

KADIR HAS UNIVERSITY  
GRADUATE SCHOOL OF SOCIAL SCIENCES

**THE RELATIONSHIP BETWEEN MUSLIM RELIGIOSITY, PRICE -VALUE  
CONSCIOUSNESS, IMPULSIVE BUYING TENDENCY AND POST-PURCHASE  
REGRET: A MODERATION ANALYSIS**

GRADUATE THESIS

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JUNE 2014

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REGRET: A MODERATION ANALYSIS**

TUĞRA NAZLI AKARSU

Submitted to the Graduate School of Social Sciences  
in partial fulfillment of the requirements for the degree of  
Master of Business Administration

KADIR HAS UNIVERSITY

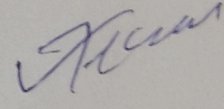
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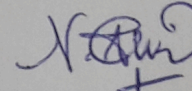
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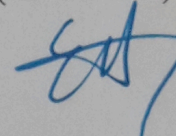
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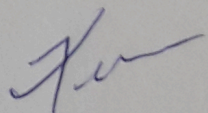
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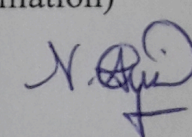
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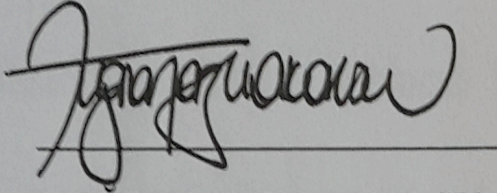
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“I, Tuğra Nazlı AKARSU, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.”

A handwritten signature in black ink, appearing to read 'Tuğra Nazlı Akarsu', written over a horizontal line.

TUGRA NAZLI AKARSU

## ÖZET

### MÜSLÜMAN DİNDARLIK, PLANSIZ ALIŞVERİŞE OLAN YATKINLIK, FİYAT-DEĞER BİLİNCİ VE ALIŞVERİŞ SONRASI PİŞMANLIK DURUMU: BİR TEMEL DÜZENLEYİCİ MODEL ANALİZİ

TUĞRA NAZLI AKARSU

İŞLETME, Yüksek Lisans

Danışman: Yar. Doç. Dr. Volkan Yeniaras

Haziran 2014

Din faktörü, kültürün ayrılmaz bir parçası olarak görüldüğünden, tüketici davranışına olan etkisini göz ardı etmek mümkün değildir. Yapılan literatür taraması dini değer farklarının tüketici davranışını etkilediğini ortaya koymaktadır. Bu çalışmada, dini değerlerin tüketicinin plansız alışverişe olan yatkınlığı ve pişmanlık durumu üzerindeki etkisi hakkında mevcut literatür incelenmiş ve ankete dayalı bir çalışma yürütülmüştür. Çalışmanın temel noktası ise fiyat bilinci ve değer bilincinin: (1) plansız alışverişe olan yatkınlık, (2) alışveriş sonrası pişmanlık durumu gibi davranışlarının Müslüman dindarlığa sahip tüketiciler üzerindeki etkisini incelemektir. Araştırma 235 kişi ile anket usulü yargısal örnekleme kullanılarak yapılmıştır. Araştırma sonuçları dini değerlerin tüketicinin plansız alışverişe olan yatkınlığı ve alışveriş sonrası pişmanlık durumu davranışlarının ilişkileri üzerinde etkili olduğunu ortaya çıkartmıştır.

Anahtar Kelimeler: Din, dindarlık, tüketici davranışı, Türkiye

## **ABSTRACT**

### **THE RELATIONSHIP BETWEEN MUSLIM RELIGIOSITY, PRICE -VALUE CONSCIOUSNESS, IMPULSIVE BUYING TENDENCY AND POST-PURCHASE REGRET: A MODERATION ANALYSIS**

TUĞRA NAZLI AKARSU

Master of Business Administration

Advisor: Assistant Professor Volkan Yeniaras

June 2014

Religion has been considered an inseparable part of culture. There is a considerable amount of research examining the relationship between religious affiliation and consumer behavior. Although past studies have confirmed that the religiosity and religious affiliation has an influence on consumers' consumption behavior, scholars has focused on some specific aspects of consumer behavior such as shopping orientation, media usage or purchasing behavior. To contribute new dimensions in the consumer behavior literature, this study's main aim is to understand how price and value consciousness effects: (1) impulsive buying tendency and (2) post-purchase regret regarding the transaction given Muslim religious affiliations via the use of moderation analyses. For the research, it is important to analyze participants who have high religious affiliations to test independent variables and to use members of religious Muslim society's members to make this research more reliable in the context of participants and their high religious affiliations.

To test the hypotheses of this study, structural equation modeling was used to analyze data obtained from questionnaires, which were collected from a judgmental sample of 235. Results demonstrated that religiosity has a

statistically significant moderating effect on impulsive buying tendency and post-purchase regret.

Keywords: Religion, religiosity, consumer behavior, Turkey

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Tuğra Nazlı Akarsu  
Kadir Has University  
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# CHAPTER 1

## **Introduction**

The effect of culture on human nature is a focus of interest in social psychology (Freud, 1928; Durkheim, 1951; Hofstede, 2002), economics (Weber, 1930) and philosophy (Muscio, 1918). Since culture affects people's needs, wants, attitudes and values (Hofstede, 1983), many studies on consumption behavior (Henry, 1976), buying behavior (Essoo, Dibb, 2010) and consumer decision behavior (Delener, 1994) have been conducted in order to understand the role of culture on the consumer. The results of the studies (Henry, 1976; McCracken, 1986; Delener, 1994; Essoo, Dibb, 2010) indicate that cultural values are the key determinants of consumer behavior.

Usunier and Lee (2005) define the source of culture as language, nationality, education, profession, ethnicity, family, sex, social class and religion. In this definition, culture seems to have many roots. Strategists, companies and researchers need to be aware of consumer behavior as well as the source of culture to conduct stable marketing strategies. From Usunier and Lee's definition of culture, it seems that culture is not static. As Lai, Choong, Sia and Ooi say (2010), "culture is not static and it is because of evolving global environments. In this situation, culture is ever changing to adapt and reflect the dynamism of the society as well as maintain the harmony within the society." Instead of using culture with its many unstable elements, it is wiser to use more stable elements to study consumer behavior.

According to Belzen (1999), there is one important element of culture which has the most substantial impact on individuals' habits, attitudes and values is religion. Despite the abundance of the cultural context and its dimensions, religion can be considered as the core of culture, because it provides individuals to identify themselves in

societies so that through religion, they have an unchangeable social identity (Geertz, 1993). As long as cultural dimensions are changing and evolving within the society, “religious tenets form a stable and static pillar in the society.” (Khraim, 2010: 166). In some societies such as Iran, Israel or Saudi Arabia, it can be seen that although not yet completely, religion is a cohesive force that spread all aspects of individuals’ lives and their decisions unquestioningly (Berkman, Lindquist, Sirgy, 1997).

Although, the mass of marketing literature emphasizes the importance of culture on consumer behavior (Arnould, Thompson, 2005), a small number of empirical studies were conducted to examine the relationship between religion and consumer behavior. Cutler (1991) reveals that prior to 1990, there were only eight articles in the literature conducted to highlight the relationship between religion and marketing, more specifically, and only five articles identified within the consumer behavior discipline. As a reason of the rareness of the empirical studies on this topic, scholars mentioned some problems about the sensitive nature of the topic (Hirschman, 1983), the lack of universal measurement (Wilkes, Burnett and Howell, 1986) and the methodological difficulties in order to get reliable data (Bailey, Sood, 1993).

### **Motivations for the Study**

Religion plays a vital role in shaping social behavior from choices consumers makes to where they want to live or what they want to eat (Fam, Waller, Erdogan, 2002). Due to the substantial diversity in race, nationality, religious values and geography, it has become progressively more challenging for marketing units to use the same marketing strategies for all consumer groups. Therefore, cultural diversity requires marketers to be familiar with each group of consumers including their shopping behavior, consumption and decision patterns. (Patel, 2010). Also, marketers should not rely completely on the characteristics related to the consumers’ basic demographic

information such as income, age, and employment status or education level. Addition to this, religion is a sub-category of culture and consumers' personal values that influence overall culture, which can make religion as stronger indicator of consumer behavior (Hofstede, 1991)

As McDaniel and Burnett (1990) suggest; these characteristics change over the years and this means that, the characteristics of targeted customers also change over time. If marketers underestimate the cultural variations or fluctuating characteristics of consumers while customizing offerings of their products or services, this would not only result in the failure of marketing programs, but might also result in loss of their shares in this specific segment.

From the marketing point of view, the unchanging nature of religion, which underlies much consumer behavior, points towards the potential of religion as the basis for marketing strategies or campaigns. (Delener, 1990). Therefore, researchers should not deny the existence of religion; instead they should embrace it as a valuable construct in understanding consumers and their decisions.

As mentioned earlier, scholars have focused on some specific aspects of consumption in their prior research such as shopping orientation, purchasing behavior or media usage. Rather than previously discussed topics, this study mainly focuses on the effect of price consciousness on impulsive buying tendency and value consciousness on post-purchase regret in the moderation of high Muslim religiosity. In the light of the literature review, this research proposes go beyond the view of consumer religiosity as a stable characteristic. Rather, by focusing on Muslim religious consumers, this research presents religiosity as a constraint that the consumer faces in their purchasing environments.

Investigating impulsive buying tendency and post-purchase regret can be explained as follows: according to Abrahams (1997), individuals make 80% of their purchases in certain product categories in the US impulsively. Mogelonsky (1998) highlights that category like candy and magazine make 4.2 billion dollar annual sales through impulse buying. In the same vein, Altunışık and Mert's study (2003) conducted on 264 consumers in Turkey reveals that 88 percent of participants make their purchases impulsively. Also in Turkey, since 2004, there is a great increase of incentives for consumer credits, which have increased approximately forty times causing an increase in consumption of consumer goods rather than capital goods (Ergin, 2011). This rapid credit growth creates an instant growth in the retail industry (Graa, Kebir, 2012). Globally, scholars, researchers and strategists investigate the driving force of impulsive buying tendency so that managers and companies can design their strategies and resources to encourage their consumers to purchase impulsively their brands and products (Rook, 1995) which contribute a great share of profit to their company or organizations. There have been several empirical studies of the relationship between culture (Kacen, Lee, 2002) and personality traits (Youn, Faber, 2000) on impulsive buying tendency. The reason for focusing on impulsive buying tendency rather than any other variable is because of the potential of impulsive buying tendency to grow massively with new technologies like internet, online stores, e-commerce, 24 hour convenience store (Ghani, Jan, 2011). Finding a statistical relationship between impulsive buying tendency and religiosity makes religiosity a new tool for such important activity (Khraim, 2010). Also, discovering what segment of the general consumer would be more likely to impulsive purchasing is quintessential for firms.



During the last two decades, researchers leaned onto the emotions in order to have better understanding of consumer behavior (Chebab, 2010). Because of the great interest in consumer satisfaction, researchers neglected to study regret as a post-purchase behavioral consequence (M'Barek and Gharbi, 2012). So, there are few studies investigating the behavioral consequences of regret. One of the earlier studies belonging to Zeelenberg and Pieters (1999, 2002) proves that regret has a direct effect on some aspects of consumer behavior such as repurchasing intentions (Tsiros, Mittal, 2000).

Regret, defined as “the painful sensation of recognizing that ‘what is’ compares unfavorably with ‘what might have been’” (Sugden, 1985: 77) is not only an emotional reaction to the bad consequences of the decisions, it is also a powerful force that gives motivation for individuals’ behavior (M'Barek, Gharbi, 2012). Binding regret to a stable characteristic and understanding the post purchase regret that consumers feel helps managers and companies prevent consumers’ post-purchase regret, so giving consumers a more joyful experience and lead them to repurchase the products or services.

Price consciousness and value consciousness are used here as predictor variables for investigating the moderating effect of Muslim religiosity on the relationship between price consciousness and impulsive buying tendency and on the relationship between value consciousness and post purchase regret. The primary reason for using price consciousness with impulsive buying tendency and value consciousness with post purchase regret is that price and value consciousness are two shopping styles most studied in the literature (Sproles, Kendall, 1986) and which strongly affect consumer decisions during their shopping activities.

There are empirical studies (Bailey, Sood, 1993; Sood, Nasu, 1995; Essoo, Dibb, 2004; Mokhlis, 2006) that attempt to relate religiosity to these shopping behaviors. The statistical significance of these relationships are also supported by the literature review (Ghani, Jan, 2010; Karbasivar, Yaramahdi 2011; Mafini, Dhurup and Mandhlazi, 2014). Knowing that price consciousness affects impulsive buying tendency and value consciousness affects post-purchase regret is necessary for the investigation of the moderating effect of Muslim religiosity is necessary to better understand these two statistical significant relationships.

Consumption goes beyond satisfying individuals' needs and becomes an aspect of the individuals' lives (Brown, 1995). The study proposes to answer the following question: how does religion matter in market behavior for Muslim religious consumers in Turkey?

### **Thesis Organization**

This study's chapters are planned as follows. Chapter 1 presents the topic and provides supporting research in this area. Chapter 2 defines religion and other concepts related with religion for the study, provides an overview of relevant marketing literature in the area before presenting the theoretical framework used in this dissertation's research and developing the hypotheses which are tested in this study. Chapter 3 summarizes the research methodology and the criteria used to assess the research hypotheses and present the hypotheses of this study. Chapter 4 provides an overview of the measurement models and outlines the structural model used and the results of the hypotheses tests. Finally, Chapter 5 offers the conclusions and future research directions of this research stream.

# CHAPTER 2

## **Definitions and Literature Review**

The current research explores the influence of consumer behavior on religion as the stable element of culture. More specifically, this study is designed to explore how value and price consciousness effects: (1) impulsive buying tendency and (2) post-purchase regret given Muslim religious affiliations via the use of moderation analyses. Therefore, this literature review will emphasize the empirical evidence and theoretical frameworks that characterize the relationship between consumer behavior and religion.

## **Defining Religion**

The definition of religion has always been a controversial as in the case of culture (Hoffman, 2011). According to Argyle and Beit-Hallami, religion is “a system of beliefs in a divine or superhuman power and practices of worship or other rituals directed towards such a power” (1975:1). Scholars have added new dimensions such as religious emotions, experiences as well as the effects of religious belongings on behavior in secular contexts (Spinks, 1963).

