certain subsets are explored such as inability to work because of health problems (Oswald and Powdthavee, 2006) or being responsible to provide support and care for others (Van den Berg and Ferrer-i-Carbonell, Forthcoming), the impact of gender in most cases disappears.

1.6.2.3. Ethnicity

Generally speaking, the dominant ethnic group in any country are always well-situated and possess a good portion of the countries resources which were passed down to them from their grandfathers. This very much applies to the white Americans whose grandfathers were the first to immigrate to North America. For this reason much of the national resources are in their hands, and hence they enjoy higher SWB relative to African Americans (Thoits and Hewitt, 2001). Some studies found that ethnicity tends to interact with age, since older white subjects report less well-being differences of the kind that can be attributed to ethnicity relative to older African Americans (Baker et al., 2005). White Americans do not significantly differ from Americans other than African Americans and differences between white Americans and Hispanics, for example, can only be attributed to factors other than ethnicity (Theodossiou, 1998). Some ethnic Americans, particularly Hispanics, did report SWB levels higher than other white Americans in many studies,

which may be attributed to the high expectations that late comers to the United States have (Luttmer, 2005).

1.6.2.4. Personality

A significant amount of research in the field of psychology has explored the extent to which personality impacts SWB (DeNeve and Cooper, 1998). However, the relationship between personality and SWB has not been examined by studies with surveys of large samples except in few cases. Anyway, Helliwell (2006) managed to find a significant, albeit only a moderate link between personality and well-being, when the factors of religious beliefs and social trust were first controlled for. He also found that individuals with high self-esteem tend to suffer less from depression relative to others with low self-esteem. Moreover, studies that administered sub-scales of the General Health Questionnaire (GHQ) to their subjects or an adaptations thereof, found that some personality variables such as self-worth, do have positive relationships with life satisfaction (Ferrer-i-Carbonell and Gowdy, 2007).

1.6.3. Socially Developed Characteristics

1.6.3.1. Education

Some studies (e.g. Blanchflower and Oswald, 2004b) examined the effect of additional education on SWB and found a positive relationship between them, while some other studies (e.g. Stutzer, 2004) found that middle education has the highest impact on life satisfaction. On the other hand, several studies (e.g. Fahey and Smyth, 2004) found evidence that points to a more positive effect of education on people in countries where income is low. However, Flouri (2004) did not find any significant relationship between

education and well-being in the GHQ scores, and some studies (e.g. Clark, 2003a) even found negative relationships between education and satisfaction in the GHQ scores.

1.6.3.2. Health

Studies have consistently pointed to a considerable relationship between both psychological and physical health and SWB. Psychological health seems to be at a more correlation level with SWB relative to physical health, which is not surprising as well-being is more of a psychological trait than actual instances. However, certain physical conditions, such as strokes and heart attacks do negatively affect well-being, in which case the cause behind low SWB will be of a pure physical health type. On the other hand, other factors, such as personality and current mood, play a mediating role in the impact of SWB at the time of poor physical health (Shields and Price, 2005).

Oswald and Powdthavee (2006) presented evidence to show that time generates a mitigating effect in the impact of physical health on well-being, i.e. the effect of poor health on well-being decreases as times passes. The authors mentioned the case of the disability status, in which case the longer the time the individual spends living with the disability, the less is the negative psychological effect of the disability, although full adaptation never takes place.

1.6.3.3. Type of Work

Work and type of work play a significant role on people's satisfaction with their life and well-being, given the great amount of time they spend at work. Some UK studies found evidence that casual work adversely affects SWB (Bardasi and Francesconi, 2004), while belonging to a trade union boosts satisfaction with one's life (Blanchflower and Oswald, 1998). On the other hand, some meagre evidence also indicates that self-

employment boosts life satisfaction including the study by Blanchflower and Oswald (1998) which found a crude positive impact of self-employment on well-being.

1.6.3.4. Unemployment

Studies have consistently pointed to considerable negative impact of unemployment on SWB. Studies that used satisfaction with life scales as a single variable (e.g. Helliwell, 2003; Stutzer, 2004), suggest that unemployed has a negative effect of about 5-15% on life satisfaction relative to employment. Lelkes (2006) used European data to examine life satisfaction and found that unemployment decreases life satisfaction scores by 19%, and happiness scores by 15%.

1.6.4. How Do People Spend their Time

1.6.4.1. Working Hours

While clear evidence is easily obtainable to conclude that employment is in most cases better than unemployment, the impact of the number of hours one works on well-being is not that straightforward. Some studies (e.g. Meier and Stutzer, 2006; Weinzierl, 2005) suggested that the more one works, the higher is his well-being; while other studies (e.g. Schoon et al., 2005) suggested that those who work part time are less satisfied than those who work full time. However, some other studies (e.g. Bardasi and Francesconi, 2004) found no significant difference between part-time and full-time work in terms of their effect on SWB.

1.6.4.2. Commuting

Stutzer and Frey (2005), in Germany, found that the greater commuting time the lower is life satisfaction, and their study also suggests that the longer the commuting time the more negative the impact on the members of the commuter's family. However, the

literature that sought to explore the effects of different kinds of commuting found other factors that may mitigate the negative effects of commuting. For instance, some studies included the mitigating factor of being attached to the particular area where one lives on the net commuting impact on well-being (Dolan et al., 2008).

1.6.4.3. Religious Activities

Some studies (e.g. Clark and Lelkes, 2005; Hayo, 2004) provided fairly good evidence that points to the positive effect of engagement in regular religious activities on SWB. The literature explored this impact on SWB in terms of two sub-factors, namely: regular attendance of the church religious services, and time spent attending them. Helliwell (2003) found that the more frequent the church attendance per week is, the higher is the life satisfaction. However, Hayo (2004) did not find any significant differences between rare attendance and no attendance in terms of their effect on life satisfaction. But Clark and Lelkes (2005) managed to get more methodical quantitative results in their study in which they found that a once a month church attendance is sufficient to bring about a positive impact on the church's goer life satisfaction. Dehejia et al. (2005) were even more methodical in their study in which they found that weekly attendance has far a more positive impact on life satisfaction than infrequent attendance. The authors also found that religious attendance, especially in the case of African Americans, mitigates the effect of lower income on the level of happiness.

1.6.5. Human Relationships

1.6.5.1. Marriage and Intimate Relationships

Solitary life in general has a negative effect on SWB than belonging to someone. On the other hand, relationships that are associated with regular sex are far more positive

in their impact on SWB, and the effects were found to be even stronger when this takes place with the same life partner. This may be interpreted by the fact that a caring relationship is what matters here, because it is more consistent with life satisfaction and well-being than being part of several relationships at the same time (Blanchflower and Oswald, 2004a). Although different studies came with different findings in this regard, there is general agreement in the literature that marriage is often associated with high levels of SWB, while separation, divorce or being widowed are associated with low levels of SWB (e.g. Helliwell, 2003).

1.6.5.2. Having Children

Literature on the effects of having children on well-being came up with different findings from different countries and as a result of using different measures (Dolan et al., 2008). However, Haller and Hadler (2006), after controlling for income levels and financial satisfaction, found no significant effect of children on happiness but on life satisfaction. This is more consistent with the findings that suggest that children exert pressure on the happy feelings of the parents by virtue of their day-to-day demands, but, at the cognitive level, parents regard them as an important factor in the overall well-being of the family. Thus, it was found that children tend to bring about more happiness when income levels catch up with the household composition, and this is why additional children will generate more pressure on the family financial resources, and negative consequence on life satisfaction (Lelkes, 2006; Schwarze and Harpfer, 2003).

This is also consistent with the finding that children negatively affect well-being in the case of divorced mothers (e.g. Schoon et al., 2005), single parents (e.g. Frey and Stutzer, 2002a), mothers with children of 3 years and more (e.g. Shields and Price, 2005),

poor families (Alesina et al., 2004) families with a seriously ill child who needs extra care (Marks et al., 2002). All this sums up to one general finding: that children tend to constitute an additional burden that may challenge the family well-being. However, most of studies about the impact of children on the family well-being explored children belonging to the same father and mother, and missed the cases of step-children, grandchildren, or children living in another house (Dolan et al., 2008).

1.6.6. Leisure and Subjective Well-Being

Leisure positively impacts subjective well-being (SWB), a notion which recently gained a lot of scientific support. Many studies (e.g. Yarnal et al., 2008) have demonstrated that different aspects of leisure enhance SWB. These may include visiting relations with family members and friends, engagement in sport activities, watching TV, listening to the radio, participation in tourist trips (Mitas, 2010), participation in art projects (Reynolds and Lim, 2007), and browsing the Internet (Koopman-Boyden and Reid, 2009) among others. These positive relations have been demonstrated in varying subpopulations, foremost among which were adolescents (Staempfli, 2007), pensioners (Kuo et al., 2007), and even individuals suffering from schizophrenia (Mausbach et al., 2007). A survey on college students in the previous USSR demonstrated that satisfaction derived from leisure and recreation represented a very strong predictor of SWB (Balatsky and Diener, 1993). Satisfaction derived from recreation correlated with SWB when two different scales were used including the Delighted-Terrible scale (Andrews and Withey, 1976), and the Satisfaction with Life Scale (SWLS; Diener et al., 1985); and was found to give higher satisfaction than satisfaction with paid employment, housing, education, family relationships, and friendship.

1.7. Well-Being and Quality of the Environment

Nature has a sense of meaning for all people and hence has always been an important component of well-being. Nature inspires awe, a sense of oneness and has a special meaning. Scanning the sky and looking at the stars at night is always an experience that is unique of its kind; likewise climbing mountains and visiting safari parks is a unique experience that is not matched by non-natural and artificial phenomena. Much more than any spiritual experience, Nature offers a range of life gains including experiences that make us reflective, thus, inspiring awe, contributing to our personal growth, and stirring up feelings of belonging and wholeness (Burns, 2005).

1.7.1. Environment and Social Ties

Pleasant local environments can help create pleasant social relationships, which, as research indicated, can contribute to our well-being. For example, one study conducted in a Chicago suburb noted that, “results consistently indicated that natural landscaping encourages greater use of outdoor areas by residents.” The study also noted that “spaces with trees attracted larger groups of people, as well as more mixed groups of youth and adults, than did spaces devoid of nature” (Coley et al., 1997).

Another study noted that “... the more vegetation in a common space, the stronger the neighbourhood social ties near that space – compared to residents living adjacent to relatively barren spaces, individuals living adjacent to greener common spaces had more social activities and more visitors, knew more of their neighbours, reported their neighbours were more concerned with helping and supporting one another, and had stronger feelings of belonging” (Kuo et al., 1998). The cause-effect relationship in this study is very clear: it suggest that social relationships are caused and augmented by

greenery, i.e. the greenery is the cause not the effect; and this also means that landscaping was not created by the residents but is natural. In this way high quality local environments have a positive effect on communities and they supplement the “social capital” (Kuo et al., 1998).

1.7.2. Environment and Mental Health

Many studies found a positive relationship between natural environment and mental health. One of these compared the impact of natural environment and built environment on mental health by asking the two samples of the study to see two videos: one to see a scene of natural environment and the other to see a scene of built environment. The result of the study was that the mood of the group members who saw the video of the natural environment became higher than that of the group members who saw the video of the built environment (Van der Berg et al., 2003).

Another survey examined 145 residents of an urban public housing in the USA some of whom lived in buildings that were near to areas of trees and grass and others who lived in buildings far away from trees and grass. The study found that residents living far from places of trees and grass were not able to solve the daily issues that they were facing, while their counterparts that were lived in greener surroundings managed to solve their daily issues in a much better way (Kuo, 2001). The study in this way supports what is known as the “attention restoration hypothesis” which presumes that greener surroundings reduce mental fatigue. Conversely, other studies show that residents of barren and congested areas often suffer from high degrees of mental fatigue, as well as show many instances of violence and aggression which are often rampant in such areas (Kuo and Sullivan, 2001).

1.8. Conclusion

Research of subjective well-being started with how to determine the individual features that correlate highly with strong feelings of well-being. The first researchers found that happy individuals are most likely young, healthy, rich, educated, optimistic, extrovert, without worry, married, religious and have high self-esteem, but with modest aspirations. However, many of these first findings, are replaced now by findings on personality, striving for goal achievement, adaptation and coping strategies.

Frey (2008) stressed happiness as an important issue in economics and showed how it can be measured. He also identified issues that relate happiness to economics, namely: unemployment, income, inflation and inequality. According to him, unemployment has the most adverse impact on happiness, even when controlled for other variables. The main contribution of happiness research to economics, according to Frey (2008), is the exchange between inflation effects and unemployment.

Frey (2008) found that happiness research contributes to economics because it can be used to measure subjective well-being, it can be used to calculate optimal prices for commodities offered by the public sector, and can be used to reconcile conflicting phenomena in economics, such as when unemployment is curbed, inflation would rise.

Despite everything, there is no doubt that happiness is a principal goal that everybody wants to attain. But different individuals will seek to attain happiness through different ways, to different extents, and using different types of knowledge. Now life satisfaction is the opposite of what was regarded in the 1930s, when Sir John Hicks and others negated the measurability of utility.

The life satisfaction approach (LSA) can be used to measure life satisfaction based on public interests, income and activities that bring about relief such as improvement in

the air quality. The LSA also allows the direct testing of the hedonic basic assumptions and assess their departure from these assumptions.

The relationship between well-being and religious tourism was found to be very complex. This is because spiritual travellers always travel for the sake of spiritual renewal and seldom seek pleasure during the travel. Hence, well-being of such travellers before, during and after the travel depends on the time and effort they exert in planning the journey and preparing themselves for it and the information they collect and resources they use to prepare for the journey, which usually motivates them and raises their morale. Following the religious tourism experience, the travellers feel relieved because they have accomplished the task for which they have set out on the journey.

Chapter 2

Theoretical Framework

2.1. Introduction

Religious travel as a type of non-economic tourism has been known since old times (Jackowski and Smith, 1992). In modern times, sites related to religious travelling have enjoyed a significant growth in terms of infrastructure and development. Pilgrimage sites such as Fátima in Portugal, Lourdes in France, and Mecca in Saudi Arabia among others, are now attracting huge numbers of visitors. For instance, religious tourism in Saudi Arabia makes up the second largest industry, second only to oil, and currently generates annual revenues of \$8 billion, and is growing now at a pace much faster than ever (Reader, 2007).

Several factors explain this current huge growth in pilgrimage including growth in travel opportunities (Reader, 2007), desire to escape the routines of mundane life (Briedenhann and Wickens, 2004) and a pressing quest for an exciting personalised experience (Hughes et al., 2013). However, other factors may have come into play, and the impact of pilgrimage on life satisfaction and subjective well-being may be one.

2.2. Religiosity and Life Satisfaction

A good amount of literature has been devoted to the effect of religiosity on well-being, and some studies have found beneficial effects that religion has on perceived quality of life and life satisfaction as a result of religiosity (Lim and Putnam, 2010; Willits and Crider, 1988). However, the relationship is not direct and may need more scrutiny.

One reason often cited in the literature for the positive effect of religiosity on well-being, (e.g., Bradshaw and Ellison, 2010), may be that religious individuals adhere to religious beliefs, and by doing so obtain interpretations about the empirical world in which

they live, and about their right role in that world, and hence resolve one problem non-believers often find mind boggling (Ellison and Levin, 1998). Such beliefs are often used as good coping devices, to help adapt to many of their life events, and have a more stable look at the world, and thereby reduce levels of stress (Ellison, 1991). Religious beliefs make people feel more virtuous, and in turn may boost their feeling of self-worth (Crocker et al., 2003).

Another reason is the potential of religiosity to help the individual cope with feelings of uncertainty, and even help him alleviate them. The theory of insecurity posited by Norris and Inglehart (2004) claims that religiosity can help the individual calm down experiences of insecurity. Immerzeel and Van Tubergen (2013) who extended the theory of insecurity to cover cases of being panicked by the unknown, argue that religious beliefs help people interpret many experiences that they live after having received guidance and comfort from their readings about such beliefs.

To strengthen the sense of security, traditional religions, including Christianity, teach that the divine providence is always there to ensure that ‘everything is OK at all times’, which also adds to the sense of safety (Bradshaw et al., 2010). In this way religious belief also increases the feeling of self-worth, as one will believe that God loves and values him (Crocker et al., 2003). Furthermore, some studies (e.g. Francis et al., 2001) report a positive relationship connecting the presence of God images in the mind with self-esteem, suggesting a contribution of religious beliefs to life satisfaction.

2.3. Religious Practices and Life Satisfaction

Similar to the effect of religious beliefs, religious practices in private settings is among the dimensions of religiosity that often play a positive role in enhancing a feeling of security. Ellison and Levin (1998) found that religious activities such as praying and performing other rituals can lead to a special relationship with a divine being. The attachment theory teaches that religious attachment can symbolize God as a source of companionship and support during stressful times and offer individuals feelings of security and safety (Bradshaw et al., 2010). As a result of all this a feeling of calmness and tranquillity ensues (Ellison et al., 2014). This nearness to God, make people feel that the divine force will provide them with their present and future needs (Ellison, 1991). Maltby et al. (1999) supported all this empirically and found that prayers play a key role in alleviating anxiety, poor self-esteem, and other depressive symptoms.

In Christianity, identifying with biblical issues helps people in tackling various problems, because it helps them behave in ways similar to the biblical stories and thereby solve their problems (Bradshaw and Ellison, 2010). Moreover, by following the examples of biblical figures, people obtain guidance that may help them solve their problems (Ellison and Levin 1998). The moral codes embodied in religious texts also help people solve problems as well as avoid risks (Ellison and Levin 1998).

2.4. Measurement of Religiosity and Life Satisfaction

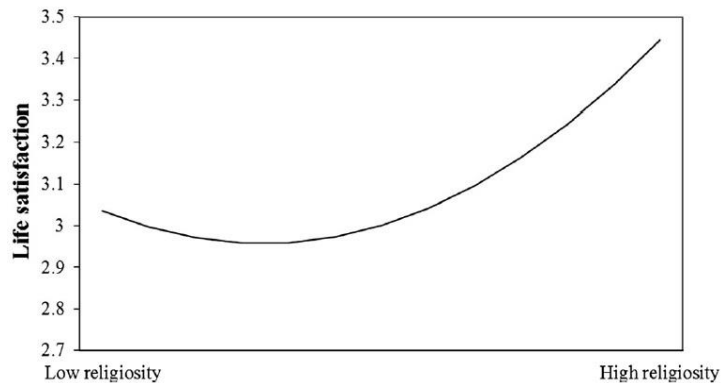
Happiness has often been measured by a cognitive element of subjective well-being (SWB), which is often used in explorations of happiness and life satisfaction (Diener, 1984). Life satisfaction itself is considered by many as a relationship between the quality of life of the individual and his or her preferences (Shin and Johnson1978). By assessing

this relationship, a cognitive element of happiness can be provided, which is distinct from the simple pleasant affect (Heller et al. 2006).

While many studies connect religiosity and SWB by a linear relationship, Mochon et al. (2011) connected religiosity to SWB by a quadratic relationship which took the form of a U-shape.

Mochon et al. (2011) cites that religiosity has been linked to several benefits among which is a lower stress level (Stawbridge et al., 1998) good physical and mental health (Hackney and Sanders, 2003) and higher level of subjective well-being. However, Mochon et al. (2011) noted that many studies based their results on Blaine and Crocker (1995) which uses a measure of religiosity for the relationship between religiosity and SWB which is uni-dimensional, and which therefore prevents getting a more profound understanding of the different aspects of SWB. Figure (2.1) shows the U-shaped relationship between religiosity and life satisfaction proposed by Mochon et al. (2011).

Fig. 2.1. Relationship between religiosity and life satisfaction.



Source: Mochon et al. (2011).

2.5. Religious Travellers Experience and Wellbeing

Religious travel is an ancient phenomenon and is one of the old non-economic types of travel (Jackowski and Smith, 1992). It differs from other segments of tourism in that it results from obligation and responsibility rather from a pursuit of pleasure (Swarbrooke and Horner, 2007). The market of religious travel, including pilgrimage, has grown worldwide in the past few decades into an industry of billions of dollars (Hashim et al., 2007). Most of its members are Christians, Muslims and Hindus (Olsen and Timothy, 2006), and its growth is expected to continue in the future. The recent growth in religious and spiritual travel has been partly driven by the development in tourism (Lloyd, 1998). The World Religious Travel Association (WRTA) estimates that more than 300 million pilgrims travel around the world to sacred destinations, and the industry now makes more than \$18 billion (Wright, 2007).

2.5.1. The Experience of Religious Travel

The experience of religious travel can be in the form of pilgrimage, grand tour or healing visit that has a great impact on the life of the individual. Attendance in such an experience may strengthen or ensure the individual's religious certainty and make his religious belief firm and enduring (Gilbert and Abdullah, 2002). Vukonić (1996) regarded the experience of religious travel as a physical journey that the individual embarks on in quest of a truth, or in search of a holy or sacred practice. People may also travel to holy or sacred places for cultural or heritage attractions (Timothy and Boyd, 2003).

2.5.2. Antecedents and Consequences of the Trip Experience

Travel stimulates us mentally, the matter which makes us mentally active when we are travelling. This is because health and wellness during travel are not limited to the

physical aspect alone, but may also involve the emotional, spiritual, social and environmental aspects of health. For this reason, travellers should take into account all the aspects of health so as to enrich their travel experience and increase satisfaction (Hassan, 2015).

2.5.2.1. Antecedents of the Trip Experience

Embarking on a journey requires both information and decision making. Information is required for the selection of the journey's destination, and this is followed by decision to choose details of the journey such as accommodation, means of transportation, activity during the journey, and other details (Gursoy and McCleary, 2004). Excitement enriches the experience, and this comes from acquisition of information from different sources, including the individual's memory, as well as external sources such as peers, friends, family members and marketplaces (Blackwell et al., 2006). Information is used to make the necessary steps that help fulfil the purpose of the journey and assist in its planning, as well as minimize the risks of the unknown and reduce stress resulting from uncertainty (Awasthy et al., 2012).

2.5.2.2. Experience during the Journey

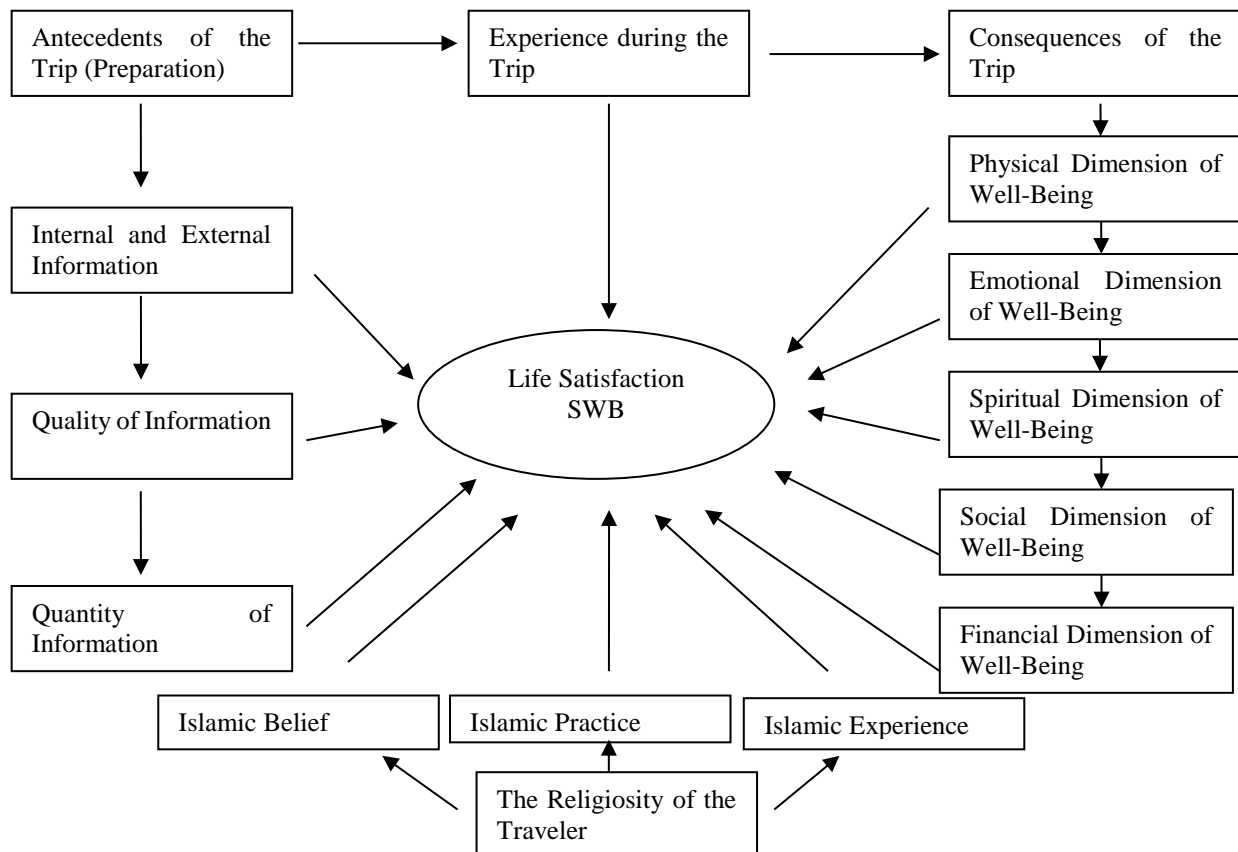
Religious tourism differs from other kinds of tourism in that it is much regarded as a kind of experiential consumption, which exceeds the mere service quality provided by the service provider (Chen and Chen, 2010), as the service quality received in religious tourism is always secondary to the pleasant experience of the religious rituals during the journey.

According to Ojha (1982) satisfaction comes from good experience and a pleasant and enjoyable trip. When expectations are higher than the actual experience, the traveller will be dissatisfied with the travel experience (Chon and Olsen, 1991).

3.5.2.3. Religiosity, Trip Experience and life Satisfaction

Dr. Bill Hettler of the National Wellness Institute developed the wellness dimensions model that relates religiosity to the religious trip experience and life satisfaction. The model consists of several dimensions of wellness, namely: the physical, emotional, spiritual, social and financial (fig. 2.2) which should be present so that a person may reach overall wellness (National Wellness Institute, 1983). Figure 2.2. shows a version of this dimensions model of religiosity, along with the effect of the trip experience on life satisfaction.

Fig. 2.2. The Dimensions Model of Religiosity, Experience and Life Satisfaction.



Adapted from Hassan (2015); Eid and El-Gohary (2015) and Sharma et al. (2017).

2.6. Income, Gender and Age Effects on Happiness and Life Satisfaction

Although, several international studies that have dealt with happiness have come up with noticeably similar results about the effects of employment, income and marriage (Blanchflower and Oswald, 2011), none of them managed to reach solid results about the effects of age and gender, which were only controversial in these studies. In terms of gender differences, all international studies – except those of Eastern Europe (Hayo and Seifert, 2003) – found that women are consistently happier than men (e.g. Blanchflower and Oswald, 2004). However, most of these studies came up with results that indicated that the gender effect is either small or negligible.

In terms of the effects of age on happiness over the lifespan, most of the international studies found a U-shaped effect (Blanchflower and Oswald, 2008). However, Easterlin (2006) reviewed a number of international psychological studies and found that they came up with results that show an inverted U-shape (Diener et al., 1999). Frijters and Beatton (2012) used large datasets from the UK, Australia and Germany and found very little change in subjective well-being from 20 years of age up to 50. Clark (2007) and Baird et al. (2010) used similar large databases from the UK and came up with a U-shaped effect of age on subjective well-being also from 20 years of age up to 50.

It should be noted that relative income, as compared to peers or groups known to the individual, as well as change in income have been correlated with overall life satisfaction in many studies, rather than the absolute income. On the other hand, women reported slightly more overall life happiness compared to their male peers in many studies.

2.7. Regression Analysis

Regression analysis is a statistical technique that is used to make forecasts by finding relations between quantitative data and estimating model parameters. An ordinary least squares (OLS) regression in this study was used to relate the main variables of the study to each other. In this study life satisfaction or subjective well-being depend on several independent variables including the quality of the trip experience; religiosity; demographic variables such as gender, age, and educational level; and the financial conditions of the Hajj pilgrim including employment status, personal income, and household income. For the purposes of this study, a multiple OLS regression analysis was adopted to establish the extent to which each independent variable affected the dependent variable. Several regressions were conducted with different variables resulting in several regression models.

2.7.1. The Linear Regression Model

The linear regression model is employed in the study of the relationships that may exist between one dependent variable and one or several independent variables. The linear regression model generic form may be written as:

$$y = f(x_1, x_2, \dots, x_K) + \varepsilon \quad (2.1)$$

$$= x_1\beta_1 + x_2\beta_2 + \dots + x_K\beta_K + \varepsilon, \quad (2.2)$$

where y is the dependent variable and x_1, \dots, x_K are the independent variables. The function of the linear regression model may be written as:

$$f(x_1, x_2, \dots, x_K) \quad (2.3)$$

Such a function is often referred to as the population regression equation of the quantity y in terms of x_1, \dots, x_K . In such a setting, y is called the regressand, while the term x_k ($k=1, \dots, \text{and } K$) is called the term of regressors or covariates.

As an example, for the above models we may cite the demand equation:

$$\text{Quantity} = \beta_1 + \text{price} \times \beta_2 + \text{income} \times \beta_3 + \varepsilon, \quad (2.4)$$

Or the inverse demand equation:

$$\text{Price} = \gamma_1 + \text{quantity} \times \gamma_2 + \text{income} \times \gamma_3 + u \quad (2.5)$$

Both equations are valid representations of a certain market. When modelling is needed, it is often wise to use the terms of “autonomous variation”. This type of variation involves the independent variables being moved outside the relationships that are written in the model in order to define them in clear terms, while dependent variable may be moved in response to a certain exogenous stimulus.

The term ε is called the random disturbance, which is so called because it disturbs the relationship which will be stable in the absence of this term. The disturbance comes as a result of several reasons, mainly because not every influence in the economic variable of the model can be captured, irrespective of how perfect the model is. The purpose of the disturbance term is to capture the omitted factors whether positive or negative. Other factors that contribute to the disturbance in the model include errors of measurement which are the second in importance. Although one can theorize about most of the relationships among variables, it is often very difficult to obtain accurate measures for the variables. For example, it is often difficult to obtain reasonable measures for profits, capital stocks, interest rates, or capital stocks flows of services.

2.7.2. Ordered Choice Model

The ordered choice model is used to describe the mechanism related to an observed rating. The modern form of the ordered choice model was introduced by McElvey and Zavoina (1975) to be used in analyzing categorical, ordered, non-quantitative responses,

choices and outcomes. Modern examples of the ordered choice model include discrete political questions that survey opinion, bond ratings, obesity measures, consumption preferences, and surveys about satisfaction with health status like the ones investigated by Boes and Winkelmann (2006a, 2006b). The ordered choice model is also used in the description of the processes by which data are generated for sets of discrete random ordered outcomes.

An individual may use a set of his characteristics such as age, gender, income, education, residence, marital status, family size and other characteristics; which we denote by $x_{i1}, x_{i2}, \dots, x_{iK}$; in order to detect how these characteristics relate to a utility function. Such an individual may also use his own aggregate characteristics that cannot be measured by the statistician, which are denoted in the equation below by ε_{im} . Whether these characteristics can be included in the utility function cannot be guaranteed, but the use of a linear function is conventional because it can give an ordinary random utility function (Greene, 2012):

$$U^*_{im} = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_K x_{iK} + \varepsilon_{im} \quad (2.6)$$

2.7.3. The Ordered Probit Model

The ordered probit model is dealt with as part of a latent regression. We begin with:

$$y^* = x'\beta + \varepsilon \quad (2.7)$$

As y^* is an unobserved function, then:

$$y = 0 \text{ if } y^* \leq 0 \quad (2.8)$$

$$= 1 \text{ if } 0 < y^* \leq \mu_1 \quad (2.9)$$

$$= 2 \text{ if } \mu_1 < y^* \leq \mu_2 \quad (2.10)$$

$$= J \text{ if } \mu_{J-1} < y^* \leq \mu_J \quad (2.11)$$

The μ 's here are unknown parameters that should be estimated with β .

We assume that ε is normally distributed across observations. When we normalize the mean and variance of ε to zero and one, we will then have the following probabilities:

$$\text{Prob}(y = 0 | x) = \Phi(-x'\beta), \quad (2.12)$$

$$\text{Prob}(y = 1 | x) = \Phi(\mu_1 - x'\beta) - \Phi(-x'\beta), \quad (2.13)$$

$$\text{Prob}(y = 2 | x) = \Phi(\mu_2 - x'\beta) - \Phi(\mu_1 - x'\beta), \quad (2.14)$$

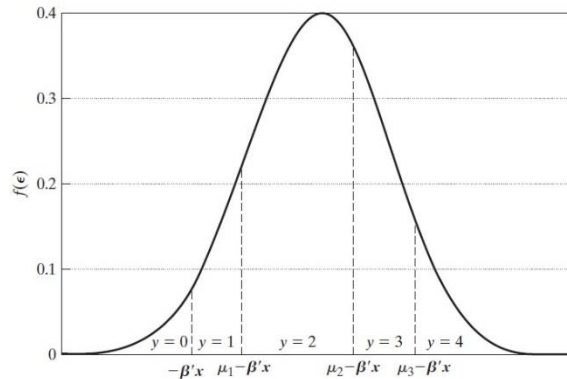
$$\text{Prob}(y = J | x) = 1 - \Phi(\mu_{J-1} - x'\beta). \quad (2.15)$$

All these probabilities can be positive only if:

$$0 < \mu_1 < \mu_2 < \dots < \mu_{J-1}. \quad (2.16)$$

Figure 2.3 illustrates these probabilities. In this way the log-likelihood function as well as its derivatives can easily be obtained, and the usual means can be used to make the optimization. It should be noted that the regressors' x partial effects on the probabilities are not to the coefficients.