Religion, its definition and the measurement of religiosity involve deeper issues. In different areas such as psychology, economics, theology and management; religion has different designations so that “it is hard to make any generalization that is universally valid” (Peterson, 2001:6). As a result, different theories and definitions of religion are mentioned in the literature.

Clarke and Bryne (1993) define the three reason of why there is not a satisfactory definition of religion. They relate this issue to (1) conflicts and elusiveness in the usage of the term, (2) confused meaning inherited by its long history and (3) the divergence among scholars about the definition of religion. Despite all of the reasons

about the unsatisfactory definition of religion, scholars define religion in a convenient and appropriate way depending upon the subjects of their studies. Anthropologist Anthony Wallace (1996) identifies different behavioral complexes to make religious phenomena's definition with different observable behavior; so that religion becomes observable and it has not an unobservable or vague meaning anymore (Dow, 2007).

**Table 1: Wallace (1996): Behavioral Complexes**

<b>Prayer</b>	<i>Addressing the supernatural.</i> This includes any kind of communication between people and unseen non-human entities.
<b>Music</b>	<i>Dancing, singing and playing instruments.</i> Although all music types are not religious, there are few religions use music for their religious activities.
<b>Exhortation</b>	<i>Addressing another human being.</i> This includes preaching by a minister, shaman or other religious practitioner.
<b>Reciting the code</b>	<i>Mythology, morality and other aspects of the belief system.</i> Every religion has its myths, symbols, and sacred knowledge.
<b>Simulation</b>	<i>Imitating things.</i> This is a special type of symbolic manipulation found particularly in religious ritual.
<b>Mana</b>	<i>Touching things.</i> This refers to the transfer of supernatural power through contact.
<b>Taboo</b>	<i>Not touching things.</i> Religions usually proscribe certain things, eating of certain things, (eating and drinking habits) contact with impure things, etc.
<b>Feasts</b>	<i>Eating and drinking.</i> All celebrations are not religious, but most of the religions have them.
<b>Sacrifice</b>	<i>Immolation, offerings.</i> Sacrifice is probably the single most definitive behavior.
<b>Congregation</b>	<i>Processions, meetings, religions organize groups.</i> Their rituals identify groups and create group solidarity.
<b>Inspiration</b>	All religions recognize some experiences as being the result of divine intervention in human life.

McDaniel and Burnett describe religion as “a belief in God accompanied by a commitment to follow principles believed to be set forth by God” (1990:110). In order to relate religion to the culture, Arnould, Price and Zikhan (2004) identify religion as “a cultural subsystem that refers to a unified system of beliefs, practices relative to a sacred ultimate reality or deity” (2004:517-518). Terpsta and David (1991) define religion as “ a social set of beliefs, ideas and actions that related to a

reality that cannot be verified empirically yet; is believed to affect the course of natural and human events” (1991:73). From the scrutiny of these diverse definitions, it can be concluded that each scholar gives a description of religion consistent with its research subject. Because of the diverse conceptualizations of religion, Wilkes et al. offer “a religious construct must be identified for each research setting” (1986: 48). Thus, for the purposes of the study, a definition of religion proposed by Terpsta and David was adopted “a social set of beliefs, ideas and actions that related to a reality that cannot be verified empirically yet; is believed to affect the course of natural and human events” (1991: 73).

Although there is not any precise decision for the definition of religion, this definition seems to be sufficient for this study. It considers the impact of religion on human nature and events and can be implied from that the religion is a set of beliefs affects the decisions or actions that individuals take.

### **Defining Religiosity**

Religiosity is defined as “the degree to which beliefs in specific religious values and ideals are held and practiced by individuals” (Delener, 1990: 27). Based on the religiosity definition, Delener develops an Islamic religiosity definition as “the degree to which beliefs in Islamic values and ideals are held and practiced by Muslims” (1990: 33). Worthington defines religiosity as religious commitment as “the degree, which a person uses or adheres to his or her religious values, beliefs, and practices and uses them in daily living. The supposition is that a highly religious person will evaluate the world through religious schemas and thus will integrate his or her religion into much of his or her life”. (Worthington et al., 2003: 85). In accordance with the definition belonging to Worthington et al. (2003), Johnson refers to religiosity as “the extent to which individuals’ are committed to the religion he or she

professes and its teachings, such that individuals' attitudes and behaviors reflect this commitment" (2001: 25). In this vein, it is expected that highly religious individuals naturally exhibit a strong sense of commitment to their belief system no matter what and they are expected to behave according to their belief system's norms, attitudes and values such as attending religious services regularly, being strictly committed to religious practices or being a committed member of his/her religious group. As Stark and Glock state "the heart of religion is commitment" (1968: 1). It can be derived from this that most of the time, highly religious individuals are characterized as closed minded and conservative (Delener, 1994). On the other hand, if one's religious commitment is weak, than they might feel behave more freely than highly religious individuals. All in all, how consumers' commitment affects their attitudes, norms and values in terms of certain consumer aspects should be examined to understand the effect of religiosity on consumers.

### **Defining Religious Affiliation**

Religious affiliation has been a major topic of investigation in behavioral sciences (Merton, 1931; Greeley, 1977). Within the consumer behavior; religious affiliation is generally considered an ascribed status (Mokhlis, 2006). This is because like ethnicity or nationality, "its effect on an individual's life often predates life, determines family size, the level of education attained, the amount of wealth accumulated and the type of life decisions taken" (Mokhlis, 2006: 37). From this definition it can be implied that individuals born into a religious tradition through the action of its influential influences such as church attendance or Friday prays develops a religious identity or so called affiliation. Therefore, individuals who have the same religious affiliation are considered as sharing the same common set of beliefs, values, expectations and behaviors (Hirschman, 1983). So, it can be said that different religious affiliations

might differentiate individuals' attitudes and behaviors. In this vein, Sheth and Mittal (2004) mention that religious affiliation affects individuals' attitudes and behavioral tendencies and these behavioral tendencies might affect consumers' marketplace behavior. According to Mokhlis (2006), religion is a supportive structure in the socialization process urging consumers to embrace certain values and moral principles. So, it can be said that religious affiliations such as Islam, Judaism and Hinduism might influence some aspects of the decisions that consumers take through the religions' specific rules or traditions. Studies on how differences in religious affiliations tend to affect the way people live including their eating habits (Jusmaliani, 2009), health and care purchases (Fam et al. 2002), and their insurance purchases (Siala, 2012) are available within the consumer behavior discipline.

## **The Relationship between Consumer Behavior and Religion**

### **Consumer Behavior**

According to Solomon, consumer behavior "is the study of the process involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy those needs and desires." (Solomon, 2007:33) Solomon gives an example of the range of needs and desires as being from hunger and thirst to love, status or even spiritual fulfillment.

The American Marketing Association describes consumer behavior as "the dynamic of interaction of affect and cognition, behavior, and the environment by which human beings conduct the exchange aspects of their lives." (Peter, Olson, 2008; 5) According to this definition; it can be implied that consumer behavior is not a stable variable, in contrast, it is dynamic and it comprises interaction of individuals, emotions, feeling and attitudes and even societies.

## **Shopping Behavior**

According to Hawkins and Mothersbaugh (2008) consumer behavior is defined as “the study of individuals, groups or organizations and the process they use to select, secure, use and dispose products, services and experiences or ideas to satisfy needs and the impacts that these processes have on the consumer and society.” (2008:6). From the definitions given by Solomon (2007), Hawkins and Mothersbaugh (2008) and the American Marketing Association (2008), it can be easily seen that one of the initial actions that the consumers take is to select and purchase the products or services. The concept of selecting and purchasing products or services can be named in several ways like shopping criteria (Smith, Frankenberger, 1991) buying or purchasing behavior (Sood, Nasu, 1995), shopping behavior (Essoo, Dibb, 2004) and shopping orientation (Mokhlis, 2006). According to the literature, shopping behavior is widely used for classifying consumers based on their habits and styles (Mokhlis, 2009). Researchers (Sproles, Kendall, 1986; Laaksonen, 1993; Hawkins et al. 2001) highlight that shopping behavior is a multi-dimensional concept that reveals consumers’ social, recreational and economic situation as well as their motivation for shopping. Therefore, scholars have defined shopping behavior by categorizing basic shopping patterns and they have used different dimensions, theoretical frameworks and approaches. Stone (1954) is one of the earlier researchers investigating shopping behavior. By interviewing 150 housewives in Chicago to determine their shopping orientations towards local merchants and large chain department stores; he found four types of shoppers:

- Economic shopper: Shoppers who judge stores based on price, quality, convenience and store personality. They are strongly motivated by learning about new trends.



- Personalizing shoppers: Shoppers who need social contact. They form strong personal bonds with store employees. They are motivated by social experience.
- Ethical shoppers: Shoppers who wish to behave consistently with moralistic beliefs such as helping little local stores or avoiding chain retailers. They are also motivated by social experience.
- Apathetic shoppers: Shoppers who do not like shopping. Therefore, they want to minimize their shopping by using the most convenient stores, retailers.

Like Stone's (1954) research, various empirical studies have been conducted to develop new consumer typologies for shopping behaviors. Stephenson and Willett (1969) classified shopping behavior into four categories: store-loyal, compulsive, convenience and price bargain shoppers. William et al. (1978) classified shopping behavior for grocery as price, convenience, apathetic and involved shoppers. Among the other studies; Sproles and Kendall (1986) provide a diverse explanation and method for categorization of shopping behavior. They support the idea of describing and identifying consumers according to basic decision-making style in the context of shopping. Based on their literature review, Sproles (1985) determined fifty different consumer orientations towards shopping activities. After their analysis, Sproles and Kendall (1986) classified these shopping behaviors into eight categories:

**Table 2: Sproles and Kendall's (1986) Consumer Shopping Styles**

<b>Quality conscious consumer</b>	Measures the degree to which a consumer searched carefully and systematically for the best quality in products.
<b>Brand conscious consumer</b>	Measures a consumer's orientation to buying the more expensive, well known brands.
<b>Hedonistic consumer</b>	Measures the degree to which a consumer finds shopping a pleasant activity and shops for the fun of it.
<b>Price conscious consumer</b>	Measures the consumers' high consciousness of sale price and lower price in general.
<b>Novelty-fashion conscious consumer</b>	Measures consumers' tendency to new and innovative products and gain excitement from seeking out new things.
<b>Impulsive consumer</b>	Measures consumers' tendency to buy on the spur of the moment and appear unconcerned by how much they spend or getting "best buys".
<b>Confused by over-choice consumer</b>	Measures consumers' tendency to perceive too many brands and stores from which to choose, experiencing information overload in the market.
<b>Brand loyal-Habitual consumer</b>	Measures a characteristic indicating consumers' favorite brands and stores, and the formation of habits in choosing these.

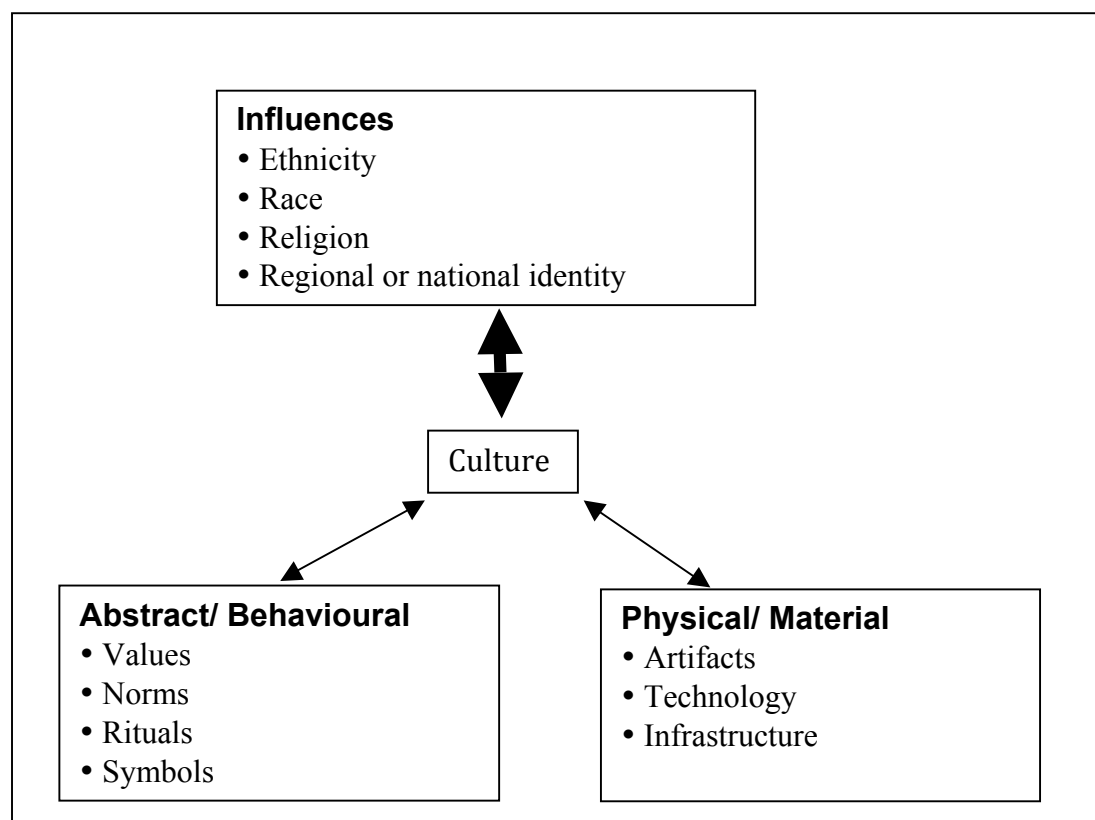
These definitions, which embody social and physical factors as well as environmental factors (Peter, Olson, 2008) make consumers' shopping behavior a quite complex and a diverse field to study. Therefore, considering consumer behavior as a whole can bring inconclusive results: instead examining some aspects of the consumer and their interactions might contribute to the current body of consumer behavior literature.

### **Culture**

According to Kotler et al. (2005) consumer behavior is affected by cultural, social, personal and psychological factors that should be taken into consideration while studying consumers. Although culture "constitutes the broadest influence on many

dimensions of human behavior” (Soares, Farhangmehr, Shoham, 2007: 277), it has remained as an elusive term because of its multi-dimensionality and pervasiveness (Yeniyurt, Townsend; 2003). One of the earliest definitions belonging to Taylor (1871) defines culture as “the complex whole, which includes, knowledge, belief, art, morals, custom and any other capabilities and habit acquired by man as a member of society” (McCort, Malhotra, 1993: 97). Despite many complicated definitions, culture is generally known as shared set of values and beliefs. The most frequently used and cited definition belongs to Hofstede (1980), sees culture as the mental programming of the society, and defines as “the interactive aggregate of common characteristics that influences a groups’ response to its environment” (Hofstede, 1980). Rather than describing culture, Blackwell, Miniard and Engel (2001) offer an explanatory model that ties the influences on culture and to its elements.

**Figure 1: Influences on Culture (Blackwell et al., 2001: 314)**



According to this model, it can be implied that culture is influenced by some factors such as ethnicity, religion, race and regional identity and vice versa. There is a reciprocal relationship between influences, behavioral and physical factors and culture. From the previous definitions mentioned above, it can be concluded that society's cultural values such as norms, religion, class or lifestyle influence how consumers buy and use products, and help to explain how groups of consumers behave. In this pervasive and broad nature of culture, studying all aspects of culture such as religion, knowledge, traditions, music... etc. cannot be possible (Lawan, Zanna, 2013). However, emphasizing the effects of one dimension of culture on some aspects of consumer can make a study more specific and detailed so that it makes it easier to identify how the specific behavior of consumers is affected by a specific dimension of culture.

### **Muslim Culture**

According to the Pew Research Center (2013), there are about 1.6 billion Muslims around the world, which makes Islam the second largest religion with 23% of the world's general population. Contrary to general belief about the only location of the Muslim population being Asia- Pacific region in fact; the Middle East- North Africa region have the highest ratio of Muslims of any region of the world at 93% (Pew Research Center, 2013). Some are very rich for example Saudi Arabia, Kuwait, Qatar and United Arab Emirates with 170 billion total income per a year. "The Future of the Global Muslim Population" research conducted by Pew Research (2011) demonstrated that the world's Muslim population is expected to increase by about 35%, rising from 1.6 billion to 2.2 billion by 2030. If the future expectation becomes real, Muslims will make up 26.4% of the world's total projected population. Looking at the Muslim profile, Saltzman (2008) highlights that Muslims have high birth rates

and a young age profile, which supports the Pew's research projection of the Muslim population. Present and future purchasing powers and steady increase in population make Muslims an attractive market segment for international brands and companies. Saltzman (2008) stated that there are different kinds of Muslim cultures. For the sake of this study, it is necessary to mention the Muslim culture of Turkey, where this study is conducted.

Regardless of cultures' and societies' differences, the religion of Islam empowers Muslims and provides a set of principles to make their lives meaningful (Yavuz, 2004). Allah is the name of the one and only God, Muhammad, peace be upon him, was chosen by God to deliver his message of peace through Quran revealed the book of God, a guidance for Muslims for their whole lives to follow (Shreim, 2009). The Quran includes instructions on moral, social, spiritual aspects of life for Muslims so that they can integrate their belief in all areas of their lives. Although there is one religion for Muslims to follow, cultural differences of Muslim societies can create an alteration of the interpretation of Islamic principles, so that "personal life, ritual practices and religious holidays- covering a whole spectrum from social mores to personal mores differ for each Muslim culture" (Yavuz, 2004:218). So that it can be said that Muslim culture in Turkey, which is a republic, is different from Arab or Persian Islam due to the secular mechanism, western lifestyle, the way of government ruling (Kılıçbay, Binark, 2002; Yavuz, 2004). In Turkey, secularism is generally defined as the regulation and administration of religious affairs by nation-state and the General Directorate of Religious Affairs (Kılıçbay, Binark, 2002). Instead of Sharia law, democracy is dominant in the Turkish Republic and in political parties representing individuals' rights in the Grand National Assembly (Göle, 1997).

According to the research “Mapping the Global Muslim Population” (2009), 98.6 percent of individuals in Turkey are Muslims.

### **The Study of Religion in Marketing**

The relationship between religion and economic growth and industrial development was provided by Weber’s study (1905) a long time ago, however, the effect of religion on the consumer has been a focus of interest only for the last thirty years. Although “religion links us through a variety of connections to a style of living that determines not only what and how we consume, but why we consume” (Hirschman, 1982: 229), the role of religion on the consumer such as their shopping orientation, satisfaction or loyalty to a brand has not been given as much importance as it deserves. Hirschman (1982) lists three reasons why researchers did not focus on studying religion in the context of the consumer. The first reason is being unaware of the relationship between religion and consumption. Secondly, researchers might have seen religion as a sensitive area for research and the third reason may be the ubiquity of religion.

Religion is not only a viable consumer behavior construct; it is also linked to many aspects of our lives and behaviors (Wilkes, Burnet, Howell, 1986; Mokhlis, 2006). Despite religions’ non- negligible impact on individuals, the issue of religion in marketing has only received attention from marketing scholars. Thirty-five marketing articles related to religion were published in the thirty years between 1960 and 1989 (Cutler, 1991). But looking today, with increasing importance of marketing research and its application research about religions’ influences on marketing practices is picking up (Pew Research Internet Project, 2014; Pew Research Center, 2014). The increasing differences between countries and cross-cultural benchmarks (Thornton, 2014) leads scholars, marketers and marketing research companies to more carefully

give some importance to topics such as ethnicity and religion despite their sensitive nature.

Elizabeth C. Hirschman investigated an early investigation of religious affiliation and its effects on consumer behavior in the early 1980's. In her studies, she mainly investigates the similarities and the differences of Catholic, Protestant and Jewish consumers and their consumption behavior. In one of her earlier studies (1981), she scrutinizes the dissimilarities between Jewish and non-Jewish individuals in information seeking, perception of product innovativeness, product information transfer relevant to consumption information processing. Her study reveals that the individual who affiliates herself as Jewish differs significantly from non-Jewish individuals in: information seeking from mass media, innovativeness and the transfer of information to others about products.

Hirschman argues that due to Jews being born into a culture and religion simultaneously (Sklare, Greenblum, 1967), Jewish ethnicity has a significantly stronger effect on individuals' behavior than those who affiliate themselves as non-Jews. Also compared with other ethnicities, Jewish ethnicity provides both more social and religious interaction from the birth of the individual, which creates great consistency in behaviors of cohorts (Hirschman, 1981). So, Hirschman suggests that when Jewish ethnicity is expanding, it is more likely to exhibit these three buying characteristics (information seeking, perception of product innovativeness, product information transfer) more frequently.

Another study of Hirschman's on the novelty seeking and information transfer differences between Catholic, Jewish and Protestant consumers (1982), shows that Jews have a higher level of innate novelty seeking compared to Protestant and Catholic consumers; also a higher level of information transfer among Jews and

Catholics compared with Protestant consumers are observed. In view of such information, it can be concluded that different religiosities create different behavioral patterns, which can easily affect consumption patterns.

Another interesting exploration of Hirschman's (1982) is the study on the effect of religious affiliation on leisure activities. In this study, Hirschman hypothesizes that there is a relationship between religious affiliation and consumers' imaginal tendencies and sensory arousal seeking which are the characteristics that directly affect certain activities such as fun, pleasure and adventure seeking, which all seem directly connected with preferences for leisure activities. According to the results of the study, it turns out that although there is a need for further investigation, religious affiliation has an impact on the pattern of leisure activities. The study was conducted on 532 students; 166 of them Catholic, 173 of them Jewish and 80 Protestants and reveals that Catholics and Protestant consumers expressed significantly greater preference for dancing, jogging, biking and swimming than Jewish consumers. She also highlights that rather than the mostly solitary activities of Catholic and Protestant consumers, Jewish consumers prefer team sports like basketball. In addition to these findings, "Jewish consumers were also found to be significantly higher in pursuit of excitement motive than Protestant and Catholic consumers and higher in pursuit of the involvement and alertness motives than Catholics". (Hirschman, 1982:6).

Similar to Hirschman's initial studies on the effect of religious affiliations on some consumption patterns or behaviors among specific religious affiliations, there have been other investigations of the relationship between religiosity and consumer behavior. One of the earlier studies of Wilkes, Burnett and Howell (1986), an empirical study of 602 Protestant consumers, that religiosity has an impact on several aspects of consumers' lifestyle, which naturally affects consumer choices. In their



research, religiosity is positively related to age, sex and income, revealing that older persons, females and individuals who have low income tend to be more religious. Also, according to their findings, consumers who have high religious commitment tend to be more satisfied in their lives. Despite the lack of strong statistical findings, the study also highlights that consumers who have high religious commitment are likely to use less credit and have a preference for using national brands of products. Delener and Schiffman (1988) conduct a study about the relationship between religiosity and the role of husbands and wives in family decision making processes in durable goods purchasing. The findings reveal that in durable goods purchasing, in Catholic households, husbands have dominance in the purchase decisions. But in Jewish households, the research indicates that husbands and wives make most durable good purchasing decisions equally. Additional findings demonstrate that pro-religious households generally have a dominant actor making most of their purchasing decisions, but unlike pro-religious households, non-religious households are more likely to make purchasing decisions jointly.

Beside its effect on consumption behavior, McDaniel and Burnett's (1991) study focuses on religious affiliation and its effect on media usage and preferences. The study conducted on media habits and usage for evangelical and non-evangelical consumers shows that evangelical consumers are less likely to read newspapers, magazines; less likely to listen popular and heavy rock music than non-evangelical consumers. Instead, evangelical consumers to read religious magazines or to listen religious broadcasts.

As seen from the literature review, early empirical studies on the effect of religious affiliation on consumer behavior could only use basic identification of religious affiliation such as being Catholic, Protestant, Muslim or Jewish. In later studies, the

religious construct became more nuanced, so the different levels of religious intensity that individuals live and experience also came to be measured as “religiosity”. Because of the lack of a universal measurement of religiosity, scholars use different religiosity scales appropriate to their studies.

Appendix 1 scrutinizes the empirical studies investigating the relationship between religious affiliation and religiosity on some aspects of consumer behavior. In addition, Appendix 1 shows the general topics of the studies, scales that each study has used, participants and sample size that each study has.

### **Religious Affiliation and Religiosity Effects on Impulsive Buying Tendency and Price-Value Consciousness**

There has been a lot of research on the relationship between religiosity, religious affiliation and some aspects of consumer behavior hypothesized in this study: impulsive buying tendency, price- value consciousness are studied using empirical evidence to reach significant conclusions.

Bailey and Sood (1993) investigate the effects of religious affiliation on consumer behavior in Washington. One of the aims of this study is to determine how minority religious groups of Buddhist, Hindu, Muslim consumers differ from the consumer considered to be a member of one of the majority religious groups of Judaist, Protestant or Catholic consumers in the purchasing process of relatively expensive stereo sound systems. It reveals that consumers in one religious group display significantly different behavior than consumers belonging to another religious group. According to the results, they found Muslim consumers are impetuous shoppers while Catholic and Muslim consumers are less likely to be informed or risky shoppers and Hindu consumers are found to be rational shoppers. Additional findings suggest that demographic variables create a moderating effect on the relationship between religious affiliation and shopping behavior. For instance, more educated Muslims,

Jews and Buddhist consumers are found to be less risky shoppers and Muslim male consumers are found to be less informed shoppers than Muslim female consumers. Another interesting finding of the study lies in Bailey and Sood's (1993) study. They also investigate whether minority religious groups in Washington such as Muslim, Buddhist and Hindu consumers reflect their religious beliefs and practices to the culture that they settle in. Findings show that Buddhist consumers have a tendency to change their way of practice in accordance with the society that they live, however, Buddhist and Muslim consumers remain loyal to their traditional teachings and beliefs no matter where they live.

Essoo and Dibb (2004) conduct a parallel study on 600 respondents on the island of Mauritius whose religious affiliations are Hindu, Muslim and Catholic. Their aim is to examine different shopping behaviors on consumers who have different religious affiliation. They use a neutral product- no religious or spiritual meaning- a television set. Regardless of what the product is, findings indicate that Catholics, Hindus and Muslims show different shopping behaviors. Catholic consumers are found to be more thoughtful shoppers while purchasing the product than Hindu and Muslim consumers. This is because Catholics have more tendencies to bargain during purchasing and are more impressed by people's opinions before purchasing a product compared with Muslim and Hindu consumers.

In parallel manner to Bailey and Sood's study, Essoo and Dibb (2004) also reveal in their study that Muslim shoppers are found to be more practical and innovative in their shopping behavior compared with Catholic and Hindu consumers. Practical shopping behaviors, like Muslim consumers, demonstrate that consumers give importance to price deals, promotions and store credit facilities. Innovative shoppers, like Muslim consumers, may try new products first, they have no favor towards any

specific brand and they do not wait for other consumers' opinions before trying a new product, which makes Muslim consumers innovative and price conscious.

McDaniel and Burnett (1990) explore the influence of religiosity on the importance of various retail department store attributes for consumers. In this study, McDaniel and Burnett divide religiosity into two dimensions: religious commitment and religious affiliations. The outcomes of the study display that one dimension of religiosity, which is religious commitment, has a significant impact on predicting the certain retail store attributes of consumers. Consumers with high religious commitment give more importance to some specific retail store attributes such as sales personnel friendliness, shopping efficiency and product quality than consumers who have low religious commitment.

In one of few the articles discussing the effects on religiosity on specific aspects of consumer behavior which is also called shopping behavior, Smith and Frankenberger (1991) conduct a study on the effects of religiosity on such selected aspects of shopping behavior as quality, social risk, price and brand. The findings indicate that consumers with high religiosity are more likely to look for product quality, are more price sensitive and more worried about the social risk associated with the product they bought. However, researchers have not found any statistical significance between the effects of religiosity and brand loyalty. Also Smith and Frankenberger (1991) highlight that marketers, managers and corporations should consider religiosity as a segmentation variable. "If in a segment consumers can be identified as high religious, then specific shopping criteria such as product quality could be stressed in advertisements" (Smith, Frankenberger, 1991: 281).

In the same vein, Mokhlis (2006) conducts a study observing the effect of religiosity on consumers' shopping orientation in Malaysia. Mokhlis (2006) investigates

different shopping orientations as (1) brand consciousness, (2) shopping enjoyment, (3) fashion consciousness, (4) quality consciousness, (5) impulsive shopping, and (6) price consciousness towards textile consumption. According to empirical results, quality consciousness, impulsive buying tendency and price conscious are directly related to religiosity. Religious individuals are more likely to be conscious about price and quality and less likely to buy impulsively compared to not religious individuals.