Fig. 2.3. Probabilities in the Ordered Probit Model.



Source: Greene, (2012).

2.8. The Marginal Rate of Substitution (MRS)

The marginal rate of substitution (MRS) is used to measure the quantity of one good that a purchaser will forego in order to obtain an extra amount of another good. For example, if a consumer is forced or is willing to forego some amount of clothes in order to purchase some extra food, and the MRS in this case was 3, this will mean that the consumer will have or is willing to give up 3 units of clothing in order to buy one extra unit of food. In case that MRS was $\frac{1}{2}$, then the consumer is forced or is willing to forego half a unit of clothing in order to buy an extra unit of food. In this way the MRS measures the value of one good that the consumer moves to an extra amount of another good (Pindyck and Rubinfeld, 2013).

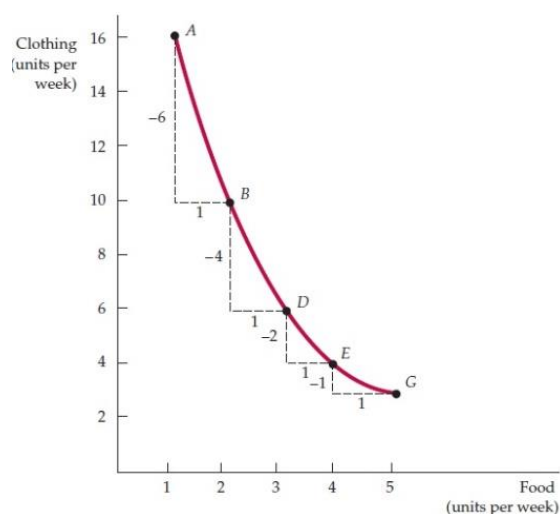
The above example is shown in fig. 2.4 where clothing is plotted on the vertical axis against food which is plotted on the horizontal axis. Thus, when MRS is used to describe an exchange of purchase of one good to buy another, then it should be pinpointed which good is foregone in order to get more of another.

In fig. 2.4 if we represent the change that takes place in clothing by ΔC and the change that takes place in food by ΔF , then the MRS may be written as:

$$\text{MRS} = -\Delta C/\Delta F \quad (2.17)$$

The negative sign is added to make the MRS a positive number, because C is always negative as some amount of C is foregone to obtain an extra amount of F.

Fig. 2.4. MRS.



Source: (Pindyck and Rubinfeld, 2013).

The magnitude of the slope in the curve of fig. 2.4 measures the consumer's MRS between two goods, namely: clothing (C) and food (F). In this case, the MRS between C and F falls from between A and B, to between B and D, to between D and E and finally to between E and G, i.e. from 6 to 4 to 2 to 1 respectively. Thus, when MRS is regularly diminishing, the curve will be convex.

2.8.1. MRS and Life Satisfaction

The word “happiness” is often used as an umbrella for whatever is good for the individual and frequently used interchangeably with terms like “quality of life”, “life satisfaction” and “well-being” (Veenhoven, 2012a). The life satisfaction approach (LSA) is sometimes used to measure non-market religious activities that affect the individual's life satisfaction, because it enables us to give them a monetary value (Tsurumi and Managi, 2017). Kahneman and Krueger (2006) introduced a method by which to assess the validity of the scores of life satisfaction. This method involves analysing the correlations of these

scores with other characteristics of the individual along with their predictive power. Thus, the equation below represents a typical regression of LSA:

$$SWB_{i,t} = \alpha + \beta Y_{i,t} + \sum_{k=1}^n Y_k X_{k,i,t} + \sum_{k=1}^n \delta_k R_{k,i,t} + \varepsilon_{i,t} \quad (2.18)$$

where $SWB_{i,t}$ represents the individual's life satisfaction or subjective well-being of the individual i at a date t ; Y represents the individual's income; X_k represents a set of socio-demographic variables that may include age, marital status (bachelor or married), number of children, level of education, employment status, etc.. R_k represents the variables of religious activities; and ε is an error term.

In addition to their relation to some socio-economic variables, the data of life satisfaction can be used to measure the monetary value of the religious activities that affect the individual's well-being. Once the above equation has been formulated, we can move to derive a monetary value for the religious activities. β in this equation is the income marginal utility, while, δ_1 represents R_1 marginal utility, i.e. in this case it is one of the n variables that are related to performing religious activities. Then the next equation (Del Saz-Salazar et al., 2017) gives the marginal rate of substitution (MRS) between the two variables:

$$MRS = \frac{\partial SWB / \partial R_1}{\partial SWB / \partial Y} = \frac{\delta_1}{\beta} \quad (2.19)$$

where MRS is either positive or negative which depends on whether performing religious activities enhances or reduces the individual's life satisfaction or well-being utility.

As an example of the religious activities that the religious tourists may try to do against forgoing some pleasures of comfort or part of their income, we may mention visits to religious or archaeological sites. To calculate the monetary value of such religious or

archaeological sites, we are required to calculate the MRS between the variables related to getting pleasure from visiting the religious or archaeological sites in question and the tourist's income. These variables include the "importance" the tourist attaches to visiting the site, the "beneficial" effect he gets from such a visit, and the "features that distinguish" the other religious or archaeological site relative to similar sites elsewhere. For this purpose, we use the second equation to calculate the above-mentioned variables (Del Saz-Salazar et al., 2017).

2.9. Latent Class Analysis

In one study (Carlquist et al., 2017) LCA has been used to investigate differences among some socio-demographic groups regarding the degree in which each group conceptualizes three terms, namely: happiness, good life, and satisfaction.

Recently, social scientists and policymakers as well as executives of some international organizations, found that the need for more clarification of the conceptual aspects of well-being is continuously increasing. Although terms such as happiness, good life, and satisfaction have ample conceptual similarities that often make them almost alike, to the extent that they allow many researchers to use them interchangeably, other researchers found a stressing need to differentiate them, because they sensed that subtle differences do exist among them. For instance, one study in Norway (Carlquist et al., 2017) found that participants believe that happiness as well as good life should include domains from external life, while satisfaction only evokes internal psychological conditions and experiences. In order to differentiate these terms, Carlquist et al. (2017) used LCA in order to highlight subtle differences among groups especially socio-demographic ones where the authors of the above study found clearly different conceptualizations of these three terms.

2.9.1. Latent Class Analysis as a tool for Addressing Heterogeneity

Latent class analysis (LCA) has been introduced as a method that can analyze the relationships among multivariate data when some of the variables are latent or not easily observed. Such latent or unobserved variables should be categorical, such that they allow the segmentation of the original dataset into several exclusive subsets which are called the latent classes. Traditional LCA is used to analyze relationships among polytomous variables. Recently LCA was extended to allow its use for variables that represent continuous, ordinal, nominal, and count data (Kaplan, 2004). The advent of software packages that can perform LCA made this technique more feasible in performing cluster analysis.

Unlike traditional methods used in cluster analysis such as k-means cluster analysis, hierarchical analysis, or data mining approaches, LCA is an approach that is based on a model, and as such offers many types of model selection tools as well as probability based classification by means of a posterior membership probability. These advantages allowed LCA to be used in many disciplines such as psychology, sociology, economics, and marketing (Haughton et al., 2009).

Furthermore, LCA can characterize segments extracted from observed measures and allow the choice of individual characteristics and attribute data to explain selected behaviors simultaneously. The advantage of LCA as a segmentation method over other segmentation methods using socio-demographics, lies in its behavior-based segmentation approach, and therefore it is more relevant for planning and management of decision making (Swait, 1994).

LCA particularly finds uses in discovering groupings when dealing with multivariate categorical data. It is used to model the data in the form of a finite distributions mixture, such that each corresponds to a cluster, class or group. By virtue of the latent class statistical model and the use of some model selection methods, the number of classes can be determined (Dean and Raftery, 2010).

LCA was first introduced by Lazarsfeld (1950a and b) and then developed by Lazarsfeld and Henry (1968). It can be regarded as a special form of clustering that uses some kinds of models in order to delve deep into discrete data that are more multivariate. The model assumes that observations come from several classes or groups with each class or group having its different probability distribution (Fraley and Raftery, 2002). The overall population is based on a finite mixture model, as follows:

$$x \sim \sum_{g=1}^G \pi_g f_g(x), \quad (2.20)$$

where f_g is the density for group g , G is the number of groups, π_g are the mixture proportions, $0 < \pi_g < 1$, \forall_g and $\sum_{g=1}^G \pi_g = 1$.

2.9.2. The Latent Class Models

A latent class model consists of a categorical latent variable rather than a continuous latent one. The latent classes in this case are the categorical latent variable unobserved levels. Such classes correspond to some groups of the population that are unobserved e.g. individuals with similar demographic characteristics but are either healthy or unhealthy, or some groups of consumers that are unobserved and were found to have different buying preferences. Latent class analysis in this case helps identify such groups and understand them (StataCorp, 2017).

Fitting a latent class model needs specifying the number of latent classes before estimating their class membership probabilities. Besides, the rest of the estimated parameters in the model can be varied across the classes. For instance, the process may involve fitting intercept-only types of logistic regression models using a group of binary variables and estimate the intercepts separately across classes (StataCorp, 2017).

When fitting latent class models by “gsem” (developed by StataCorp), the STATA command syntax in this type of model will be:

$$(y1\ y2\ y3\ y4\ <-), \text{logit lclass (C 2)} \quad (2.21)$$

In this way the latent class model will be fitted with one categorical variable, C, that comprises two classes.

2.9.3. Finite Mixture Models

Finite mixture models also consist of categorical latent variables. In this the focus should be on finite mixture regression models where it is possible to fit the regression model allowed by “gsem” and then estimate the model parameters for each latent class separately. In the case of a linear regression of y on x1 and x2, the command syntax of a two-class model will be (StataCorp, 2017):

$$(y\ <-\ x1\ x2), \text{lclass (C 2)} \quad (2.22)$$

The coefficients on x1 and x2 and the intercept will can estimate for the two classes separately. Besides, we can estimate the probability of being in each class. If a variable z predicts the class membership, then the command syntax will be (StataCorp, 2017):

$$(y\ <-\ x1\ x2)\ (C\ <-\ z), \text{lclass (C 2)} \quad (2.23)$$

2.10. Research Variables of Interest

Studies and researches are usually conducted to investigate and test some particular events or phenomena. The researcher needs to tackle such events or phenomena in order to come up with findings and outcomes, which are the major objective of the study or research. Such an intervention involves collection of data about variables which are expected to influence the outcome of the research. If such variables are measurable or can be elicited from the collected data, then they are known as the independent variable(s). In this way the independent variable will be the same as the intervention or treatment that is made to measure or collected data (Starks et al., 2009) about “a causal event that is under investigation” (Kirk, 1995). The independent variable which is tackled by the researcher in this way should describe the expected influence on the outcomes. The objective here is to connect the independent variable with a dependent variable, which should measure the outcome, i.e. answer the research questions or test its hypotheses. The purpose of the questions or hypotheses is to predict the causal effects of the independent variable(s) on the dependent variable (Rosson and Carroll, 2002).

In this study some independent variables were assigned to represent the socio-demographic characteristics of the whole sample of the pilgrims. The relationship between the pilgrims’ satisfaction or well-being, and some of the demographic factors and personal information including age, gender, family size, personal income, marital status, and performing Hajj before, were tested based on the clusters chosen from the best model found from statistical procedures, and then regression analysis was used to find the relationships between some attributed of life satisfaction and demographic independent variables.

Regression analysis was used to test the relationship between the dependent variable of life satisfaction and the independent variables of the quality of the trip experience and religiosity (represented by Islamic belief, Islamic practice and Islamic experience).

Thus, the study investigated the relationships between the various dependent variables and the independent variables in order to come up with general findings about how the Hajj trip experience impacted the overall subjective well-being and life satisfaction of the Hajj pilgrims before, during and after the Hajj trip.

2.11. Conclusion

This chapter covered the theoretical framework that relates the effect of religiosity and the religious trip experience on life satisfaction and SWB citing the role played by religious beliefs in helping religious individuals to obtain interpretations about the empirical world in which they live, and about their right role in that world. The role of religion is evident in ensuring a sense of safety and reducing stress and fear as well as improving the feeling of self-worth, and in this way contributes to life satisfaction and higher quality of life.

The chapter also discussed the religious traveller's satisfaction as an interaction between the religious trip experience and his or her expectations after living the experience at the destination site. The satisfaction of the traveller with the different aspects of the religious trip results in an overall life satisfaction, as a significant relationship exists between the traveller's expectations on the destination and his or her satisfaction.

Furthermore, the manner in which socio-demographic characteristics as well as personal and household income interfere to modify the effect of religiosity and the trip experience on life satisfaction has also been tested in this chapter.

Chapter 3

Survey Designing and Descriptive Analysis

3.1. Introduction

The market of religious tourism has recently witnessed a fast growth that led to adverse impacts on travellers, thus raising a pressing need to understand the satisfaction and well-being of such travellers and their experience during the religious journey, as well as the social transformation that they may have undergone after the journey (Ross, 2010). Tourist well-being signifies what the quality of the leisure event they experience, the mental escape they get from it and the relaxation they feel during the tourist travel and afterwards (Cracolici and Nijkamp, 2005).

In our case in the Hajj pilgrimage, in order to gather or collect the information needed for addressing the relationship between life satisfaction and religiosity, a questionnaire was designed and administered to 500 pilgrims. The relationship between life satisfaction and religiosity is measured in this research by several dimensions incorporated in the questionnaire (Appendix A, Sections A, B and C), including items about the geographic information and demographic information (Section A); details of satisfaction with different aspects of life including health status, personal relationships, feeling part of your community, volunteering activities, quality of the trip experience, subjective well being, life satisfaction, and religiosity (represented by Islamic belief, Islamic practice and Islamic experience) (Section B); and details about education, financial conditions, and satisfaction after the journey (Section C).

Thus, the research methodology primarily depended on a sheer quantitative approach in the form of a questionnaire survey that was administered to a big sample of Hajj pilgrims (n=500).

3.2. Method

To fulfil the research goals and answer the research questions, research method(s) which constitute the plans and procedures that can help achieve this purpose, have been adopted. These include the procedures and the steps of data collection, analysis and data interpretation. The researcher then arranged the components of the method(s) in an appropriate order that match the goals of the research. Such decisions are known as the procedures of inquiry or research designs (Creswell, 2014).

Generally speaking there are three research approaches used in modern research, namely: qualitative, quantitative, and mixed methods. As expected, the three approaches outlined here are not entirely distinct from each other and may sometimes even overlap. Distinction between qualitative and quantitative methods is frequently judged in terms of the use of words in the qualitative and numbers in the quantitative methods, or the use of the open-ended questions in the qualitative method (such as interview questions) and closed-ended questions in the quantitative method (such as in research hypotheses) (Creswell, 2014).

Another way of distinguishing between these two research methods is that the qualitative method usually aims to explore and understand the perceived meaning of a human or social problem in the opinion of particular individuals or groups. The method in this way involves the collection of data from the participants' which are then analyzed

inductively based on interpretations made by the researcher of the meanings of such data (Creswell, 2014).

The quantitative research method, on the other hand, is principally used to test objective theories where relationships among variables are examined. Such variables are then measured by means of suitable instruments so as to obtain results consisting of numbered data that can then be analyzed by means of statistical procedures. The results are then discussed in view of the extant literature in order to reach findings and report them as presumptively new facts reached by the researcher. In this way the quantitative methods test theories deductively, while controlling alternative explanations, in order to see if the findings are replicable and then generalize them (Creswell, 2014).

The mixed research method, as its name implies, integrates both the quantitative and qualitative methods, by collecting data using both of them (Creswell, 2014).

The choice in this research has fallen on the sheer quantitative method. For this purpose, the questionnaire was used to collect and analyze relevant data. The questionnaire was designed and adjusted based on a pilot study to test the instrument and used to collect primary data.

The sheer quantitative approach was used because the Hajj pilgrims to whom the questionnaire survey was administered constitute the whole sample, and their satisfaction is the one which matters more than any other people present at the Hajj pilgrimage mega-event.

3.3. Setting, Population and Sample

The setting of the present study is the holy shrines of Mecca, Saudi Arabia, where Hajj pilgrims come on yearly-basis to perform the Hajj rituals which constitute a mandatory act that should be performed by every Muslim who is physically and financially capable. Hajj pilgrims visit, as part of their Hajj journey, four main holy shrines in the vicinity of Mecca, namely: the Ka'aba in Mecca, Arafat, Mena and Muzdalifa during the period of 8-13 of the 12th month of the Muslim Hijri calendar. The Hajj pilgrims also visit the Mosque of the Prophet in Medina, though not part of the mandatory Hajj rituals.

For the sake of the primary data, a large sample (500 Hajj pilgrims) was randomly selected from this large population of Hajj pilgrims which is often between two and three millions every year. The questionnaire was administered to this sample of 500 Hajj pilgrims in four distinct places where large crowds of Hajj pilgrims usually gather during the Hajj season, namely: King Abdul Aziz Airport in Jeddah (100 questionnaire copies), randomly selected hotels in the vicinity of the Holy Mosque in Makkah (100 questionnaire copies), at the gates of the Holy Mosque in Makkah (200 questionnaire copies), and at the gates of the Prophets Mosque in Madinah (100 questionnaire copies). The researcher sought help from five research assistants to distribute the questionnaire copies: two for the gates of the Holy Mosque in Makkah, one for each of King Abdul Aziz Airport in Jeddah, the randomly selected hotels in the vicinity of the Holy Mosque, and at the gates of the Prophets Mosque in Madinah. Although the selection was random, the researcher asked the research assistants to cover a diversity of pilgrims from different countries, of different ethnicities and ages, and from both sexes.

The disadvantage of the huge random sample method is the anonymity of the participants who might not give precise information sufficiently suitable for the purpose and objectives of the research (Saunders et al, 2009). To avoid this disadvantage, only Hajj pilgrims who are fully aware of the Hajj rituals and services provided therein, will be included in the survey.

3.4. The Instruments

3.4.1. The Questionnaire

As indicated above and based on the above-mentioned method chosen for this research, the quantitative data will be collected by means of a questionnaire survey (Appendix A) that will be administered to a large pool of Hajj pilgrims (500) chosen from the large population of the Hajj pilgrims of the Hijri year 1438, corresponding to the calendar year 2017. The selection of the participants was random, but selection was directed to cover a diverse research sample made up of Hajj pilgrims from different countries, of different ethnicities and ages, and from both sexes.

The questionnaire consists of an introduction and three sections. The introduction of the questionnaire depicts its purpose and calls on the participants to fill out the questionnaire copy, indicating that it is of vital importance to the success of the study.

Section A of the questionnaire contains the geographic information (including country of origin, and questions related to the Hajj trip); and the demographic information (including gender, marital status, number of family members, and number of children).

Section B consists of five questions (B1 to B5) along with a Likert type survey. The five questions inquire about satisfaction with life, satisfaction with health status, satisfaction with personal relationships, satisfaction with feeling as part of the community,

and volunteering activities related to the community in which the Hajj pilgrims were living. The Likert type survey consists of items about the quality of trip experience (items 1-23), subjective well being (items 24-32), life satisfaction (items 33-37), religiosity (items 38-52), broken down into Islamic belief items 39-43, Islamic practice items 44-49 and Islamic experience items 50-52). These items are rated by a scale of 11 points (0-10).

Section C consists of six questions (C1 to C6) about education (C1), current employment status (C2), personal income (C3), household income (amount C4a and description C4b), money spent in the Holy Places (C5), and satisfaction after the visit (C6).

The survey items (Section B) were scored using a Likert type scale made up of eleven points whose answers ranged from 0 “Entirely Disagree” to 10 “Entirely Agree”. The items were formulated in the form of statements to which all the eleven answers could be relevant, as there are no right or wrong answers.

3.4.2. Wording and Translation

The original items of the questionnaire were formulated in English language and then translated to Arabic language. Two professional translators carried out the translation job, in which case one translator was asked to translate the English copies of the items of the questionnaire, while the other was asked to back-translate the resulting Arabic translations into English. The researcher compared the resulting translations, and corrected divergences based on the original copies.

3.5. Reliability

Reliability analysis is used to ensure that the data that have been collected are trustworthy. Reliability analysis is usually accomplished by assessing the degree of internal consistency between the measurements of each variable (Hair et al., 2010). The most

acceptable kind of reliability analysis is the measurement of internal consistency which has been applied here because it was found suitable in ensuring that all the statements of the questionnaire, which make up the survey dimensions and items, measured the same construct and ensured correlation. For a reasonable degree of internal consistency, the value of the coefficient of reliability (Cronbach's alpha) should be more than 0.7 (Hair et al, 2010). In this study (Cronbach's alpha) is more than 0.9.

3.6. Validity

Validity is defined as the degree of credibility of the instrument as a measure of the construct or variable under investigation. In the present study validity was enhanced by checking all the items of the questionnaire in terms of their content and construct. The content part of the validity was evaluated by comparing it with similar content in the literature review (Hair et al, 2010).

3.7. Regression

Regression analysis is a statistical technique that is used to make forecasts by finding relations between quantitative data and estimating model parameters. An ordinary least square (OLS) regression was used in this study to relate the main variables of the study to each other. In this study life satisfaction or subjective well-being depend on several independent variables including the quality of the trip experience; religiosity; demographic variables. OLS regression is also used to relate life happiness to the educational level; and the financial conditions of the Hajj pilgrim including employment status, personal income, and household income. For the purposes of this study, a multiple OLS regression analysis was adopted to establish the extent to which each independent variable affected the

dependent variable. Several regressions were conducted with different variables resulting in multi regression models.

3.8. The Marginal Rate of Substitution (MRS)

The marginal rate of substitution (MRS) is defined as the coefficients' ratio of the variables that relate performance of religious activities to income. It is the amount of income required to maintain a constant SWB when people experience a change in the provision of non-market goods. By measuring the marginal utilities of non-market goods and income, we can express the value of non-market goods as their equivalent in income. In this way MRS can be expressed in terms of the quantity of money needed to offset the unfavourable changes in the individual's well-being when he/she performs religious activities (Tsurumi and Managi, 2017).

In this study MRS was used in the sense that the individual will forego some comforts that are brought by spending an amount of money in order to use it to pay the expenses of performing religious activities. In our case such expenditure on religious activities may be the purchase of the religious experience against spending the same amount of money to buy material goods, and thereby sacrifice the comfort brought from such goods.

Multiple analysis approaches are also adopted here. Among these, the ordered probit model (OPM), stochastic frontier analysis (SFA), and data envelopment analysis (DEA) are widely used in the literature to guide the LSA analysis. Ordered Probit Model (OPM) adopts the concept of ordinal SWB and models the underlying latent variable SWB (Tsurumi and Managi, 2017).

3.9. Latent Class Analysis (LCA)

The relationship between the pilgrims' satisfaction and well-being, and some of the demographic factors and personal information including age, gender, family size, personal income, marital status, and performing Hajj before, were tested based on the clusters chosen from the best model found from statistical procedures.

Another field in which latent class analysis was used was the regression of life satisfaction with some Islamic attributes of religiosity. In order to test the utility of Latent Gold 5.1 software in making clusters, 5 questions were chosen from the religiosity section of the questionnaire, namely:

1. In my personal life, Islamic religion is very important. (Question 38 of the Islamic belief section of the questionnaire).

2. Performing Hajj is one of my main priorities. (Question 42 of the Islamic belief section of the questionnaire).

3. I always perform all my prayers on time. (Question 45 of the Islamic practice section of the questionnaire).

4. I perform the obligation of Zakat. (Question 47 of the Islamic practice section of the questionnaire).

5. I experience pleasure in seeing others following Islamic teachings. (Question 51 of the Islamic experience section of the questionnaire).

These questions were then introduced to Latent Gold program. 5 models were chosen in order to find the model with the strongest degree of Islamic religiosity. The best model was model 3 because the BIC was the lowest relative to the other models, and AIC

was also very low compared to the other models. In this way this model was found to fit the data. Finally, the regression was carried out also using Latent Gold program.

3.10. Ethical Aspects

In order to abide by the research ethics, the researcher first made each Hajj pilgrim, who expressed his explicit consent to participate in the questionnaire survey, aware of all the rights he is entitled to in relation to his participation in the survey and the completion of the questionnaire copy given to him. Each participant was told about the title of the research, its purpose, and the benefits that might be derived from its accomplishment. Each participant was also told that participation is absolutely voluntary and that the participant may withdraw from all the survey any time he likes without any claims against him or blame from the part of the researcher. Each participant was also told that his identity will not feature in the results of the survey, and any information he furnishes will be confidential, as the whole survey will be conducted for academic purposes only.

However, each Hajj pilgrim was kindly requested to complete the survey within the specified time which was four hours and was told that his participation is necessary for the success of the study, and that the researcher would appreciate completion of all the three sections of the survey.

3.11. Description analysis of variables

The purpose of this analysis is to report the results of the questionnaire that was administered to the sample of Hajj pilgrims ($n = 500$) that was selected from the population of the Hajj pilgrims who performed Hajj in the year 1438H corresponding to the year 2017G. The results that are shown herein below involve the answers that were furnished

by the sample of Hajj pilgrims regarding their demographic characteristics, income, religiosity, trip experience, life satisfaction and subjective well-being.

A.1. Which is your country of origin?

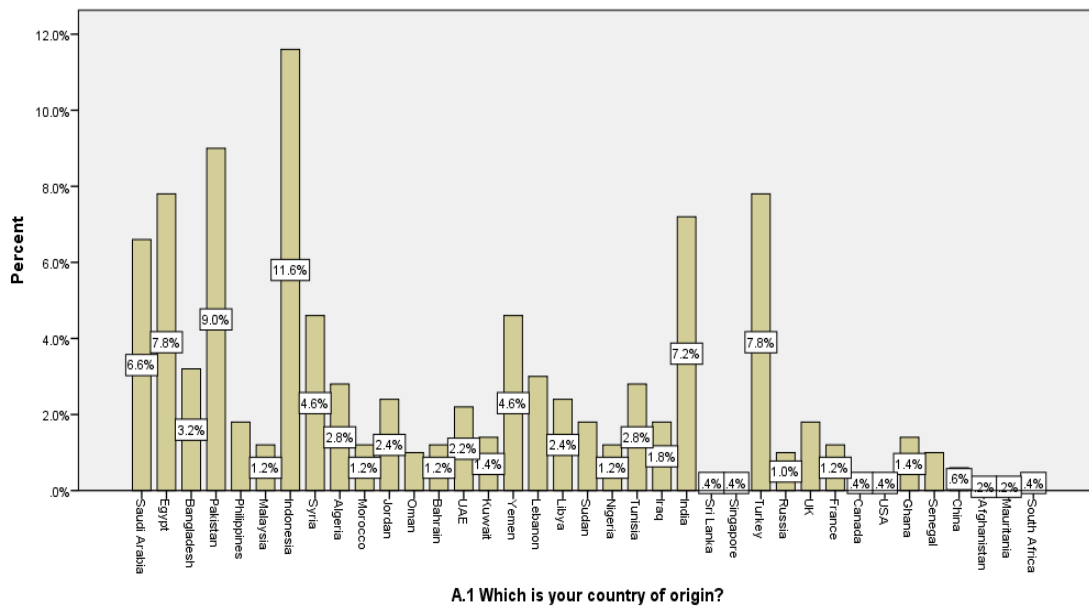
Table 3.1. below shows the frequency distribution of the respondents according to their countries of origin. The table shows that the total number of respondents from all countries was 500, most of whom were from Indonesia (11.6%), Pakistan (9.0%), Egypt and Turkey (each with 7.8% of the total number of respondents), India (7.2%), Saudi Arabia (6.6%), and some others with less representation. The countries represented by the least numbers of respondents were Afghanistan and Mauritania (each with 0.2% of the total number of respondents), South Africa (0.4%) and China (0.6) along with some other countries.

Table 3.1. The frequency distribution of the respondents according to their countries of origin.

Variable	Frequency	Percent
Saudi Arabia	33	6.6
Egypt	39	7.8
Bangladesh	16	3.2
Pakistan	45	9.0
Philippines	9	1.8
Malaysia	6	1.2
Indonesia	58	11.6
Syria	23	4.6
Algeria	14	2.8
Morocco	6	1.2
Jordan	12	2.4
Oman	5	1.0
Bahrain	6	1.2
UAE	11	2.2
Kuwait	7	1.4
Yemen	23	4.6
Lebanon	15	3.0
Libya	12	2.4
Sudan	9	1.8
Nigeria	6	1.2
Tunisia	14	2.8
Iraq	9	1.8

India	36	7.2
Sri Lanka	2	0.4
Singapore	2	0.4
Turkey	39	7.8
Russia	5	1.0
UK	9	1.8
France	6	1.2
Canada	2	0.4
USA	2	0.4
Ghana	7	1.4
Senegal	5	1.0
China	3	0.6
Afghanistan	1	0.2
Mauritania	1	0.2
South Africa	2	0.4
Total	500	100.0

Figure 3.1. The frequency distribution of the respondents according to their countries of origin.



A.2. Are you travelling alone or with other people?

Table 3.2. shows the frequency distribution of the respondents according to their trip status (alone or with others). As seen from the table, (54.2%) respondents stated that they were travelling with other people, while (45.8%) respondents were travelling alone.

Table 3.2. The frequency distribution of the respondents according to their trip status (alone or with others).

Answer	Frequency	Percent
Alone	229	45.8
With other people	271	54.2
Total	500	100.0

A.3. If you answered “2” in question A.2, could you tell me whom you travel with?

Table 3.3. shows that among those that who were travelling “with other people” a vast majority stated that they are travelling with a relative 58.6%, while 38.4% of the respondents were travelling with their friends and only 3.0% were travelling with others.

Table 3.3. The frequency distribution of the respondents who were traveling with others (a relative, friend or other).

Answer	Frequency	Percent
A relative	159	58.6
A friend	104	38.4
Other	8	3.0
Sub-Total	271	100.0%
<i>Not Applicable</i>	229	
Total	500	100.0

A.4. (If you are not Saudi) How many days do you plan to spend in Saudi Arabia?

Table 3.4. below shows that the majority (81.3%) of the non-Saudis respondents planned to spend 16-30 days, followed by those who said they want to spend 31-49 days who make up 15.1%, and the least were those who said they want to spend 1-15 days who make up 3.6%. The mean of the days that the non-Saudi respondents plan to stay in Saudi Arabia is 25.1 days with a standard deviation of 5.6 days.

Table 3.4. The frequency distribution of non-Saudis respondents according to the times they want to spend in Saudi Arabia during the Hajj season.

Number of Days	Frequency	Percent
1-15	17	3.6%
16-30	380	81.3%
31-49	70	15.1%
Sub-Total	467	100.0%
Mean±SD	25.1±5.6	

A.5. Have you visited the Holly Places before?

Table 3.5. shows that a vast majority of the respondents 85% stated that they had never visited the Holly Places before, while the rest (15%) of respondents reported that they had visited the Holly Places before.

Table 3.5. The frequency distribution of respondents in terms of whether they have visited the Holy Places before or not.

Answer	Frequency	Percent
Yes	75	15.0
No	425	85.0
Total	500	100.0

A.6. If you answered “yes” in question A5, how many times in the last ten years?

Table 3.6. shows that a big number 46.7% of the respondents who had visited the Holy Places before stated that they had visited them once before, 34.7% had visited them

twice, one person or 1.3% had visited them 6 times, and an equal number (one person or 1.3%) had visited the Holy Places 20 times before. 425 of the respondents were not allowed to answer because it was the first time that they visited the Holy Places, so, they were excluded.

Table 3.6. The frequency distribution of respondents in terms of the number of times they have visited the Holy Places before.

Visits	Frequency	Percent
1	35	46.7
2	26	34.7
3	6	8.0
4	3	4.0
5	3	4.0
6	1	1.3
20	1	1.3
Sub-Total	75	100.0%
<i>Not Applicable</i>	425	
Total	500	

A.7. Gender

Table 3.7. shows that the majority of the respondents 77.4% were male, while the rest 22.6% were female.

Table 3.7. The frequency distribution of respondents in terms of gender.

Gender	Frequency	Percent
Male	387	77.4
Female	113	22.6
Total	500	100.0

A.8. Age (Years)

Table 3.8. shows that the mean age of the respondents was 44.2 years with a standard deviation of 9.7 years. The minimum age among the respondents was 22 years while the maximum age was 65 years.

Table 3.8. The frequency distribution of respondents in terms of age.

Statistics	A.8 Age (years):
Mean	44.2
Std. Deviation	9.7
Minimum	22
Maximum	65

A.9. Marital Status

Table 3.9. shows the frequency distribution of the respondents according to their marital status. The table shows that the majority 63.8% of the respondents are married, while 29% are single, and 7.2% did not say.

Table 3.9. The frequency distribution of respondents according to marital status.

Marital Status	Frequency	Percent
Married	319	63.8
Single	145	29.0
Other	36	7.2
Total	500	100.0

A.10. Number of Family Members: (Mean, SD, Min and Max)

Table 3.10. shows that the mean number of family members of the respondents is 5.5 members with standard deviation of 1.9 members. The minimum number of family members is 2 members and the maximum is 10 members.

Table 3.10. The status of the respondents in terms of their family members.

Statistics	A.10 Number of family members:
Mean	5.5
Std. Deviation	1.9
Minimum	2
Maximum	10

A.11. Number of children at home (under 21): (Mean, SD, Min & Max):

Table 3.11. shows that the mean number of children under 21 at home is 2.5 children with standard deviation of 1.5 children. The minimum number of children under 21 at home is 0 and the maximum is 6 children.

Table 3.11. The status of the respondents in terms of number of children under 21 at home.

Statistics	A.11 Number of Children (under 21) at Home
Mean	2.5
Std. Deviation	1.5
Minimum	0
Maximum	6

B. Life Satisfaction of Respondents

The following questions aim to collect data about life satisfaction of the sample of Hajj pilgrims to whom the questionnaire was administered.