### **Measurement of Religion in Consumer Research**

After gaining an intensive understanding of religion as a construct in models of consumer behavior, it is necessary to review the measurement of religion as it applies to consumer behavior studies. As mentioned earlier, in early empirical studies, scholars only identified religious such as Jew, Catholic, and Muslim (Engel, 1976; Hirschman, 1981, 1982; Delener, 1987). But in the same religious affiliation, individuals can have different levels of religious affiliations (high religiosity, low religiosity etc.) that can alter their way of consumption, shopping and purchasing behavior. Thus, for eliminating this kind of limitation, religiosity and religious commitment addition to religious affiliation should be measured to determine the degree of religiosity (Wilkes et al., 1986; McDaniel and Burnett, 1990; Smith and Frankenberger, 1991; Delener, 1990; Essoo and Dibb, 2004).

Wilkes et al. (1986) support that religiosity cannot be seen as a uni-dimensional of measurement in academic studies. They assess four dimensions of religiosity in their study: (1) church attendance, (2) confidence in religious values, (3) importance of religious values, (4) self-perceived religiousness. They construct a scale and measure these four dimensions of religiosity with the following statements: (1) the frequency of church attendance was measured by the statement of “I go to church regularly”. In order to measure (2) confidence in religious values, “If Americans were more

religious, this country would be a better county” statement was used. (3) The importance of religious values was measured by the statement of “Spiritual values are more important than material things”. In order to evaluate this statement, a 6-point Likert scale from strongly disagree to strongly agree was used. Finally, (4) self-perceived religiousness was tested by requesting participants to evaluate their religiosity levels as religious, moderately, slightly or antireligious.

Another measurement of religiosity measurement frequently used in the consumer research belongs to Allport and Ross (1967) called “Intrinsic- Extrinsic Religious Orientation Scale”. According to Allport and Ross (1967), intrinsically motivated religious people are completely committed to their faith while extrinsically motivated religious people are more self-serving as “the extrinsically motivated person uses his religion, whereas the intrinsically motivated ones live their religion” (Allport, Ross, 1967: 434).

**Table 3: Allport-Ross (1967), Religious Orientation Scale**

Statements	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
1. I enjoy reading about my religion.	1	2	3	4	5
2. I go to church because it helps me make friends.	5	4	3	2	1
3. It does not matter what I believe so long as I am good.	5	4	3	2	1
4. Sometimes I have to ignore my religious beliefs because of what people might think of me.	5	4	3	2	1
5. It is important for me to spend time in private thought and prayer.	1	2	3	4	5
6. I would prefer to go to church:					
Once every month or two.	1				
Two or three times a month.	2				
About once a week.	3				
More than once a week.	4				
7. I have often had a strong sense of God presence.	1	2	3	4	5
8. I pray mainly to get relief and protection.	5	4	3	2	1
9. I try hard to live all my life according to my religious beliefs.	1	2	3	4	5
10. What religion offers me most is the comfort in times of trouble and sorrow.	5	4	3	2	1
11. My religion is important because it answers many questions about the meaning of life.	1	2	3	4	5
12. I would rather join a Bible study group than a church social group.	1	2	3	4	5
13. Prayer is for peace and happiness.	5	4	3	2	1
14. Although I am religious I don't let it affect my daily life.	5	4	3	2	1
15. I go to church mostly to spend time with my friends.	5	4	3	2	1
16. My whole approach to life is based on my religion.	1	2	3	4	5
17. I enjoy going to church because I enjoy seeing people I know there.	5	4	3	2	1
18. I pray chiefly because I have been taught to pray.	5	4	3	2	1
19. Prayers I say when I am alone are as important to me as those I say in church.	1	2	3	4	5
20. Although I believe in my religion, many other things are more important in life.	5	4	3	2	1

The Religious Orientation Scale (ROS) of Allport and Ross (1967) is popular among scholars studying religiosity and consumer behavior (Delener, Schiffman, 1988; Delener, 1989, 1990, 1994; Essoo and Dibb, 2004). Despite its common usage, Allport and Ross designed this study only for Christian samples. Using this for non-

Christian groups may produce inaccurate or non-valid results (Genia, 1993). Perhaps it can be seen that this most serious shortcoming of ROS is that it is designed for Christian subjects. Genia (1993) provides evidence as a result of his psychometric evaluation of ROS, and recommends that the measurement of the frequency of worship can cause problems. What he wants to explain is that in measuring Islamic religiosity, for example, this can be only done for men because they are obligated to attend worship in congregation at mosque at least every Friday. So, this kind of inconsistency can create methodological problems.

A number of studies (Mokhlis, 2008; Mokhlis, 2009, Taks, Shreim, 2009) use the Religious Commitment Inventory (RCI-10) developed by Worthington et al. (2003) in order to investigate the effect of religiosity on some aspects of consumer behavior. The Religious Commitment Inventory includes the two dimensions of cognitive (intrapersonal) religiosity and behavioral (interpersonal) religiosity with their total of ten statements in the 5-point Likert type scale having statements from not at all true for me to totally true for me.



**Table 4: Worthington et al. (2003), the Religious Commitment Inventory (RCI-10)**

Statements	Not at all	Somewhat	Moderately	Mostly	Totally
1. I often read books and magazines about my faith.	1	2	3	4	5
2. I make financial contributions to my religious organization.	1	2	3	4	5
3. I spend time trying to grow in understanding of my faith.	1	2	3	4	5
4. Religion is especially important to me because it answers many questions about the meaning of life	1	2	3	4	5
5. My religious beliefs lie behind my whole approach to life.	1	2	3	4	5
6. I enjoy spending time with others of my religious affiliation.	1	2	3	4	5
7. Religious beliefs influence all my dealings in life	1	2	3	4	5
8. It is important to me to spend periods of time in private religious	1	2	3	4	5
9. I enjoy working in the activities of my religious affiliation.	1	2	3	4	5
10. I keep well informed about my local religious group and have some	1	2	3	4	5

Although Worthington et al. (2003) suggest that RCI-10 can be used for different religious sample such as Buddhists, Muslims or Catholics, Muhamad and Mizerski (2010) assert that, Hindu and Muslim consumers, religious perception needs to be measured separately rather than using a single measurement of religiosity. Therefore, for this study, an Islamic religiosity scale is needed in order to rule out any methodological problems as Genia (1993) and Muhamad and Mizerski (2010) have argued.

More recently, Shabbir (2007) developed a questionnaire in order to measure Islamic religiosity and called it the Islamic Religiosity Index. He defines religion as a strong belief in a supernatural power that controls human destiny or an institution express belief in divine power” (Rehman, Shabbir, 2010: 65). In accordance with Glock’s

(1972) model, religiosity is operationally defined in five dimensions: ideological, ritualistic, intellectual, consequential and experiential. The ideological dimension includes overall beliefs associated with religion such as belief in God, Prophet or fate. Ritualistic dimension include the actions prescribed by religion as prayer, fasting or pilgrimage. Intellectual dimensions refer to an individual's knowledge about religion. At last, consequential dimensions refer to the importance of religion while experiential dimensions describe the practicality of religion.

In this study, Shabbir's (2007) Islamic Religiosity Index was used for measuring the effect of religiosity on impulsive buying tendency and post-purchase feeling via moderation analysis.

**Table 5: Shabbir (2007), Islamic Religiosity Index**

Statements	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
<i>Ideological Dimension</i>					
1. I have a firm belief in all basic ideological dimensions of Islam	1	2	3	4	5
2. Muhammad (PBUH) is His last Prophet	1	2	3	4	5
3. I believe there is only one Allah	1	2	3	4	5
<i>Ritualistic Dimension</i>					
4. I regularly offer prayer five times a day	1	2	3	4	5
5. I fast regularly during Ramadan	1	2	3	4	5
6. I regularly recite the Holy Quran	1	2	3	4	5
7. I believe that I am obliged to perform Hajj to meet the prescribed criteria	1	2	3	4	5
<i>Intellectual Dimension</i>					
8. I never offer Sajjda at Saint's graves	1	2	3	4	5
9. I always keep my self away from earning through haram (prohibited) means	1	2	3	4	5
10. I always try to avoid minor and major sin	1	2	3	4	5
11. I know the basic and necessary knowledge about my religion	1	2	3	4	5
12. I always try to follow Islamic injunctions in all matters of my life	1	2	3	4	5
<i>Consequential Dimension</i>					
13. It is my duty to give respect to others and give them their rights according to Islamic injunctions	1	2	3	4	5
14. I try to avoid any activity which hurt others	1	2	3	4	5
15. I always try to help those who need my help	1	2	3	4	5
16. I try to be honest and fair with others	1	2	3	4	5
<i>Experiential Dimension</i>					
17. I feel sorrow and dissatisfaction when I do something against my faith	1	2	3	4	5
18. I have feelings of being tempted by the devil	1	2	3	4	5
19. I have feelings of being afraid of Allah	1	2	3	4	5
20. I have feelings of being punished by Allah for doing wrong	1	2	3	4	5
21. I feel pleasure by seeing others following Islamic teaching	1	2	3	4	5

## **CHAPTER 3**

This section of the study summarizes previous studies, which offer empirical evidence of several important dimensions of religiosity, and presents hypotheses of this study. From the studies, the conclusion that can be drawn is that consumer religiosity is a diverse concept that can be measured from numerous perspectives. In the next chapter, the research methods of the study and criteria used to assess the research hypotheses will be presented.

### **Theoretical Frameworks**

#### **Price Consciousness**

Price consciousness refers to the scope of buyers' motivation in searching for and paying low prices for a product or service (Lichtenstein, Bloch and Black, 1988; Lichtenstein, Ridgway and Netemeyer, 1993) and defined as "the degree to which a consumer focuses exclusively on paying a low price" (Lichtenstein et al., 1993: 235). Therefore, price conscious consumers seek a low price for a chosen product and the price has a significant importance compare to non-price conscious consumers (Kinney, Ridgway and Monroe, 2012). It is known that sale discounts and other promotional activities are directly related to price consciousness (Lichtenstein, 1993; Alford and Biswas, 2002).

#### **Value Consciousness**

Value consciousness is defined as "the consumers' overall assessment of the utility of a product based on what is received and what is given" (Ziethaml, 1988: 14). Generally scholars define value consciousness as being giving and getting actions appropriate to value consciousness' nature (Lichtenstein et al. 1993). It resembles a ratio of quality of a product has to its price. It has consistent with what Ziethaml

(1988) finds about the meaning of value that consumers use: the quality they get for the price they pay.

### **Impulsive Buying Tendency**

Looking at the pioneer definition of impulsive buying tendency, Rook (1987) defines it as an unintended reaction that occurs while a consumer is exposed to stimuli inside the store. Beatty and Ferrell (1998) define impulsive buying as an immediate purchase, which does not involve any considerations during both the pre-purchasing, and purchasing process. Since impulsive buying behavior has gained importance for companies, managers and anyone related to marketing, there have been lots of studies to investigate the influence on impulsive buying behavior from the shopping environment, personal traits, the product itself to demographic and socio-cultural aspects of consumers (Muruganantham, Bhakat, 2013). Muruganantham and Bhakat (2013) analyze past studies and in the light of these studies, they categorize the factors effecting impulsive buying behavior as external, internal, situational-product related and demographic– socio-cultural factors.

### **Post- purchase Regret**

Regret, defined as “the painful sensation of recognizing that ‘what is’ compares unfavorably with ‘what might have been’” (Sugden, 1985: 77) is not only an emotional reaction to the bad consequences of the decisions, it is also a powerful force that gives motivation for individuals’ behavior (M’Barek, Gharbi, 2012). Binding regret to a stable characteristic and understanding the post purchase regret that consumers feel helps managers and companies prevent consumers’ post-purchase regret, so giving consumers a more joyful experience and lead them to repurchase the products or services.

## **Hypotheses**

In the literature review, studies provide empirical evidence of the relationship between religiosity and their different aspects of shopping behavior as impulsive buying tendency, price and value consciousness (Smith, and Frankenberger, 1991; Bailey and Sood, 1993; Essoo and Dibb, 2004; Mokhlis, 2006). Relationships have not been carried out on Muslim consumers in the context of Turkey has not studied yet. That will contribute to the literature by giving data on Muslim religiosity as a stable factor, what makes this research innovative and distinctive is that it supplies significant. In addition, the effect of price consciousness on impulsive buying tendency and the effect of value consciousness on post-purchase regret will be also investigated in order to examine how value and price consciousness affect post-purchase regret and impulsive buying tendency independent from the Muslim religiosity variable.

Price and value consciousness has always been investigated in the context of consumer behavior (Mizerski, Golden and Kernan, 1979; Lichtenstein et al., 1993; Jafarzadeh, 2012). Indeed, research on the effect of price and value consciousness on impulsive buying tendency has become more often studied as impulsive buying tendency increased importance in the marketplace (Skallerud, Olsen, 2010). Karbasivar and Yaramahdi (2011) highlight that consumers are prone to discounts, promotions and coupon offers- meaning they are conscious about the products' price- have a tendency to impulsive buying because they do not have to go along with their shopping list, their actual purchase depend on price discounts, coupons and other promotions. In the same vein, Ghani and Jan (2010) show that with low priced convenience goods such as grocery shopping, consumers have a tendency to do their shopping impulsively. Another study (Yu and Bastin, 2010) reveals that promotion techniques such as price off promotions, coupons, and samplings induce consumers to

make impulse purchases. In contrast; the literature about religiosity states that consumers with high religiosity have high price consciousness and have less tendency to impulsive buying behavior (Smith and Frankenberger; 1991, Mokhlis and Spartks, 2007; Mokhlis, 2009).

Independent from religion; the relationship between impulsive buying tendency and regret will also be investigated. According to the research (George, Yaoyuneyong, 2010; Saleh, 2012), there is a positive relationship between impulsive buying and post purchase regret feeling. Therefore, based on the literature, it will be expected that consumers who make their purchases impulsively feel more regret after purchasing.

In the light of the empirical evidence it will be expected that Muslim religiosity has a negative impact on impulsive buying tendency and price consciousness has a positive impact on impulsive buying tendency. Knowing that price consciousness positively affect impulsive buying tendency and Muslim religiosity negative effect on impulsive buying tendency to discover how the interaction of the two predictor variable would influence impulsive buying tendency would contribute the literature as religion is often an inseparable part of life.

We have tested the 4<sup>th</sup> hypothesis to satisfy the rules of moderation analysis as suggested by Dawson (2014).