B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

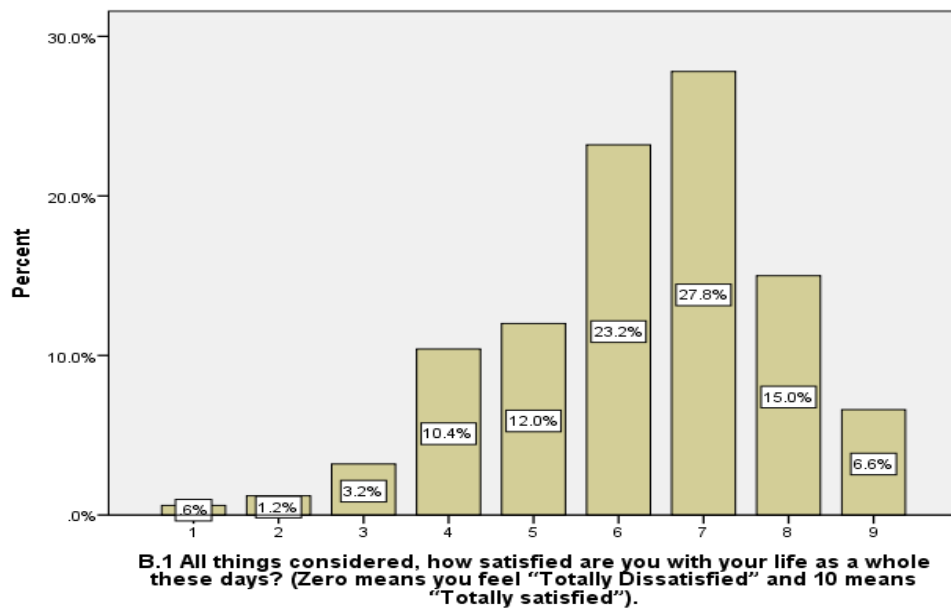
Table 3.12. shows the frequency distribution of the respondents in terms of their satisfaction with their lives as a whole these days after considering all things. As seen from the table 27.8% of the respondents rated their satisfaction score as 7, 23.2% rated their satisfaction score as 6. In general, the vast majority of the respondents 78% rated their

satisfaction score in the range of 5-8. The mean satisfaction score was 6.3 with a standard deviation of 1.6. The bar chart below the table also shows all the percentages.

Table 3.12. The frequency distribution of the respondents in terms of their satisfaction with their lives as a whole these days after considering all things.

Life Satisfaction	Frequency	Percent
0	0	0
1	3	0.6
2	6	1.2
3	16	3.2
4	52	10.4
5	60	12.0
6	116	23.2
7	139	27.8
8	75	15.0
9	33	6.6
10	0	0
Total	500	100.0
Mean ± SD	6.3±1.6	

Figure 3.2. The frequency distribution of the respondents in terms of their satisfaction with their lives as a whole these days after considering all things.



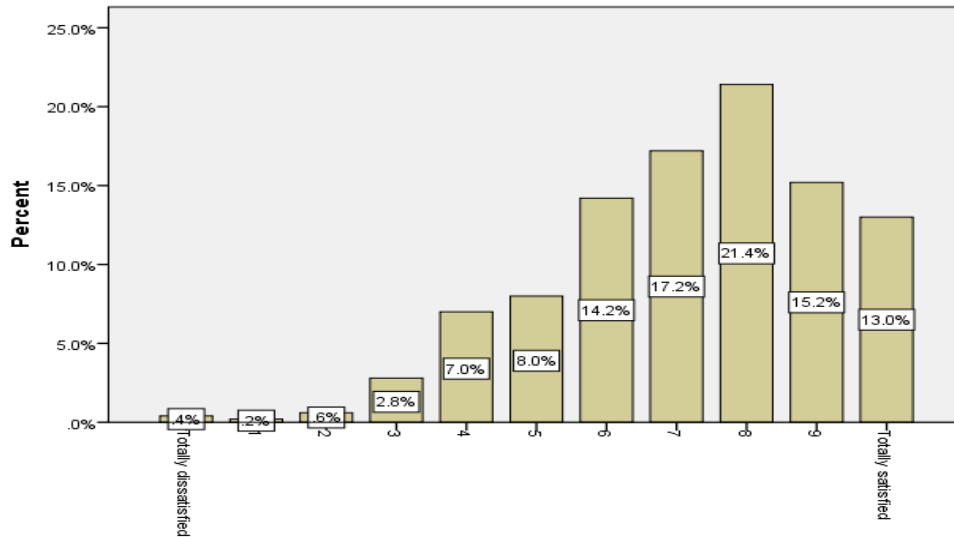
B.2. Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.13. below shows the frequency distribution of the respondents’ health status, namely how satisfied they are with their health. The table shows that 21.4% of the respondents rated their satisfaction score as 8, and 17.2% rated their satisfaction score as 7. On the other hand, 13.0% of the respondents were totally satisfied (i.e. score of 10), while only 0.4% were totally dissatisfied (i.e. score of 0). In general, the vast majority 81% of the respondents rated their health status in the range of 6-10. The mean health satisfaction score was 7.2 with a standard deviation of 2.0. The bar chart under the table shows all the percentages.

Table 3.13. The frequency distribution of the respondents’ health status.

Health Satisfaction	Frequency	Percent
0	2	0.4
1	1	0.2
2	3	0.6
3	14	2.8
4	35	7.0
5	40	8.0
6	71	14.2
7	86	17.2
8	107	21.4
9	76	15.2
10	65	13.0
Total	500	100.0
Mean ± SD	7.2±2.0	

Figure 3.3. The frequency distribution of the respondents' health status.



B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

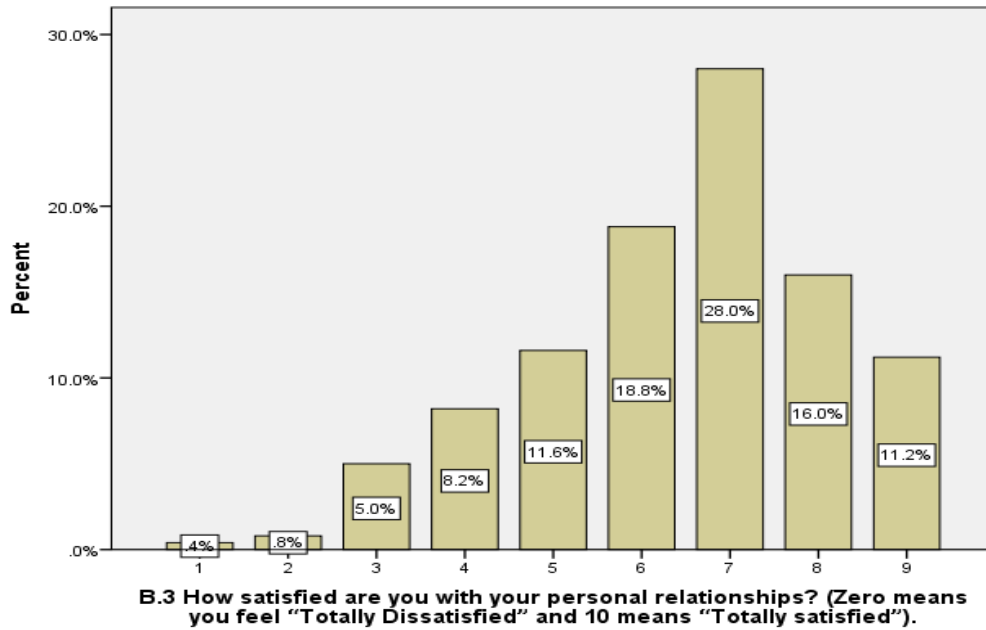
B.3. How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.14. below shows the frequency distribution of the respondents on their satisfaction with their personal relationships. The table shows that 28.0% of the respondents rated their satisfaction score as 7, while 18.8% rated their satisfaction score as 6. In general, the vast majority 85.6% of the respondents rated their satisfaction with their personal relationships in the range of 5-9. The mean score was 6.5 with a standard deviation of 1.7. The table below shows all the percentages.

Table 3.14. The frequency distribution of the respondents' satisfaction with their personal relationships.

Personal relationship	Frequency	Percent
0	0	0
1	2	.4
2	4	.8
3	25	5.0
4	41	8.2
5	58	11.6
6	94	18.8
7	140	28.0
8	80	16.0
9	56	11.2
10	0	0
Total	500	100.0
Mean ± SD	6.5±1.7	

Figure 3.4. The frequency distribution of the respondents' satisfaction with their personal relationships.



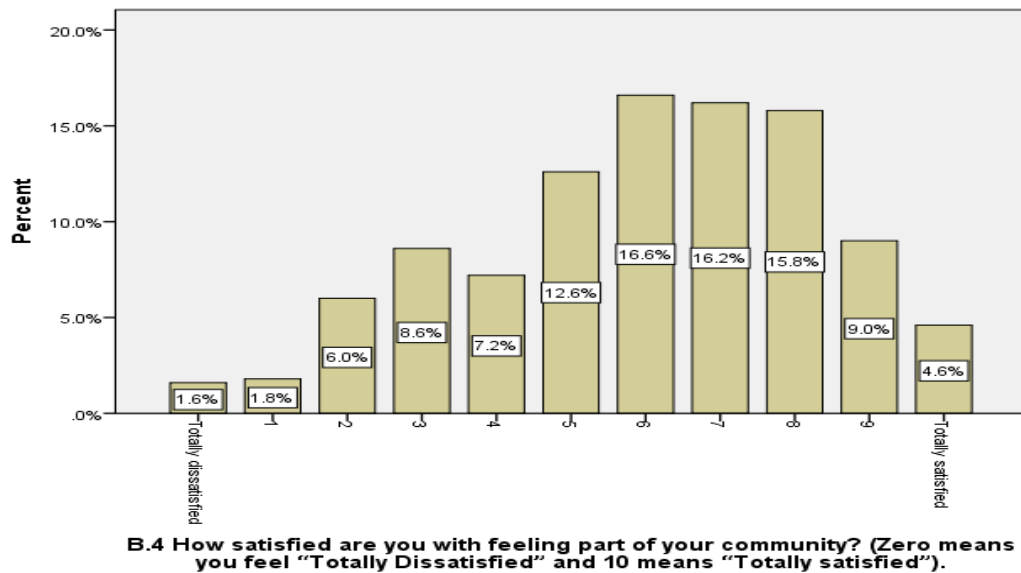
B.4. How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.15. shows the frequency distribution of the respondents on their satisfaction with feeling part of their community. The table shows that 16.6% of the respondents rated their satisfaction score as 6, 16.2% rated their satisfaction score a 7, 15.8% rated their satisfaction score as 8. On the other hand, 4.6% of the respondents were totally satisfied, and 1.6% were totally dissatisfied. In general, the majority (70.2%) of the respondents rated their satisfaction with their personal relationships in the range of 5-9. The mean satisfaction score was 6.0 with standard deviation 2.4. The bar chart below the table shows all the percentages.

Table 3.15. The frequency distribution of the respondents on their satisfaction with feeling part of their community.

Satisfaction with Community	Frequency	Percent
0	8	1.6
1	9	1.8
2	30	6.0
3	43	8.6
4	36	7.2
5	63	12.6
6	83	16.6
7	81	16.2
8	79	15.8
9	45	9.0
10	23	4.6
Total	500	100.0
Mean ± SD	6.0±2.4	

Figure 3.5. The frequency distribution of the respondents on their satisfaction with feeling part of their community.



B.5. Volunteering activities: Are you doing volunteering activities related to the community in which you are living? [Volunteering is any unpaid activity which involves spending time and doing something which aims to benefit someone (individuals or groups) other than or in addition to close relatives or to benefit the environment].

Table 3.16. below shows that the majority 82.4% of respondents stated that they are not doing any volunteering activities related to the community in which they are living, while the rest 17.6% stated that they are doing volunteering activities related to the community in which they are living.

Table 3.16. The frequency distribution of the respondents in terms of whether they are doing volunteering activities or not.

Answer	Frequency	Percent
Yes	88	17.6
No	412	82.4
Total	500	100.0

B.6. If you answer “yes” in Question B.5: How many hours per week?

Table 3.17. shows that 38.6% of the respondents who are doing volunteering activities, 2 hours per week and 31.8% of them work 3 hours per week. The minimum percentage 1.1% was reported by those who work 7 hours per week. The mean of hours per week spent in doing volunteering activities was 2.4 with a standard deviation of 1.1. 412 respondents were not allowed to answer because they are not doing any volunteering activities, so, they are excluded.

Table 3.17. The frequency distribution of the respondents in terms of the time they spend in doing volunteering activities.

Hours	Frequency	Percent
1	16	18.2
2	34	38.6
3	28	31.8
4	7	8.0
5	2	2.3
7	1	1.1
Sub-Total	88	100.0%
Mean ± SD	2.4±1.1	
<i>Not Applicable</i>	412	
Total	500	

Section B: Quality of Trip Experience Items 1-23

The following section shows the extent to which the respondents were satisfied with the trip in terms of whether they liked the trip because it had characteristics that they found exciting, nice, memorable, challenging, stirred their imagination, or the trip possessed other characteristics that they found likable.

Table 3.18. shows the mean scores and standard deviations that were reported by the respondents according to their agreement with the items that describe the characteristics of the trip experience. The table shows that the respondents reported a mean score of 7-7.4 with a standard deviation of 1.5-1.8 about the extent to which they were doing something they really liked to do during the trip, something memorable that enriches their life, exciting or can be described as a “once in a lifetime” experience.

On the other hand the table shows that the respondents reported a mean score of 6.8 or 6.9 with a standard deviation of 1.5-1.9 about the extent to which they could share their memories from the trip, the trip challenged them in some way, stirred their imagination or it seemed like an adventure in their eyes, the established new friendships, or they felt they are doing something new and different; while they reported a mean score of 6.0 with a standard deviation of 1.9 about the extent to which the experience provided them with fun.

The table further shows that the respondents reported a mean score of 5.4-5.9 with a standard deviation of 1.7-2.4 about the extent to which the trip let them feel physically comfortable, relaxed, or let them feel a sense of personal security, or that their privacy is assured; while they a mean score of 6.2 with a standard deviation of 1.7 about the extent to which the trip made them feel that their property was safe.

Furthermore, the table further shows that the respondents reported a mean score of 5.7-5.9 with a standard deviation of 1.8-1.9 about the extent to which the trip let them feel the presence of an element of choice in the process, they have some control over the outcome, or let them feel that they are being educated and informed; while they reported a mean score of 6.7-6.8 with a standard deviation of 2.0-2.1 about the extent to which trip let them feel that they are taken seriously or important.

Finally, the table further shows that the respondents reported a mean score of 7.0 with a standard deviation of 2.0 about the extent to which the trip let them feel a sense of cooperation.

Table 3.18. The mean scores and standard deviations reported by the respondents according to their agreement with some characteristics of the trip experience.

Item	Mean	SD
1. On this trip, I am doing something I really like to do	7.4	1.5
2. I am doing something memorable that enriches my life	7.4	1.5
3. This experience is exciting	7.3	1.8
4. I am having a “once in a lifetime” experience, I feel much better about things and myself after this trip	7.0	1.6
5. After travelling, I can share memories from my trip	6.9	1.5
6. I am being challenged in some way	6.8	1.6
7. My imagination is being stirred	6.9	1.8
8. It feels like I am on an adventure	6.9	1.9
9. This travel experience provides me with fun	6.0	1.9
10. On this trip, I established friendships with one or more new people	6.6	1.8
11. This trip let me feel that I am doing something new and different	6.7	1.8
12. This trip let me feel physically comfortable	5.4	2.4
13. This trip let me feel that my property is safe	6.2	1.7
14. This trip let me feel relaxed	5.8	1.9
15. This trip let me feel a sense of personal security	5.9	1.8
16. This trip let me feel that my privacy is assured	5.8	1.8
17. This trip let me feel that I am involved in the process of this trip	5.8	1.9
18. This trip let me feel that there is an element of choice in the process	5.7	1.9
19. This trip let me feel that I have some control over the outcome	5.8	1.8
20. This trip let me feel that I am being educated and informed	5.9	1.8
21. This trip let me feel a sense of cooperation	7.0	2.0
22. This trip let me feel that I am being taken seriously	6.7	2.0
23. This trip let me feel that I am important	6.8	2.1

Section B: Subjective well-being items 24-32

The following sub-section is about the extent to which the trip had an influence on the respondents' quality of life or subjective well-being after the trip.

Table 3.19. shows the mean scores and standard deviations that were reported by the respondents according to their agreement with the items that describe the effect of the trip on their quality of life and life satisfaction in general after they returned from the trip. The table shows that the respondents reported a mean score of 6.3-6.8 with a standard deviation of 1.6-1.8 about the extent to which the trip was memorable having enriched their quality of life, increase in their satisfaction with life in general shortly after the trip, feeling good about their life shortly after the trip, feeling that they are leading a meaningful and fulfilling life, or feeling happy. They also reported a mean score of 6.5-6.6 with a standard deviation of 1.7-1.8 about the extent to which the trip was a wise one, or that they did the right thing when they purchased this trip as the experience was exactly what they needed.

Table 3.19. The mean scores and standard deviations reported by the respondents according to their agreement with the effect of the trip experience on the respondents' subjective well-being.

Item	Mean	SD
24. Overall, my experience with this trip was memorable having enriched my quality of life.	6.8	1.6
25. My satisfaction with life in general was increased shortly after the trip.	6.5	1.6
26. Although I have my ups and downs, in general I felt good about my life shortly after the trip.	6.3	1.6
27. After the trip I felt that I lead a meaningful and fulfilling life.	6.4	1.6
28. Overall, I felt happy upon my return from the trip.	6.5	1.7
29. My choice of this trip was a wise one.	6.4	1.7
30. I did the right thing when I purchased this trip.	6.5	1.7
31 This experience is exactly what I needed.	6.6	1.8
32. I feel good about my decision of buying this trip.	6.6	1.8

Section B: Life satisfaction questions 33-37

This sub-section is about the extent to which the trip had an influence on the respondents' life satisfaction or subjective well-being after the trip.

Table 3.20. shows the mean scores and standard deviations reported by the respondents according to their agreement with the effect of the trip experience on the respondents' life satisfaction. The table shows that the respondents reported a mean score of 6.2-6.5 with a standard deviation of 1.8-2.1 about the extent to which that the respondents' life in most ways became close to their ideals, the conditions of their life were excellent, they were satisfied with their lives, they now have got the important things they want in life, and if they could live their lives over, they would change almost nothing.

It is noted that the mean score of item 35 "I am satisfied with my life" in this table was 6.4. This same life satisfaction status of the respondents was tested before in item B.1 "All things considered, how satisfied are you with your life as a whole these days?" where the mean satisfaction score was 6.3, which confirms their life satisfaction status as now it is 6.4.

Table 3.20. The mean scores and standard deviations reported by the respondents according to their agreement with the effect of the trip experience on the respondents' life satisfaction.

Item	Mean	SD
33. In most ways my life is close to my ideal.	6.5	1.8
34. The conditions of my life are excellent.	6.2	1.8
35. I am satisfied with my life.	6.4	2.0
36. So far I have gotten the important things I want in life.	6.4	1.8
37. if I could live my life over, I would change almost nothing.	6.2	2.1

Section B: Religiosity (Islamic Belief) Items 38-43

This sub-section describes the respondents' religiosity and the extent to which religion influences their lives.

Table 3.21. shows the mean scores and standard deviations reported by the respondents according to their agreement with the description of their religiosity and its effect on their lives. The table shows that the respondents reported a mean score of 7.3-8.0 with a standard deviation of 1.6-1.8 about the extent to which Islamic religion is important. In my personal life, the extent to which Islam helps them have a better life, the extent to which dua'aa (supplication) supports them, whether the Prophet Muhammad (pbum) has a role model for them, whether performing Hajj is among of their main priorities, and whether they that Allah helps them.

Table 3.21. The mean scores and standard deviations reported by the respondents according to their agreement with the description of respondents' religiosity and the extent to which religion influences their lives.

Item	Mean	SD
38. In my personal life, Islamic religion is very important.	7.4	1.8
39. Islam helps me to have a better life.	7.3	1.7
40. The Dua'aa (supplication) supports me.	7.5	1.7
41. The Prophet Muhammad (pbum) is the role model for me.	7.7	1.6
42. Performing Hajj is one of my main priorities.	7.7	1.7
43. I believe that Allah helps me.	8.0	1.7

Section B: Religiosity (Islamic Practice) Items 44-49

This sub-section describes the respondents' Islamic practice and the extent to which they regularly practice Islamic rituals.

Table 3.22. shows the mean scores and standard deviations reported by the respondents according to their agreement with the description of their Islamic practice and the extent to which they regularly practice Islamic rituals.

The table shows that the respondents reported a mean score of 7.2-8.8 with a standard deviation of 1.6-2.1 about how often they perform all their prayers, how often they perform all their prayers on time, to what extent they perform their daily prayers in the mosque regularly, to what extent they perform the obligation of Zakat, to what extent they read the Qur'an regularly, and whether they fast the whole month of Ramadan.

Table 3.22. The mean scores and standard deviations reported by the respondents according to their agreement with the description of their Islamic practice and the extent to which they regularly practice Islamic rituals.

Item	Mean	SD
44. I perform all my prayers.	8.8	1.6
45. I always perform all my prayers on time.	7.9	1.7
46. I perform my daily prayers in the mosque regularly.	7.2	1.9
47. I perform the obligation of Zakat.	7.8	2.0
48. I read the Qur'an regularly.	7.0	2.1
49. I fast the whole month of Ramadan.	8.2	1.7

Section B: Religiosity (Islamic experience) questions 50-52

This sub-section describes the respondents' consequences of Islamic beliefs such as punishment by Allah for wrong-doing, their pleasure when they see others follow Islamic teachings and how religion answers questions about the meaning of life.

Table 3.23. shows the mean scores and standard deviations reported by the respondents according to their agreement with the believing consequences.

The table shows that the respondents reported a mean score of 6.7-7.1 with a standard deviation of 1.8-2.0 about their belief that they will be punished by Allah for wrong-doing, their pleasure when they see others follow Islamic teachings and how religion answers questions about the meaning of life.

Table 3.23. The mean scores and standard deviations reported by the respondents according to their agreement with the consequences of Islamic experience.

Item	Mean	SD
50. I experience the feeling of being punished by Allah for wrong doings.	7.1	1.8
51. I experience pleasure in seeing others following Islamic teachings.	6.9	1.9
52. I experience my religion answers questions about the meaning of life.	6.7	2.0

C.1. Education

Table 3.24. below shows the frequency distribution of the respondents according to their education. The table shows that 29.8% of the respondents have secondary school education, 22.0% have intermediate school education, 19.4% have elementary school education, 19.0% have (university) education, and only 8.6% have post graduate education. 1.2% are not educated.

Table 3.24. The frequency distribution of the respondents according to their education.

Title	Frequency	Percent
No School	6	1.2
Elementary School	97	19.4
Intermediate School	110	22.0
Secondary School	149	29.8
University	95	19.0
Post Graduate	43	8.6
Total	500	100.0

C.2. Current Employment Status

Table 3.25. below shows the frequency distribution of the respondents according to their current employment status. The table shows that 21.2% of the respondents are public sector (white collar) employees, 17.6% are private sector (white collar) employees, 15.2% are public sector (blue collar) employees, and 12.8% are private sector (blue collar) employees. 10.0% of the respondents are self-employed, 8.8% are homemakers, 6.2% are unemployed and another 6.2% are retired. 1.8% of them are students.

Table 3.25. The frequency distribution of the respondents according to their current employment status

Title	Frequency	Percent
Employed for Public sector (blue collar)	76	15.2
Employed for Public sector (white collar)	106	21.2
Employed for private sector (blue collar)	64	12.8
Employed for private sector (white collar)	88	17.6
Self employed	50	10.0
A homemaker	44	8.8
A Student	9	1.8
Unemployed	31	6.2
Retired	31	6.2
Others	1	0.2
Total	500	100.0

C.3. Personal Income (Total Monthly Income before Taxes).

Table 3.26. below shows the frequency distribution of the respondents according to their personal income. From the table below, this vast majority can be further broken down into two categories, e.g. the category with personal income of (less than \$500 - \$2000) which makes up 44.6%, i.e. a bit less than half of all the respondents; and the category with personal income of (\$2001 - \$5000) which makes up 39.2% i.e. a bit more than a third of all the respondents.

Table 3.26. The frequency distribution of the respondents according to their personal income.

Title	Frequency	Percent
Less than \$500	64	12.8
\$500 - \$1000	84	16.8
\$1001 - \$2000	75	15.0
\$2001 - \$3000	96	19.2
\$3001 - \$4000	45	9.0
\$4001 - \$5000	55	11.0
\$5001 - \$10000	29	5.8
\$10001 - \$15000	21	4.2
\$15001 - \$20000	13	2.6
\$20001 - \$25000	10	2.0
More than \$25000	4	.8
Do not know/ No answer	4	.8
Total	500	100.0

C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes?

Table 3.27 below shows the frequency distribution of the respondents according to household total monthly income before taxes. The table shows that a good number (58%) of the respondents have a household monthly income of (\$2001 - \$10000). This big category of respondents can be further broken down into two categories, e.g. the category with household income of (\$2001 - \$4000) which makes up 26%, i.e. a bit more than a quarter of all the respondents; and the category with household income of (\$4001 - \$10000) which makes up 32% i.e. a bit less than a third of all the respondents.

Table 3.27. The frequency distribution of the respondents according to household total monthly income before taxes

Title	Frequency	Percent
Less than \$1000	34	6.8
\$1001- \$2000	41	8.2
\$2001 - \$ \$3000	67	13.4
\$3001 - \$4000	63	12.6
\$4001 - \$5000	95	19.0
\$5001 - \$10000	65	13.0
\$10001 - \$15000	45	9.0
\$15001 - \$20000	32	6.4
\$20001- \$25000	25	5.0
\$25001 - \$30000	15	3.0
More than \$30000	11	2.2
Do not know / no answer	7	1.4
Total	500	100.0

C.4.b. Which of these descriptions comes closest to how you feel about your household’s income nowadays?

Table 3.28. below shows the frequency distribution of the respondents according to how they feel about their household nowadays. The table shows that 29.2% feel it is difficult for them on present income, 25.0% feel it is very difficult for them on present income, 23.8% feel they are living comfortably on present income, and 20.6% feel are coping on present income.

Table 3.28. The frequency distribution of the respondents according to how they feel about their household nowadays

Title	Frequency	Percent
Living comfortably on present income	119	23.8
Coping on present income	103	20.6
Difficult on present income	146	29.2
Very difficult on present income	125	25.0
Do not know / do not answer	7	1.4
Total	500	100.0

C.5. In the current visit to the Holly Place, please, could you tell me how much do you plan to spend including the transport fees, the hotel, the tuition and other expenses?

Table 3.29. below shows the frequency distribution of the respondents according to amount of money they plan to spend in their current visit to the Holy Places. The table shows that a good number 67% of the respondents plan to spend from \$10001 to more than \$14000, with 15.6% of them planning to spend (\$11001 - \$12000), 15.2% planning to spend (\$10001 - \$11000), 13.2% planning to spend (\$12001 - \$13000), and 11.8% planning to spend (\$13001 - \$14000).

Table 3.29. The frequency distribution of the respondents according to amount of money they plan to spend in their current visit to the Holy Places

Title	Frequency	Percent
Less than \$ 5000	10	2.0
\$5001 - \$6000	11	2.2
\$6001 - \$7000	16	3.2
\$7001 - \$8000	29	5.8
\$8001 - \$9000	32	6.4
\$9001 - \$10000	45	9.0
\$10001 - \$11000	76	15.2
\$11001 - \$12000	78	15.6
\$12001 - \$13000	66	13.2
\$13001 - \$14000	59	11.8
More than \$14000	56	11.2
Do not know/ No answer	22	4.4
Total	500	100.0

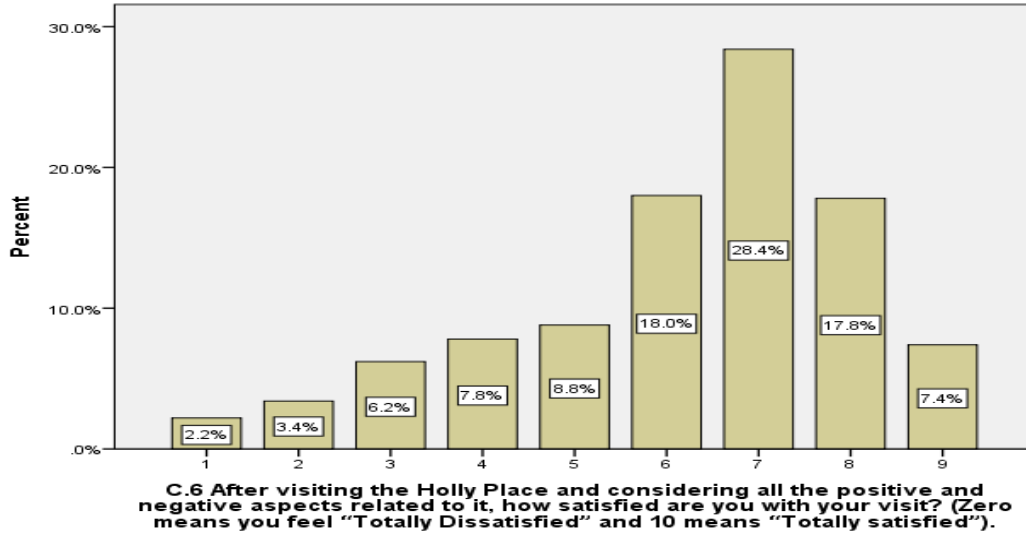
C.6. After visiting the Holly Place and considering all the positive and negative aspects related to it, how satisfied are you with your visit? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.30. below shows the frequency distribution of the respondents according to their satisfaction with their visit after visiting the Holy Places considering all the positive and negative aspects related to it. The table shows that a good number 64.2% of the respondents rated their satisfaction score in the range of 6-8, with 28.4% of them rating their satisfaction score as 7, 18.0% rating their satisfaction score as 6, and 17.8% rating their satisfaction score as 8. The chart below the table shows these and other percentages.

Table 3.30. The frequency distribution of the respondents according to their satisfaction with their visit after visiting the Holy Places

Title	Frequency	Percent
1	11	2.2
2	17	3.4
3	31	6.2
4	39	7.8
5	44	8.8
6	90	18.0
7	142	28.4
8	89	17.8
9	37	7.4
Total	500	100.0
Mean ± SD	6.2±1.9	

Figure 3.6. The frequency distribution of the respondents according to their satisfaction with their visit after visiting the Holy Places.



5.12. Association between Demographics, Satisfaction and Level of Income Questions

This part of the descriptive analysis breaks down by country the various aspects of satisfaction, including satisfaction with life as a whole, health status, personal relationships, feeling part of your community, personal income, and household income. The part also cross-tabs the relationship between personal income and satisfaction with life as a whole, health status, personal relationships, and feeling part of your community; and then cross-tabs the relationship between household income and satisfaction with life as a whole, health status, personal relationships, and feeling part of your community.

1/ A.1. Which is your country of origin? Vs. B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.31. below shows the frequency distribution of the respondents according to their countries of origin along with their satisfaction with life as a whole these days. The table shows that 11.6% were from Indonesia, 9.0% were from Pakistan, 7.8% from Egypt, 7.2% from India, and 6.6% from Saudi Arabia and some others with less representation.

In terms of their answers of how satisfied with life these day, 31 (94%) of the Saudis rated their score of happiness in the range of 6-9, 31 (79%) of the Egyptians rated their score of happiness also in the range of 6-9, 26 (58%) of the Pakistani rated their score of happiness in the range of 6-9, 40 (69%) of the Indonesians rated their score of happiness in the range of 6-9, and 22 (61%) of the Indians rated their score of happiness in the range of 6-9.

Since chi-square is 334.39 and p-value is 0.031, there is a statistically significant association between A.1 “Which is your country of origin?” and “B.1 All things considered, how satisfied are you with your life as a whole these days?” (p-value = 0.031).

Contrasting the results of this study regarding satisfaction with life as a whole by country with the results of the world database of happiness (Veenhoven, 2017), we note that the world database of happiness reports the average happiness of Saudi Arabia as 6.3 (against 6.8 in our study), of Egypt as 5.5 (against 6.0 in our study), of Pakistan as 6.0 (against 5.3 in our study), of Indonesia as 6.1 (against 6.0 in our study), and of India as 5.5 (against 6.0 in our study).

Table 3.31. The frequency distribution of the respondents according to their countries of origin cross-tabbed with their satisfaction with life as a whole these days

			B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									Total
			1	2	3	4	5	6	7	8	9	
A.1 Which is your country of origin?	Saudi Arabia	Count	0	0	0	2	0	7	14	5	5	33
		% within B.1	0.0%	0.0%	0.0%	3.8%	0.0%	6.0%	10.1%	6.7%	15.2%	6.6%
	Egypt	Count	0	0	1	2	5	9	11	6	5	39
		% within B.1	0.0%	0.0%	6.3%	3.8%	8.3%	7.8%	7.9%	8.0%	15.2%	7.8%
	Bangladesh	Count	0	2	0	2	5	7	0	0	0	16
		% within B.1	0.0%	33.3%	0.0%	3.8%	8.3%	6.0%	0.0%	0.0%	0.0%	3.2%
	Pakistan	Count	2	0	1	10	6	10	9	5	2	45
		% within B.1	66.7%	0.0%	6.3%	19.2%	10.0%	8.6%	6.5%	6.7%	6.1%	9.0%
	Philippines	Count	0	0	1	3	0	2	2	0	1	9
		% within B.1	0.0%	0.0%	6.3%	5.8%	0.0%	1.7%	1.4%	0.0%	3.0%	1.8%
	Malaysia	Count	0	0	0	0	0	1	2	2	1	6
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.4%	2.7%	3.0%	1.2%
	Indonesia	Count	0	0	2	6	10	16	16	7	1	58
		% within B.1	0.0%	0.0%	12.5%	11.5%	16.7%	13.8%	11.5%	9.3%	3.0%	11.6%
	Syria	Count	0	1	2	4	3	6	4	2	1	23
		% within B.1	0.0%	16.7%	12.5%	7.7%	5.0%	5.2%	2.9%	2.7%	3.0%	4.6%
	Algeria	Count	0	0	0	1	1	5	4	3	0	14
		% within B.1	0.0%	0.0%	0.0%	1.9%	1.7%	4.3%	2.9%	4.0%	0.0%	2.8%
	Morocco	Count	0	0	1	1	1	0	0	2	1	6
		% within B.1	0.0%	0.0%	6.3%	1.9%	1.7%	0.0%	0.0%	2.7%	3.0%	1.2%
	Jordan	Count	0	0	0	0	0	6	4	2	0	12
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	2.9%	2.7%	0.0%	2.4%
	Oman	Count	0	0	0	0	0	2	2	1	0	5
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	1.4%	1.3%	0.0%	1.0%
	Bahrain	Count	0	0	0	0	0	1	2	3	0	6
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	1.4%	4.0%	0.0%	1.2%
	UAE	Count	0	0	0	0	0	1	4	3	3	11
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	2.9%	4.0%	9.1%	2.2%
Kuwait	Count	0	0	0	0	0	1	3	1	2	7	
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	2.2%	1.3%	6.1%	1.4%	
Yemen	Count	0	0	0	6	3	5	8	1	0	23	
	% within B.1	0.0%	0.0%	0.0%	11.5%	5.0%	4.3%	5.8%	1.3%	0.0%	4.6%	
Lebanon	Count	0	0	1	0	1	7	5	0	1	15	

	% within B.1	0.0%	0.0%	6.3%	0.0%	1.7%	6.0%	3.6%	0.0%	3.0%	3.0%
Libya	Count	0	0	0	0	0	1	7	4	0	12
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	5.0%	5.3%	0.0%	2.4%
Sudan	Count	0	0	0	1	1	3	2	1	1	9
	% within B.1	0.0%	0.0%	0.0%	1.9%	1.7%	2.6%	1.4%	1.3%	3.0%	1.8%
Nigeria	Count	0	0	0	1	0	2	1	2	0	6
	% within B.1	0.0%	0.0%	0.0%	1.9%	0.0%	1.7%	0.7%	2.7%	0.0%	1.2%
Tunisia	Count	0	0	0	1	2	3	5	1	2	14
	% within B.1	0.0%	0.0%	0.0%	1.9%	3.3%	2.6%	3.6%	1.3%	6.1%	2.8%
Iraq	Count	0	1	0	0	3	3	1	0	1	9
	% within B.1	0.0%	16.7%	0.0%	0.0%	5.0%	2.6%	0.7%	0.0%	3.0%	1.8%
India	Count	0	0	2	5	7	4	10	7	1	36
	% within B.1	0.0%	0.0%	12.5%	9.6%	11.7%	3.4%	7.2%	9.3%	3.0%	7.2%
Sri Lanka	Count	0	0	0	0	1	1	0	0	0	2
	% within B.1	0.0%	0.0%	0.0%	0.0%	1.7%	0.9%	0.0%	0.0%	0.0%	0.4%
Singapore	Count	0	0	0	0	0	2	0	0	0	2
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.4%
Turkey	Count	1	2	3	3	7	8	10	4	1	39
	% within B.1	33.3%	33.3%	18.8%	5.8%	11.7%	6.9%	7.2%	5.3%	3.0%	7.8%
Russia	Count	0	0	0	1	1	1	1	1	0	5
	% within B.1	0.0%	0.0%	0.0%	1.9%	1.7%	0.9%	0.7%	1.3%	0.0%	1.0%
UK	Count	0	0	0	0	1	0	2	4	2	9
	% within B.1	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	1.4%	5.3%	6.1%	1.8%
France	Count	0	0	0	0	0	0	1	5	0	6
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	6.7%	0.0%	1.2%
Canada	Count	0	0	0	0	0	0	1	1	0	2
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	1.3%	0.0%	0.4%
USA	Count	0	0	0	0	0	0	0	1	1	2
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	3.0%	0.4%
Ghana	Count	0	0	0	2	1	0	4	0	0	7
	% within B.1	0.0%	0.0%	0.0%	3.8%	1.7%	0.0%	2.9%	0.0%	0.0%	1.4%
Senegal	Count	0	0	2	0	0	1	1	0	1	5
	% within B.1	0.0%	0.0%	12.5%	0.0%	0.0%	0.9%	0.7%	0.0%	3.0%	1.0%
China	Count	0	0	0	0	0	1	1	1	0	3
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.7%	1.3%	0.0%	0.6%
Afghanist an	Count	0	0	0	1	0	0	0	0	0	1
	% within B.1	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mauritani a	Count	0	0	0	0	1	0	0	0	0	1
	% within B.1	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.2%
South Africa	Count	0	0	0	0	0	0	2	0	0	2
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.4%
Total	Count	3	6	16	52	60	116	139	75	33	500
	% within B.1	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Pearson Chi-Square: 334.393.

p-value: 0.031*

2\ A.1. Which is your country of origin? * B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.32. below shows the frequency distribution of the respondents according to their countries of origin along with their satisfaction with their health status. The table

shows that 11.6% were from Indonesia, 9.0% are from Pakistan, 7.8% from each of Egypt, 7.2% from India, and 6.6% from Saudi Arabia and some others with less representation.

In terms of their answers of how satisfied with their health status, 32 (97%) of the Saudis rated their score of happiness in the range of 7-9, 26 (67%) of the Egyptians rated their score of happiness also in the range of 7-9, 32 (71%) of the Pakistani rated their score of happiness in the range of 7-9, 26 (45%) of the Indonesians rated their score of happiness in the range of 7-9, and 24 (67%) of the Indians rated their score of happiness in the range of 7-9.

Since chi-square is (413.833) and p-value is (0.026) which considered statistically significant at level (0.05), hence, there is a statistically significant association between A.1 “Which is your country of origin?” and “B.2 Health status: How satisfied are you with your health?” (p-value = 0.026).

Table 3.32. The frequency distribution of the respondents according to their countries of origin cross-tabbed with their satisfaction with their health status

		B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).											Total	
		0	1	2	3	4	5	6	7	8	9	10		
A.1 Which is your country of origin?	Saudi Arabia	Count	0	0	0	0	1	0	0	9	4	11	8	33
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	10.5%	3.7%	14.5%	12.3%	6.6%
	Egypt	Count	0	0	0	1	2	3	7	5	6	9	6	39
		% within B.2	0.0%	0.0%	0.0%	7.1%	5.7%	7.5%	9.9%	5.8%	5.6%	11.8%	9.2%	7.8%
	Bangladesh	Count	0	1	0	0	0	2	3	5	2	2	1	16
		% within B.2	0.0%	100.0%	0.0%	0.0%	0.0%	5.0%	4.2%	5.8%	1.9%	2.6%	1.5%	3.2%
	Pakistan	Count	0	0	1	1	4	2	5	4	14	7	7	45
		% within B.2	0.0%	0.0%	33.3%	7.1%	11.4%	5.0%	7.0%	4.7%	13.1%	9.2%	10.8%	9.0%
	Philippines	Count	0	0	0	0	0	2	2	3	1	0	1	9
		% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.8%	3.5%	0.9%	0.0%	1.5%	1.8%
	Malaysia	Count	0	0	0	0	0	0	0	1	1	1	3	6
		% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.9%	1.3%	4.6%	1.2%
	Indonesia	Count	0	0	0	3	4	11	14	6	12	3	5	58
		% within B.2	0.0%	0.0%	0.0%	21.4%	11.4%	27.5%	19.7%	7.0%	11.2%	3.9%	7.7%	11.6%
	Syria	Count	0	0	0	1	3	3	5	6	2	2	1	23
		% within B.2	0.0%	0.0%	0.0%	7.1%	8.6%	7.5%	7.0%	7.0%	1.9%	2.6%	1.5%	4.6%
	Algeria	Count	0	0	0	0	1	2	2	1	3	3	2	14
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	5.0%	2.8%	1.2%	2.8%	3.9%	3.1%	2.8%
	Morocco	Count	0	0	0	0	1	1	1	0	0	0	3	6
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	2.5%	1.4%	0.0%	0.0%	0.0%	4.6%	1.2%
	Jordan	Count	0	0	0	0	1	0	2	4	3	1	1	12
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	2.8%	4.7%	2.8%	1.3%	1.5%	2.4%
	Oman	Count	0	0	0	0	0	0	2	0	2	1	0	5
		% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.9%	1.3%	0.0%	1.0%
	Bahrain	Count	0	0	0	0	0	0	1	0	0	2	3	6
		% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	2.6%	4.6%	1.2%
	UAE	Count	0	0	0	0	1	0	1	2	1	3	3	11
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	1.4%	2.3%	0.9%	3.9%	4.6%	2.2%
	Kuwait	Count	0	0	0	0	0	0	0	2	3	1	1	7
		% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	2.8%	1.3%	1.5%	1.4%
	Yemen	Count	0	0	0	0	2	3	4	7	3	2	2	23
		% within B.2	0.0%	0.0%	0.0%	0.0%	5.7%	7.5%	5.6%	8.1%	2.8%	2.6%	3.1%	4.6%
	Lebanon	Count	0	0	0	0	1	1	1	5	1	6	0	15
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	2.5%	1.4%	5.8%	0.9%	7.9%	0.0%	3.0%
	Libya	Count	0	0	0	0	1	0	1	3	4	1	2	12
		% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	1.4%	3.5%	3.7%	1.3%	3.1%	2.4%
	Sudan	Count	0	0	0	2	0	1	0	1	3	1	1	9
		% within B.2	0.0%	0.0%	0.0%	14.3%	0.0%	2.5%	0.0%	1.2%	2.8%	1.3%	1.5%	1.8%
	Nigeria	Count	1	0	0	0	0	0	1	0	3	1	0	6
		% within B.2	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	2.8%	1.3%	0.0%	1.2%
Tunisia	Count	0	0	0	2	1	0	1	2	6	2	0	14	
	% within B.2	0.0%	0.0%	0.0%	14.3%	2.9%	0.0%	1.4%	2.3%	5.6%	2.6%	0.0%	2.8%	
Iraq	Count	0	0	0	0	1	1	2	1	2	2	0	9	
	% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	2.5%	2.8%	1.2%	1.9%	2.6%	0.0%	1.8%	
India	Count	0	0	0	0	4	4	4	9	10	2	3	36	
	% within B.2	0.0%	0.0%	0.0%	0.0%	11.4%	10.0%	5.6%	10.5%	9.3%	2.6%	4.6%	7.2%	
Sri Lanka	Count	0	0	0	0	0	0	1	1	0	0	0	2	
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	1.2%	0.0%	0.0%	0.0%	0.4%	
Singapore	Count	0	0	0	0	0	0	0	1	0	1	0	2	
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	1.3%	0.0%	0.4%	

Turkey	Count	1	0	1	3	5	2	6	5	11	3	2	39
	% within B.2	50.0%	0.0%	33.3%	21.4%	14.3%	5.0%	8.5%	5.8%	10.3%	3.9%	3.1%	7.8%
Russia	Count	0	0	0	0	0	1	1	0	1	2	0	5
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	1.4%	0.0%	0.9%	2.6%	0.0%	1.0%
UK	Count	0	0	0	0	0	0	1	0	1	4	3	9
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.9%	5.3%	4.6%	1.8%
France	Count	0	0	0	0	0	0	0	0	3	2	1	6
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	2.6%	1.5%	1.2%
Canada	Count	0	0	0	0	0	0	0	0	2	0	0	2
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	0.0%	0.0%	0.4%
USA	Count	0	0	0	0	0	0	0	0	0	0	2	2
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.4%
Ghana	Count	0	0	0	1	1	0	0	3	2	0	0	7
	% within B.2	0.0%	0.0%	0.0%	7.1%	2.9%	0.0%	0.0%	3.5%	1.9%	0.0%	0.0%	1.4%
Senegal	Count	0	0	1	0	0	0	2	0	0	0	2	5
	% within B.2	0.0%	0.0%	33.3%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	3.1%	1.0%
China	Count	0	0	0	0	0	1	0	0	0	1	1	3
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	1.3%	1.5%	0.6%
Afghanist an	Count	0	0	0	0	1	0	0	0	0	0	0	1
	% within B.2	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mauritani a	Count	0	0	0	0	0	0	1	0	0	0	0	1
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.0%	0.0%	0.2%
South Africa	Count	0	0	0	0	0	0	0	0	1	0	1	2
	% within B.2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	1.5%	0.4%
Total	Count	2	1	3	14	35	40	71	86	107	76	65	500
	% within B.2	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

Pearson Chi-Square = 413.833

p-value = 0.026*

A.1. Which is your country of origin? * B.3 How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.33. below shows the frequency distribution of the respondents according to their countries of origin along with their satisfaction with their personal relationships. The table shows that 11.6% were from Indonesia, 9.0% are from Pakistan, 7.8% from each of Egypt, 7.2% from India, and 6.6% from Saudi Arabia and some others with less representation.

In terms of their answers of how satisfied with life these day, 30 (91%) of the Saudis rated their score of happiness in the range of 6-9, 32 (82%) of the Egyptian rated their score of happiness also in the range of 6-9, 30 (67%) of the Pakistani rated their score of happiness in the range of 6-9, 40 (69%) of the Indonesians rated their score of happiness in the range of 6-9, and 21 (58%) of the Indians rated their score of happiness in the range of 6-9.

Since chi-square is (339.999) and p-value is (0.019), there is a statistically significant association between A.1 “Which is your country of origin?” and “B.3 How satisfied are you with your personal relationships?” (p-value = 0.019).

Table 3.33. The frequency distribution of the respondents according to their countries of origin cross-tabbed with their satisfaction with their personal relationships

			B.3 How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									Total
			1	2	3	4	5	6	7	8	9	
A.1 Which is your country of origin?	Saudi Arabia	Count	0	0	0	2	1	5	8	12	5	33
		% within B.3	0.0%	0.0%	0.0%	4.9%	1.7%	5.3%	5.7%	15.0%	8.9%	6.6%
	Egypt	Count	0	0	1	1	5	7	12	3	10	39
		% within B.3	0.0%	0.0%	4.0%	2.4%	8.6%	7.4%	8.6%	3.8%	17.9%	7.8%
	Bangladesh	Count	1	1	1	0	3	4	5	1	0	16
		% within B.3	50.0%	25.0%	4.0%	0.0%	5.2%	4.3%	3.6%	1.3%	0.0%	3.2%
	Pakistan	Count	1	0	4	5	5	7	11	9	3	45
		% within B.3	50.0%	0.0%	16.0%	12.2%	8.6%	7.4%	7.9%	11.3%	5.4%	9.0%
	Philippines	Count	0	1	1	2	0	3	0	2	0	9
		% within B.3	0.0%	25.0%	4.0%	4.9%	0.0%	3.2%	0.0%	2.5%	0.0%	1.8%
	Malaysia	Count	0	0	0	0	0	0	2	1	3	6
		% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	1.3%	5.4%	1.2%
	Indonesia	Count	0	0	2	9	7	11	15	9	5	58
		% within B.3	0.0%	0.0%	8.0%	22.0%	12.1%	11.7%	10.7%	11.3%	8.9%	11.6%
	Syria	Count	0	0	2	1	2	9	5	3	1	23
		% within B.3	0.0%	0.0%	8.0%	2.4%	3.4%	9.6%	3.6%	3.8%	1.8%	4.6%
	Algeria	Count	0	0	1	1	2	3	5	2	0	14
		% within B.3	0.0%	0.0%	4.0%	2.4%	3.4%	3.2%	3.6%	2.5%	0.0%	2.8%
	Morocco	Count	0	0	0	2	1	1	1	1	0	6
		% within B.3	0.0%	0.0%	0.0%	4.9%	1.7%	1.1%	0.7%	1.3%	0.0%	1.2%
	Jordan	Count	0	0	0	0	0	5	3	1	3	12
		% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	2.1%	1.3%	5.4%	2.4%
	Oman	Count	0	0	0	0	1	1	2	0	1	5
		% within B.3	0.0%	0.0%	0.0%	0.0%	1.7%	1.1%	1.4%	0.0%	1.8%	1.0%
	Bahrain	Count	0	0	0	0	0	1	2	0	3	6
		% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.4%	0.0%	5.4%	1.2%
	UAE	Count	0	0	0	0	1	0	2	7	1	11
		% within B.3	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	1.4%	8.8%	1.8%	2.2%
	Kuwait	Count	0	0	0	0	0	0	3	2	2	7
		% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.5%	3.6%	1.4%
	Yemen	Count	0	0	1	1	5	6	7	1	2	23
		% within B.3	0.0%	0.0%	4.0%	2.4%	8.6%	6.4%	5.0%	1.3%	3.6%	4.6%
	Lebanon	Count	0	0	0	1	2	0	9	3	0	15
		% within B.3	0.0%	0.0%	0.0%	2.4%	3.4%	0.0%	6.4%	3.8%	0.0%	3.0%
	Libya	Count	0	0	0	1	0	2	7	1	1	12
		% within B.3	0.0%	0.0%	0.0%	2.4%	0.0%	2.1%	5.0%	1.3%	1.8%	2.4%
	Sudan	Count	0	0	1	0	0	2	4	2	0	9
		% within B.3	0.0%	0.0%	4.0%	0.0%	0.0%	2.1%	2.9%	2.5%	0.0%	1.8%
	Nigeria	Count	0	0	0	0	0	0	5	0	1	6
		% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	1.8%	1.2%
Tunisia	Count	0	0	0	2	1	4	4	1	2	14	
	% within B.3	0.0%	0.0%	0.0%	4.9%	1.7%	4.3%	2.9%	1.3%	3.6%	2.8%	
Iraq	Count	0	0	0	0	3	3	3	0	0	9	
	% within B.3	0.0%	0.0%	0.0%	0.0%	5.2%	3.2%	2.1%	0.0%	0.0%	1.8%	
India	Count	0	0	6	4	5	6	5	8	2	36	
	% within B.3	0.0%	0.0%	24.0%	9.8%	8.6%	6.4%	3.6%	10.0%	3.6%	7.2%	
Sri Lanka	Count	0	0	0	1	0	0	1	0	0	2	
	% within B.3	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.7%	0.0%	0.0%	0.4%	

Singapore	Count	0	0	0	0	0	1	0	0	1	2
	% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	1.8%	0.4%
Turkey	Count	0	1	4	3	8	8	7	4	4	39
	% within B.3	0.0%	25.0%	16.0%	7.3%	13.8%	8.5%	5.0%	5.0%	7.1%	7.8%
Russia	Count	0	0	0	1	2	0	0	2	0	5
	% within B.3	0.0%	0.0%	0.0%	2.4%	3.4%	0.0%	0.0%	2.5%	0.0%	1.0%
UK	Count	0	0	0	0	1	1	3	1	3	9
	% within B.3	0.0%	0.0%	0.0%	0.0%	1.7%	1.1%	2.1%	1.3%	5.4%	1.8%
France	Count	0	0	0	0	0	1	2	2	1	6
	% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.4%	2.5%	1.8%	1.2%
Canada	Count	0	0	0	0	0	0	2	0	0	2
	% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	0.4%
USA	Count	0	0	0	0	0	0	1	0	1	2
	% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	1.8%	0.4%
Ghana	Count	0	1	0	3	0	2	1	0	0	7
	% within B.3	0.0%	25.0%	0.0%	7.3%	0.0%	2.1%	0.7%	0.0%	0.0%	1.4%
Senegal	Count	0	0	0	1	1	0	2	1	0	5
	% within B.3	0.0%	0.0%	0.0%	2.4%	1.7%	0.0%	1.4%	1.3%	0.0%	1.0%
China	Count	0	0	0	0	1	1	1	0	0	3
	% within B.3	0.0%	0.0%	0.0%	0.0%	1.7%	1.1%	0.7%	0.0%	0.0%	0.6%
Afghanistan	Count	0	0	1	0	0	0	0	0	0	1
	% within B.3	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mauritania	Count	0	0	0	0	1	0	0	0	0	1
	% within B.3	0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.2%
South Africa	Count	0	0	0	0	0	0	0	1	1	2
	% within B.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	1.8%	0.4%
Total	Count	2	4	25	41	58	94	140	80	56	500
	% within B.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square = 339.999

p-value = 0.019*

A.1. Which is your country of origin? * B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.34. below shows the frequency distribution of the respondents according to their countries of origin along with their satisfaction with their personal relationships. The table shows that 11.6% were from Indonesia, 9.0% are from Pakistan, 7.8% from each of Egypt, 7.2% from India, and 6.6% from Saudi Arabia and some others with less representation.

In terms of their answers of how satisfied with feeling part of your community, 25 (78%) of the Saudis rated their score of happiness in the range of 7-10, 21 (54%) of the Egyptian rated their score of happiness also in the range of 7-10, 21 (47%) of the Pakistani rated their score of happiness in the range of 7-10, 20 (34%) of the Indonesians rated their score of happiness in the range of 7-10, and 18 (50%) of the Indians rated their score of happiness in the range of 7-10.

Since chi-square is (433.86) and p-value is (0.005), there is a statistically significant association between A.1 “Which is your country of origin?” and “B.4 How satisfied are you with feeling part of your community?” (p-value = 0.005).

Table 3.34. The frequency distribution of the respondents according to their countries of origin cross-tabbed with their satisfaction with feeling part of your community

		B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).												Total
		0	1	2	3	4	5	6	7	8	9	10		
A.1 Which is your country of origin?	Saudi Arabia	Count	0	0	1	1	1	1	4	7	7	8	3	33
		% within B.4	0.0%	0.0%	3.3%	2.3%	2.8%	1.6%	4.8%	8.6%	8.9%	17.8%	13.0%	6.6%
	Egypt	Count	0	0	0	2	3	3	10	3	6	8	4	39
		% within B.4	0.0%	0.0%	0.0%	4.7%	8.3%	4.8%	12.0%	3.7%	7.6%	17.8%	17.4%	7.8%
	Bangladesh	Count	2	2	0	0	3	1	3	3	2	0	0	16
		% within B.4	25.0%	22.2%	0.0%	0.0%	8.3%	1.6%	3.6%	3.7%	2.5%	0.0%	0.0%	3.2%
	Pakistan	Count	1	0	4	5	4	3	7	7	9	4	1	45
		% within B.4	12.5%	0.0%	13.3%	11.6%	11.1%	4.8%	8.4%	8.6%	11.4%	8.9%	4.3%	9.0%
	Philippines	Count	1	0	2	3	0	0	1	0	1	1	0	9
		% within B.4	12.5%	0.0%	6.7%	7.0%	0.0%	0.0%	1.2%	0.0%	1.3%	2.2%	0.0%	1.8%
	Malaysia	Count	0	0	0	0	0	1	0	1	1	1	2	6
		% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	1.2%	1.3%	2.2%	8.7%	1.2%
	Indonesia	Count	0	0	4	5	5	11	13	7	9	4	0	58
		% within B.4	0.0%	0.0%	13.3%	11.6%	13.9%	17.5%	15.7%	8.6%	11.4%	8.9%	0.0%	11.6%
	Syria	Count	1	0	1	1	2	3	7	3	4	1	0	23
		% within B.4	12.5%	0.0%	3.3%	2.3%	5.6%	4.8%	8.4%	3.7%	5.1%	2.2%	0.0%	4.6%
	Algeria	Count	0	1	0	0	2	3	3	3	0	1	1	14
		% within B.4	0.0%	11.1%	0.0%	0.0%	5.6%	4.8%	3.6%	3.7%	0.0%	2.2%	4.3%	2.8%
	Morocco	Count	0	1	1	0	0	1	1	2	0	0	0	6
		% within B.4	0.0%	11.1%	3.3%	0.0%	0.0%	1.6%	1.2%	2.5%	0.0%	0.0%	0.0%	1.2%
	Jordan	Count	0	0	1	0	0	0	4	5	2	0	0	12
		% within B.4	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	4.8%	6.2%	2.5%	0.0%	0.0%	2.4%
	Oman	Count	0	0	1	0	0	0	0	2	1	1	0	5
		% within B.4	0.0%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	2.5%	1.3%	2.2%	0.0%	1.0%
	Bahrain	Count	0	0	0	0	0	1	1	0	0	2	2	6
		% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	1.2%	0.0%	0.0%	4.4%	8.7%	1.2%
	UAE	Count	0	0	0	0	1	0	1	1	5	1	2	11
		% within B.4	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	1.2%	1.2%	6.3%	2.2%	8.7%	2.2%
	Kuwait	Count	0	0	0	0	0	0	1	2	2	1	1	7
		% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	2.5%	2.5%	2.2%	4.3%	1.4%
	Yemen	Count	0	0	1	4	4	4	3	3	3	1	0	23
		% within B.4	0.0%	0.0%	3.3%	9.3%	11.1%	6.3%	3.6%	3.7%	3.8%	2.2%	0.0%	4.6%
	Lebanon	Count	0	0	0	2	0	2	5	4	2	0	0	15
		% within B.4	0.0%	0.0%	0.0%	4.7%	0.0%	3.2%	6.0%	4.9%	2.5%	0.0%	0.0%	3.0%
	Libya	Count	0	0	0	0	0	3	0	2	5	1	1	12
		% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	2.5%	6.3%	2.2%	4.3%	2.4%
	Sudan	Count	0	0	1	1	0	1	2	1	2	0	1	9
		% within B.4	0.0%	0.0%	3.3%	2.3%	0.0%	1.6%	2.4%	1.2%	2.5%	0.0%	4.3%	1.8%
	Nigeria	Count	1	1	1	1	0	0	0	1	0	0	1	6
		% within B.4	12.5%	11.1%	3.3%	2.3%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	4.3%	1.2%
Tunisia	Count	0	0	0	2	1	1	4	2	1	1	2	14	
	% within B.4	0.0%	0.0%	0.0%	4.7%	2.8%	1.6%	4.8%	2.5%	1.3%	2.2%	8.7%	2.8%	
Iraq	Count	0	1	0	0	1	4	0	3	0	0	0	9	
	% within B.4	0.0%	11.1%	0.0%	0.0%	2.8%	6.3%	0.0%	3.7%	0.0%	0.0%	0.0%	1.8%	
India	Count	1	0	3	7	2	3	2	10	6	1	1	36	
	% within B.4	12.5%	0.0%	10.0%	16.3%	5.6%	4.8%	2.4%	12.3%	7.6%	2.2%	4.3%	7.2%	
Sri Lanka	Count	0	0	0	0	0	1	1	0	0	0	0	2	
	% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	1.2%	0.0%	0.0%	0.0%	0.0%	0.4%	
Singapore	Count	0	0	0	0	0	0	0	0	1	1	0	2	
	% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	2.2%	0.0%	0.4%	
Turkey	Count	0	2	6	3	2	9	4	6	3	3	1	39	
	% within B.4	0.0%	22.2%	20.0%	7.0%	5.6%	14.3%	4.8%	7.4%	3.8%	6.7%	4.3%	7.8%	
Russia	Count	0	0	0	1	0	2	0	0	2	0	0	5	
	% within B.4	0.0%	0.0%	0.0%	2.3%	0.0%	3.2%	0.0%	0.0%	2.5%	0.0%	0.0%	1.0%	
UK	Count	0	0	1	0	0	2	2	0	4	0	0	9	
	% within B.4	0.0%	0.0%	3.3%	0.0%	0.0%	3.2%	2.4%	0.0%	5.1%	0.0%	0.0%	1.8%	

France	Count	0	0	0	1	1	1	0	1	0	2	0	6
	% within B.4	0.0%	0.0%	0.0%	2.3%	2.8%	1.6%	0.0%	1.2%	0.0%	4.4%	0.0%	1.2%
Canada	Count	0	0	0	0	0	0	2	0	0	0	0	2
	% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.4%
USA	Count	0	0	0	0	0	0	1	1	0	0	0	2
	% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.2%	0.0%	0.0%	0.0%	0.4%
Ghana	Count	1	0	1	1	3	0	0	0	0	1	0	7
	% within B.4	12.5%	0.0%	3.3%	2.3%	8.3%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	1.4%
Senegal	Count	0	1	1	0	0	1	0	0	1	1	0	5
	% within B.4	0.0%	11.1%	3.3%	0.0%	0.0%	1.6%	0.0%	0.0%	1.3%	2.2%	0.0%	1.0%
China	Count	0	0	0	1	1	0	1	0	0	0	0	3
	% within B.4	0.0%	0.0%	0.0%	2.3%	2.8%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.6%
Afghanistan	Count	0	0	0	1	0	0	0	0	0	0	0	1
	% within B.4	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mauritania	Count	0	0	0	0	0	1	0	0	0	0	0	1
	% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
South Africa	Count	0	0	0	1	0	0	0	1	0	0	0	2
	% within B.4	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.4%
Total	Count	8	9	30	43	36	63	83	81	79	45	23	500
	% within B.4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square = 433.863

p-value = 0.005**

A.1. Which is your country of origin? * C.3 Personal Income

Table 3.35. shows the results of cross-tab of the relationship between A.1 “Which is your country of origin?” and C.3 “Personal Income”. Since chi-square is (667.86) and p-value is (0.000) which is considered statistically significant at the level (0.01), there is a statistically significant association between country of origin and personal income (p-value = 0.000).

Table 3.35. shows the results of cross-tab of the relationship between A.1 “Which is your country of origin?” and C.3 “Personal Income”

		C.3 Personal Income												Total	
		Less than \$500	\$500 - \$1000	\$1001 - \$2000	\$2001 - \$3000	\$3001 - \$4000	\$4001 - \$5000	\$5001 - \$10000	\$10001 - \$15000	\$15001 - \$20000	\$20001 - \$25000	More than \$25000	Do not know/ No answer		
A.1 Which is your country of origin?	Saudi Arabia	Count	5	1	1	0	5	8	3	2	5	2	1	0	33
		% within C.3	7.8%	1.2%	1.3%	0.0%	11.1%	14.5%	10.3%	9.5%	38.5%	20.0%	25.0%	0.0%	6.6%
	Egypt	Count	3	8	5	11	4	6	1	0	0	0	0	1	39
		% within C.3	4.7%	9.5%	6.7%	11.5%	8.9%	10.9%	3.4%	0.0%	0.0%	0.0%	0.0%	25.0%	7.8%
	Bangladesh	Count	3	6	2	4	0	1	0	0	0	0	0	0	16
		% within C.3	4.7%	7.1%	2.7%	4.2%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.2%
	Pakistan	Count	11	13	10	4	3	1	3	0	0	0	0	0	45
		% within C.3	17.2%	15.5%	13.3%	4.2%	6.7%	1.8%	10.3%	0.0%	0.0%	0.0%	0.0%	0.0%	9.0%
	Philippines	Count	3	3	2	1	0	0	0	0	0	0	0	0	9
		% within C.3	4.7%	3.6%	2.7%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
	Malaysia	Count	0	1	0	0	2	1	1	0	0	0	1	0	6
		% within C.3	0.0%	1.2%	0.0%	0.0%	4.4%	1.8%	3.4%	0.0%	0.0%	0.0%	25.0%	0.0%	1.2%
	Indonesia	Count	10	23	14	10	0	0	0	0	0	0	0	1	58
		% within C.3	15.6%	27.4%	18.7%	10.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	11.6%
	Syria	Count	2	4	4	6	1	2	1	3	0	0	0	0	23
		% within C.3	3.1%	4.8%	5.3%	6.3%	2.2%	3.6%	3.4%	14.3%	0.0%	0.0%	0.0%	0.0%	4.6%
	Algeria	Count	0	2	1	3	1	2	1	2	1	0	0	1	14
		% within C.3	0.0%	2.4%	1.3%	3.1%	2.2%	3.6%	3.4%	9.5%	7.7%	0.0%	0.0%	25.0%	2.8%
	Morocco	Count	0	1	1	4	0	0	0	0	0	0	0	0	6
		% within C.3	0.0%	1.2%	1.3%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
Jordan	Count	0	1	0	5	1	4	1	0	0	0	0	0	12	
	% within C.3	0.0%	1.2%	0.0%	5.2%	2.2%	7.3%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	
Oman	Count	0	0	0	1	0	1	0	0	1	1	1	0	5	
	% within C.3	0.0%	0.0%	0.0%	1.0%	0.0%	1.8%	0.0%	0.0%	7.7%	10.0%	25.0%	0.0%	1.0%	
Bahrain	Count	0	0	1	1	2	0	0	1	1	0	0	0	6	

		% within C.3	0.0%	0.0%	1.3%	1.0%	4.4%	0.0%	0.0%	4.8%	7.7%	0.0%	0.0%	0.0%	1.2%
	UAE	Count	1	0	0	1	1	1	2	4	0	1	0	0	11
		% within C.3	1.6%	0.0%	0.0%	1.0%	2.2%	1.8%	6.9%	19.0%	0.0%	10.0%	0.0%	0.0%	2.2%
	Kuwait	Count	0	0	0	0	1	1	2	1	1	1	0	0	7
		% within C.3	0.0%	0.0%	0.0%	0.0%	2.2%	1.8%	6.9%	4.8%	7.7%	10.0%	0.0%	0.0%	1.4%
	Yemen	Count	2	7	6	4	2	2	0	0	0	0	0	0	23
		% within C.3	3.1%	8.3%	8.0%	4.2%	4.4%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%
	Lebanon	Count	1	0	2	4	2	4	1	1	0	0	0	0	15
		% within C.3	1.6%	0.0%	2.7%	4.2%	4.4%	7.3%	3.4%	4.8%	0.0%	0.0%	0.0%	0.0%	3.0%
	Libya	Count	0	0	1	4	2	3	1	0	0	1	0	0	12
		% within C.3	0.0%	0.0%	1.3%	4.2%	4.4%	5.5%	3.4%	0.0%	0.0%	10.0%	0.0%	0.0%	2.4%
	Sudan	Count	0	0	2	3	2	1	1	0	0	0	0	0	9
		% within C.3	0.0%	0.0%	2.7%	3.1%	4.4%	1.8%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
	Nigeria	Count	2	0	1	0	1	1	1	0	0	0	0	0	6
		% within C.3	3.1%	0.0%	1.3%	0.0%	2.2%	1.8%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
	Tunisia	Count	0	2	0	3	5	1	2	1	0	0	0	0	14
		% within C.3	0.0%	2.4%	0.0%	3.1%	11.1%	1.8%	6.9%	4.8%	0.0%	0.0%	0.0%	0.0%	2.8%
	Iraq	Count	2	1	0	5	0	1	0	0	0	0	0	0	9
		% within C.3	3.1%	1.2%	0.0%	5.2%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
	India	Count	8	5	9	9	1	2	0	0	0	1	0	1	36
		% within C.3	12.5%	6.0%	12.0%	9.4%	2.2%	3.6%	0.0%	0.0%	0.0%	10.0%	0.0%	25.0%	7.2%
	Sri Lanka	Count	0	0	1	0	0	0	0	1	0	0	0	0	2
		% within C.3	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	0.0%	0.0%	0.4%
	Singapore	Count	0	0	1	1	0	0	0	0	0	0	0	0	2
		% within C.3	0.0%	0.0%	1.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
	Turkey	Count	7	4	10	8	6	4	0	0	0	0	0	0	39
		% within C.3	10.9%	4.8%	13.3%	8.3%	13.3%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%
	Russia	Count	0	1	0	1	1	0	1	0	0	1	0	0	5
		% within C.3	0.0%	1.2%	0.0%	1.0%	2.2%	0.0%	3.4%	0.0%	0.0%	10.0%	0.0%	0.0%	1.0%
	UK	Count	0	0	0	0	1	3	1	1	2	1	0	0	9
		% within C.3	0.0%	0.0%	0.0%	0.0%	2.2%	5.5%	3.4%	4.8%	15.4%	10.0%	0.0%	0.0%	1.8%
	France	Count	0	0	0	0	0	2	2	1	1	0	0	0	6
		% within C.3	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	6.9%	4.8%	7.7%	0.0%	0.0%	0.0%	1.2%
	Canada	Count	0	0	0	0	0	0	1	0	0	1	0	0	2
		% within C.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	10.0%	0.0%	0.0%	0.4%
	USA	Count	0	0	0	0	0	0	0	1	0	0	1	0	2
		% within C.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	0.0%	0.0%	25.0%	0.0%	0.4%
	Ghana	Count	2	0	1	1	0	2	1	0	0	0	0	0	7
		% within C.3	3.1%	0.0%	1.3%	1.0%	0.0%	3.6%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
	Senegal	Count	1	0	0	2	0	0	1	1	0	0	0	0	5
		% within C.3	1.6%	0.0%	0.0%	2.1%	0.0%	0.0%	3.4%	4.8%	0.0%	0.0%	0.0%	0.0%	1.0%
	China	Count	0	0	0	0	1	0	0	1	1	0	0	0	3
		% within C.3	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	4.8%	7.7%	0.0%	0.0%	0.0%	0.6%

	Afghanistan	Count	0	1	0	0	0	0	0	0	0	0	0	0	1	
		% within C.3	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
	Mauritania	Count	1	0	0	0	0	0	0	0	0	0	0	0	0	1
		% within C.3	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
	South Africa	Count	0	0	0	0	0	1	1	0	0	0	0	0	0	2
		% within C.3	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Total	Count	64	84	75	96	45	55	29	21	13	10	4	4	500		
	% within C.3	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Pearson Chi-Square = 667.827

p-value = 0.000

A.1. Which is your country of origin? * C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes?