**H1:** Price consciousness has a positive impact on impulsive buying tendency.

**H2:** Muslim religiosity has a negative impact on impulsive buying tendency

**H3:** High Muslim religiosity and high price consciousness have a negative impact on impulsive buying tendency.

**H4:** Impulsive buying tendency has a positive effect on post-purchase regret.

As discussed above, compared with other emotional experiences that consumer faces such as consumer satisfaction or brand loyalty, there are a limited number of studies

investigating the post-purchase regret. According to Tsiros and Mittal (2000), regret may come out as a result of a wrong decision even if it appears to be right at the time it was made. Therefore, consumers regret their decisions by thinking if they had made different decision, it would have led to better outcomes. If we can determine the effect of religiosity on post-purchase regret that consumers feel in the post-purchase process, it will increase the value of religiosity as an important marketing construct. The investigation conducted by M'Barek and Gharbi (2012) highlights that according to consumers, religion and faith are ways of regulating post-purchase regret. By convincing themselves that God has already made the decision, consumers persuade themselves of fate, so they can easily deny the responsibility of their choice and get rid of their post-purchase regret. Also, M'Barek and Gharbi (2012) state, "regulating regret is mainly based on the belief in God and is part of some principles of the Islamic religion" (M'Barek and Gharbi, 2012: 8). In the light of M'Barek and Gharbi's argument, it will be expected that religiosity has a negative effect on post-purchase regret feeling.

In addition, the effect of value consciousness on post-purchase regret will be also investigated in order to examine how value consciousness affect post-purchase regret. According to Mafini, Dhurup and Mandhlazi (2014), consumers having value consciousness have an indecisive nature while selecting a product, so because of their overthinking, they feel less regret in their post-purchase process. After their careful selection, they might feel that they give the right decision in the process of purchasing, and they do not have any remorse after purchasing. In the light of this evidence, it will be expected that value consciousness has negative impact on regret feeling, therefore, it is expected that consumers with high Muslim religiosity and high value consciousness will have less regret feelings.



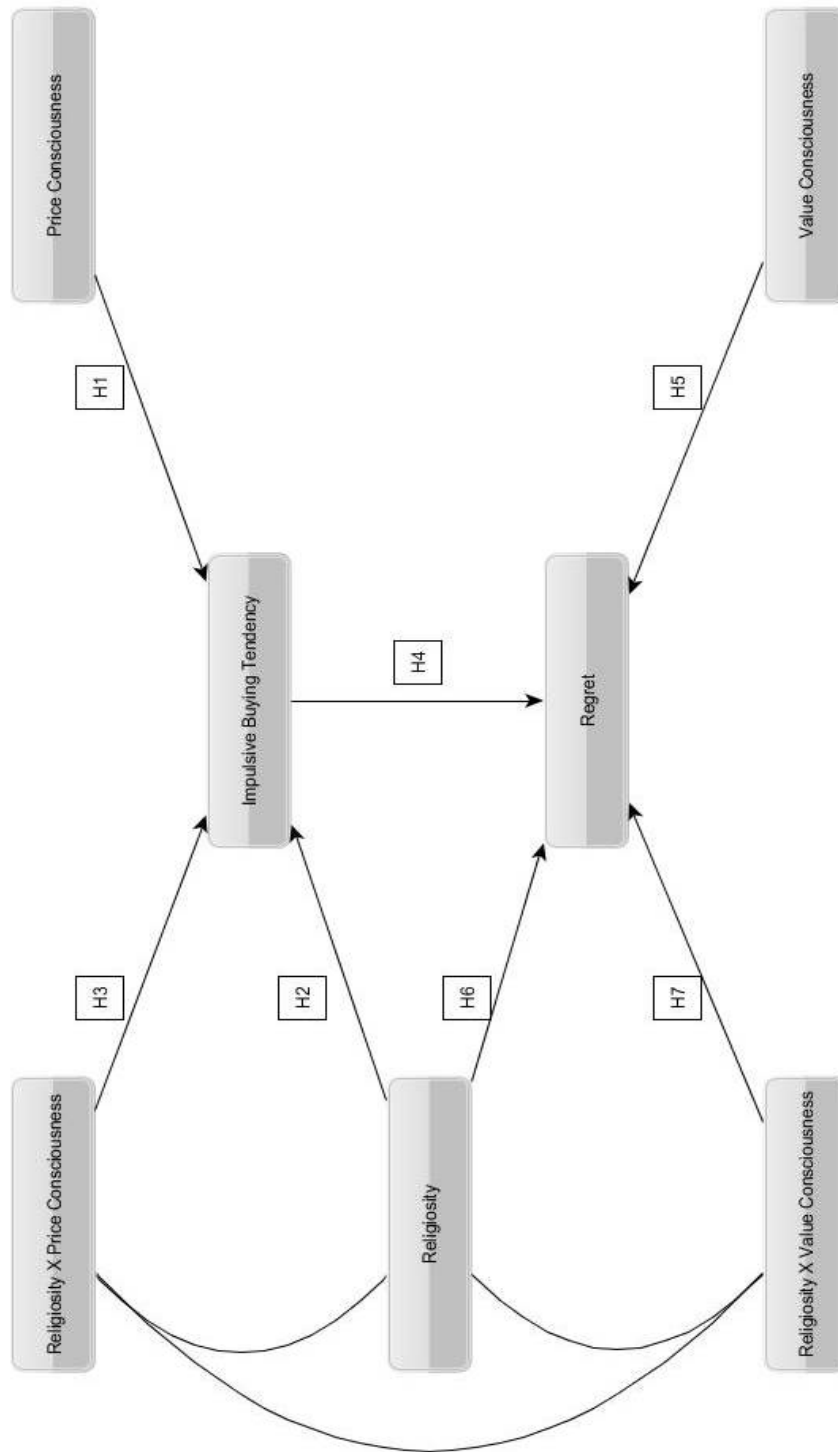
**H5:** Value consciousness has a negative impact on post-purchase regret.

**H6:** Muslim religiosity has a negative impact on post-purchase regret.

**H7:** High Muslim religiosity and high value consciousness have a negative impact on post-purchase regret.

The preliminary aim of this study is to investigate effect of Muslim religiosity on selected aspects of consumer behavior. The theoretical framework of this study presented below.

Figure 2: Hypothesized Model



# CHAPTER 4

## **Introduction**

Chapter 4 is the section of research and analysis of this dissertation. In the first part of Chapter 4, a discussion of the data collection procedures and sample, the context of the study and the measurement instruments, which are used, are presented. In addition, preliminary statistics are presented in this chapter. In the second part of Chapter 4, reliability analysis, moderation analysis and their statistics are presented. In addition to statistical values, analysis' steps are presented for the each of the analyses.

## **Data Collection and Sample Description**

In order to collect the data for this dissertation study, an online survey software Qualtrics was used to distribute the questionnaire (see Appendix 3) to individuals who are known to be members of a well-known Muslim congregation by judgmental sampling. Via Qualtrics, 350 individuals were invited to respond to the questionnaire and 235 responses were received of which 220 were usable for this study. 15 of these were eliminated because of missing or outliers. For empirical studies, sample size has significance in maintaining reliability. Tabachnick and Fidell (2007) state that between 200-300 samples is enough to conduct a factor analysis. Osborne and Costello (2004) highlight that factor analysis and other analysis such as structural model analysis need large samples because these are not well suited for small sample sizes. Kline (2005) mentions that 100-200 can be considered as medium sample size, whereas  $N > 200$  is considered to be a large sample size. In addition to this, Suhr (2008) states that the requirement of sufficient sample size is to have a 20 to 1 ratio for the number of subjects to the number of model parameters. However, a 5 to 1 ratio

can be a realistic target for a study. For this study it can be said that an appropriate sample size is used for the analysis.

## **Measurement Instruments**

### **Independent Variables**

#### **Religiosity**

Religiosity was measured using the Islamic Religiosity Scale developed by Shabbir (2007). In Islamic religiosity scale, religiosity has been operationally defined in five dimensions: ideological, ritualistic, intellectual, consequential and experiential. The ideological dimension includes overall beliefs associated with religion such as belief in God, Prophet or fate. Ritualistic dimension include the actions prescribed by religion as prayer, fasting or pilgrimage. Intellectual dimensions refer to an individual's knowledge about religion. Finally, consequential dimensions refer to the importance of religion while experiential dimensions describe the practicality of religion. All dimensions were expressed through 5-point Likert type 21 statements. Rehman and Shabbir (2007) determine the Cronbach's alpha for overall religiosity as 0.67.

### **Dependent Variables**

#### **Impulsive Buying Tendency**

The impulsive buying tendency scale is composed of nine items scored on 5-point Likert type scales from strongly disagree to strongly agree developed by Rook and Fisher (1995), and five items scored on 5-point Likert type scales developed by Weun, Jones and Batty (1997). These two scales are put together because Weun et al. (1997) considers a new dimension of impulsive buying tendency which is emotional dimension engaged with impulsive buying. However, in Rook and Fisher's (1995), this dimension is not covered. With this combined scale, it reflects the cognitive and

emotional dimension of the impulsive buying. Total 14 items in this scale were adjusted to measure consumers' impulsive buying tendency. Rook and Fisher (1995) reports that according to confirmatory factor analysis, this scale is uni-dimensional for the nine-item scale whereas its factor loadings are ranged from 0.6 to 0.81 across items and its internal consistency is reported as 0.88 (Rook and Fisher, 1995).

### **Post-purchase Regret**

Regret scale is composed of five items scored on 7-point Likert type scales and developed by Schwartz et al. (2002). This scale was used to measure consumers' post purchase emotions whether they feel regret or not. Schwartz (2002) determines its Cronbach's alpha as 0.67 for overall items.

### **Predictor Variables**

#### **Price Consciousness and Value Consciousness**

Price and value consciousness scale is composed of twelve items: seven for value consciousness and five item for price consciousness scored on 7-point Likert type scales and developed by Lichtenstein et al. (1993). This items in this scale were adjusted to determine how religiosity affects and directs impulsive buying tendency and regret different from the effect of itself only. Lichtenstein et al. (1993) determines price and value consciousness' Cronbach's alpha as 0.833 and 0.729 respectively.

### **Data Analysis**

Data obtained from the participants are organized using *SPSS for Windows v. 19*. Before the analysis, data obtained from participants were examined and missing and incomplete responses any outliers were eliminated.

For the analysis of the data, structural equation modeling was used. In order to test the data and its compatibility with the model, the model fit indices such as goodness-of-fit statistics (Chi-square), normed fit index (NFI) and goodness of fit (GFI) was

obtained, in addition to model fit, regression analysis was conducted for testing the hypotheses presented earlier in the dissertation.

### **Investigating the Relationship between Variables**

First, by using *SPSS for Windows v. 19*, mean and standard deviation of variables presented in the model were calculated. Also, to investigate the relationship between variables, correlations of the variables were calculated. These are presented in the following tables.

**Table 6: Descriptive Statistics**

<b>Variables</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
<b>Value Consciousness</b>	5.4011	.65580	220
<b>Price Consciousness</b>	4.2426	.81663	220
<b>Muslim Religiosity</b>	3.2539	.61463	220
<b>Post-purchase Regret</b>	4.1698	.93121	220
<b>Impulsive Buying Tendency</b>	3.1458	.55768	220

**Table 7: Correlations**

		VALAVE	PRCAVE	MRELAVE	RGTAVE	IPTAVE
<b>Value Consciousness</b>	Pearson	1	.448**	.188**	.216**	.011
	Correlation					
	Sig. (2-tailed)		.000	.005	.001	.872
<b>Price Consciousness</b>	Pearson	.448**	1	-.094	.019	-.040
	Correlation					
	Sig. (2-tailed)	.000		.164	.780	.554
<b>Muslim Religiosity</b>	Pearson	.188**	-.094	1	.047	.095
	Correlation					
	Sig. (2-tailed)	.005	.164		.488	.159
<b>Post-purchase Regret</b>	Pearson	.216**	.019	.047	1	.024
	Correlation					
	Sig. (2-tailed)	.001	.780	.488		.724
<b>Impulsive Buying Tendency</b>	Pearson	.011	-.040	.095	.024	1
	Correlation					
	Sig. (2-tailed)	.872	.554	.159	.724	

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

## Reliability Analysis

This study used existing measures, which have been well established and frequently used in empirical research supported with evidence in literature review. Factor analysis is often employed to identify or confirm latent constructs from a large sample of observed variables (Worthington, Whittaker, 2006). It is also used to identify the defining dimensions of the construct that underlies the set of items (Tabachnick, Fidell, 2001). Exploratory factor analysis (EFA) generally assesses the construct validity during the initial of an instrument and it also helps to develop scales that show good internal consistency while minimizing overlap with other scales (Hurley et al. 1997). Its aim is to help an investigator determine the number of latent constructs underlying a set of items (Suhr, 2008).

Despite all of the scales conducted in previous empirical studies, reliability of each scales are measured to be sure the fact that the scales really consistently reflect the

construct it is measuring. As mentioned earlier, this study was used existing measures for investigating the relationship between variables. Therefore there is no need to conduct exploratory factor analysis. Despite the reliability of the measurement instruments are given, reliability analysis was conducted in order to show whether the internal consistency is good or not (Yeniaras, 2013).

The most common measure for testing the scale reliability is Cronbach's Alpha (Field, 2005). The scales reliability is measured by using SPSS for Windows v.19 with the sample size of 220. Reliability statistics of scales, which are: Islamic Religiosity scale, impulsive buying tendency, regret, price and value consciousness are presented in Appendix 4.

In order to interpret the Cronbach's alpha, scholars (Kline, 1994; Field, 2005) state that 0.7 can be considered as an acceptable value, and substantially lower value indicates that scale's unreliability (Malhorta, Birks, 2007). Looking the scales' Cronbach's alpha, (for Islamic Religiosity Index;  $\alpha = .952$ ; for price consciousness;  $\alpha = .852$ ; for value consciousness,  $\alpha = .873$ ; for impulsive buying tendency,  $\alpha = .869$  and for regret,  $\alpha = .792$ ) it is concluded that all of them are above 0.7, which reflect an acceptable degree of reliability.

## **Moderation Analysis**

Structural equation modeling (SEM) provides researchers to examine how well process model that links "some variable X to outcome Y through one or more intervening pathways fits the observed data" (Hayes, 2009: 408). "SEM is a technique that effectively incorporated a wide range of standard multivariate analysis methods including regression, factor analysis and analysis of variance" (Yeniaras, 2013: 91).