Table 3.36. shows the results of cross-tab of the relationship between A.1 “Which is your country of origin?” and C.4. “Household Income”. Since chi-square is (410.228) and p-value is (0.300) which is considered not significant, there is no significant association between A.1 and C.4. (p-value = 0.300).

Table 3.36. shows the results of cross-tab of the relationship between A.1 “Which is your country of origin?” and C.4. “Household Income”

		C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes?												Total	
		Less than \$1000	\$1001 - \$2000	\$2001 - \$3000	\$3001 - \$4000	\$4001 - \$5000	\$5001 - \$10000	\$10001 - \$15000	\$15001 - \$20000	\$20001 - \$25000	\$25001 - \$30000	More than \$30000	Do not know / no answer		
A.1 Which is your country of origin?	Saudi Arabia	Count	5	5	6	6	4	0	1	4	1	0	0	1	33
	% within C.4.	14.7%	12.2%	9.0%	9.5%	4.2%	0.0%	2.2%	12.5%	4.0%	0.0%	0.0%	14.3%	6.6%	
	Egypt	Count	6	2	5	2	13	2	5	1	2	0	1	0	39
	% within C.4.	17.6%	4.9%	7.5%	3.2%	13.7%	3.1%	11.1%	3.1%	8.0%	0.0%	9.1%	0.0%	7.8%	
	Bangladesh	Count	1	2	2	1	4	1	2	0	1	1	1	0	16
	% within C.4.	2.9%	4.9%	3.0%	1.6%	4.2%	1.5%	4.4%	0.0%	4.0%	6.7%	9.1%	0.0%	3.2%	
	Pakistan	Count	6	5	9	4	8	7	4	0	1	1	0	0	45
	% within C.4.	17.6%	12.2%	13.4%	6.3%	8.4%	10.8%	8.9%	0.0%	4.0%	6.7%	0.0%	0.0%	9.0%	
	Philippines	Count	1	1	1	0	1	1	1	2	0	0	1	0	9
	% within C.4.	2.9%	2.4%	1.5%	0.0%	1.1%	1.5%	2.2%	6.3%	0.0%	0.0%	9.1%	0.0%	1.8%	
	Malaysia	Count	0	1	0	1	2	0	1	0	0	0	0	1	6
	% within C.4.	0.0%	2.4%	0.0%	1.6%	2.1%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	1.2%
	Indonesia	Count	2	6	5	13	10	9	3	5	3	2	0	0	58
	% within C.4.	5.9%	14.6%	7.5%	20.6%	10.5%	13.8%	6.7%	15.6%	12.0%	13.3%	0.0%	0.0%	11.6%	
	Syria	Count	1	0	2	5	5	5	1	3	0	0	1	0	23
	% within C.4.	2.9%	0.0%	3.0%	7.9%	5.3%	7.7%	2.2%	9.4%	0.0%	0.0%	9.1%	0.0%	4.6%	
	Algeria	Count	2	1	1	2	1	1	1	2	1	0	1	1	14
	% within C.4.	5.9%	2.4%	1.5%	3.2%	1.1%	1.5%	2.2%	6.3%	4.0%	0.0%	9.1%	14.3%	2.8%	
	Morocco	Count	0	0	0	0	0	3	1	0	1	1	0	0	6
	% within C.4.	0.0%	0.0%	0.0%	0.0%	0.0%	4.6%	2.2%	0.0%	4.0%	6.7%	0.0%	0.0%	1.2%	
	Jordan	Count	1	0	0	1	2	4	0	1	2	0	1	0	12
	% within C.4.	2.9%	0.0%	0.0%	1.6%	2.1%	6.2%	0.0%	3.1%	8.0%	0.0%	9.1%	0.0%	2.4%	
	Oman	Count	0	1	0	0	1	1	0	1	0	1	0	0	5
	% within C.4.	0.0%	2.4%	0.0%	0.0%	1.1%	1.5%	0.0%	3.1%	0.0%	6.7%	0.0%	0.0%	1.0%	
	Bahrain	Count	0	0	3	1	0	0	1	0	0	1	0	0	6
	% within C.4.	0.0%	0.0%	4.5%	1.6%	0.0%	0.0%	2.2%	0.0%	0.0%	6.7%	0.0%	0.0%	1.2%	
	UAE	Count	0	0	2	0	2	4	2	1	0	0	0	0	11
	% within C.4.	0.0%	0.0%	3.0%	0.0%	2.1%	6.2%	4.4%	3.1%	0.0%	0.0%	0.0%	0.0%	2.2%	
Kuwait	Count	0	0	0	3	1	0	1	1	1	0	0	0	7	
% within C.4.	0.0%	0.0%	0.0%	4.8%	1.1%	0.0%	2.2%	3.1%	4.0%	0.0%	0.0%	0.0%	1.4%		
Yemen	Count	2	2	2	2	3	5	3	0	2	1	0	1	23	
% within C.4.	5.9%	4.9%	3.0%	3.2%	3.2%	7.7%	6.7%	0.0%	8.0%	6.7%	0.0%	14.3%	4.6%		
Lebanon	Count	1	1	0	1	2	3	1	3	2	1	0	0	15	
% within C.4.	2.9%	2.4%	0.0%	1.6%	2.1%	4.6%	2.2%	9.4%	8.0%	6.7%	0.0%	0.0%	3.0%		
Libya	Count	0	1	2	1	1	3	0	3	0	0	0	1	12	
% within C.4.	0.0%	2.4%	3.0%	1.6%	1.1%	4.6%	0.0%	9.4%	0.0%	0.0%	0.0%	14.3%	2.4%		

Sudan	Count	1	0	3	0	3	0	1	0	1	0	0	0	9
	% within C.4.	2.9%	0.0%	4.5%	0.0%	3.2%	0.0%	2.2%	0.0%	4.0%	0.0%	0.0%	0.0%	1.8%
Nigeria	Count	0	0	1	1	1	1	1	0	0	1	0	0	6
	% within C.4.	0.0%	0.0%	1.5%	1.6%	1.1%	1.5%	2.2%	0.0%	0.0%	6.7%	0.0%	0.0%	1.2%
Tunisia	Count	2	2	2	0	3	1	3	1	0	0	0	0	14
	% within C.4.	5.9%	4.9%	3.0%	0.0%	3.2%	1.5%	6.7%	3.1%	0.0%	0.0%	0.0%	0.0%	2.8%
Iraq	Count	0	2	1	2	3	1	0	0	0	0	0	0	9
	% within C.4.	0.0%	4.9%	1.5%	3.2%	3.2%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
India	Count	2	1	4	7	7	4	5	1	1	1	1	2	36
	% within C.4.	5.9%	2.4%	6.0%	11.1%	7.4%	6.2%	11.1%	3.1%	4.0%	6.7%	9.1%	28.6%	7.2%
Sri Lanka	Count	0	1	0	1	0	0	0	0	0	0	0	0	2
	% within C.4.	0.0%	2.4%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Singapore	Count	0	0	1	0	1	0	0	0	0	0	0	0	2
	% within C.4.	0.0%	0.0%	1.5%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Turkey	Count	1	3	3	7	8	6	4	2	2	2	1	0	39
	% within C.4.	2.9%	7.3%	4.5%	11.1%	8.4%	9.2%	8.9%	6.3%	8.0%	13.3%	9.1%	0.0%	7.8%
Russia	Count	0	1	2	1	0	0	0	0	0	1	0	0	5
	% within C.4.	0.0%	2.4%	3.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	1.0%
UK	Count	0	0	5	0	3	0	0	0	0	0	1	0	9
	% within C.4.	0.0%	0.0%	7.5%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	1.8%
France	Count	0	0	3	0	2	0	0	0	0	1	0	0	6
	% within C.4.	0.0%	0.0%	4.5%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	1.2%
Canada	Count	0	0	0	0	0	1	1	0	0	0	0	0	2
	% within C.4.	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
USA	Count	0	0	0	0	0	0	0	0	1	0	1	0	2
	% within C.4.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	9.1%	0.0%	0.4%
Ghana	Count	0	1	0	1	1	1	1	0	2	0	0	0	7
	% within C.4.	0.0%	2.4%	0.0%	1.6%	1.1%	1.5%	2.2%	0.0%	8.0%	0.0%	0.0%	0.0%	1.4%
Senegal	Count	0	1	1	0	1	1	0	1	0	0	0	0	5
	% within C.4.	0.0%	2.4%	1.5%	0.0%	1.1%	1.5%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	1.0%
China	Count	0	0	0	0	0	0	1	0	1	0	1	0	3
	% within C.4.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	4.0%	0.0%	9.1%	0.0%	0.6%
Afghanistan	Count	0	0	1	0	0	0	0	0	0	0	0	0	1
	% within C.4.	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mauritania	Count	0	0	0	0	1	0	0	0	0	0	0	0	1
	% within C.4.	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
South Africa	Count	0	1	0	0	1	0	0	0	0	0	0	0	2
	% within C.4.	0.0%	2.4%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Total	Count	34	41	67	63	95	65	45	32	25	15	11	7	500
	% within C.4.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square = 410.228

p-value = 0.300

C.3. Personal Income * B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.37 shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.1 “All things considered, how satisfied are you with your life as a whole these days?”. Since chi-square is (200.196) and p-value is (0.000) which is considered statistically significant at the level (0.01), there is a statistically significant association between C.3 and B.1 (p-value = 0.000).

Table 3.37. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.1 “All things considered, how satisfied are you with your life as a whole these days?”.

		B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).										Total
		1	2	3	4	5	6	7	8	9		
C.3 Personal Income	Less than \$500	Count	0	2	11	17	10	9	10	3	2	64
		% within B.1	0.0%	33.3%	68.8%	32.7%	16.7%	7.8%	7.2%	4.0%	6.1%	12.8%
	\$500 - \$1000	Count	3	1	2	13	20	22	19	3	1	84
		% within B.1	100.0%	16.7%	12.5%	25.0%	33.3%	19.0%	13.7%	4.0%	3.0%	16.8%
	\$1001 - \$2000	Count	0	2	2	7	14	16	19	10	5	75
		% within B.1	0.0%	33.3%	12.5%	13.5%	23.3%	13.8%	13.7%	13.3%	15.2%	15.0%
	\$2001 - \$3000	Count	0	1	0	9	9	30	25	15	7	96
		% within B.1	0.0%	16.7%	0.0%	17.3%	15.0%	25.9%	18.0%	20.0%	21.2%	19.2%
	\$3001 - \$4000	Count	0	0	0	4	0	15	10	10	6	45
		% within B.1	0.0%	0.0%	0.0%	7.7%	0.0%	12.9%	7.2%	13.3%	18.2%	9.0%
	\$4001 - \$5000	Count	0	0	0	1	3	11	24	12	4	55
		% within B.1	0.0%	0.0%	0.0%	1.9%	5.0%	9.5%	17.3%	16.0%	12.1%	11.0%
	\$5001 - \$10000	Count	0	0	0	0	2	4	12	9	2	29
		% within B.1	0.0%	0.0%	0.0%	0.0%	3.3%	3.4%	8.6%	12.0%	6.1%	5.8%
	\$10001 - \$15000	Count	0	0	1	1	0	2	11	5	1	21
		% within B.1	0.0%	0.0%	6.3%	1.9%	0.0%	1.7%	7.9%	6.7%	3.0%	4.2%
	\$15001 - \$20000	Count	0	0	0	0	0	4	3	4	2	13
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	2.2%	5.3%	6.1%	2.6%
	\$20001 - \$25000	Count	0	0	0	0	0	2	4	3	1	10
		% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	1.7%	2.9%	4.0%	3.0%	2.0%
More than \$25000	Count	0	0	0	0	0	0	2	1	1	4	
	% within B.1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	1.3%	3.0%	0.8%	
Do not know/ No answer	Count	0	0	0	0	2	1	0	0	1	4	
	% within B.1	0.0%	0.0%	0.0%	0.0%	3.3%	0.9%	0.0%	0.0%	3.0%	0.8%	
Total	Count	3	6	16	52	60	116	139	75	33	500	
	% within B.1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Pearson Chi-Square: 200.196

p-value = 0.000**

C.3. Personal Income * B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.38. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.2 “Health status”. Since chi-square is (109.116) and p-value is (0.506) which is considered not significant, there is no significant association between C.3 and B.2 (p-value = 0.506).

Table 3.38. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.2 “Health status”.

		B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).											Total	
		Totally dissatisfied	1	2	3	4	5	6	7	8	9	Totally satisfied		
C.3 Personal Income	Less than \$500	Count	1	0	1	4	9	6	8	11	14	4	6	64
		% within B.2 Health status	50.0%	0.0%	33.3%	28.6%	25.7%	15.0%	11.3%	12.8%	13.1%	5.3%	9.2%	12.8%
	\$500 - \$1000	Count	1	1	1	2	9	9	21	17	10	7	6	84
		% within B.2 Health status	50.0%	100.0%	33.3%	14.3%	25.7%	22.5%	29.6%	19.8%	9.3%	9.2%	9.2%	16.8%
	\$1001 - \$2000	Count	0	0	0	3	5	9	12	12	20	7	7	75
		% within B.2 Health status	0.0%	0.0%	0.0%	21.4%	14.3%	22.5%	16.9%	14.0%	18.7%	9.2%	10.8%	15.0%
	\$2001 - \$3000	Count	0	0	0	2	7	10	15	14	19	18	11	96
		% within B.2 Health status	0.0%	0.0%	0.0%	14.3%	20.0%	25.0%	21.1%	16.3%	17.8%	23.7%	16.9%	19.2%
	\$3001 - \$4000	Count	0	0	1	1	4	0	3	8	10	8	10	45
		% within B.2 Health status	0.0%	0.0%	33.3%	7.1%	11.4%	0.0%	4.2%	9.3%	9.3%	10.5%	15.4%	9.0%
	\$4001 - \$5000	Count	0	0	0	0	1	3	6	9	13	13	10	55
		% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	2.9%	7.5%	8.5%	10.5%	12.1%	17.1%	15.4%	11.0%
	\$5001 - \$10000	Count	0	0	0	1	0	0	3	3	9	8	5	29
		% within B.2 Health status	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	4.2%	3.5%	8.4%	10.5%	7.7%	5.8%
	\$10001 - \$15000	Count	0	0	0	1	0	1	1	4	4	6	4	21
		% within B.2 Health status	0.0%	0.0%	0.0%	7.1%	0.0%	2.5%	1.4%	4.7%	3.7%	7.9%	6.2%	4.2%
	\$15001 - \$20000	Count	0	0	0	0	0	1	1	3	2	2	4	13
		% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	1.4%	3.5%	1.9%	2.6%	6.2%	2.6%
	\$20001 - \$25000	Count	0	0	0	0	0	0	0	2	4	3	1	10
% within B.2 Health status		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	3.7%	3.9%	1.5%	2.0%	
More than \$25000	Count	0	0	0	0	0	0	0	1	2	0	1	4	
	% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.9%	0.0%	1.5%	0.8%	
Do not know/ No answer	Count	0	0	0	0	0	1	1	2	0	0	0	4	
	% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	1.4%	2.3%	0.0%	0.0%	0.0%	0.8%	
Total	Count	2	1	3	14	35	40	71	86	107	76	65	500	
	% within B.2 Health status	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Pearson Chi-Square: 109.116 p-value: 0.506

**C.3. Personal Income * B.3 How satisfied are you with your personal relationships?
(Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).**

Table 3.39. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.3 “How satisfied are you with your personal relationships?”. Since chi-square is (128.904) and p-value is (0.003) which is considered statistically significant at the level (0.01), there is a statistically significant association between C.3 and B.3 (p-value = 0.003).

Table 3.39. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.3 “How satisfied are you with your personal relationships?”.

			B.3 How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									Total
			1	2	3	4	5	6	7	8	9	
C.3 Personal Income	Less than \$500	Count	0	2	11	12	8	11	5	11	4	64
		% within B.3 personal relationships	0.0%	50.0%	44.0%	29.3%	13.8%	11.7%	3.6%	13.8%	7.1%	12.8%
	\$500 - \$1000	Count	1	2	7	10	13	20	19	6	6	84
		% within B.3 personal relationships	50.0%	50.0%	28.0%	24.4%	22.4%	21.3%	13.6%	7.5%	10.7%	16.8%
	\$1001 - \$2000	Count	0	0	4	6	10	15	25	11	4	75
		% within B.3 personal relationships	0.0%	0.0%	16.0%	14.6%	17.2%	16.0%	17.9%	13.8%	7.1%	15.0%
	\$2001 - \$3000	Count	1	0	1	6	14	21	28	13	12	96
		% within B.3 personal relationships	50.0%	0.0%	4.0%	14.6%	24.1%	22.3%	20.0%	16.3%	21.4%	19.2%
	\$3001 - \$4000	Count	0	0	1	2	3	7	17	9	6	45
		% within B.3 personal relationships	0.0%	0.0%	4.0%	4.9%	5.2%	7.4%	12.1%	11.3%	10.7%	9.0%
	\$4001 - \$5000	Count	0	0	1	1	5	10	17	9	12	55
		% within B.3 personal relationships	0.0%	0.0%	4.0%	2.4%	8.6%	10.6%	12.1%	11.3%	21.4%	11.0%
	\$5001 - \$10000	Count	0	0	0	1	0	5	11	6	6	29
		% within B.3 personal relationships	0.0%	0.0%	0.0%	2.4%	0.0%	5.3%	7.9%	7.5%	10.7%	5.8%
	\$10001 - \$15000	Count	0	0	0	2	1	4	6	6	2	21
		% within B.3 personal relationships	0.0%	0.0%	0.0%	4.9%	1.7%	4.3%	4.3%	7.5%	3.6%	4.2%
	\$15001 - \$20000	Count	0	0	0	0	2	1	3	5	2	13
		% within B.3 personal relationships	0.0%	0.0%	0.0%	0.0%	3.4%	1.1%	2.1%	6.3%	3.6%	2.6%
	\$20001 - \$25000	Count	0	0	0	0	1	0	6	3	0	10
% within B.3 personal relationships		0.0%	0.0%	0.0%	0.0%	1.7%	0.0%	4.3%	3.8%	0.0%	2.0%	
More than \$25000	Count	0	0	0	0	0	0	1	1	2	4	
	% within B.3 personal relationships	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	1.3%	3.6%	0.8%	

	Do not know/ No answer	Count	0	0	0	1	1	0	2	0	0	4
		% within B.3 personal relationships	0.0%	0.0%	0.0%	2.4%	1.7%	0.0%	1.4%	0.0%	0.0%	0.8%
Total		Count	2	4	25	41	58	94	140	80	56	500
		% within B.3 personal relationships	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0%

Pearson Chi-Square: 128.904

p-value: 0.003*

C.3. Personal Income * B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.40. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.4 “How satisfied are you with feeling part of your community?” Since chi-square is (158.013) and p-value is (0.002) which is considered statistically significant at the level (0.01), there is a statistically significant association between C.3 and B.4 (p-value = 0.002).

Table 3.40. shows the results of cross-tab of the relationship between C.3 “Personal Income” and B.4 “How satisfied are you with feeling part of your community?”

		B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).											Total		
		Totally dissatisfied	1	2	3	4	5	6	7	8	9	Totally satisfied			
C.3 Personal Income	Less than \$500	Count	3	3	11	10	10	4	9	3	6	3	2	64	
		% within B.4	37.5%	33.3%	36.7%	23.3%	27.8%	6.3%	10.8%	3.7%	7.6%	6.7%	8.7%	12.8%	
	\$500-\$1000	Count	3	2	5	13	7	14	12	9	12	5	2	84	
		% within B.4	37.5%	22.2%	16.7%	30.2%	19.4%	22.2%	14.5%	11.1%	15.2%	11.1%	8.7%	16.8%	
	\$1001-\$2000	Count	0	0	6	7	6	8	14	18	9	4	3	75	
		% within B.4	0.0%	0.0%	20.0%	16.3%	16.7%	12.7%	16.9%	22.2%	11.4%	8.9%	13.0%	15.0%	
	\$2001-\$3000	Count	0	3	4	5	4	17	18	17	20	8	0	96	
		% within B.4	0.0%	33.3%	13.3%	11.6%	11.1%	27.0%	21.7%	21.0%	25.3%	17.8%	0.0%	19.2%	
	\$3001-\$4000	Count	1	0	2	3	2	6	10	8	3	5	5	45	
		% within B.4	12.5%	0.0%	6.7%	7.0%	5.6%	9.5%	12.0%	9.9%	3.8%	11.1%	21.7%	9.0%	
	\$4001-\$5000	Count	0	1	0	3	1	8	8	12	8	11	3	55	
		% within B.4	0.0%	11.1%	0.0%	7.0%	2.8%	12.7%	9.6%	14.8%	10.1%	24.4%	13.0%	11.0%	
			Count	0	0	0	1	3	2	4	5	8	4	2	29

	\$5001 - \$10000	% within B.4	0.0%	0.0%	0.0%	2.3%	8.3%	3.2%	4.8%	6.2%	10.1%	8.9%	8.7%	5.8%
	\$10001 - \$15000	Count	0	0	1	1	2	3	4	0	6	2	2	21
		% within B.4	0.0%	0.0%	3.3%	2.3%	5.6%	4.8%	4.8%	0.0%	7.6%	4.4%	8.7%	4.2%
	\$15001 - \$20000	Count	0	0	1	0	0	1	2	4	3	1	1	13
		% within B.4	0.0%	0.0%	3.3%	0.0%	0.0%	1.6%	2.4%	4.9%	3.8%	2.2%	4.3%	2.6%
	\$20001 - \$25000	Count	0	0	0	0	1	0	2	2	3	1	1	10
		% within B.4	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	2.4%	2.5%	3.8%	2.2%	4.3%	2.0%
	More than \$25000	Count	0	0	0	0	0	0	0	2	0	1	1	4
		% within B.4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	2.2%	4.3%	0.8%
	Do not know/ No answer	Count	1	0	0	0	0	0	0	1	1	0	1	4
% within B.4		12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	1.3%	0.0%	4.3%	0.8%	
Total	Count	8	9	30	43	36	63	83	81	79	45	23	500	
	% within B.4	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Pearson Chi-Square: 158.013

p-value: 0.002

C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes? * B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.41. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.1 “All things considered, how satisfied are you with your life as a whole these days?” Since chi-square is (89.737) and p-value is (0.428) which is considered not significant, there is no significant association between C.4. and B.1 (p-value = 0.428).

Table 3.41. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.1 “All things considered, how satisfied are you with your life as a whole these days?”

		B.1 All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).										Total
		1	2	3	4	5	6	7	8	9		
C.4. Household Income	Less than \$1000	Count	0	0	0	2	6	11	10	4	1	34
		% within B.1	0.0%	0.0%	0.0%	3.8%	10.0%	9.5%	7.2%	5.3%	3.0%	6.8%
	\$1001 - \$2000	Count	0	1	2	3	8	7	11	4	5	41
		% within B.1	0.0%	16.7%	12.5%	5.8%	13.3%	6.0%	7.9%	5.3%	15.2%	8.2%
	\$2001 - \$3000	Count	0	2	2	5	5	17	15	13	8	67
		% within B.1	0.0%	33.3%	12.5%	9.6%	8.3%	14.7%	10.8%	17.3%	24.2%	13.4%
	\$3001 - \$4000	Count	1	0	4	8	7	13	20	8	2	63
		% within B.1	33.3%	0.0%	25.0%	15.4%	11.7%	11.2%	14.4%	10.7%	6.1%	12.6%
	\$4001 - \$5000	Count	0	2	3	11	12	20	30	14	3	95
		% within B.1	0.0%	33.3%	18.8%	21.2%	20.0%	17.2%	21.6%	18.7%	9.1%	19.0%
	\$5001 - \$10000	Count	1	0	1	12	12	12	16	7	4	65
		% within B.1	33.3%	0.0%	6.3%	23.1%	20.0%	10.3%	11.5%	9.3%	12.1%	13.0%
	\$10001 - \$15000	Count	0	1	2	2	4	7	17	6	6	45
		% within B.1	0.0%	16.7%	12.5%	3.8%	6.7%	6.0%	12.2%	8.0%	18.2%	9.0%
	\$15001 - \$20000	Count	0	0	2	3	0	11	9	5	2	32
		% within B.1	0.0%	0.0%	12.5%	5.8%	0.0%	9.5%	6.5%	6.7%	6.1%	6.4%
	\$20001 - \$25000	Count	1	0	0	2	1	9	7	4	1	25
		% within B.1	33.3%	0.0%	0.0%	3.8%	1.7%	7.8%	5.0%	5.3%	3.0%	5.0%
	\$25001 - \$30000	Count	0	0	0	2	1	5	2	5	0	15
		% within B.1	0.0%	0.0%	0.0%	3.8%	1.7%	4.3%	1.4%	6.7%	0.0%	3.0%
More than \$30000	Count	0	0	0	1	3	1	1	5	0	11	
	% within B.1	0.0%	0.0%	0.0%	1.9%	5.0%	0.9%	0.7%	6.7%	0.0%	2.2%	
Do not know / no answer	Count	0	0	0	1	1	3	1	0	1	7	
	% within B.1	0.0%	0.0%	0.0%	1.9%	1.7%	2.6%	0.7%	0.0%	3.0%	1.4%	
Total	Count	3	6	16	52	60	116	139	75	33	500	
	% within B.1	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Pearson Chi-Square: 89.737

p-value: 0.428

C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes? * B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.42. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.2 “Health status”. Since chi-square is (88.886) and p-value is (0.931) which is considered not significant, there is no significant association between C.4. and B.2 (p-value = 0.931).

Table 3.42. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.2 “Health status”.

		B.2 Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).											Total	
		Totally dissatisfied	1	2	3	4	5	6	7	8	9	Totally satisfied		
C.4. Household Income	Less than \$1000	Count	0	0	0	2	2	2	0	7	11	5	5	34
		% within B.2 Health status	0.0%	0.0%	0.0%	14.3%	5.7%	5.0%	0.0%	8.1%	10.3%	6.6%	7.7%	6.8%
	\$1001-\$2000	Count	1	0	0	2	1	5	5	8	4	11	4	41
		% within B.2 Health status	50.0%	0.0%	0.0%	14.3%	2.9%	12.5%	7.0%	9.3%	3.7%	14.5%	6.2%	8.2%
	\$2001-\$3000	Count	1	0	0	3	3	3	12	10	12	15	8	67
		% within B.2 Health status	50.0%	0.0%	0.0%	21.4%	8.6%	7.5%	16.9%	11.6%	11.2%	19.7%	12.3%	13.4%
	\$3001-\$4000	Count	0	0	0	2	7	7	11	12	10	9	5	63
		% within B.2 Health status	0.0%	0.0%	0.0%	14.3%	20.0%	17.5%	15.5%	14.0%	9.3%	11.8%	7.7%	12.6%
	\$4001-\$5000	Count	0	1	1	0	7	7	14	18	23	11	13	95
		% within B.2 Health status	0.0%	100.0%	33.3%	0.0%	20.0%	17.5%	19.7%	20.9%	21.5%	14.5%	20.0%	19.0%
	\$5001-\$10000	Count	0	0	1	1	7	7	11	11	15	5	7	65
		% within B.2 Health status	0.0%	0.0%	33.3%	7.1%	20.0%	17.5%	15.5%	12.8%	14.0%	6.6%	10.8%	13.0%
	\$10001-\$15000	Count	0	0	0	1	3	2	4	7	10	9	9	45
		% within B.2 Health status	0.0%	0.0%	0.0%	7.1%	8.6%	5.0%	5.6%	8.1%	9.3%	11.8%	13.8%	9.0%
	\$15001-\$20000	Count	0	0	0	1	1	3	7	5	8	6	1	32
		% within B.2 Health status	0.0%	0.0%	0.0%	7.1%	2.9%	7.5%	9.9%	5.8%	7.5%	7.9%	1.5%	6.4%
	\$20001-\$25000	Count	0	0	1	2	2	1	2	4	6	2	5	25
		% within B.2 Health status	0.0%	0.0%	33.3%	14.3%	5.7%	2.5%	2.8%	4.7%	5.6%	2.6%	7.7%	5.0%
	\$25001-\$30000	Count	0	0	0	0	1	0	3	1	6	1	3	15
		% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	4.2%	1.2%	5.6%	1.3%	4.6%	3.0%

More than \$30000	Count	0	0	0	0	0	2	2	2	1	1	3	11
	% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	2.8%	2.3%	0.9%	1.3%	4.6%	2.2%
Do not know / no answer	Count	0	0	0	0	1	1	0	1	1	1	2	7
	% within B.2 Health status	0.0%	0.0%	0.0%	0.0%	2.9%	2.5%	0.0%	1.2%	0.9%	1.3%	3.1%	1.4%
Total	Count	2	1	3	14	35	40	71	86	107	76	65	500
	% within B.2 Health status	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square: 88.886

p-value: 0.931

C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes? * B.3 How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.43. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.3 “How satisfied are you with your personal relationships?” Since chi-square is (78.785) and p-value is (0.748) which is considered not significant, there is no significant association between C.4. and B.3 (p-value = 0.748).

Table 3.43. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.3 “How satisfied are you with your personal relationships?”

			B.3 How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									Total
			1	2	3	4	5	6	7	8	9	
C.4. Household Income:	Less than \$1000	Count	0	0	2	2	4	7	8	7	4	34
		% within B.3: personal relationships	0.0%	0.0%	8.0%	4.9%	6.9%	7.4%	5.7%	8.8%	7.1%	6.8%
	\$1001- \$2000	Count	0	1	1	5	5	9	9	6	5	41
		% within B.3: personal relationships	0.0%	25.0%	4.0%	12.2%	8.6%	9.6%	6.4%	7.5%	8.9%	8.2%
	\$2001 - \$ \$3000	Count	1	0	5	3	5	10	13	16	14	67
		% within B.3: personal relationships	50.0%	0.0%	20.0%	7.3%	8.6%	10.6%	9.3%	20.0%	25.0%	13.4%
	\$3001 - \$4000	Count	0	0	5	8	10	9	16	7	8	63
		% within B.3: personal relationships	0.0%	0.0%	20.0%	19.5%	17.2%	9.6%	11.4%	8.8%	14.3%	12.6%
	\$4001 - \$5000	Count	0	1	6	6	9	22	28	13	10	95
		% within B.3: personal relationships	0.0%	25.0%	24.0%	14.6%	15.5%	23.4%	20.0%	16.3%	17.9%	19.0%
	\$5001 - \$10000	Count	0	2	2	7	14	12	21	6	1	65
		% within B.3: personal relationships	0.0%	50.0%	8.0%	17.1%	24.1%	12.8%	15.0%	7.5%	1.8%	13.0%
	\$10001 - \$15000	Count	0	0	1	1	3	8	18	9	5	45
		% within B.3: personal relationships	0.0%	0.0%	4.0%	2.4%	5.2%	8.5%	12.9%	11.3%	8.9%	9.0%
	\$15001 - \$20000	Count	0	0	1	3	3	9	10	4	2	32
		% within B.3: personal relationships	0.0%	0.0%	4.0%	7.3%	5.2%	9.6%	7.1%	5.0%	3.6%	6.4%
	\$20001- \$25000	Count	1	0	1	3	2	4	7	4	3	25
		% within B.3: personal relationships	50.0%	0.0%	4.0%	7.3%	3.4%	4.3%	5.0%	5.0%	5.4%	5.0%
	\$25001 - \$30000	Count	0	0	0	1	2	1	4	5	2	15
% within B.3: personal relationships		0.0%	0.0%	0.0%	2.4%	3.4%	1.1%	2.9%	6.3%	3.6%	3.0%	
More than \$30000	Count	0	0	0	1	1	2	3	2	2	11	
	% within B.3: personal relationships	0.0%	0.0%	0.0%	2.4%	1.7%	2.1%	2.1%	2.5%	3.6%	2.2%	
Do not know / no answer	Count	0	0	1	1	0	1	3	1	0	7	
	% within B.3: personal relationships	0.0%	0.0%	4.0%	2.4%	0.0%	1.1%	2.1%	1.3%	0.0%	1.4%	
Total	Count	2	4	25	41	58	94	140	80	56	500	
	% within B.3: personal relationships	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0%	

Pearson Chi-Square: 78.785

p-value: 0.748

C.4. Household Income: C.4.a. Could you tell us which sentence best describes your household total monthly income before taxes? * B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).

Table 3.44. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.4 “How satisfied are you with feeling part of your community?” Since chi-square is (119.883) and p-value is (0.244) which is considered not significant, there is no significant association between C.4. and B.4 (p-value = 0.244).

Table 3.44. shows the results of cross-tab of the relationship between C.4. “Household Income” and B.4 “How satisfied are you with feeling part of your community?”

			B.4 How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).											Total
			Totally dissatisfied	1	2	3	4	5	6	7	8	9	Totally satisfied	
C.4. Household Income	Less than \$1000	Count	0	0	1	5	5	2	5	5	6	4	1	34
		% within B.4	0.0%	0.0%	3.3%	11.6%	13.9%	3.2%	6.0%	6.2%	7.6%	8.9%	4.3%	6.8%
	\$1001-\$2000	Count	0	0	4	0	6	5	5	5	8	6	2	41
		% within B.4	0.0%	0.0%	13.3%	0.0%	16.7%	7.9%	6.0%	6.2%	10.1%	13.3%	8.7%	8.2%
	\$2001 - \$3000	Count	1	2	3	3	5	10	8	6	14	10	5	67
		% within B.4	12.5%	22.2%	10.0%	7.0%	13.9%	15.9%	9.6%	7.4%	17.7%	22.2%	21.7%	13.4%
	\$3001 - \$4000	Count	0	1	5	7	1	11	14	10	5	5	4	63
		% within B.4	0.0%	11.1%	16.7%	16.3%	2.8%	17.5%	16.9%	12.3%	6.3%	11.1%	17.4%	12.6%
	\$4001 - \$5000	Count	2	2	6	8	5	9	16	14	20	10	3	95
		% within B.4	25.0%	22.2%	20.0%	18.6%	13.9%	14.3%	19.3%	17.3%	25.3%	22.2%	13.0%	19.0%
	\$5001 - \$10000	Count	2	1	2	11	5	8	17	9	9	0	1	65
		% within B.4	25.0%	11.1%	6.7%	25.6%	13.9%	12.7%	20.5%	11.1%	11.4%	0.0%	4.3%	13.0%
	\$10001 - \$15000	Count	1	0	4	1	3	4	6	10	6	4	6	45
		% within B.4	12.5%	0.0%	13.3%	2.3%	8.3%	6.3%	7.2%	12.3%	7.6%	8.9%	26.1%	9.0%
	\$15001 - \$20000	Count	0	1	3	1	3	4	4	8	6	2	0	32
		% within B.4	0.0%	11.1%	10.0%	2.3%	8.3%	6.3%	4.8%	9.9%	7.6%	4.4%	0.0%	6.4%
\$20001-\$25000	Count	2	0	2	2	2	3	4	7	2	1	0	25	
	% within B.4	25.0%	0.0%	6.7%	4.7%	5.6%	4.8%	4.8%	8.6%	2.5%	2.2%	0.0%	5.0%	
\$25001 - \$30000	Count	0	1	0	1	1	3	1	5	2	1	0	15	
	% within B.4	0.0%	11.1%	0.0%	2.3%	2.8%	4.8%	1.2%	6.2%	2.5%	2.2%	0.0%	3.0%	
More than \$30000	Count	0	1	0	2	0	2	3	1	1	1	0	11	
	% within B.4	0.0%	11.1%	0.0%	4.7%	0.0%	3.2%	3.6%	1.2%	1.3%	2.2%	0.0%	2.2%	
Count		0	0	0	2	0	2	0	1	0	1	1	7	

	Do not know / no answer	% within B.4	0.0%	0.0%	0.0%	4.7%	0.0%	3.2%	0.0%	1.2%	0.0%	2.2%	4.3%	1.4%
Total	Count		8	9	30	43	36	63	83	81	79	45	23	500
	% within B.4		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square: 119.883

p-value: 0.244

Chapter 4

Data Analysis and Results

4.1. Regression Analysis

Before moving forward to analyze the results of each multiple regression model, the dependent, and independent variables included in each model will be presented. The independent variables (descriptive statistics and definitions) that are expected to have an effect on life satisfaction or well-being of pilgrims in general and the Hajj journey in particular, are presented as shown in table 4.1, herein below. As mentioned before, the independent variables include both the socioeconomic and the demographic characteristics of the pilgrims that answered the survey.

Table 4.1: Explanatory variables and summery statistics

Variable	Definition	Mean (SD)	% of 1s
Life sat	How satisfied are you with your life as a whole these days? (0= Totally dissatisfied; 10= Totally satisfied)	6.27 (1.603)	
Age	Pilgrim's age	44.15 (9.702)	
Age ²	Square of the pilgrim's age	2042.81 (871.46)	
Health Satisfaction	How satisfied are you with your health? (0= Totally dissatisfied; 10= Totally satisfied)	7.21 (1.978)	
Personal relationships	How satisfied are you with your personal relationships? (0= Totally dissatisfied; 10= Totally satisfied)	6.45 (1.688)	
Memorable	I am doing something memorable that enriches my life (0= Entirely disagree; 10= entirely agree)	7.44 (1.506)	
Challenge	I am being challenged in some way (0= Entirely disagree; 10= entirely agree)	6.79 (1.557)	

Physical comfort	This trip let me feel physically comfortable (0= Entirely disagree; 10= entirely agree)	5.42 (2.403)	
Important	This trip let me feel that I am important (0= Entirely disagree; 10= entirely agree)	6.76 (2.058)	
Fulfill	After the trip I felt that I lead a meaningful and fulfilling life (0= Entirely disagree; 10= entirely agree)	6.41 (1.608)	
Hbefore1	Have you visited the Holy Places before? (1 if yes 0 otherwise)		15.0
P income	Pilgrim's Personal Income in twelve intervals ranging from interval 1(<500\$) to interval 11 (>25001) and interval 12 (do not know/ No answer)	4.09 (2.347)	
Satisfaction community	How satisfied are you with feeling part of your community? (0= Entirely disagree; 10= entirely agree)	5.98 (2.350)	
Sharing memories	After travelling, I can share memories from my trip (0= Entirely disagree; 10= entirely agree)	6.94 (1.541)	
Adventure	It feels like I am on an adventure (0= Entirely disagree; 10= entirely agree)	6.89 (1.946)	
Fun	This travel experience provides me with fun (0= Entirely disagree; 10= entirely agree)	5.96 (1.884)	
Perform	I perform all my prayers (0= Entirely disagree; 10= entirely agree)	8.83 (1.611)	
Punished	I experience the feeling of being punished by Allah for wrong doings (0= Entirely disagree; 10= entirely agree)	7.06 (1.760)	
Answers	I experience my religion answers questions about the meaning of life (0= Entirely disagree; 10= entirely agree)	6.74 (2.022)	
Exciting	This experience is exciting (0= Entirely disagree; 10= entirely agree)	7.28 (1.799)	
Duaa	The Dua'a (supplication) supports me (0= Entirely disagree; 10= entirely agree)	7.53 (1.749)	

Marital	Marital status (1 if the pilgrim's Married, 2 Single and 3 other)	1.43 (.625)
Felt	Although I have my ups and downs, in general I felt good about my life shortly after the trip (0= Entirely disagree; 10= entirely agree)	6.33 (1.574)
Quran	I read the Qur'an regularly (0= Entirely disagree; 10= entirely agree)	6.96 (2.133)
Seriously	This trip let me feel that I am being taken seriously (0= Entirely disagree; 10= entirely agree)	6.72 (2.027)
Educated	This trip let me feel that I am being educated and informed (0= Entirely disagree; 10= entirely agree)	5.91 (1.837)
Privacy	This trip let me feel that my privacy is assured (0= Entirely disagree; 10= entirely agree)	5.76 (1.830)
Education	Pilgrim's Education	3.72 (1.250)
Ramadan	I fast the whole month of Ramadan (0= Entirely disagree; 10= entirely agree)	8.24 (1.734)
Choice	My choice of this trip was a wise one (0= Entirely disagree; 10= entirely agree)	5.67 (1.857)
Ideal	In most ways my life is close to my ideal (0= Entirely disagree; 10= entirely agree)	6.46 (1.812)
Happyre	Overall, I felt happy upon my return from the trip (0= Entirely disagree; 10= entirely agree)	6.48 (1.651)
Islamic	In my personal life, Islamic religion is very important (0= Entirely disagree; 10= entirely agree)	7.36 (1.796)
Satisfiedtrip	After visiting the Holy Places and considering all the positive and negative aspects related to it, how satisfied are you with your visit? (0= Totally dissatisfied; 10= Totally satisfied)	6.19 (1.920)

The results of applying multiple regression analysis to examine the effect of each set of independent variables on life satisfaction or well-being of Hajj pilgrims as tourists to the Holy Places are presented in the following tables:

Life Satisfaction and Well-Being of Hajj Pilgrims as Tourists to the Holy Places (whole sample)

Table 4.2: Life satisfaction determinants (OLS estimation)

Variables	Coefficients (B)	T - Statistic
Cons.	1.379	1.59
P income	0.0749***	3.32
Age	-0.069*	-1.81
Age ²	0.001*	1.91
Health Satisfaction	0.156***	4.12
Personal relationships	0.245***	6.44
Memorable	0.158***	3.52
Challenge	0.145***	3.53
Physical comfort	0.033	1.62
Important	0.056*	1.73
Fulfill	0.076**	1.96
Hbefore1	0.251*	1.93
Adj. R ² = 0.6079		
F (11,484) = 70.76		
Prop > F = 0.0000		
Number of obs. = 496		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The detailed analysis and interpretations of the determinants of life satisfaction and well-being of Hajj pilgrims will be presented herein below.

Table 4.2 shows the multiple regression analysis that examined the factors that affect life satisfaction and well-being of Hajj pilgrims in the Holy Places. It should be noted here that F-statistics value of 70.76 is statistically significant, indicating that the multiple regression model fits the observed data, that is to say it can predict the proportion of variance in the dependent variable (life satisfaction and well-being) of Hajj pilgrims. On the other hand, Adj. R^2 value was 0.6079 indicating that the independent variables included in the multiple regression model can be used to estimate and interpret the changes in life satisfaction and well-being of Hajj pilgrims by about 61.0%. This means that 61.0% of the variations in the dependent variables (life satisfaction) are related to the independent variables included in the model. Therefore, based on the previous Adj. R^2 value the variables included in the multiple regression model can be considered as the best determinants or predictors of life satisfaction and well-being of Hajj pilgrims as tourists in the Holy Places.

Table 4.2 also shows that the “health status” of Hajj pilgrims was a significant factor affecting their life satisfaction and well-being in general with a significant regression coefficient value of 0.156. These findings are supported by the study of Yeniaras and Akarsu (2017) that established that the health of the individual is critical for his life satisfaction and well-being.

The scholars also added that religious people report having happier lives than their irreligious counterparts as a result of having good mental health (Yeniaras and Akarsu, 2017). Propp and Frey (2009) also found that religion contributes to a therapeutic or

preventative effect on the mental health outcomes of the individual, thus supporting the fact that religious people enjoy a better health and ultimately happier life than irreligious people. Koenig et al (2001) also concluded that most studies reported a positive association between religiosity, happiness, pleasure, well-being, contentment, and fulfillment in life. Furthermore, Shields and Price (2005) supported these findings by noting that religious peoples' lives are happier with better health.

The results also revealed that “personal relationships” significantly affect pilgrims' life satisfaction. The regression coefficient of satisfaction of travelers with personal relationships was significant at the confidence level of 1%. It is vital to note that personal relationships are shaped by self-esteem along with several factors that include personalities and practices such as religious beliefs, social trusts, and self-worth; as people with a higher self-esteem are less likely to suffer depression, which in turn leads to a happier life. In support of these findings, Dolan et al. (2008), in their literature review study, established that life satisfaction rating correlates with the behavior of the individual that is responsible for defining personal relationships. The current study found that the regression coefficient of satisfaction of Hajj travelers to personal relationships stands at 0.245. Furthermore, the study findings show that the independent variable of “personal income” positively affects pilgrims' life satisfaction, as its regression coefficient was 0.0749 which was statistically significant at a p-value of 0.001. Similar findings are reported by Diener et al. (2013) from their global surveys on happiness, which provide substantive evidence of increased happiness in the case of individuals living in rich countries as opposed to those living in poor countries. More specifically, their study showed that the shift from survival values to high values is closely related to the change that shapes subjective well-being. Frey and

Stutzer (2002a) also support these findings in their study which indicates a positive association between happiness and personal income. However, their evidence also indicates that the national per capita income has little impact on well-being. In an opposing finding, Vendrik and Woltjer, (2007) established concavity in the income effect on life satisfaction in the U.S.

Another significant variable that was found to affect life satisfaction is “challenge” as its regression coefficient was found to be equal to 0.145 and significant at a p-value of (0.00). This means that a 10% unit change in challenge will increase the pilgrims’ life satisfaction by approximately 1.5%. This result indicated that the ability of travelers to accept the challenge is regarded as a significant factor that has a positive effect on their satisfaction. These findings are backed by Flinchbaugh et al. (2015) who found that hindrance stressors diminish appraisals of life satisfaction and challenge stressors promote life satisfaction.

The study also established that “fulfilling life” significantly and positively affected life satisfaction of pilgrims. Although few studies have been conducted on this relationship, the one by Andrew and Meeks (2018) that focused on old age patients was notable in reporting that the relationship between fulfilled preferences and life satisfaction ($\beta = .420$, $p < .001$) was positive and significant, thus supporting the findings of this study.

Finally, the results indicate that “memorable experiences” significantly and positively affect the pilgrims’ life satisfaction, as its regression coefficient amounted to 0.158, which means that a 10% change in the independent variable “memorable experience” contributes to a change in pilgrims’ life satisfaction by 1.6%. These findings are supported by Hassan (2015) who found in his review study that when experiences are

contrasted with expectations, the travelers feel contented, and are thus, regarded as satisfied. He also stated that satisfaction is determined by the total experiences obtained. Furthermore, he indicated that there is a significant relationship between tourists' expectations on their destination experience and their satisfaction.

“Age” and “age²” are reported to have a significant impact on life satisfaction at a confidence level of 10%. Some studies suggested a U-shaped curve relationship between age and well-being, where well-being feeling is highest at younger and older age, and lowest at middle age, i.e. middle-aged individuals will be the least satisfied with their life. Some studies found that the tips of the arms of the U stand were at 32 and 50 years, or nearest to these two limits. Easterlin (2006) found that the U-shaped relationship does exist but only when age-related differences in the status of life, such as income, health, and employment, are controlled for. However, he says that this graphic representation tells little about the manner in which subjective well-being at young and old age can be compared to that of middle age.

Dolan et al. (2008) reported higher levels of well-being at younger and older age between 32 years and 50 years, while the levels of satisfaction at middle ages between these two ages are at their lowest. Also, Sotgiu et al. (2011) established that older people are happier due to experiences of hard life after having adapted themselves. However, Ngoo et al. (2015) found results negating any significant effects on life satisfaction among the Asian population of their study.

Furthermore, the results of table 4.2 show that the fact that the trip makes one feel important, has a significant impact on life satisfaction. This result agrees with the

conclusion derived by Hayslip Jr et al. (1998) as their study that focused on grand parenting revealed that feeling valued has a positive impact on life satisfaction.

In the following section will examine heterogeneity among the pilgrims' groups from different areas including Asians, Africans, Europe, and Gulf Cooperation Council Hajj pilgrims. The statistical results of examining the influence of these factors on pilgrims of each region.

Table 4.3 below shows a F-statistics value of 47.26, which is statistically significant at the significance level of 0.01, indicating that the regression model fits the data, and estimate the variations in Asian pilgrims' life satisfaction and well-being during the Hajj season. Furthermore, the results showed that an Adj. R^2 value of 0.6408, indicating that the determinants of life satisfaction included in the regression model explain and interpret the changes in the Asian pilgrims' life satisfaction and well-being by around 64.0%. Therefore, these determinants (socioeconomic factors) can be used to forecast the life satisfaction and well-being of Asian pilgrims in the future when they come to the Holy Places to perform Hajj.

Table 4.3: Life satisfaction determinants of Asians pilgrims (OLS estimation)

Variables	Coefficients (B)	T- Statistic
Cons.	1.707*	1.71
P income	0.0716***	2.83
Age	-0.0914**	-2.13
Age ²	0.001**	2.07
Health Satisfaction	0.111**	2.50
Personal relationships	0.164***	3.02
Satisfaction community	0.071*	1.88
Memorable	0.188***	3.65
Sharing memories	0.113**	2.32
Adventure	0.078**	2.02
Fun	0.083**	2.31
Physical comfort	0.0492*	1.89
Perform	0.0868**	2.30
Punished	-0.125***	-3.09
Answers	0.080**	2.10
Adj. R ² =0.6408		
F (14, 349) = 47.26		
Prop > F = 0.0000		
Number of Obs. = 364		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

In general, the results are very similar to the ones obtained from the whole sample. This may be attributed to the fact that the majority of pilgrims of the sample were from Asia who make up approximately 73% of the sample.

Asian pilgrims reported a regression coefficient of 0.111 in terms of their satisfaction with their “health status”. This result is supported by the findings of Koseki and Reid (1995) derived from a study on an Asian population in which they established favorable self-ratings of health status, high life satisfaction levels, and positive health practices among the study participants. Moreover, personal income also showed a positive correlation with the life satisfaction of Asian pilgrims. The positive effect of “personal income” on life satisfaction concluded by our current study was supported by the findings of the study conducted by Ngoo et al. (2015), who concluded that income increases life satisfaction and is a significant factor in four Asian regions, namely: East, South, Central and West, and Southeast Asia.

The results of table 4.3 also revealed that “age” as an independent factor has a negative effect on Asian pilgrims’ satisfaction, meaning that as Asian pilgrims get older, this will have negative effect on their satisfaction, a result which was supported by a regression coefficient of (-0.0914), which is statistically significant at the significance level of 0.05. Our current results disagree with Dolan et al. (2008) and Sotgiu et al. (2011), who found a positive correlation between age and life satisfaction. However, our research result regarding the impact of age on life satisfaction agreed with Kozerska (2015) findings via a literature review of Polish populations that showed that age was a negative predictor of life satisfaction, implying that older people are less satisfied with life.

While the results of table 4.3, found that age² has a positive and significant effect at the (0.05) significant level with a regression coefficient equal to (0.001). This means that age², is considered as a significant factor on pilgrims' life satisfaction.

Furthermore, the results found that “memorable experiences” has a positive effect on Asian pilgrims' life satisfaction as its regression coefficient was 0.188, which is statistically significant at 0.01, which also indicates that a unit change in memorable experience introduced a 0.19% of change in life satisfaction. On the other hand, the results of multiple regression indicate that “personal relationships” has a significant and positive effect on Asian pilgrims. In this case the results indicate that a one unit change in personal relationship will generate a 0.16% change in life satisfaction. Besides, “sharing memories” also has a significant and positive effect on the Asian pilgrims' life satisfaction. Although the independent variables of “fun, feeling of adventure, performing all prayers, and experiencing religion answers questions about the meaning of life” had a minor contribution, all of them showed a positive and significant association with life satisfaction in the case of Asian pilgrims. Courtney (2015) supported these findings by establishing a connection between pilgrims' experience health and well-being benefits, and hence life satisfaction.

In support of these findings, Grine et al. (2015) found that Muslims top priority of avoiding wrongdoings that lead to Allah's punishment, is manifested through commitment to Ramadhan (fasting), prayers, Zakaat and pilgrimage (Hajj), and thus motivates Muslims to cope with life problems. They also found that the consumer behaviour in Islam is based on economic rationalism and fear of Allah. Table 4.3 also shows that the feeling that “religion answers all questions about life”, and that the trip makes the Asian pilgrim feel

physiologically comfortable, and thereby these two factors have a significant positive impact on life satisfaction. In agreement with these findings, Fernandes et al. (2012) noted that pilgrims were highly satisfied and that their revisit intentions were based on favorable experiences with people, landscape, atmosphere, foods, warm hospitality, and special sites in the pilgrimage area. In support of the above, Gesler (1996) found that pilgrims are refreshed in body, mind, and spirit by their religious experiences and adventure. As to prayers, Dilmaghani (2016) found a positive correlation with well-being, and hence life satisfaction, further supporting these results. In terms of experience of religion, Cohen (2002) found dissimilar findings as he found that religious belief, religious practice, religious knowledge, and religious coping did not make significant independent contributions to Jews' and Christians' life satisfaction. Regarding personal relationships, Peiro (2006) agreed with these findings by indicating that married people are happier compared to singles, who were in turn happier than the divorced ones. Besides, feeling part of a community is shown to have a significant impact on life satisfaction in the case of Asian pilgrims. O'Brien and Ayidiya (1991) agreed with these findings by noting that feeling as a part of a community positively affects life satisfaction. In this connection, Cantarero et al. (2007) stated that the extended feelings of a neighborhood intervene and impact life satisfaction.

Regression analysis was also conducted with the model of African pilgrims, who account for 23.0% of the total sample of the current study. Generally speaking the most important determinants of life satisfaction of the African pilgrims include personal relationships and health status. The detailed results are presented herein below.

Table 4.4: Life satisfaction determinants of African pilgrims (OLS estimation)

Variables	Coefficients (B)	T- Statistic
Cons.	0.869	1.47
P income	0.0338	0.64
Health Satisfaction	0.201***	3.38
Personal relationships	0.206***	2.62
Exciting	0.176**	2.56
Challenge	0.155*	1.97
Duaa	0.0397	0.059
Adj. R ² =0.4956		
F (6, 106) = 19.37		
Prop > F = 0.0000		
Number of obs. = 113		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The results of multiple regression analysis in the above table showed that the F-statistics value of 19.37 is statistically significant at the significance level of 0.01, indicating that the regression model fits the observed data, and thus can be used to explain the pilgrims' life satisfaction determinants. Furthermore, the Adj. R² value of 0.4956 indicates the proportion of variance in life satisfaction explained by the predictors included in the regression model, which accounted for approximately 50.0% of the changes in the pilgrims' life satisfaction.

The results of table 4.4 revealed that the variables with a significant positive effect on the life satisfaction of African pilgrims included “health status”, “personal

relationships”, and the “exciting experience they live during Hajj days in the Holy Places”. Table also shows that “feeling challenged” in some way has a significant positive impact on the life satisfaction of African pilgrims. In support of this, Cohen (2002)’s review established a significant association between health status and life satisfaction. Ngamaba and Soni (2017) study agrees with these findings as their multilevel analysis showed a positive association between health status and both happiness and life satisfaction. “Personal income” and “Duaa” had no significant relationship with the satisfaction of African pilgrims in the Holy Places. Backing these findings, Diener et al. (2013) have noted that the society influences the correlation between income and subjective wellbeing more than personal reflection. Most of the other studies have identified minimal correlations.

The European pilgrims account only for 3% of the sample. Table 4.5 presents the regression model results of this group, whose determinants of life satisfaction are shown here.

Table 4.5: Life satisfaction determinants of European pilgrims (OLS estimation)

Variables	Coefficients (B)	T- Statistic
Cons.	-1.625*	-1.92
P income	0.214***	4.6
Marital	0.4998**	4.01
Age ²	0.001***	7.41
Felt	0.5295***	8.30
Quran	0.0982**	2.99
Exciting	0.2066**	3.23
Fulfill	-0.144**	-2.02
Seriously	0.0064	0.08
Educated	-0.1626**	-2.33
Privacy	0.1247**	2.23
Adj. R ²	=0.9639	
F (10, 4)	= 38.38	
Prop > F	= 0.0016	
Number of Obs.	= 15	

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The results of table 4.5 show F-statistics value of 38.38, which is statistically significant at the significance level of 0.01, which indicates that the overall the regression model is statistically significant and can predict the outcome variable (life satisfaction) of Europe pilgrims.

The Adj. R^2 value of 0.9639 indicates that the predictor variables explained a high percentage of variations in life satisfaction which was estimated at 96.4%. This strikingly high value provides evidence that the predictors of life satisfaction of European pilgrims are very important for the European pilgrims' life satisfaction.

The results of table 4.5, show that the most important predictors of European pilgrims' life satisfaction are "feeling good about life shortly after the trip", as its regression coefficient was 0.5295, which is statistically significant at the 0.01 level, indicating that if the pilgrims' feeling changed by 10% unit, which made pilgrims satisfaction to change by approximately 5.3%. The second predictor that was found to have a significant and positive effect on European pilgrims' life satisfaction is the marital status, whose regression coefficient was 0.4998, which is statistically significant at the 0.05 level. For example, a 10% unit change in marital status, will contribute to an increase approximately 5.0% in the pilgrims' life satisfaction.

This regression results also indicated that "personal income" is among the most important predictors, as it had a significant and positive effect on the life satisfaction of European pilgrims. Other significant variables such as "exciting" of the experiment was found to have a positive and significant effect on the European pilgrims' life satisfaction as its regression coefficient was 0.2066, which was statistically significant at the 0.05 level. Furthermore, the study also found that "privacy" is among the predictors that positively and significantly influence the life satisfaction of the European pilgrims. Besides, the results of the regression model showed that reading the "Qur'an" regularly is among the factors that positively affect the life satisfaction of European pilgrims.

Therefore, based on the values of the regression coefficient, it is obvious that the most important factors that positively and significantly affect the European pilgrims are “feeling good” after the trip to the Holy Places, and “marital status”. In addition to this, among the factors that determine the level of life satisfaction of the European pilgrims are “personal income” and “exciting”, which had a positively and significant effect. Likewise, “feeling fulfillment” and “being educated” were significant but negatively affected the life satisfaction of European pilgrims. This means that as the European pilgrims have been highly educated, which will negatively affect their satisfaction and well-being during the Hajj time.

In agreement with these findings, Veenhoven (2012a) noted that at any given point of time, higher income results in higher life satisfaction. However, over the life cycle, it remains similar or unchanged. In the same line, DeJonge et al. (2015) noted that there are reliable results that always indicate that richer people on the average have higher subjective well-being and higher aspiration levels. Plouffe and Tremblay (2017), on the other hand, found a positive significant impact of individual income on life satisfaction. Contrary to these results, these two authors also noted that at country level, income has no significant impact on life satisfaction. Furthermore, Michalos (1991) argues that according to the theory of aspiration levels, happiness is influenced by the gap that exists between aspirations and the achievements of the individual. Greenberg (1995) found from his review study supporting evidence that points to a positive correlation between income and happiness. In this connection, Frey and Stutzer (2002a) found that aspirations rise with income, and in this way the level considered as sufficient by an individual is based on the current level of income, thus leading to more satisfaction. Moreover, this aspect is

supported by Veenhoven (2012a) via a nonlinear relationship between these two variables. However, Diener et al. (2013) noted that a diminishing marginal utility occurs with absolute income.

Plouffe and Tremblay (2017) noted that studies carried out in the United States have indicated higher subjective well-being in the case of religious people and religious nations. This regression analysis revealed that European pilgrims value good feelings about life after the trip that lead to life satisfaction with a variable regression coefficient of 0.5295 which is statistically significant at the 0.01 level. Table also shows that European pilgrims derive life satisfaction from the status of being married with a regression coefficient of 0.4998 significant at the 0.05 significance point. In support of these findings, Greenstein (2016) found a positive correlation between life satisfaction and marriage. Achour et al. (2015), in their study that investigated the impact of Islamic practices such as regular reading of the Qur'an on subjective wellbeing, found a positive and significant correlation between personal well-being and religiosity

With respect to the negatively correlated variables, the study found that the desire to be educated, as well as feeling fulfilled among European pilgrims reduces life satisfaction. These results were found to be at odds with the conclusions of Melin et al. (2003) who found that highly educated people are more satisfied with life. The results of our study regarding the effects of education were also found to disagree with Peterson et al. (2005) who noted that people who report living a fulfilled life in terms of happiness also report higher levels of life satisfaction.

The results of table 4.6 mainly present the regression model that estimates the most important factors determining the life satisfaction of the pilgrims of the Gulf Cooperation Council (GCC).

Table 4.6: Life satisfaction determinants of Gulf Cooperation Council pilgrims (OLS estimation)

Variables	Coefficients (B)	T-Statistic
Cons.	-1.023	-0.63
P income	0.098**	2.06
Age	-0.0025***	-3.07
Age ²	0.193***	2.87
Education	-0.40**	-2.43
Personal relationships	0.191**	2.47
Challenge	0.283***	3.23
Exciting	0.344***	4.82
Perform	-0.200**	-2.29
Ramadan	0.198**	2.24
F (9, 52) = 16.46		
Prop > F = 0.00		
Adj. R ² = 0.6952		
Number of Obs. = 62		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The previous table shows F-statistics value of 16.46 that is statistically significant at the 0.01 level. This F-statistics value indicates that the model of regression analysis for

Gulf pilgrims will fit the data. So, the model is useful in estimating the most important factors that have an effect on life satisfaction of the pilgrims of the Gulf region.

Also, the results show an Adj. R^2 value of 0.6952 which indicates that the regression model has to explain about 69.5% of the variation in the life satisfaction of the pilgrims of the Gulf region during the Hajj days, if other things remained equal.

The estimated regression model for GCC pilgrims indicated that there are some factors positively affect the GCC pilgrims life satisfaction, among which are “exciting”, “challenge”, “personal relationship”, “fasting Ramadan”, “age²”, and “personal income”, while other factors that include education and performing prayers regularly have a negative effect. The most interesting finding is that this study found a negative correlation between education of GCC travelers and their level of satisfaction. In contrast with the findings of Greenstein (2016) based on evidence from a meta-analysis, education is linked to a modest positive impact on life satisfaction. However, the regression coefficient in this study disagreed with the findings of Gasper (2010) who noted that education has a positive correlation with happiness. In the same line, Blanchflower and Oswald (2004) found that each additional level of education has a positive correlation with happiness. This is further supported by Wheatley and Bickerton (2017) who found that people with university degrees are more satisfied than their counterparts who lack these degrees, as higher education correlates positively with increased income. In addition to this, Bukenya et al. (2003) explored the benefits of education and found that it results in better health and greater income and overall subjective well-being. “fasting Ramadan” is also indicated to have a positive impact on life satisfaction. Cohen (2002) supported this finding by indicating that religiosity has a positive impact on life satisfaction.

From the table, it can be seen that “age” showed a negative correlation with life satisfaction. However, the review by Greenstein (2016) did not find an effect of age on life satisfaction but some studies in his review found a U-shaped correlation between age and life satisfaction.

In connection with “performing of prayers”, Hackney and Sanders (2003) found a positive correlation between performing of prayers and life satisfaction, as religious people who engage in prayers believe that God will help them even in challenging circumstances. In this way they become more resilient to challenges leading to higher satisfaction. In a nationwide survey in the U.S., the data by Krause and Hayward (2013) indicated that stronger trust-based prayer beliefs are associated with a greater sense of life satisfaction.

Now, for the whole sample using also a regression analysis model (see table 4.7) we focus on determinations of pilgrims' "Satisfaction with trip" that was the question number (C.6) of the questionnaire. This variable is measured using a scale from "0-10", where "0" means "totally dissatisfied" with the trip – "10" means "totally satisfied".

Table 4.7: Trip Satisfaction determinants (OLS estimation)

Variables	Coefficients (B)	T-Statistic
Cons.	-1.0867	-1.11
P income	0.0856***	2.66
Age	0.0178	0.42
Age ²	-0.00017	-0.36
Personal relationships	0.130***	2.67
Satisfaction community	0.0745**	2.18
Choice	0.127***	3.58
Exciting	0.109***	2.94
Ideal	0.373***	9.17
Happier	0.113***	2.61
Education	0.146**	2.28
Adj. R ² = 0.6595		
F (10, 485) = 96.89		
Prop > F = 0.0000		
Number of Obs. = 496		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The previous table, it can be seen that “life is close to my ideal”, “education”, “personal relationships”, “Satisfaction with community”, “personal income”, “choice of the trip”, “Exciting” and “feeling happy upon return from the trip” are the most important factors affecting satisfaction from the trip. The perception that the pilgrimage is close to an ideal life has a positive impact on the satisfaction with the trip with regression coefficient equal to (0.373) which is significant at the (0.01) level. Besides, the higher the education level, the more satisfied the pilgrims are with the trip. The education level effectiveness on pilgrims’ life satisfaction is supported by the regression coefficient equal to (0.146) which is statistically significant at the (0.05) level. In support of these findings, Battour, et al. (2017) noted that the feeling of being educated or achieving close to an ideal life, significantly and positively affected the trip satisfaction among religious tourists. The results also confirmed that personal relationship is among the factors that have a significant and positive effect on pilgrims’ satisfaction of the trip with regression coefficient equal to (0.130) which is significant at the (0.01) level. In addition to that choice of the trip has a positive and significant effect with regression coefficient equal to (0.127). This means that the success of the trip going on time and returning on time is very important for pilgrims. However, the results found that feeling happier and exciting as well as personal income have positively and significantly affects the trip satisfaction. On the other hand, Jarvis et al. (2016) found that happily married people are more likely to return for a trip than unmarried people as married people are highly satisfied with the trip. However, there are other factors such age and age² don’t have any significant effects on pilgrims’ satisfaction of the trip.