Moderation analysis helps researchers "to understand how a process operates if the moderator places constraints on how or when that process can function." (Hayes,



2009: 410). A moderator can be seen as a variable that specifies conditions under which a given predictor is related to an outcome. (Rose et al., 2004). Because of its nature, a moderator can explain when a dependent and independent variables are related. According to Wu and Zumbo (2008), a moderator can be an innate attribute such as ethnicity and religion, which has an unchangeable background, compared with any demographic variables. As seen from the model given above, while the study treats impulsive buying tendency and regret feeling as dependent variables, value consciousness and price consciousness are considered as the predictor variables of this study. To test the moderating effect of Muslim religiosity, the study used new variables-  $\text{Religiosity} \times \text{Price Consciousness}$  and  $\text{Religiosity} \times \text{Value Consciousness}$ - which are essential for moderation analysis to see the moderator (Muslim religiosity) has any effect of predictor (price and value consciousness) on the outcome (impulsive buying tendency and post-purchase regret).

According to Cohen, Cohen, West and Aiken (2003), a moderation effect can be:

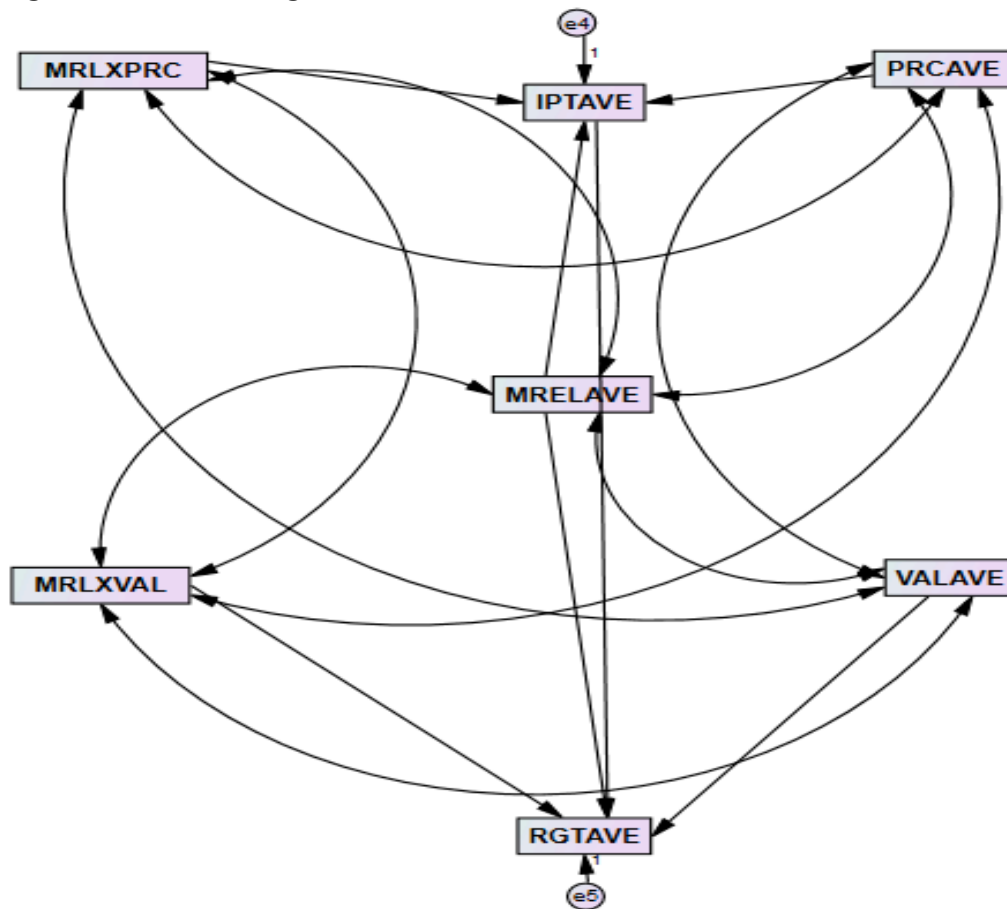
- (1) **Enhancing**, where increasing the moderator could increase the effect of predictor on outcome,
- (2) **Buffering**, where increasing the moderator could decrease the effect of predictor on outcome,
- (3) **Antagonistic**, where increasing the moderator would reverse the effect of predictor on the outcome.

### **Steps in Testing Moderation**

In this section of the study, moderation analysis was performed using *AMOS for Windows v.19*. In order to conduct a moderation analysis, there are some steps that should be followed: first, we need to standardize moderator variable and independent

variables before calculation of the product term. Dawson (2014) highlights that although it is not essential, it is important for both avoiding multicollinearity and making interaction more interpretable. Then, we need to multiply predictor and moderator variables to provide the interaction. The model presented in Figure 3. Was obtained through the structural equation modeling's path analysis by using *AMOS for Windows v. 19*.

**Figure 3: Amos Path Diagram**



## Model Fit

In this process, model fit indices are the values showing whether the model has a good fit with data obtained in the study. There are some critical values for each model fit indices so that a researcher can compare its own values with these critical values to

see how well its research's theoretical model fit with its own data (Hoyle, 1995; Raykov and Marcoulides, 2000; Meydan and Şeşen, 2011).

**Table 8: Model Fit Indices**

Measures of Fit	Structural Model
( $\chi^2$ -Chi-square) Goodness of Fit Statistic	4.224
Chi-square/ Degrees of Freedom ( $\chi^2/df$ )	1.056
Probability Level	0.376
Normed Fit Index (NFI)	0.997
Goodness of Fit Index (GFI)	0.995

### **Chi-square ( $\chi^2$ )**

Chi-square test is a test of discrepancy between predicted and observed model (Yeniaras, 2013). Bollen (1989) recommends that chi-square should be a small value as below 4 or 5, so that it could depict the hypothesized model and the data have a good match with each other. It has been argued that as chi-square fit statistics is sensitive to sample size (Tabachnick, Fidell, 2001). Since chi-square is sensitive to sample size, chi-square/ degrees of freedom were also evaluated (Ingram, Cope, Harju, Wuensch, 2000). A value ranges from 5 to 1 to 2 to 1 is considered and interpreted as an acceptable value for the ratio (Arbuckle, Worthke, 1999). The values obtained from the study's hypothesized model fit indicates that data and model has a relatively good fit comparing with critical values of model fit indices ( $\chi^2=$  4.224, degrees of freedom= 4,  $\chi^2/df=$  1.056 (4.224/4) , p= .376).

### **Normed Fit Index (NFI)**

The Normed Fit Index is simply found by dividing the hypothesized model's chi-square by the chi-square of the independence model (Ullman, 2001). NFI is a value between 0 and 1 (Hu and Bentler, 1983). According to Wuensch et al. (2000), values

of 0.9 or higher indicate good fit whereas values of 0.95 and higher indicate perfect fit (Ullman, 2001). The study's NFI is 0.997, almost 1, therefore indicates perfect fit.

### Goodness of Fit Index (GFI)

The Goodness of Fit Index is a statistical analysis that shows how well the theoretical model reproduces the observed correlation (Tabachnick and Fidel, 2007). Like other values, values for GFI also range between 0 and 1 and it is generally accepted that 0.9 or greater indicates a good fit for the hypothesized model. The study's GFI is 9.995, almost 1, indicates a good fit for the model.

### Structural Fit

According to the model fit indices, it was depicted that hypothesized model has a good fit with the data. However, despite there is a good model fit, it is need to investigate the statistical significance of the relationship between variables so that regression weights and the standardized the regression coefficients should be investigated for the model given in Figure 3.

**Table 9: Regression Weights**

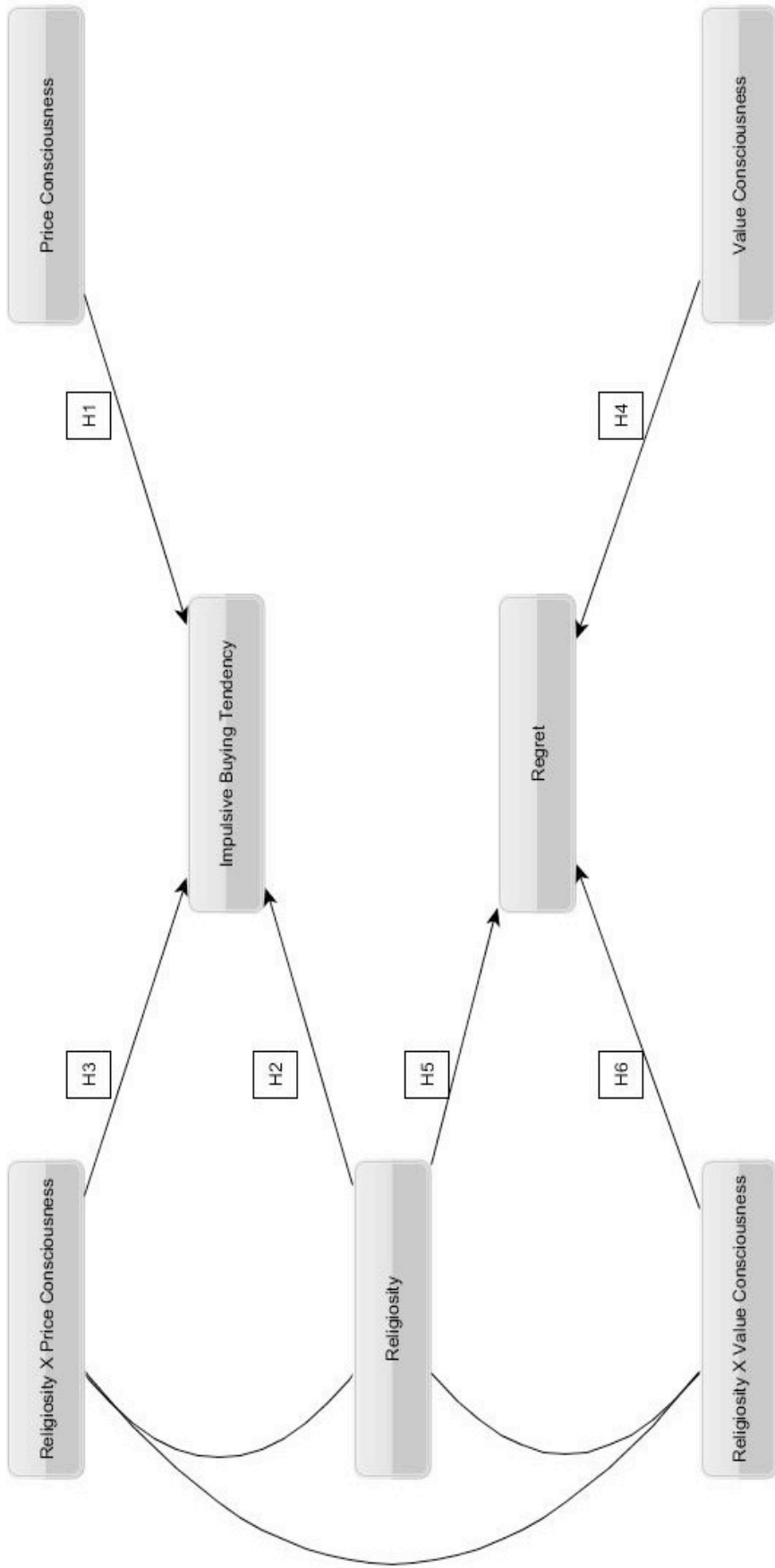
			Estimate	Standard Error	Critical Ratio	P
<b>Impulsive Buying Tendency</b>	<---	Price Consciousness	, 384	, 150	2,566	, 010
<b>Impulsive Buying Tendency</b>	<---	Muslim Religiosity	, 593	, 189	3,138	, 002
<b>Impulsive Buying Tendency</b>	<---	MuslimRelXPriceConsciousness	-, 122	, 043	-2,843	, 004
<b>Post-purchase Regret</b>	<---	Value Consciousness	, 816	, 263	3,105	, 002
<b>Post-purchase Regret</b>	<---	Muslim Religiosity	, 932	, 454	2,053	, 040
<b>Post-purchase Regret</b>	<---	MuslimRelXValueConsciousness	-, 171	, 082	-2,087	, 037
<b>Post-purchase Regret</b>	<---	<b>Impulsive Buying Tendency</b>	<b>, 000</b>	<b>, 110</b>	<b>, 004</b>	<b>, 997</b>

**Table 10: Standardized Regression Weights**

			Estimate
<b>Impulsive Buying Tendency</b>	<---	Price Consciousness	, 563
<b>Impulsive Buying Tendency</b>	<---	Muslim Religiosity	, 654
<b>Impulsive Buying Tendency</b>	<---	MuslimRelXPriceConsciousness	-, 800
<b>Post-purchase Regret</b>	<---	Value Consciousness	, 615
<b>Post-purchase Regret</b>	<---	Muslim Religiosity	, 575
<b>Post-purchase Regret</b>	<---	MuslimRelXValueConsciousness	-, 775
<b>Post-purchase Regret</b>	<---	<b>Impulsive Buying Tendency</b>	<b>, 000</b>

From the regression weights seen in Table 7 the relationship between impulsive buying tendency and regret has no statistical significance ( $p= 0.997$ ). Considering other relationships; despite its statistical insignificance, H4 can affect other variables and their estimates, therefore, after eliminating H4 hypothesis, regression weights and model fit indices should be tested again.

Figure 4: Finalized Version of Hypothesized Model



**Table 11: Model Fit Indices of Finalized Model**

Measures of Fit	Structural Model
( $\chi^2$ -Chi-square) Goodness of Fit Statistic	4.224
Chi-square/ Degrees of Freedom ( $\chi^2/df$ )	0.845
Probability Level	0.518
Normed Fit Index (NFI)	0.997
Goodness of Fit Index (GFI)	0.995

After eliminating the relationship between impulsive buying tendency and post-purchase regret (H4), model fit indices are tested again. According to new model fit indices, it can be seen that there is a good fit between model and data ( $\chi^2= 4.224$ , degrees of freedom= 5,  $\chi^2/df= 0.845$ ,  $p= .518$ ). Also, NFI and GFI are 0.997 and 0.995 respectively; they also reflect a good fit between model and data.

According to the model fit indices, it was depicted that hypothesized model has a good fit with the data. However, despite there is a good model fit, it is need to investigate the statistical significance of the relationship between variables, so that the regression weights and estimates of the relationships are also investigated after eliminating H4.