4.2. Calculating the Economic Value: The Marginal Rate of Substitution

Now, we take a step further since we make an attempt of estimating the monetary value that pilgrims give to some spiritual variables that positively affect the life satisfaction. These variables are: “Islamic”, “Quran”, “Ramadan” and “Duaa”.

Therefore, the objective here is to estimate in monetary terms value that pilgrims attach to their Islamic beliefs which constitute their basic characteristics of religiosity. Thus, we estimated a life satisfaction function (see table 4.8) in which the main determinates of life satisfaction are the “adjusted income” of the pilgrims and these four variables related to pilgrims’ belief or religiosity.

Table 4.8: Islamic commitments as determinants of pilgrim’s life satisfaction (OLS estimation)

Variables	Coefficients (B)	T- Statistic
Cons.	1.68***	5.17
Adjusted income	0.0001106***	3.96
Islamic	0.2534772***	5.39
Quran	0.1248928***	4.16
Ramadan	0.1180146***	2.76
Duaa	0.0947622**	2.00
Adj. R ² = 0.3463		
F (5, 490) = 53.45		
Prop > F = 0.0000		
Number of Obs. = 496		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The results of table 4.8 show an Adj. R^2 value of 0.3463 which indicates that the independent variables included in the model can estimate and explain about 34.6% of the changes in pilgrim's satisfaction, after controlling for pilgrim's adjusted income.

From the results of table 4.8 it should be noted that, among the Islamic commitments variables, the "Islamic" variable, which refers to the religiosity of the Hajj pilgrim or his general Islamic beliefs, is the most predictive factor of pilgrims' life satisfaction, which means that as pilgrims' Islamic beliefs become very strong, they feel more satisfied with life. This result was quantified by a regression coefficient of 0.2534772 which is positive and statistically significant at the level of 0.01. The second predictive factor or variable that has a significant positive effect on pilgrims' life satisfaction, at the level of 0.01, is reading Quran whose regression coefficient was found to be 0.1248928. Then comes Ramadan which was found to have a positive and significant effect on the pilgrims' life satisfaction. Finally, Duaa was found to have a positive and significant effect on pilgrim's life satisfaction but with less effect compared to the other 3 Islamic obligatory variables, as its regression coefficient was only 0.0947622.

Thus, in conclusion it can be noted that all the four Islamic obligatory variables have a significant correlation with the pilgrims' life satisfaction, which means that these variables can be used as predictors of pilgrims' life satisfaction.

Finally, regarding the effect of adjusted income, the regression analysis model conducted in table 4.8 indicates that the regression coefficient of additional income which was found to be (0.0001106), is one of the determinants of pilgrims' life satisfaction. This coefficient is a low one but has a positive effect on the pilgrims' life satisfaction. This

means that the high adjusted income is more linearly related to the life satisfaction of the Hajj pilgrims.

Now, using the formula introduced with the equation (2.19) (see chapter two), it is possible to obtain the economic value of a discrete change in these spiritual variables through the calculating of the marginal rate of substitution between each one of them and the adjusted income, i.e. we are obtaining how much a pilgrim is willing to pay for a discrete change in one of these variables that increase his/her wellbeing while maintaining his original life satisfaction level.

The results of the calculation of MRS for the four Islamic commitments variables are presented in table 4.9 herein below:

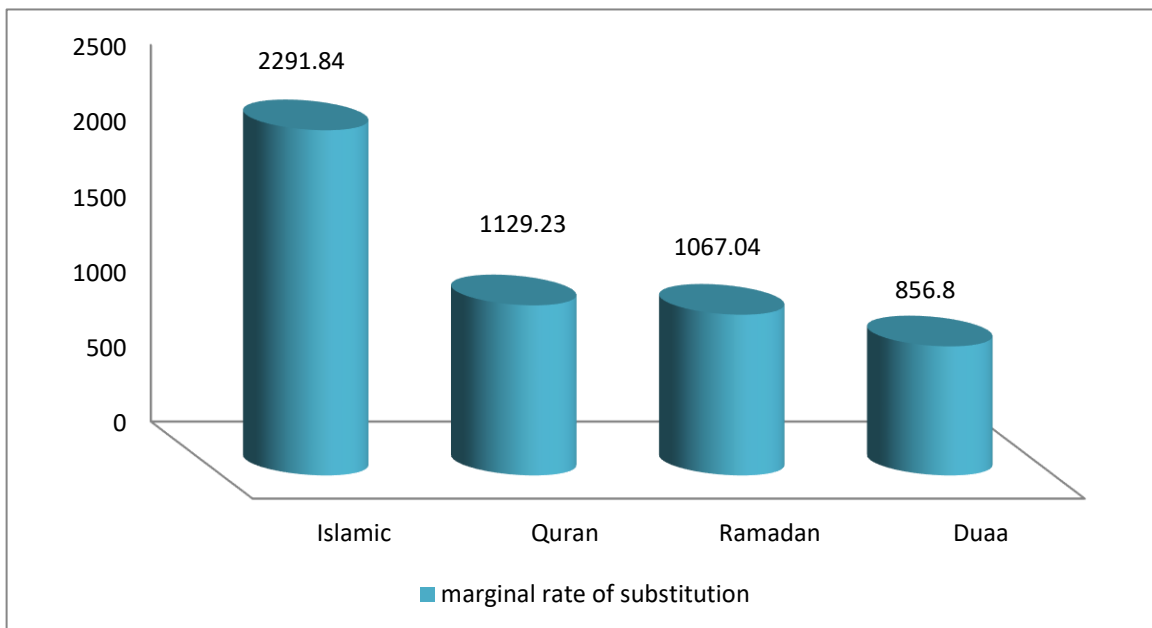
Table 4.9: Marginal rate of substitution for the four Islamic obligations used in the model of life satisfaction.

Islamic obligations	Islamic obligation coefficients	AD INCOME Coefficient	Marginal Rate of Substitution (USD)
Islamic	0.2534772	0.0001106	2291.84
Quran	0.1248928	0.0001106	1129.23
Ramadan	0.1180146	0.0001106	1067.04
Duaa	0.0947622	0.0001106	856.80

Here MRS is used to estimate how much the pilgrim is willing to pay for a unit increase in fulfilling each one of the four Islamic commitments of Islamic beliefs, Quran, Ramadan and Duaa. The results of this study show that pilgrims are willing to pay more for their Islamic beliefs, followed by Quran, then Ramadan and finally Duaa, in this order.

The results of table 4.9 above show the monetary value that pilgrims attach to these four Islamic commitments. As all of them have positive coefficients, it means that a unitary increase in these variables increases the pilgrims' subjective wellbeing or life satisfaction. For example, in the case of Islamic beliefs, each additional level of this variable increases pilgrims SWB or LS to an equivalent of USD 2.291 while for the rest of the variables of Quran, Ramadan and Duaa the increase in SWB or LS rises to an equivalent of 1129.23\$, 1067\$, 856.8\$, respectively. Figure 4.1 below presents these findings.

Figure.4.1: Display the marginal rate of substitution for the four Islamic commitments.



As all of these obligations call for religious commitment, these results agree with Grine, et al. (2015) who noted that the five pillars of Islam that are considered obligatory and include creed, daily prayers, zakah, fasting and pilgrimage to Mecca at least once in a lifetime, positively impact life satisfaction. Likewise, Husser and Fernandez (2015) noted that the practice of religion correlates with happiness as a social support. In general, as Park and Folkman (1997) noted, religious perspectives give causal explanation and

individual significance, as well as survival and outcome. A greater support of the above result of this study comes from Abu Raiya and Pargament (2011) as well as Abu Rayya et al. (2016) who found from their investigation of Islamic religiosity, that Islamic religious practice has a positive association with life satisfaction. However, among the few studies that were in variance with these findings, Ten Kate et al. (2017) found that Muslims display significantly lower life satisfaction than the non-religious, which is related to underprivileged social position and have nothing to do with intra-religious factors of believing and belonging.

4.3. Addressing Heterogeneity: Latent Class Analysis

Introduction

Due to the fact that Hajj pilgrimage draws huge masses of people from different countries with vastly different features, a high degree of heterogeneity may be expected due to the Hajj pilgrimage different demographic characteristics and socio-economic backgrounds. Such heterogeneity is addressed in this thesis using a latent class analysis (LCA) model that takes into account these demographic characteristics and socio-economic background.

LCA is usually used to analyse the relationships among the data in cases where some variables are hidden or unobserved. Analysis in these cases allows the segmentation of the original dataset into a number of exhaustive subsets or latent classes. A suitable statistics package used in these instances is Latent Gold software package (Haughton et al., 2009).

In this study LCA is introduced in order to demonstrate its use in addressing the variables associated with different demographic and socio-economic characteristics of the

participant hajj pilgrims. LCA is applied to collect empirical data from the whole Hajj pilgrims sample investigated in the year 2017. Following the approach of Porcu and Giambona (2017), the data were used to measure the subtle effects of such demographic and socio-economic characteristics on life satisfaction and subjective well-being.

Use of Latent Gold Package

For the sake of testing the utility of the Latent Gold 5.1 software package in making clusters, 5 questions were chosen from the religiosity section of the questionnaire as follows:

1. In my personal life, Islamic religion is very important. (Question 38 of the Islamic belief section of the questionnaire).
2. Performing Hajj is one of my main priorities. (Question 42 of the Islamic belief section of the questionnaire).
3. I always perform all my prayers on time. (Question 45 of the Islamic practice section of the questionnaire).
4. I perform the obligation of Zakat. (Question 47 of the Islamic practice section of the questionnaire).
5. I experience pleasure in seeing others following Islamic teachings. (Question 51 of the Islamic experience section of the questionnaire).

These questions were then introduced to the Latent Gold program. 5 classifications or models were chosen to distinguish which class of pilgrims has the strongest degree of Islamic religiosity, the results of which are shown in table 4.10 below. The best model was found to be model 3 because the Bayesian Information Criterion (BIC) is the lowest relative to the other models, in addition to the Akaike information criteria (AIC) which is also very

low compared to the other models. This indicates that the resulting model provides an adequate fit to the data.

Table 4.10: Results of the application of the Latent Gold program.

		LL	BIC(LL)	AIC (LL)	Npar	L ²	df	p-value	Class.Err.
Model1	1-Cluster	-4714.8277	9721.3645	9523.6554	47	9379.3846	449	1.3e-1644	0.0000
Model2	2-Cluster	-4336.9198	9300.7038	8875.8396	101	8614.5687	395	4.6e-1524	0.0442
Model3	3-Cluster	-4160.4243	9282.8679	8630.8487	155	8261.5778	341	1.6e-1487	0.0655
Model4	4-Cluster	-4086.8481	9479.8706	8591.6962	209	8114.4254	287	4.5e-1495	0.1049
Model5	5-Cluster	-4051.3040	9734.9375	8628.6080	263	8043.3371	233	1.7e-1520	0.1009

The results of table 4.11 show the perceptions of the respondent pilgrims in the current study about the main variables that measure their attitudes towards their degree of religiosity. Latent class models were used to identify the classes of respondent pilgrims towards these variables.

From the results in table 4.11, it could be noticed the participants of cluster 1, comprised about 48.3% of total respondents in the current study, while the participants in Cluster 2, constituted about 33.1%, whereas the participants in Cluster 3, represent 18.6% of the total participants which is the less group of pilgrims among clusters.

The results showed that, when respondent pilgrims were asked to indicate their attitudes regarding the statement of “In my personal life, Islamic religion is very important”, it was noted that more than 80% of the respondents in class 1 agreed that Islamic religion is very important in their personal life, as most of their responses to this variable were in the range of 6-8 on the scale. In class 2 around 88.0% of the respondents strongly agreed that Islamic religion is very important in their life, as their responses were in the range of 8-10. In class 3 around 75.0% of the respondents moderately believed that their Islamic religion is very important, as their responses were in the range of 4-6.

When the participants indicated their attitudes regarding the variable of “Performing Hajj is one of my main priorities”, it was noted that round 81% of the participants in class 1 confirmed their belief that performing Hajj is one of their main priorities. In class 2, the majority 96% of the respondents confirmed that performing Hajj is one of their priorities, as their responses were in the range of 8-10 on the scale. In class 3 around 78.0% of the respondents agreed that performing Hajj is among their priorities, as their responses were in the range of 5-7.

When the participant pilgrims were asked about their attitudes with regard to the variable concerning whether they always performed their prayers on time, the results show that about 80% of them, in class 1, had responses in the range of 7-9, which indicates that most pilgrims in this class always performed their prayers on time. In class 2 the responses of around 91% of the participant pilgrims were in the range of 8-10, which indicates that the participants in this class are more committed to perform their prayers on time. However, in class 3 around 70.0% of the participant pilgrims performed their prayers on time.

Further to this analysis, the participants’ attitudes regarding performing the obligation of Zakat as one of the main obligations that Muslims must perform, it was found that the answer of around 77.0% of them in class 1 were in the range of 7-9, which means that the majority in this class agreed that they perform the obligation of Zakat. In class 2, about 94% of the participants strongly agreed that they perform the obligation of Zakat. However, around 66% of the participants entirely agreed that they perform the obligation of Zakat, while the responses of about 69% of them in class 3 were in the range of 5-7.

In summary, comparison of the 3 classes reveals that respondents of class 2 are more obliged to perform their Zakat.

The results of table 4.11 show that the participants' responses, expressed in probabilities, indicate that the participant pilgrims attitude in class 1 in relation to the variable of "I experience pleasure in seeing others following Islamic teachings" show that the responses of the majority of the participants were in the range of 6-8. In total about 76.0% of the participant pilgrims said that they experience pleasure in seeing others follow Islamic teachings. In class 2 around 85% agreed that they experience pleasure in seeing the others follow Islamic teachings, as the majority of their responses were in the range of 7-10. In class 3 around 65% of the participants fairly feel that they experience pleasure when they see others follow Islamic teachings.

Based on the above class analysis, it is obvious that class 2 is the best class that comprises more respondents committed to Islamic obligations, which indicates that pilgrims in this class are more satisfied with Islamic religion, because they perform their Islamic obligations, as they believe more than others that Islamic religion is very important, and they consider that performing Hajj is one of their main priorities, in addition to the fact that they always perform all their prayers on time, and perform the obligation of Zakat.

Thus, it can be concluded that the participants of class 2 have a "strong" degree of religiosity because their responses on the scale were very high as they were in the range of 8-10. while the participants of class 1 may be considered to have "medium" degree of religiosity, as their responses were in the range of 6-8, and the pilgrims in class 3 have "poor" degree of religiosity as most of their responses were in the range of 4-6, or 5-7.

Table 4.11: Class conditional outcome probabilities.

Class size		Class1	Class2	Class3
		0.4833	0.3307	0.1860
Question	Response	Class1	Class2	Class3
In my personal life, Islamic religion is very important	0 Entirely Disagree	0	0	0.0107
	1	0	0	0.0107
	2	0.0041	0	0.0537
	3	0	0	0.0644
	4	0.0001	0.0061	0.1824
	5	0.0488	0.0002	0.2276
	6	0.2003	0.0084	0.3355
	7	0.3222	0.0983	0.0955
	8	0.3082	0.2349	0.0182
	9	0.101	0.2997	0.0006
	10 Entirely Agree	0.0152	0.3524	0.0006
Performing Hajj is one of my main priorities	1	0.0000	0.0000	0.0107
	2	0.0000	0.0000	0.0107
	3	0.0000	0.0000	0.0752
	4	0.0001	0.0001	0.1396
	5	0.0510	0.0068	0.2424
	6	0.1206	0.0116	0.3006
	7	0.2971	0.0214	0.1899
	8	0.3820	0.1559	0.0205
	9	0.1311	0.2738	0.0006
		10 Entirely Agree	0.0182	0.5304
I always perform all my prayers on time	1	0.0000	0.0000	0.0430
	2	0.0000	0.0000	0.0215
	3	0.0000	0.0000	0.0537
	4	0.0000	0.0061	0.0537
	5	0.0058	0.0072	0.2303
	6	0.0634	0.0005	0.2860
	7	0.2236	0.0717	0.1842
	8	0.3482	0.2802	0.1132
	9	0.2663	0.2079	0.0137
		10 Entirely Agree	0.0927	0.4266
I perform the obligation of Zakat	0 Entirely Disagree	0.0000	0.0000	0.0107
	1	0.0000	0.0000	0.0430
	2	0.0082	0.0000	0.0323
	3	0.0072	0.0067	0.0769
	4	0.0123	0.0001	0.0756
	5	0.0204	0.0114	0.2171
	6	0.1093	0.0081	0.3038
	7	0.2737	0.0319	0.1676
	8	0.3165	0.1086	0.0597
	9	0.1813	0.1756	0.0123
	10 Entirely Agree	0.0711	0.6575	0.0010
I experience pleasure in seeing others following Islamic teachings	1	0.0000	0.0000	0.0215
	2	0.0000	0.0000	0.0214
	3	0.0046	0.0001	0.1384
	4	0.0334	0.0158	0.2185
	5	0.1167	0.0337	0.2929

	6	0.2416	0.0993	0.1741
	7	0.2966	0.1739	0.0706
	8	0.2192	0.1738	0.0460
	9	0.0701	0.2396	0.0157
	10 Entirely Agree	0.0178	0.2638	0.0010

Thereafter some covariates (age, gender, family size, personal income, married dummy, have you visited Holy Places before) were chosen from the questionnaire and the results are shown in the table 4.12 below. The 3 clusters were compared in order to detect the cluster which has the best degree of Islamic religiosity among pilgrims.

The relationship between the pilgrims' satisfaction and well-being, and some of the demographic factors and personal information including age, gender, family size, personal income, marital status, and performing Hajj before, were tested based on the clusters chosen from the best model. The results of the test show that the model is efficient in estimating the relationship, as the P-value of the model for the 3 clusters is significant at the 0.01 level. Furthermore, the results show that age has a significant effect on life satisfaction and well-being of the pilgrims as the P-value is 0.00088, which is significant at the 0.01 level. Age was found to have a positive effect in cluster 3, while it has a negative effect in both cluster 1, and cluster 2. Gender is also significant at the 0.05 level, as its P-value is 0.013. In fact, gender was found to have a positive effect on clusters 2, and 3, but it has a negative effect on life satisfaction for the participants of cluster 1. One cannot infer from the results a strong role for the family size on the pilgrims' satisfaction and well-being as its P-value is 0.88, while personal income was found to have a significant and positive correlation with satisfaction and well-being for cluster 1, and 2, but it correlates negatively in cluster 3. On the other hand, the results show that, both marital status, and performing

Hajj before have no significant effect on the pilgrims’ satisfaction and well-being in all the 3 clusters.

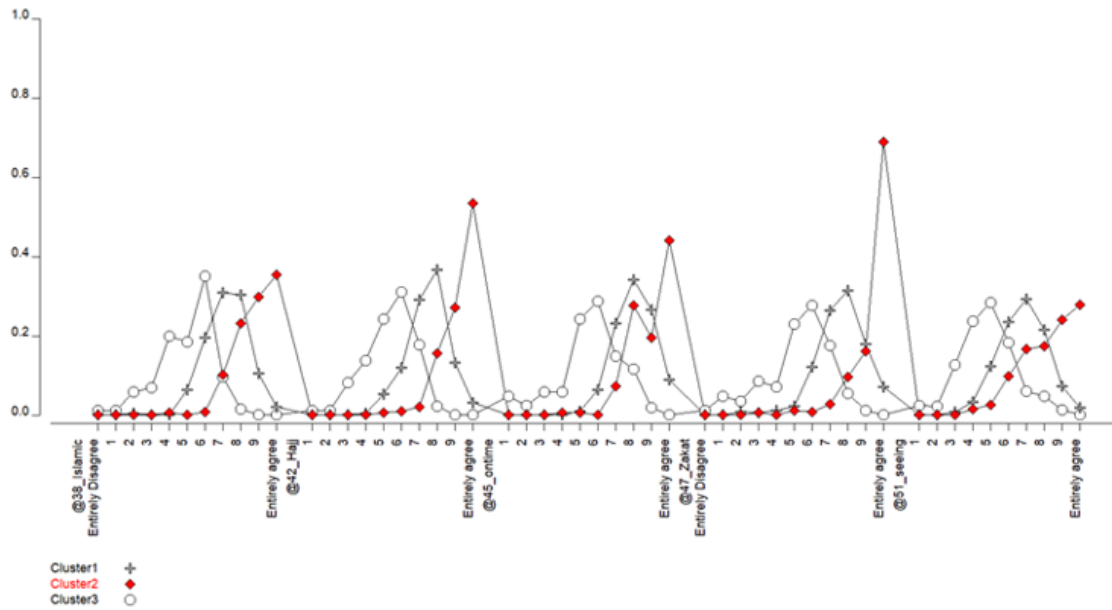
Therefore, we conclude from Wald test that the non-significant P-values imply that the indicators, such as family size, marital status, and performing Hajj before, cannot be used to discriminate between clusters on statistically significance basis.

Table 4.12: Regression analysis that presents the best model (3 clusters) with covariates.

Model for Clusters								
Intercept	Cluster1	z-value	Cluster2	z-value	Cluster3	z-value	Wald	p-value
Covariates	Cluster1	z-value	Cluster2	z-value	Cluster3	z-value	Wald	p-value
Age								
	-0,0196	-1.9678	-0.0279	-2.4667	0.0475	3.7520	14.0773	0.00088
Gender1								
	-0.5467	-2.9203	0.2098	0.8870	0.3369	1.4246	8.6138	0.013
Family size								
	0.0215	0.5019	-0.0063	-0.1326	-0.0151	-0.2645	0.2528	0.88
Pincome1								
	0.0002	4.3924	0.0003	5.8758	-0.0006	-5.2737	38.7380	3.9e-9
M_married								
	0.2093	1.1112	0.1721	0.8160	-0.3815	-1.6204	2.7211	0.26
H before1								
	-0.1533	-0.6947	0.0569	0,2407	0.0964	0.2998	0.5367	0.76

The graph in figure 4.2 shows that cluster 2 (red dots) is the “best” cluster because most of the answers of the pilgrims were in the range of 8-10 (entirely agree), which means that the pilgrims of cluster 2 have the strongest degree of Islamic religiosity because most of their answers are high.

Figure 4.2: Distinction among 3 clusters.



Thereafter the data of the best model (3- clusters model) were imported to STATA program and a regression analysis was performed. Then this regression result is compared with the previous regression which was done before (also using STATA package). These results regression of life satisfaction and trip satisfaction for the whole sample and for each one of the three clusters.

The results of regression analysis for model 3 and the three clusters are presented in the following tables. Table 4.13 presents the regression analysis for the best model of the whole sample. The results of this table show the factors that influence the pilgrims’ life satisfaction, when the regression analysis of model 3 is applied. The results show that there are some factors that have positive effects on pilgrims’ life satisfaction, while others have no effect. Among the factors that have a positive effect on life satisfaction, the results show that “personal relationship”, as an independent variable, is the most important factor that has an effect on the pilgrims’ life satisfaction, as its regression coefficient is 0.245, which

is statistically significant at the significance level of 0.01. The results also show that the second factor that has a positive effect on life satisfaction is “memorable”, as its regression coefficient is 0.158, which is statistically significant at the significance level of 0.01. Further, the results also show that the third factor that positively affects the pilgrims’ life satisfaction is the pilgrims’ health status, as its regression coefficient is 0.156, which is significant at the significance level of 0.01. This means that those pilgrims, who have good health status, will be able to perform their hajj activities successfully. The fourth factor that has a positive influence on life satisfaction is “challenge” which has a regression coefficient of 0.1448, which is statistically significant at the significance level of 0.01. The fifth factor that has a significant positive effect on life satisfaction is “personal income” which has a regression coefficient of 0.0749, which is statistically significant at the significance level of 0.01.

The results of the table also show that Adj. R^2 value at 0.6079 indicates that the independent variables included in the regression model have an explanatory power of about 61.0% to interpret the changes in the pilgrims’ life satisfaction, which means that these factors are responsible of the variations that happen in the life satisfaction of the pilgrims while performing their Hajj.

From the results of this section one can conclude that when latent class analysis is used, the results agree to a very highly degree with the conclusions derived from the first part of the regression analysis, when examining the socioeconomic factors that have an influence on the pilgrims’ life satisfaction. The main similarity was expressed by the value of Adj. R^2 , which in both regression analyses is 0.6079. Moreover, the same factors that influence the pilgrims’ life satisfaction were present in the two models of regression

analysis, albeit sometimes different in the level of significance. These main factors were found to influence the pilgrims' life satisfaction in both models of regression which include: health status, personal relationship, personal income, challenge, and memorable experiences.

Table 4.13: Regression analysis for the best model of the whole sample which aims to examine the independent variables that influence life satisfaction.

Variables	Coefficients (B)	T-test
Cons.	1.379	1.59
P income	0.0749***	3.32
Age	-0.0694*	-1.81
Age ²	0.000828*	1.91
Health Staisfaction	0.156***	4.12
Personal relationships	0.245***	6.44
Memorable	0.158***	3.52
Challenge	0.1448***	3.53
Physical comfort	0.0334	1.62
Important	-0.0559*	1.73
Fulfill	0.0760**	1.96
Hbefore1	0.251*	1.93
Adj. R ² = 0.6079		
F (11, 484) = 70.76		
Prop > F = 0.000		
Number of Obs. = 496		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

Based on the best model that was chosen, and which resulted in 3 clusters (1, 2, and 3), the following tables will present the results of regression analysis for each one of those clusters.

Based on the results of table 4.14, which resulted from the analysis of cluster 1 (medium degree of religiosity), that aimed to examine the socioeconomic factors that influence pilgrims' life satisfaction, the following was noted:

The results of table 4.14 show that 4 factors that have significant and positive effects on the pilgrims' life satisfaction, in cluster 1 (medium degree of religiosity). Among these factors that have positive effects on the pilgrims' life satisfaction, the results show that "personal relationships" is the most important factor, as its regression coefficient is 0.250, which is statistically significant at the significance level of 0.01. The second factor that has a positive effect on life satisfaction is the "health satisfaction" of the pilgrims, as its regression coefficient is 0.236, which is statistically significant at the significance level of 0.01. The third factor that also has a positive and significant effect on life satisfaction is "memorable", as its regression coefficient is 0.158, which is statistically significant at the significance level of 0.05. Finally, physical comfort has a significant and positive effect on life satisfaction, although its regression coefficient is only 0.0615.

Regarding the other factors included in the regression analysis of cluster 1 (medium degree of religiosity) (Age, age², important and fulfill), results show that they have no statistically significant effects on the life satisfaction of the pilgrims. The statistical evidence of the P-values of the regression coefficient does not support any effect for these factors on life satisfaction, as all values were greater than the 0.05 level of significance.

Furthermore, the results of table 4.14 revealed F-value of 18.27, which is statistically significant indicating that the regression model applied in cluster 1 can be used to measure the effects of the independent variables on life satisfaction. On the other hand, Adj. R² value is 0.4798 showing that the independent factors have contributed to interpreting the change in life satisfaction by about 48.0%.

Furthermore, when the results of the regression analysis of cluster 1 (medium degree of religiosity) are compared, they also reveal that there are same factors that significantly influence life satisfaction such as health status, personal relationship, and memorable, which are also found to be significantly important as influencing factors in the first regression done before in the regression chapter, or when STATA was used here in the current analysis.

Table 4.14: Regression analysis for cluster 1 (medium degree of religiosity) which examines the independent variables that influence life satisfaction.

Variables	Coefficients (B)	T-test
Cons.	0.63458	0.45
P income	0.0626*	1.78
Age	-0.0624	-1.06
Age ²	0.000859	1.28
Health Satisfaction	0.23579***	3.55
Personal relationships	0.2503395***	3.91
Memorable	0.1582049**	2.27
challenge	0.10500*	1.65
Physical comfort	0.0615**	2.01

Important	0.0544	1.46
fulfill	0.05796	0.84
Hbefore1	0.3524*	1.75
Adj. R ²	=0.4798	
F (11, 195)	= 18.27	
Prop > F	= 0.000	
Number of Obs.	= 207	

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The regression analysis in pilgrims belonging to cluster 2 (strong degree of religiosity) revealed noticeable results, as shown in table 4.15. The results can be analysed as follows:

The results of table 4.15 detected 4 factors that have significant and positive effects on the pilgrims' life satisfaction, when the regression analysis is applied to cluster 2 (strong degree of religiosity). Among these factors that have positive effects on life satisfaction, "personal relationships" is the most important factor that has positive and significant effects on pilgrims' life satisfaction, as its regression coefficient is 0.281, which is statistically significant at the significance level of 0.01. The second factor that has a positive effect on the pilgrims' life satisfaction is the "health satisfaction" of the pilgrims, as its regression coefficient is 0.164, which is statistically significant at the significance level of 0.05. The third factor that has also a positive and significant effect on the pilgrims' life satisfaction is "personal income" as its regression coefficient is 0.0979, which is statistically significant at the significance level of 0.01. Finally, the results revealed that Age² is among the factors that have a significant and positive effect on the pilgrims' life

satisfaction, as its regression coefficient is 0.0013, which is statistically significant at the significance level of 0.1.

Regarding age, the most important relationship with subjective well-being was found by Frijters and Beatton (2012) who used large datasets from the UK, Australia and Germany and found very little change in subjective well-being between 20 and 50 years, as well as Clark (2007) and Baird et al. (2010) who also used large databases from the UK and found a U-shaped effect of age on subjective well-being also between 20 and 50 years.

As to the other factors included in the regression analysis for cluster 2 (strong degree of religiosity) (challenge, important, Physical comfort, fulfill, and performing Hajj before), the results did not show any statistically significant effects of these factors on the life satisfaction of the pilgrims, as all the P-values of the regression coefficient were greater than the significance level of 0.05.

The results of table 4.15 also show that Adj. R^2 is 0.3146, which indicates that the factors included in the model interpret the changes in the life satisfaction of the pilgrims by about 31.5%.

Table 4.15: Regression analysis of cluster 2 (strong degree of religiosity) which examines the independent variables that influence life satisfaction.

Variables	Coefficients (B)	T-test
Cons.	0.63458	0.45
P income	0.0979***	2.69
Age	-0.12096*	-1.73
Age ²	0.0013785*	1.72
Health Satisfaction	0.1644**	2.30
Personal relationships	0.281996***	3.92
Memorable	0.11191	1.55
Challenge	0.044767	0.61
Physical comfort	-0.01573	-0.49
Important	-0.0384	-0.65
Fulfill	0.0762	1.23
Hbefore1	0.01866	0.09
Adj. R ² = 0.3146		
F (11, 139) = 7.26		
Prop > F = 0.000		
Number of Obs. = 151		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

Furthermore, when the regression analysis for cluster 3 (weak degree of religiosity) was conducted, the results revealed some factors that significantly influence pilgrims' life

satisfaction, which are presented in table 4.16, after which the analysis of the results derived from cluster 3 (weak degree of religiosity) are presented.

The results of table 4.16 show that there are only two factors that have significant and positive effects on the pilgrims' life satisfaction when the regression analysis for cluster 3 (weak degree of religiosity) is applied. The first factor that has a positive effect on the pilgrims' life satisfaction is "challenge", as its regression coefficient is 0.2728855, which is statistically significant at the significance level of 0.01. The second factor that has a positive effect on life satisfaction is "personal income", as its regression coefficient is 0.158265, which is statistically significant at the significance level of 0.05. Whereas the results revealed that the other factors included in the model have no significant effects on the pilgrims' life satisfaction.

The results of table 4.16 also revealed that Adj. R^2 value is 0.4571, which means that the independent variables included in the model, can accurately estimate the changes in life satisfaction by about 46.0%.

Therefore, based on the analysis of the 3 clusters, although there seems to be some similarities in the estimated factors that influence the pilgrims' life satisfaction, heterogeneity exists between the 3 clusters in the ratio of the overall influence of the independent factors on life satisfaction, which was measured by Adj. R^2 , as presented in tables 4.14, 4.15, and 4.16 with values of 48.0%, 31.0% and 46.0% respectively. This result of heterogeneity agrees with the conclusion made by Astrid et al. (2006) as the results of estimated latent class model provide evidence of significant heterogeneity in park choice behaviour in the older age group.

Table 4.16: Regression analysis of cluster 3 (weak degree of religiosity) which examines the independent variables that influence the pilgrims' life satisfaction.

Variables	Coefficients (B)	T-test
Cons.	0.0831247	0.04
P income	0.158265**	2.38
Age	-0.0119	-0.13
Age ²	0.001786	0.17
Health Satisfaction	0.1223696	1.41
Personal relationships	0.0993374	1.12
Memorable	0.114188	0.91
Challenge	0.2728855***	2.63
Physical comfort	0.01502022	0.22
Important	0.0941917	1.23
Fulfill	0.0941544	1.04
Hbefore1	0.1887458	0.52
Adj. R ² = 0.4571		
F (11, 101) = 9.57		
Prop > F = 0.000		
Number of Obs. = 113		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

Addressing the Trip Satisfaction Heterogeneity

Now also, using the classification from the LCA, we proceed to analyse the determinants of “trip satisfaction” in each of the three classes. Indeed, in the last question of the questionnaire pilgrims were asked about the overall satisfaction with the trip using

the scale from 0 (totally dissatisfied) to 10 (totally satisfied). By estimating these three models we again address the issue of heterogeneity, but in this case referred to as “trip satisfaction”

The results of table 4.17 show the regression analysis that aimed to detect the factors that mostly influence the pilgrims’ satisfaction of the trip. It was noticed that most factors have an effect on the pilgrims’ satisfaction of the trip, except two, which are age and age ², which do not have any significant effects on the pilgrims’ satisfaction of the trip.