**Table 12: Regression Weights of Finalized Model**

			Estimate	Standard Error	Critical Ratio	P
<b>Impulsive Buying Tendency</b>	<---	Price Consciousness	, 384	, 150	2,566	, 010
<b>Impulsive Buying Tendency</b>	<---	Muslim Religiosity	, 593	, 189	3,138	, 002
<b>Impulsive Buying Tendency</b>	<---	MuslimRelXPriceConsciousness	-, 122	, 043	-2,843	, 004
<b>Post-purchase Regret</b>	<---	Value Consciousness	, 816	, 261	3,121	, 002
<b>Post-purchase Regret</b>	<---	Muslim Religiosity	, 932	, 451	2,066	, 039
<b>Post-purchase Regret</b>	<---	MuslimRelXValueConsciousness	-, 171	, 082	-2,097	, 036

**Table 13: Standardized Regression Weights of Finalized Model**

			<b>Estimate</b>
<b>Impulsive Buying Tendency</b>	<---	Price Consciousness	, 563
<b>Impulsive Buying Tendency</b>	<---	Muslim Religiosity	, 654
<b>Impulsive Buying Tendency</b>	<---	MuslimRelXPriceConsciousness	-, 800
<b>Post-purchase Regret</b>	<---	Value Consciousness	, 575
<b>Post-purchase Regret</b>	<---	Muslim Religiosity	, 615
<b>Post-purchase Regret</b>	<---	MuslimRelXValueConsciousness	-, 775

## Hypotheses Results

A total seven hypotheses were tested. Empirical support for each hypothesis was determined by the statistical significance of the corresponding path estimate and the direction of the relationship. Six of the seven hypotheses were found to be statistically significant at 0.05. Table 10 shows all regression weights of the finalized version of the hypothesized model. Despite the statistical significance, some of the hypotheses show the opposite directional effect expected in our hypotheses.

**H1:** Price consciousness has a positive impact on impulsive buying tendency.

H1 is statistically significant ( $\beta= 0.384$ ;  $p=0.010$ ) thus H1 is supported. The price consciousness levels of consumers positively influence consumers' tendency to buy impulsively.

**H2:** Muslim religiosity has a negative impact on impulsive buying tendency.

Despite H2 being a statistically significant, our analysis show that Muslim religiosity has a positive effect on impulsive buying, which means consumers who have high Muslim religiosity tend to make their purchase impulsively, therefore H2 is rejected ( $\beta=0.593$ ,  $p= 0.002$ ).

**H3:** High Muslim religiosity and high price consciousness have a negative impact on impulsive buying tendency.

H3 shows statistical significance ( $\beta=-0.122$ ,  $p=0.004$ ) thus, this hypothesis is supported.



**H4:** Impulsive buying tendency has a positive impact on post-purchase regret.

H4 hypothesis is not statistically significant at 0.05 ( $p=0.997$ ), indicating a lack of support for this hypothesis.

**H5:** Value consciousness has a negative impact on post-purchase regret.

Despite H5 being statistically significant, according to the results value conscious consumers feels regret after their purchase ( $\beta=0.816$ ,  $p=0.002$ ), therefore H5 is rejected.

**H6:** Muslim religiosity has a negative impact on post-purchase regret.

Despite H6 being statistically significant, results show that consumers having high Muslim religiosity feel regret after their purchase ( $\beta=0.932$ ,  $p=0.039$ ) therefore H6 is rejected.

**H7:** High Muslim religiosity and high value consciousness have a negative impact on post-purchase regret.

H7 is statistically significant ( $\beta= -0.171$ ,  $p=0.036$ ) thus this hypothesis is supported.

## **CHAPTER 5**

### **Conclusions and Future Research**

The primary objective of this study was to determine the influence of consumers' religiosity on their behavior during their purchases. To address this objective, this study proposed the following question: how does religion matter in market behavior for Muslim religious consumers in Turkey? To answer this question; some specific aspects of consumer behavior are studied. So, specifically, this study's main aim is to understand how price and value consciousness effects: (1) impulsive buying tendency and (2) feelings of regret regarding the transaction given Muslim religious affiliations via the use of moderation analyses.

Consumer religiosity was defined using Shabbir's (2007) Islamic Religiosity Index, which was explained in Chapter 2 in detail. Studies reviewed in Chapter 2 also present a literature review of previous studies examining how religiosity and religious affiliation affect the specific aspect of consumer behavior such as shopping orientation (Mokhlis, 2010), quality consciousness (Smith and Frankenberger, 1991), price consciousness (Mokhlis and Spartks, 2007), and new product adoption (Rehman and Shabbir, 2010). Although the direct effect of religiosity on consumer behavior was examined, researchers had not examined the moderating effect of consumers' religiosity on some aspects of consumer behaviors. This research examined how price consciousness effects impulsive buying tendency and how value consciousness effect post-purchase regret under the moderating effect of Muslim religiosity.

In summary, the findings of this research empirically found that religiosity has a statistically significant moderating effect on impulsive buying tendency and regret.

### **Interpretation of Findings and Theoretical Contribution**

From the hypotheses testing, it is concluded that price consciousness has a positive impact on impulsive buying tendency, which supports existing literature (Ghani, Jan, 2010, Yu, Bastin, 2010). Price conscious consumers have a tendency to seek low price, discounts and promotional activities, when buying a product or service impulsively. Another findings of this study is that consumers who have high Muslim religiosity have a higher tendency to make their purchases impulsively. Although this result contradicts Mokhlis and Spartks' (2007) study discussed in the literature review, the result of our study supports Bailey and Sood's (1993) preliminary investigation on the Muslim consumers' impulsive shopping behavior. This study also reveals the impulsive shopping behavior of Muslim religious consumers in the context of Turkey.

Looking at the moderating effect of Muslim religiosity, the study indicates that consumers who have high Muslim religiosity and high price consciousness show fewer tendencies to impulsive buying. This finding indicates that while Muslim religiosity has a direct positive effect on impulsive buying tendency, Muslim religiosity has an antagonistic effect as a moderating variable on the relationship between price consciousness and impulsive buying tendency.

Another interesting finding is that consumers who are value conscious have more tendency to feel regret after purchasing a product or service. Although this result contradicts the literature (Mafini, Dhurup and Mandhlazi, 2014), Gorsht's (2014) opinions seem to support this finding. Gorsht (2014) highlight that value conscious consumers are like experts in finding best price deals and checking multiple source for the best qualified product. Despite the level of expertise they have, if they feel that they pay more than they need to pay or buy low qualified product, than they might regret later. So, it can be said that this finding supports Gorsht (2014) opinion

in the context of Turkey. Another interesting finding belongs to the study is Muslim consumers feels regret after their purchasing. Despite M'Barek and Gharbi (2012) emphasized that Muslim religious consumers cannot feel regret because of their belief on faith and pre-determined actions decided by God, this finding might be supported by Quran. One of the section of Quran highlights the importance of having qualified product and clothing while individuals should not squander:

*“O Children of Adam! Wear your beautiful apparel at every time and place of prayer: eat and drink: But waste not by excess, for Allah loveth not the wasters”* (The Heights- Al- Araf, 7: 31, Qur'an, 1996). Therefore, Muslim consumers may feel post-purchase regret due to the making of a squander during their purchasing.

Looking the moderating effect on Muslim religiosity on the relationship between value consciousness and regret feeling, it was found that consumers who have high Muslim religiosity and high value consciousness have a tendency to feel less regret after their purchasing decisions. Like the moderating effect of Muslim religiosity on the relationship between price consciousness and impulsive buying tendency, it is seen that Muslim religiosity has an antagonistic effect on the relationship between value consciousness and post purchase regret. After examining the results of the study, it can be said that Muslim religiosity has a significant effect on impulsive buying tendency and regret feeling, moreover, it has an antagonistic moderating effect- where increasing the moderator would reverse the effect of predictor on the outcome (Cohen, Cohen, West, Aiken, 2003) - on the relationship between price consciousness and impulsive buying tendency and value consciousness and post-purchase regret.

## **Managerial Contributions**

An important contribution of this research is to provide marketers to the answers and a preliminary guidance based on the empirical evidence of a question which has not examined in the context of Turkey “How does religion matter in market behavior for Muslim religious consumers in Turkey?”

Findings have several potential significant marketing implications. Data shows that Muslim religious consumers were likely to be impetuous shoppers whereas high Muslim religious and price conscious consumers were likely to be less impetuous shoppers. Therefore, it would seem desirable for marketing strategists to emphasize religious images or visuals to increase its impulse buying. Most importantly, a consumer’s religiosity would provide an important basis for markets for developing promotional strategies, positioning products and maximizing consumer satisfaction.

Specifically, in advertising, promotion, direct sales etc. the importance of consumers’ religiousness must be considered

In particular, for promotion strategies, the appropriate communications target should be more clearly identifiable. Also such knowledge should serve as a guide to development of more suitable message content and appeals.

This knowledge may also have implications for distribution and product variables. In this way, marketing strategists can more effectively encounter the needs of diverse religious groups.

## **Limitations and Future Research**

A few limitations of this dissertation research should be noted. Because of the limited time and limited budget for this dissertation, the scales used in the research were used here in the original language, which is English. It would be appropriate to translate all of the scales and conduct the study on a larger sample. For this study, there might be

some semantic shift in some of the statements, especially in the Islamic Religiosity Index (Shabbir, 2007) because of the way religious terms are worded in English, and participants may have faced a few unknown words.

A second limitation of this dissertation might be the small sample size. Although this study reached a satisfactory sample size, with a bigger sample size, we could have conducted multiple-group analysis and examine whether how income, sex and education level affect the moderating effect of Muslim religiosity on the targeted relationships. In this study, because of the small sample size, although we obtained demographic information of participants, we could not conduct multi-group analysis for this study. Future research should attempt to conduct multi-group analysis to see the different impacts of the moderating effect of Muslim religiosity with low/high income level, male/female and education levels. Also future research may lean on other consumer behavior variables such as new product adoption behavior, repurchase intention and brand loyalty to see how other important variables are affected by Muslim religiosity level in the context of Turkey.

**Appendix 1: Overview of the Literature Examining the Relationship between Religion and Consumer Behavior**

<b>Author</b>	<b>Date Published</b>	<b>Sample</b>	<b>Religious Variable</b>	<b>Dimension of Religious Variable</b>	<b>Focus of the Study</b>
<b>Engel</b>	1976	2625 Church Member	Religious Affiliation	None	Psychographic profile
<b>Thomson and Raine</b>	1976	854 Protestants	Religious Affiliation	None	Store Location
<b>Hirschman</b>	1981	192 Jews 469 non-Jews	Religious Affiliation	None	Jewish Ethnicity
<b>Hirschman</b>	1982	96 Catholics 120 Jews 114 Protestants	Religious Affiliation	None	Novelty Seeking and Information Transfer
<b>Hirschman</b>	1982	166 Catholics 172 Jews 80 Protestants	Religious Affiliation	None	Leisure Activities and Motives
<b>Hirschman</b>	1982	167 Catholics 228 Jews 55 Protestants	Religious Affiliation	None	Hedonic Consumption
<b>Hirschman</b>	1983	96 Catholics 120 Jews 114 Protestants	Religious Affiliation	None	Consumption Patterns
<b>Wilkes, Burnett, Howell</b>	1986	602 Mostly Protestants	Religiosity	Scale: Wilkes et al. (1986) Church Attendance Importance of Religious Values in Religious Values Self Perceived Religiousness	Measurement of Religiosity and Consumer Styles
<b>Delener and Schiffman</b>	1988	204 Catholics 145 Jews	Religious Orientation, Perceived Strength of Religious Affiliation	Scale: Allport & Ross (1967) Intrinsic/Extrinsic Orientation	Family Decision Making
<b>Delener</b>	1989	131 Catholics 76 Jews	Religious Affiliation, Religious Orientation, Perceived Strength of Religious Affiliation	Scale: Allport & Ross (1967) Intrinsic/Extrinsic Orientation	External Information Search
<b>McDaniel and Burnett</b>	1990	314 Protestants 264 Catholics 39 Jews	Religiosity	Scale: McDaniel and Burnett (1990) Cognitive and Behavioral Religious	Store Evaluative Criteria

				Commitment Scale	
<b>McDaniel and Burnett</b>	1991	108 Born Again Christians 442 Non Born Again Christians	Religious Affiliation	None	Media Usage Behavior
<b>Andaleeb</b>	1993	130 Patients	Religious Affiliation	None	Hospital Selection and Evaluation of Medical Services
<b>Bailey and Sood</b>	1993	28 Buddhists 96 Catholics 16 Hindus 40 Muslims 31 Jews 107 Protestants 37 Non-Religious	Religious Affiliation	None	Shopping Behavior
<b>Rodriguez</b>	1993	313 Catholics	Religiosity	Scale: Wilkes et al. (1986) Religious Beliefs and Practices	Purchasing Patterns of Peruvian Consumers
<b>Sood and Nasu</b>	1995	125 Buddhists 105 Protestants	Religious Affiliation-Religiosity	Scale: Sood and Nasu (1995) Personal Activity in one's religion, Importance in Confidence in religious values, Self-Evaluation of One's Religiosity	Shopping Behavior in Japan and United States
<b>La Barbera and Gurhan</b>	1997	241 Born again Christian and Non Born Christian	Religiosity	Scale: McDaniel and Burnett (1990)	Materialism and Subjective Well Being
<b>Siala, O'Keefe and Hone</b>	2004	29 Christians 38 Muslims 24 Others	Religious Affiliation	None	Trust in e-commerce
<b>Fam, Waller and Erdogan</b>	2004	1393 Respondent including Buddhists, Muslims, Christians, Hindus and non-Religious believers	Religious Affiliation	None	Attitudes Towards the Advertising of Controversial Products
<b>Essoo and Dibb</b>	2004	324 Hindus 198 Catholics 78 Muslims	Religious Affiliation, Religiosity	Scale: Allport and Ross (1967)	Shopping Behavior in Mauritius
<b>Mokhlis and Spartks</b>	2007	226 Respondent including Muslims, Buddhists,	Religiosity	Scale: Worthington (2003) Religious Commitment Inventory (RCI-10)	Shopping Behavior in Kuala Lumpur



		Hindus and Christians			
<b>Taks and Shreim</b>	2009	240 Muslims	Religiosity	Scale: Worthington (2003) Religious Commitment Inventory (RCI-10)	Shopping Behavior for Sports Apparel
<b>Mokhlis</b>	2010	260 Muslims 104 Buddhists 113 Hindus and 20 other religions	Religious Affiliation	None	Consumer Shopping Styles
<b>Rehman and Shabbir</b>	2010	300 Muslims	Religiosity, Strength of Religious Affiliation	Scale: Shabbir (2007), Islamic Religiosity Index	The Relationship between Religiosity and New Product Adoption
<b>Siala</b>	2012	208 Muslims	Religious Commitment	Scale: Glock and Stark (1965)	Consumers' High Involvement Purchasing Decision

## Appendix 2: Origin, Belief and Teaching of the Islam

### **Origin**

According to Pew Research Center (2013), there are about 1.6 billion Muslims around the world, which makes Islam the second largest religion with %23 of the world's general population. Regardless of cultures' and societies' differences, religion of Islam empowers Muslims and provides a set of principal to make the life meaningful (Yavuz, 2004).

### **Beliefs and Teachings**

Allah is the name of one and only God, Muhammad peace be upon him, who was chosen by God to deliver his message of peace through Quran, the revealed book of God, a guidance for Muslims for their whole lives to follow (Shreim, 2009).

The Quran includes moral, social, spiritual aspects of life for Muslims so that they can integrate their belief in all areas of their lives.

In Islamic belief, there are five pillars namely: creed, prayers, fasting, zakat and pilgrimage.

- 1- Creed: The verbal commitment and pledge that there is only one God and Muhammad is the messenger of God.
- 2- Prayers: The performance of five daily prayers is required of Muslims
- 3- Fasting: It is total abstinence from food, liquids in specific time period during the entire month of Ramadan.
- 4- Zakat: It is some sort of annual payment of a certain percentage of a Muslims' property which has to be distributed among the poor individuals.
- 5- Pilgrimage: The performance of pilgrimage to the Makkah is required once in a lifetime if means are available.

### Appendix 3: Survey



## KADIR HAS ÜNİVERSİTESİ

Despite its importance, religiosity and its effects on consumer behavior have largely been neglected. This study aims to understand how consumers with different levels of religious beliefs differ in their behavior. Even if you don't consider yourself spiritual (and/or religious), your opinions are valuable to us and we ask that you take the time to complete the survey.

This survey is being conducted, as part of the criteria required for a Master degree in Business Administration, at the Kadir Has University at İstanbul, Turkey.

**Procedures:** If you agree to participate, you will be asked to fill out an online survey. The time to complete the survey will vary depending on your answers, but it should take no longer than 5 to 10 minutes.

**Confidentiality:** All responses to this survey will be kept anonymous. Your name or identity will not be linked in any way to your responses.

**Individuals to contact:** If you have any questions about your rights as a research subject, or to discuss any problems, or concerns you have related to the survey, you may email at [tugra.akarsu@khas.edu.tr](mailto:tugra.akarsu@khas.edu.tr) or at +905309683271.

After reading that form, if you are interested in to participate, please proceed to the next survey page by clicking **the button below**. It indicates your willingness to continue and you will be immediately directed to the survey questions.

If you don't wish to participate in this survey, please click **Exit this survey** at the top-right corner of the screen.

Thank you very much for your time and help!

Tuğra Nazlı Akarsu

MBA Candidate

School of Business and Economics

**To what degree does each of the following statements apply to you? Please put (x) to your answer box.**

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I often buy things spontaneously.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	“Just do it.” describes the way I buy things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.	I often buy things without thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.	“I see it, I buy it” describes me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.	“Buy now, think about it later” describes me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6.	Sometimes I feel like buying things on the spur of moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7.	I buy things according to how I feel at the moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8.	I carefully plan most of my purchase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	Sometimes I bit a reckless about what I buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.	When I go shopping, I buy things that I had not intended to purchase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11.	I am a person who makes unplanned purchase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.	When I see something that really interests me, I buy it without considering the consequences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13.	It is fun to buy spontaneously.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.	I avoid buying things that are not on my shopping list.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Indicate how much you agree with each of the following about your shopping behavior by putting (x) to your answer box.**

		Strongly Disagree	Moderately Disagree	Mildly Disagree	Neither Disagree Nor Agree	Mildly Agree	Moderately Agree	Strongly Agree
1	Once I make a decision, I don't look back.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Whenever I make a choice, I'm curious about what would have happened if I had chosen differently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Whenever I make a choice, I try to get information about how the other alternatives turned out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	If I make a choice and it turns out well, I still feel like something of a failure if I find out that another choice would have turned out better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	When I think about how I'm doing in life, I often assess opportunities I have passed up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**To what degree does each of the following statements apply to you? Please put (x) to your answer box.**

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I have a firm belief in all basic ideological dimensions of Islam.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Muhammad is His last Prophet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	I believe there is only one Allah.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	I regularly offer prayer five times a day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	I fast regularly during Ramadan.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	I regularly recite Quran.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	I believe that I am obligated to perform Hajj to meet the prescribed criteria.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I never offer Saijda at Saint's graves.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I always keep myself away from earnings through haram (prohibited) means.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	I always try to avoid minor and major sin.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	I know the basic necessary knowledge about my religion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	I always try to follow Islamic injunctions in all matters of my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	It's my duty to give respect to others and give them their rights according to Islamic injunctions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	I try to avoid any activity, which hurt others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	I always try to help those who need my help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	I try to be honest and fair with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	I feel sorrow and dissatisfaction when I do something against my faith.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	I have feeling of being tempted by devil.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	I have feeling of being afraid of Allah.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	I have feeling of being punished by Allah for something doing wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21	I feel pressure by seeing others following Islamic teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**To what degree does each of the following statements apply to you? Please put (x) to your answer box.**

		Strongly Disagree	Moderately Disagree	Mildly Disagree	Neither Disagree Nor Agree	Mildly Agree	Moderately Agree	Strongly Agree
1	I am very concerned about low prices, but I am equally concerned about product quality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	When purchasing a product, I always try to maximize the quality I get for the money I spend.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	When I buy products, I like to be sure that I am getting my money's worth.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	When I shop, I usually compare the "price per ounce" information for brands I normally buy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	I always check prices at the grocery store to be sure I get the best value for the money I spend.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I am not willing to go to extra effort to find lower prices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I will grocery shop at more than one store to take advantage of low prices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	The money saved by finding lower prices is usually not worth the time and effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	I would never shop at more than one store to find low prices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	The time it takes to find low prices is usually not worth the effort.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Age:**

- 20-30 ( )
- 31-40 ( )
- 41-50 ( )
- 51-60 ( )
- 60 + ( )

**Education:**

- Below high school ( )
- High school ( )
- Undergraduate level ( )
- Master level ( )
- Doctoral level ( )

**Income:**

- below 11.000 TL ( )
- 11.001-20.000 ( )
- 20.001-30.000 ( )
- 30.001-40.000 ( )
- 40.001 + ( )

**Sex:**

 M F

#### Appendix 4: Reliability Statistics

##### Islamic Religiosity Scale (Shabbir, 2007)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.952	.952	22

##### Impulsive Buying Tendency Scale (Rook and Fisher, 1995; Weun et al., 1997)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.869	.869	14

##### Regret Feeling (Schwartz et al. 2002)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.792	.792	5

##### Price Consciousness (Lichtenstein et al.1993)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.858	.858	5

##### Value Consciousness (Lichtenstein et al. 1993)

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.873	.873	7



**Appendix 5: Amos Output Summary for Final Model**

***Computation of degrees of freedom (Default model)***

Number of distinct sample moments: 28  
 Number of distinct parameters to be estimated: 23  
 Degrees of freedom (28 - 23): 5

***Result (Default model)***

Minimum was achieved  
 Chi-square = 4,224  
 Degrees of freedom = 5  
 Probability level = 0,518

***Regression Weights:***

			Estimate	S.E.	C.R.	P	Label
IPTAVE	<---	PRCAVE	,384	,150	2,566	,010	
IPTAVE	<---	MRELAVE	,593	,189	3,138	,002	
IPTAVE	<---	MRLXPRC	-,122	,043	-2,843	,004	
RGTAVE	<---	VALAVE	,816	,261	3,121	,002	
RGTAVE	<---	MRELAVE	,932	,451	2,066	,039	
RGTAVE	<---	MRLXVAL	-,171	,082	-2,097	,036	

***Standardized Regression Weights: (Group number 1 - Default model)***

			Estimate
IPTAVE	<---	MRLXPRC	-,800
IPTAVE	<---	MRELAVE	,654
IPTAVE	<---	PRCAVE	,563
RGTAVE	<---	MRELAVE	,615
RGTAVE	<---	MRLXVAL	-,775
RGTAVE	<---	VALAVE	,575

***Covariances: (Group number 1 - Default model)***

			Estimate	S.E.	C.R.	P	Label
MRLXPRC	<-->	MRLXVAL	10,549	1,258	8,389	***	
MRLXPRC	<-->	MRELAVE	1,411	,179	7,903	***	
MRELAVE	<-->	MRLXVAL	2,252	,231	9,728	***	
MRLXPRC	<-->	VALAVE	,959	,174	5,523	***	
MRLXVAL	<-->	VALAVE	1,685	,218	7,722	***	
MRELAVE	<-->	VALAVE	,075	,028	2,731	,006	
PRCAVE	<-->	VALAVE	,239	,039	6,052	***	
MRELAVE	<-->	PRCAVE	-,047	,034	-1,386	,166	
MRLXVAL	<-->	PRCAVE	,385	,233	1,652	,099	
MRLXPRC	<-->	PRCAVE	2,007	,242	8,290	***	

**Correlations: (Group number 1 - Default model)**

			Estimate
MRLXPRC	<-->	MRLXVAL	,688
MRLXPRC	<-->	MRELAVE	,632
MRELAVE	<-->	MRLXVAL	,872
MRLXPRC	<-->	VALAVE	,402
MRLXVAL	<-->	VALAVE	,612
MRELAVE	<-->	VALAVE	,188
PRCAVE	<-->	VALAVE	,448
MRELAVE	<-->	PRCAVE	-,094
MRLXVAL	<-->	PRCAVE	,112
MRLXPRC	<-->	PRCAVE	,676

**Variances: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
MRLXPRC	13,266	1,268	10,464	***	
MRELAVE	,376	,036	10,464	***	
MRLXVAL	17,717	1,693	10,464	***	
PRCAVE	,664	,063	10,464	***	
VALAVE	,428	,041	10,464	***	
e4	,296	,028	10,464	***	
e5	,807	,077	10,464	***	

**Squared Multiple Correlations: (Group number 1 - Default model)**

	Estimate
RGTAVE	,065
IPTAVE	,045

**Model Fit Summary**

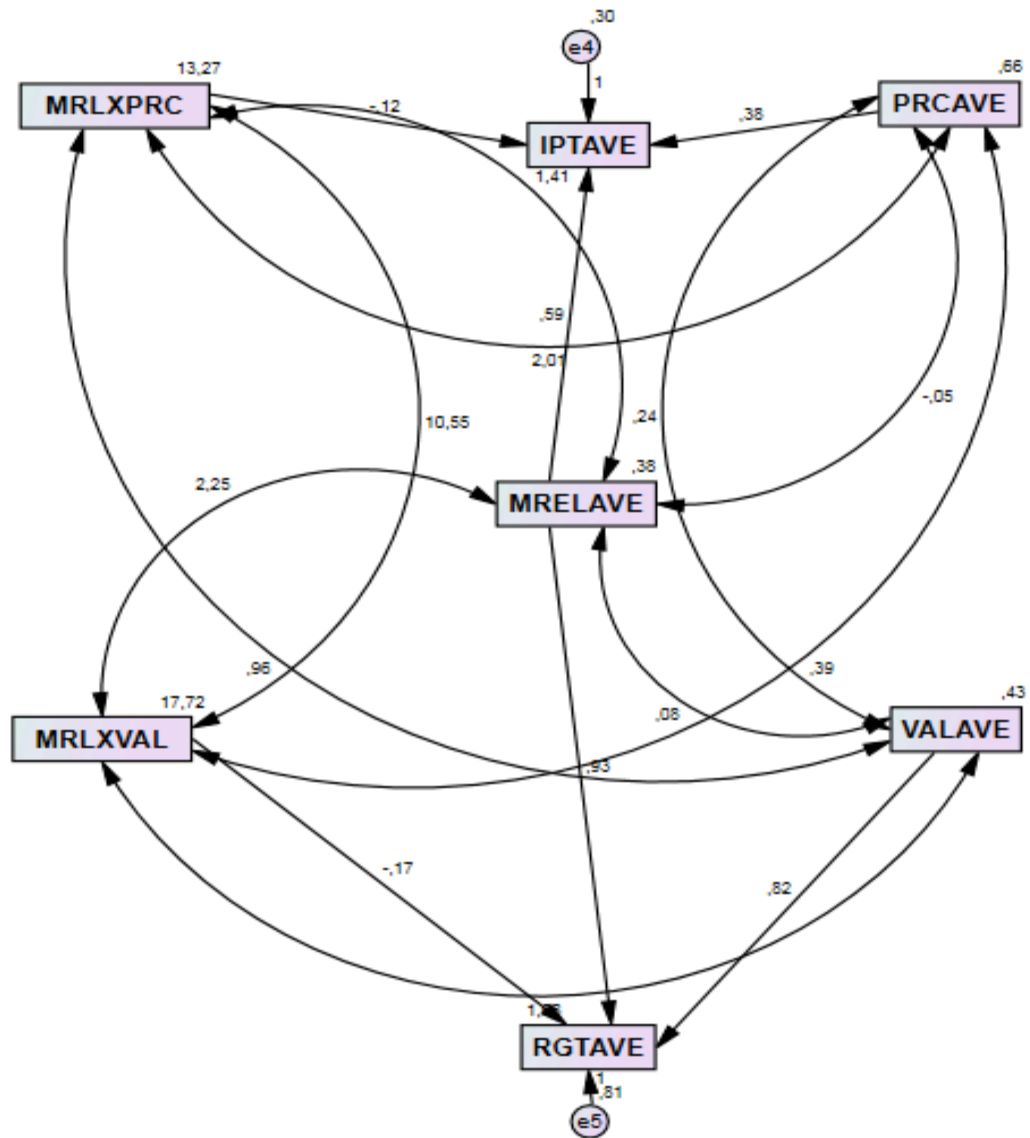
**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	23	4,224	5	,518	,845
Independence model	7	1604,272	21	,000	76,394

**RMR, GFI**

Model	RMR	GFI	AGFI	PGFI
Default model	,049	,995	,969	,178
Independence model	2,126	,542	,389	,406

Appendix 6: Amos Model for Final Model



## References

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