Based on values of the regression coefficients, the results revealed that the most important factor that influences the pilgrims’ satisfaction of the trip is “ideal” as its regression coefficient is 0.3725, which is statistically significant at the significance level of 0.01. The second factor that was detected to have a positive and significant effect on the pilgrims’ satisfaction of the trip is “education” as its regression coefficient is 0.146, while the third factor is “personal relationships” which has a regression coefficient of 0.130, which is also statistically significant at the significance level of 0.01. The fourth factor that was found to have an effect on satisfaction of the trip is “accurate choice of the trip” whose regression coefficient is 0.1268, which is significant at the significance level of 0.01. Furthermore, the results show that “feeling happy upon return from the trip” is among the factors that positively influence satisfaction of the trip as its regression coefficient is 0.1130786, which is also significant at the significance level of 0.01 (P-value =0.009). The sixth factor that was found to have a positive and significant effect on satisfaction of the trip is “satisfaction community” because its regression coefficient is 0.07449, which is statistically significant at the significance level of 0.05.

The results of table 4.17 also revealed that Adj. R² value is 0.6595, which indicates that the factors included in the model have the power to estimate and interpret the changes on satisfaction of the trip by about 66.0%.

Thus, if we go back to the regression analysis of the effect of the factors on pilgrims' satisfaction of the trip, which we have done before in this chapter (regression section), we find results similar to the results of this section in which the latent class analysis is applied. Thus, different statistical methods can be applied in data analysis to give similar results in the case of satisfaction of the trip.

Table 4.17: Regression analysis which aims to examine the independent factors that influence the satisfaction of the trip for the whole sample.

Variables	Coefficients (B)	T-test
Cons.	-1.086659	-1.11
P income	0.0856342***	2.66
Age	0.0178255	0.42
Age ²	-0.0001702	-0.36
Personal relationships	0.1302949***	2.67
Satisfaction with community	0.0744903**	2.18
E choice	0.126826***	3.58
Exciting	0.1092805***	2.94
Ideal	0.3725***	9.17
Happier	0.1130786***	2.61
Education	0.1460144**	2.28
Adj. R ²	=0.6595	

$F(10, 485) = 96.85$

Prop > F = 0.000

Number of Obs. = 496

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

Now, we proceed to analyse the factors that influence the travellers' satisfaction of the trip for each class.

The results of table 4.18 show the regression analysis that aim to detect the factors that mostly influence the pilgrims' satisfaction of the trip in the case of cluster 1 (medium degree of religiosity). It can be seen here that most of the factors have significant effects on the pilgrims' satisfaction of the trip, except two factors, which are personal income and accurate choice.

The most remarkable results found here concern the fact that age, and age², are statistically significant in influencing the pilgrim's satisfaction of the trip, albeit with different signs. Thus, the results revealed that age has a positive and significant effect, while age² has a negative and significant effect. Furthermore, results show that the value of Adj. R² is 0.5544, which indicates that the factors included in the model of cluster 1 has a power of about 55.4% to interpret the change in pilgrims' satisfaction of the trip.

Table 4.18: Regression analysis which aims to examine the independent factors that influence the satisfaction of the trip for cluster 1 (medium degree of religiosity).

Variables	Coefficients (B)	T-test
Cons.	-4.341286***	-2.84
P income	0.0568875	1.23
Age	0.1438761**	2.34
Age ²	-0.0015991**	-2.34
Personal relationship	0.1802403**	2.35
Satisfaction with community	0.1222476**	2.26
E choice	0.0770386	1.64
Exciting	0.1157908*	1.90
Ideal	0.03274589***	5.26
Happier	0.1361754**	2.05
Education	0.2830846***	3.21
Adj. R ²	=0.5544	
F (10, 196)	= 26.63	
Prop > F	= 0.000	
Number of Obs.	= 207	

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

For cluster 2 (strong degree of religiosity) the main findings are presented in table 4.19. That shows the factors that have significant effects on the pilgrims' satisfaction of the trip. The first factor is "ideal", whose regression coefficient is 0.280, which is statistically significant at the significance level of 0.01. This means that the factor of the

“ideal” has a significant and positive influence on the pilgrims’ satisfaction of the trip. The second factor is the “accurate choice of the trip”, which has a positive effect on the pilgrims’ satisfaction of the trip, as its regression coefficient is pilgrims’0.132675, which is statistically significant at the significance level of 0.05. The variables age, age² and happier also have a significant relationship with life satisfaction, albeit with different signs.

Here also the effect of age on subjective well-being found by Frijters and Beaton (2012) in UK, Australia and Germany, as well as Clark (2007) and Baird et al. (2010) in UK, in which the three studies found a U-shaped effect of age on subjective well-being between 20 and 50 years, is very important.

The results of table 4.19 also show that the value of Adj. R² is 0.3765, which indicates that the factors included in the model have a power of about 37.7% to estimate the change in the pilgrims’ satisfaction of the trip.

Table 4.19: Regression analysis which aims to examine the independent factors that influence the pilgrims' satisfaction of the trip for cluster 2 (strong degree of religiosity).

Variables	Coefficients (B)	T-test
Cons.	4.100695**	2.39
P income	0.070256	1.43
Age	-0.1269514*	-1.67
Age ²	0.0014637*	1.70
Personal relationships	0.0813544	0.98
Satisfaction with community	0.0761772	1.60
E choice	0.1326754**	2.14
Exciting	0.0024592	0.04
Ideal	0.2804223***	3.98
Happier	0.1437288*	1.80
Education	0.0623855	0.60
Adj. R ² = 0.3764		
F (10, 140) = 10.05		
Prop > F = 0.000		
Number of Obs. = 151		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

The results of the regression analysis of cluster 3 (weak degree of religiosity) are shown as in table 4.20, and the main comments are presented herein below. It can be seen here that there are only two factors that have significant effects on the pilgrims' satisfaction

of the trip. The first factor is “ideal”, because its regression coefficient is 0.4709637, which is statistically significant at the 0.01 significance level. This means that as the pilgrims feel that their life are close to ideal, they will be in a very good state of satisfaction of the trip. The second factor is “personal income”, which has a positive effect on the pilgrims’ satisfaction of the trip, as its regression coefficient is 0.2165568, which is statistically significant at the 0.05 significance level. The other factors have no statistically significant effect on the pilgrims’ satisfaction of the trip.

The results of table 4.20 also revealed that the value of Adj. R^2 is 0.5233, indicating the factors included in the model in the case of cluster 3 (weak degree of religiosity) have a power of about 52.3% to interpret the changes in the pilgrims’ satisfaction of the trip if other things remain constant.

Based on the Adj. R^2 values of the regression analysis of the three clusters of 1, 2, and 3, which are 55.4%, 37.6%, and 52.3% respectively, we can conclude that the model of cluster 1 is more effective in estimating the changes in pilgrims’ satisfaction of the trip.

Table 4.20: Regression analysis which examines the independent factors that influence the satisfaction of the trip for cluster 3 (weak degree of religiosity).

Variables	Coefficients (B)	T-test
Cons.	-2.9831	-1.19
P income	0.2165568**	2.15
Age	0.1018326	0.96
Age ²	-0.0010317	-0.90
Personal relationships	0.0574846	0.47
Satisfaction with community	0.0163057	0.17
E choice	0.1393085	1.28
Exciting	0.0678469	0.72
Ideal	0.4709637***	4.82
Happier	0.137976	1.28
Education	0.01183	0.07
Adj. R ² = 0.5233		
F (10, 102) = 13.29		
Prop > F = 0.000		
Number of Obs. = 113		

***, **, and * indicate significant at the confidence level at 1, 5 and 10% respectively.

Conclusions

This study investigates the influence of religious tourism on life satisfaction or subjective well-being (SWB) in the case of Hajj pilgrims. The study is conducted through a descriptive analytical methodology based on quantitative methods using an extensive questionnaire administered to a large pool of Hajj pilgrims during the Hajj season of 1438H corresponding to the calendar year 2017.

The study was conducted in order to fulfill three major goals: the first of which is to reveal the multifaceted relationships between religiosity, life satisfaction or subjective well-being of the Hajj pilgrim before, during and after completing the Hajj journey. This is carried out through the estimation of a life satisfaction function in which, besides some socio-economic variables (income, age, gender, etc.), life satisfaction is explained using variables related to the practice of Islamic religion. The second goal is to estimate the monetary value that pilgrims attach to non-market characteristics of their religious beliefs. This is carried out by means of calculating the marginal rate of substitution (MRS) between pilgrims' income and the religious variables of interest. The third goal is to address the high heterogeneity of the Hajj pilgrims as they possess different demographic characteristics and come from different backgrounds and cultures. This heterogeneity is addressed using a latent class analysis (LCA) model that takes into account these different socio- demographic characteristics. For this purpose, Latent Gold software package (Finkbeiner and Waters, 2008) was used to carry out a latent class cluster analysis to address the said heterogeneity. The study came up with findings mentioned herein below.

5.1. Findings

As above mentioned, the effect of the socio-demographic variables and other independent variables on the pilgrims' life satisfaction or well-being was investigated by means of multiple regression analysis, and fairly good results were obtained indicating that the independent variables included in the model can be used to estimate and interpret the changes in life satisfaction or well-being of Hajj pilgrims. The results also indicated that the variations in life satisfaction are related to the independent variables included in the model.

The study found that the most important independent variables that have significant and positive effects on life satisfaction and well-being of the pilgrims in the Holy Places include "personal income", "personal relationships", "my experience with this trip was memorable", "health status", and "I am being challenged in some way with this trip". Thus, comparing to previous research in this area.

Heterogeneity among pilgrims' groups firstly was addressed estimating a different life satisfaction function by continents, namely among Asian, African, European Hajj pilgrims, and among Hajj pilgrims from the Gulf Cooperation Council countries. The regression model in the case of Asian pilgrims indicated that the independent variables included in the model are fairly capable of interpreting the changes in Asian pilgrims' life satisfaction during and after Hajj pilgrimage based on the value of the adjusted determination coefficient. Moreover, the most important variables that were capable of determining the Asians' life satisfaction in the Holy Places and had positive effects thereof, included "personal income", "my experience with this trip was memorable", "personal relationship" and "health status". The results also indicated that the feeling of punishment

from Allah has a negative and significant effect on Asian pilgrims' life satisfaction and well-being.

Multiple regression analysis was also applied in the case of African pilgrims in order to examine their life satisfaction in the Holy Places during and after Hajj pilgrimage. The results indicated that the independent variables included in the model were capable of explaining about half of the changes in their life satisfaction, with “personal relationship”, “health satisfaction”, and “this experience is exciting for me” as the most significant factors that can determine their life satisfaction.

In the same way, multiple regression analysis was applied in the case of European pilgrims in order to examine the effects of the independent factors on their life satisfaction in the Holy Places during and after Hajj. The results showed that the independent factors included in the model were highly efficient in explaining the variations in the life satisfaction of these European pilgrims. Furthermore, the results showed that the most important factors that have positive and significant effects on life satisfaction included “personal income”, “feeling good about life shortly after the trip”, “marital status”, “this experience is exciting for me” and “this trip let me feel that my privacy is assured”.

Likewise, multiple regression analysis was applied in the case of pilgrims from the Gulf Cooperation Council countries so as to examine the most important significant predictors of their life satisfaction in the Holy Places during and after Hajj. The results indicated that the independent variables included in the model were also good in interpreting the changes in their life satisfaction. Moreover, the results showed that the most important predictors of life satisfaction of these pilgrims and have positive effect thereof included “this experience is exciting for me”, “I am being challenged in some way

with this trip”, “fasting during Ramadan”, “personal relationship”, and “Age²”. However, “education” and “performing prayers regularly” emerged as significant factors with negative effects on pilgrims’ life satisfaction.

In the same way, the determinants of trip satisfaction were also analyzed using a regression model. In this respect, the results showed that “personal income”, “personal relationships”, “choice of the trip”, “life is close to my ideal”, “education”, “satisfaction with community”, “this experience is exciting for me” and “feeling happy upon return from the trip” are the most important factors affecting satisfaction with the trip. While “life is close to my ideal” had a positive impact on the satisfaction with the trip in this study, education is also supported and agrees with the findings of Battour et al. (2017) that being educated, significantly and positively affected the trip satisfaction among religious tourists. However, these factors are in contrast with the findings of Jarvis et al. (2016) who found that happily married people are more likely to return for a trip than happily unmarried people.

Once the life satisfaction functions were estimated, the basic concept of marginal rate of substitution (MRS) from the microeconomic theory was applied in order to gauge the degree in which pilgrims are willing to pay more to fulfill four of their Islamic commitments such as “Islamic beliefs”, reading “Quran”, fasting in “Ramadan”, and reciting “Duaa”.

With regard to the monetary value that pilgrims attach to the above mentioned Islamic obligations, each additional level of “Islamic beliefs”, measured by a scale between 0-10, increases pilgrims’ life satisfaction or subjective well-being to an equivalent of USD 2.291, while for the rest of the variables of “Quran”, “Ramadan” and “Duaa” the increase

in life satisfaction or subjective well-being rises to an equivalent of 1129.23\$, 1067\$, 856.8\$, respectively.

In addressing the issue of heterogeneity in a more sophisticated way, latent class analysis (LCA) was applied in order to select optimal classes that allowed the measurement of the subtle effects of the demographic and socio-economic characteristics on pilgrims' subjective well-being or life satisfaction. By virtue of this analysis and considering five questions that were introduced to measure the degree of religiosity of the pilgrims, the best model was found to be a three-class model.

The results of the 5 questions indicated that while the pilgrims of class1 were moderately religious, and the pilgrims of class3 were weakly religious, the pilgrims of class2 were strongly religious, as they were found to have more commitment to their Islamic obligations.

The relationship between pilgrims' well-being or life satisfaction and some of the demographic factors and personal information was also examined based on the cluster chosen from the best model. The results showed that age, gender, and personal income had a significant effect on the tested clusters (1, 2, and 3), while other factors such as family size, marital status, and performing Hajj before did not show any significant effect on pilgrims' satisfaction and well-being. Furthermore, the results showed that the pilgrims of cluster 2 have the strongest degree of Islamic religiosity.

Now a regression model for each class was estimated in order to analyze the main determinants of life satisfaction. The results for the 3-class model showed that the factors that have positive and significant effect on the pilgrims' life satisfaction include "personal relationship", "my experience with this trip was memorable", "health status", "I am being

challenged in some way with this trip”, and “personal income”. Furthermore, the results show that the factors included in the best model have a fairly good explanatory power to interpret the changes in the pilgrims’ life satisfaction.

For pilgrims belonging to cluster 1 (medium degree of religiosity) the results from the regression analysis showed that 4 main factors have positive and significant effects on the pilgrims’ life satisfaction, first among which was “personal relationship”, followed by “health status”, then “my experience with this trip was memorable”, and finally “physical comfort”, in this order.

For cluster 2 (strong degree of religiosity) the results from the regression analysis showed that the factors included in the model were slightly capable of explaining the variations in the pilgrims’ life satisfaction. In this case the most important factors that have a significant positive effect on pilgrims’ life satisfaction were “personal relationship”, “health status”, “personal income”, and “age²”, in this order.

Finally, for cluster 3 (weak degree of religiosity) the regression analysis showed that the factors included in the regression model have a medium power to interpret and explain the changes in the pilgrims’ life satisfaction. In fact, only two factors were found to have a significant and positive effect on the pilgrims’ life satisfaction, which were “I am being challenged in some way with this trip” which had a regression coefficient of 0.273, and “personal income” which had a regression coefficient of 0.158.

This same procedure was further followed using the LCA to address the issue of heterogeneity in explaining the most important factors that determine the pilgrims’ satisfaction of the trip. The results showed that the factors included in the model have a fairly good power to explain the variations in the pilgrims’ satisfaction of the trip. In this

case most of the factors have an effect on the satisfaction of the trip except for two factors, namely “age” and, “age²”. Topping the factors that have a significant effect on pilgrims’ satisfaction of the trip was “life is close to my ideal”, followed by “education”, then “personal relationship”, “accurate choice of the trip”, “feeling happy upon return from the trip”, and “satisfaction with community”, in this order.

For cluster 1 (medium degree of religiosity), the results showed that the factors included in the model have a medium power to explain the changes in pilgrims’ satisfaction of the trip. Furthermore, the most important factor here was “age” which had a positive and significant effect, while “age²” had a negative and significant effect. The results also showed that the factors of “personal income”, “this experience is exciting for me”, and “choice of the trip” had no significant effect on pilgrims’ satisfaction of the trip.

For cluster 2 (strong degree of religiosity), the results indicated that that the factors included in the model have a weak power to explain the pilgrims’ satisfaction of the trip. Moreover, the results showed that the most important factors that have a positive and significant effect on the pilgrims’ satisfaction of the trip are “life is close to my ideal” and “accurate choice of the trip”.

Finally, for cluster 3 (weak degree of religiosity), the results indicated that only two factors have a significant and positive effect on pilgrims’ satisfaction of the trip, namely: “life is close to my ideal” followed by “personal income”. Furthermore, the study showed that the factors included in the model have a medium power to explain the changes in the dependent variable.

5.2. Summary of the Findings

The first question of this thesis asks about the factors that mediate the relationship between religiosity and life satisfaction or subjective well-being of the Hajj pilgrim before, during and after completing his or her religious journey. In answering this question, the study revealed that the most important factors that mediate the relationships between religiosity and life satisfaction or subjective well-being and have significant and positive effects on life satisfaction or well-being of the pilgrims in the Holy Places, include personal income, personal relationships, memorable experiences during the Hajj trip, health status, the square of age, and challenging experiences.

Another part of this question concerns satisfaction of the Hajj pilgrims with the trip. In answering this part, the study revealed that the pilgrim's life being close to his ideal, education, personal relationships, satisfaction with the community, personal income, choice of the trip, exciting experience and feeling happy upon return from the trip, make up the most important factors that affect satisfaction with the trip.

The second question asks about the monetary values that pilgrims attach to the non-market characteristics of their religious beliefs. In answering this question, the study revealed that Hajj pilgrims are willing to pay more to fulfill four Islamic commitments that determine their degree of religiosity, namely: Islamic beliefs, reading the Quran, fasting in Ramadan, and reciting Duaa. Moreover, the study found that Hajj pilgrims attached monetary values to these four religious commitments in the following order: Islamic beliefs, followed by reading the Quran, fasting in Ramadan, and reciting Duaa.

The third question asks about the degree of heterogeneity among Hajj pilgrims, and how it affects their life satisfaction or subjective wellbeing. In answering this question, the

study found that the most important factors that can determine the Asians' life satisfaction in the Holy Places and had positive effects thereof included personal income, memorable experience, personal relationships, and health status.

Regarding the African pilgrims, the study found that the most important factors that explain their life satisfaction were personal relationships, health satisfaction, and the exciting experience.

In the case of European pilgrims, the study found that the most important factors that have positive and significant effects on their life satisfaction included feeling good after the trip, marital status, personal income, exciting experience and my privacy is assured.

Regarding the Hajj pilgrims from the Gulf Cooperation Council countries, the study found that the most important predictors of life satisfaction included exciting experience, challenging experience, personal relationships and performing prayers regularly.

Another part of the answer of this question categorizes the Hajj pilgrims according to their degrees of religiosity. For this purpose, latent class analysis was used along with some demographic and socio-economic variables to see if there are any hidden effects on the pilgrims' life satisfaction. This revealed that age and gender have a significant effect on the pilgrims' life satisfaction. Moreover, the results indicated a high degree of religiosity among the pilgrims.

5.3. Recommendations

Based on the data analysis that have been conducted in this study through the use of different statistical techniques to estimate the most important factors that determine the pilgrims satisfaction or well-being in the Holy Places during the Hajj season, the following

recommendations may be made with regard to the pilgrims' life satisfaction and satisfaction with the trip, which can be adopted by the policy and decision makers in Saudi Arabia the destination where pilgrims perform Hajj, as well as in the home countries of the pilgrims in Asia, Africa, Europe and the Gulf Cooperation Council countries. The key objective here should be to make the Hajj experience most valuable and pleasurable and bring its effects to bear positively on the whole life of the pilgrims.

1. Religiosity and religious beliefs featured high in this study as among the factors that have a strong relationship with life satisfaction and well-being of the Hajj pilgrims. The positive effect of religiosity on life satisfaction is a topic that is gaining momentum in the tourism literature (e.g. Heller et al. 2006). To address this issue, concerned Saudi policy and decision makers should make the various shrines to be visited by Hajj pilgrims while performing Hajj easily accessible and remove all hindrances to these places especially those which may endanger their lives, compromise their health or have a detrimental effect on their life satisfaction.
2. The study found two factors featuring as most important in terms of their positive effects and contribution to life satisfaction of the Hajj pilgrims in the Holy Places in both the whole sample of the study and the Asian group, which are "personal relationships", and "health status". As early as 1951 Durkheim found that religious involvement, measured by frequent attendance at active religious rituals or services, or affiliation to certain religious groups, as capable of reducing morbidity and overall mortality thanks to their effects of religious people morale.

In this respect all the precautions that keep the health status and personal relationships of the pilgrims at their highest possible level should be taken,

especially in the case of senior pilgrims. This may take the form of some kind of health insurance that is affordable to Hajj pilgrims, and social activities that may include seminars, and enlightenment activities that aim to raise the morale of Hajj pilgrims. The Saudi Hajj authorities may also seek help from Hajj pilgrims' relatives who may be residing in Saudi Arabia on work permits.

3. As the sufficiency of personal income for the Hajj journey is considered as among the most important factors that contribute to the life satisfaction of the Hajj pilgrims, sufficient resources with each Hajj pilgrim should be well checked and ascertained during the selection process of Hajj pilgrims well before the Hajj pilgrim comes to the Holy Places. This factor emerged as particularly very important in the case of the European pilgrims. If some funds could be raised by the Saudi government and those of the countries of origin of the Hajj pilgrims, then this may be used to replenish the resources of poor Hajj pilgrims.

The financial factor is a supportive factor for pilgrims, as it will enable them to get better services, particularly housing services in Mecca and Madina, taking into consideration that most pilgrims prefer to stay near the Holy Mosque in Makkah and the Prophet's Mosque in Medina in order to be able to perform their prayers in congregation regularly.

4. "Marital status" emerged as very important in terms of its contribution to the life satisfaction and satisfaction with Hajj trip in the case of European Hajj pilgrims in this study. This factor was mentioned in the previous studies (e.g. Lea et al., 1993) as among the factors that have positive effects on the life satisfaction of religious tourists. Policy and decision makers in both Saudi Arabia and the European

- countries from where Hajj pilgrims come should take this factor into account in the selection process of Hajj pilgrims by giving more opportunities to couples and families to come to perform Hajj together.
5. Education featured prominently in this study as among the main factors that affect satisfaction with the trip in the case of the Hajj pilgrims from the Gulf Cooperation Council (GCC) countries. Policy and decision makers in both Saudi Arabia and the GCC countries from where Hajj pilgrims come should take the education factor into account by giving educated Hajj pilgrims from the GCC countries priorities in the selection processes.
 6. Factors such as “life is close to my ideal”, “accurate choice of the trip”, “feeling happy upon return from the trip”, and “feeling part of the community”, were found in this study to affect the pilgrims’ satisfaction of the trip to the Holy Places effectively. All these factors should be taken care of through coordination with the tourist and tour operation agencies in the countries of origin of the Hajj pilgrims, in order to help the pilgrims get their best choices within their budgets and the resources they set apart for the Hajj journey.

5.5. Implications for Future Studies

This study has dealt with several factors that mediate in the influence of religiosity on life satisfaction or subjective well-being in the case of Hajj pilgrims. As the subject is expansive and multifaceted, this study must have left behind many research gaps that were not tapped. The areas discussed herein below could be among the areas that may be tackled in future studies.

1. Salary and Shaieri (2013) defined happiness as a term used by people to evaluate their past lives. Such evaluation may be in general form such as life satisfaction or a feeling of happiness, or a specific form such as marriage, search for a better job or career, or any other emotional feeling experienced by the individual.

Our study tackled the manner in which Hajj pilgrimage may bring about life satisfaction and happiness before, during and after the Hajj journey. However, the study did not specify the manner in which happiness would manifest after returning from the Hajj journey. Future studies may look into the plans which the individual may develop as a result of his/her happy feeling after completing the Hajj journey.

2. A study conducted by Sarpitaningtyas (2012) revealed that older people are motivated to participate in religious activities because of their need for peace, tranquillity, comfort, and happiness. Our study did tackle the manner in which age and the square of age mediate in happiness and life satisfaction after Hajj pilgrimage among the other socio-demographic factors but did not deal with old age as a special period in which people feel they are about to leave this world, and hence have special motivation, which is a field replete with research opportunities.
3. Tumanggor (2014) investigated the relationships between the practice of obligatory religious duties in Islam and philanthropic activities such as rendering financial supports to orphans and poor people, being equitable, doing good things, and staying away from negative behaviours. Our study did not relate religiosity with such virtuous behaviours, which is a field that can be researched.

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Ministry of Haj and Umra



Appendix A

Questionnaire

Dear Hajj Pilgrim

The purpose of this survey questionnaire is to reveal the multifaceted relationships between religiosity and life satisfaction or subjective well-being of the pilgrim in Mecca and Medina.

You are kindly requested to fill out this copy of the survey, and will take approximately five minutes. While your responses are of vital importance to the success of this academic study, your answers will be confidential, as your identity will not feature in any published results of the study, and because the information that you furnish will be used only for academic purposes. It will be much appreciated if you answer all items of the survey questionnaire.

Thanks in advance.

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SECTION A

Geographical Information about The Trip

A.1 Which is your country of origin?

A.2 Are you travelling alone or with other people?

1. Alone

2. With other people

A.3 If you answer “2” in question A.2, could you tell me who you travel with?

1. A relative

2. A friend

3. Other

A.4 (If you are not Saudi) How many days do you plan to spend in Saudi Arabia?

_____ **Days**

A.5 Have you visited the Holly Place before?

1. Yes

2. NO

A.6 If you answer “yes” in question A5, how many times in the last ten years?

_____ **times**

Demographic Information

A.7 Gender

1. Male

2. Female

A.8 Age

_____ **years**

A.9 Marital status

1. Married

2. Single

3. Other

A.10 Number of family members

A.11 Number of children at home (under 21)

SECTION B

B.1	All things considered, how satisfied are you with your life as a whole these days? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									
0 Totally dissatisfied	1	2	3	4	5	6	7	8	9	10 Totally satisfied

B.2	Health status: How satisfied are you with your health? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									
0 Totally dissatisfied	1	2	3	4	5	6	7	8	9	10 Totally satisfied

B.3	How satisfied are you with your personal relationships? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									
0 Totally dissatisfied	1	2	3	4	5	6	7	8	9	10 Totally satisfied

B.4	How satisfied are you with feeling part of your community? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									
0 Totally dissatisfied	1	2	3	4	5	6	7	8	9	10 Totally satisfied

B.5 Volunteering activities

Are you doing volunteering activities related to the community in which you are living? [Volunteering is any unpaid activity which involves spending time and doing something which aims to benefit someone (individuals or groups) other than or in addition to close relatives, or to benefit the environment].

1. Yes
 2. NO

If you answer “yes” in Question B.5:

B.6 How many hours per week?
 _____ hours

Quality of the Trip Experience - Subjective Wellbeing - Life Satisfaction

To what degree do you agree with the items below? Rate the items using the scale below (0 Entirely Disagree – 10 Entirely Agree). There are not right nor wrong questions, please be sincere. Your info is treated confidentially.

		Please rate your degree of disagreement or agreement with the following items (Zero means you feel “Entirely Disagree” and 10 means “Entirely Agree”).										
Quality of Trip Experience		0	1	2	3	4	5	6	7	8	9	10
1	On this trip, I am doing something I really like to do											
2	I am doing something memorable that enriches my life											
3	This experience is exciting											
4	I am having a “once in a lifetime” experience, I feel much better about things and myself after this trip											
5	After travelling, I can share memories from my trip											
6	I am being challenged in some way											
7	My imagination is being stirred											
8	It feels like I am on an adventure											
9	This travel experience provides me with fun											
10	On this trip, I established friendships with one or more new people											
11	This trip let me feel that I am doing something new and different											
12	This trip let me feel physically comfortable											
13	This trip let me feel that my property is safe											
14	This trip let me feel relaxed											
15	This trip let me feel a sense of personal security											
16	This trip let me feel that my privacy is assured											
17	This trip let me feel that I am involved in the process of this trip											
18	This trip let me feel that there is an element of choice in the process											
19	This trip let me feel that I have some control over the outcome											
20	This trip let me feel that I am being educated and informed											

21	This trip let me feel a sense of cooperation											
22	This trip let me feel that I am being taken seriously											
23	This trip let me feel that I am important											
Subjective Well Being (SWB)		0	1	2	3	4	5	6	7	8	9	10
24	Overall, my experience with this trip was memorable having enriched my quality of life.											
25	My satisfaction with life in general was increased shortly after the trip.											
26	Although I have my ups and downs, in general I felt good about my life shortly after the trip											
27	After the trip I felt that I lead a meaningful and fulfilling life.											
28	Overall, I felt happy upon my return from the trip.											
29	My choice of this trip was a wise one.											
30	I did the right thing when I purchased this trip.											
31	This experience is exactly what I needed.											
32	I feel good about my decision of buying this trip.											
Life Satisfaction		0	1	2	3	4	5	6	7	8	9	10
33	In most ways my life is close to my ideal.											
34	The conditions of my life are excellent.											
35	I am satisfied with my life.											
36	So far I have gotten the important things I want in life.											
37	If I could live my life over, I would change almost nothing.											

Religiosity

We want to measure to which extent someone ascribes to the beliefs, experiences, and rituals of a religion in a 0-10 scale. Rate the items using the scale below (0 Entirely Disagree-10 Entirely Agree).

There are not right or wrong questions, please be sincere. Your info will be treated confidentially and with academic purposes.

		Please rate your degree of disagreement or agreement with the following items (0 means you feel “Entirely Disagree” and 10 means “Entirely Agree”).										
Religiosity		0	1	2	3	4	5	6	7	8	9	10
	Islamic belief											
38	In my personal life, Islamic religion is very important.											
39	Islam helps me to have a better life.											
40	The Dua'aa (supplication) supports me.											
41	The Prophet Muhammad (pbum) is the role model for me.											
42	Performing Hajj is one of my main priorities.											
43	I believe that Allah helps me.											
	Islamic practice											
44	I perform all my prayers.											
45	I always perform all my prayers on time.											
46	I perform my daily prayers in the mosque regularly.											
47	I perform the obligation of Zakat.											
48	I read the Qur'an regularly.											
49	I fast the whole month of Ramadan.											
	Islamic experience											
50	I experience the feeling of being punished by Allah for wrong doings											
51	I experience pleasure in seeing others following Islamic teachings											
52	I experience my religion answers questions about the meaning of life											

SECTION C

C.1 Education

- 1. No Schooling
- 2. Elementary School
- 3. Intermediate School
- 4. Secondary School
- 5. University
- 6. Post Graduate

C.2 Current Employment Status

Please tell us which sentence best describes your current job.

- 1. Employed for public sector (blue collar)
- 2. Employed for public sector (white collar)
- 3. Employed for private sector (blue collar)
- 4. Employed for private sector (white collar: lawyer, doctor, etc.)
- 5. Self-employed
- 6. A homemaker
- 7. A student
- 8. Unemployed
- 9. Retired
- 10. Unable to work (physical disability)
- 11. Others

C.3 Personal Income

Could you tell us which sentence best describes your personal monthly income before taxes?

- 1. Less than \$500
- 2. \$501-\$1000
- 3. \$1,001-\$2,000
- 4. \$2,001-3,000
- 5. \$3,001-\$4,000

- 6. \$4,001-\$5,000
- 7. \$5,001-\$10,000
- 8. \$10,001-\$15,000
- 9. \$15,001-\$20,000
- 10. \$20,001-\$25,000
- 11. More than \$25,001
- 12. Do not know/No answer

C.4 Household Income

C.4.a Could you tell us which sentence best describes your household total monthly income before taxes?

- 1. Less than \$1000
- 2. \$1001-\$2000
- 3. \$2,001-\$3,000
- 4. \$3,001-4,000
- 5. \$4,001-\$5,000
- 6. \$5,001-\$10,000
- 7. \$10,001-\$15,000
- 8. \$15,001-\$20,000
- 9. \$20,001-\$25,000
- 10. \$25,001-\$30,000
- 11. More than \$30,000
- 12. Do not know/No answer

C.4.b Which of these descriptions comes closest to how you feel about your household's income nowadays:

- 1. Living comfortably on present income.
- 2. Coping on present income.
- 3. Difficult on present income.
- 4. Very difficult on present income.
- 5. Don't know/don't answer.

C.5 In the current visit to the Holly Place, please, could you tell me how much do

- 1. Less than \$5000
- 2. \$5001-\$6000
- 3. \$6,001-\$7,000
- 4. \$7,001-8,000
- 5. \$8,001-\$9,000
- 6. \$9,001-\$10,000
- 7. \$10,001-\$11,000
- 8. \$11,001-\$12,000
- 9. \$12,001-\$13,000
- 10. \$13,001-\$14,000
- 11. More than \$14,000
- 12. Do not know/No answer

C.6	After visiting the Holly Place and considering all the positive and negative aspects related to it, how satisfied are you with your visit? (Zero means you feel “Totally Dissatisfied” and 10 means “Totally satisfied”).									
0 Totally dissatisfied	1	2	3	4	5	6	7	8	9	10 Totally satisfied