

**FINANCIAL SATISFACTION THROUGH RESPONSIBLE FINANCIAL  
BEHAVIOR**

**DOCTORAL THESIS**

**Patrice Racine DIALLO**

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**DOCTORAL THESIS**

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## **JÜRİ VE ENSTİTÜ ONAYI**

## ÖZET

### SORUMLU FİNANSAL DAVRANIŞ ARACILIĞIYLA FİNANSAL TATMİN

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Bu çalışma, Sorumlu Finansal Davranış, Dini Yönelim ve Finansal Okuryazarlık ile Finansal Tatmin arasındaki ilişkileri araştırmayı amaçlamaktadır. Ayrıca, Sorumlu Finansal Davranış yoluyla Dini Yönelim ve Finansal Okuryazarlığın Finansal Tatmin üzerindeki etkilerini incelemeyi hedeflemektedir. Demografik değişkenlerdeki varyansları gözlemlemek ve ilişkili popülasyon ortalamalarının önemli ölçüde farklı olup olmadığını keşfetmek için parametrik olmayan testler uygulanırken, çalışma kapsamındaki ana değişkenler arasındaki doğrusal ilişki yollarını analiz etmek için Yapısal Eşitlik Modellemesi (YEM) kullanılmıştır. Parametrik olmayan test sonuçları farklı grupların Finansal Tatminleri arasında anlamlı farklılıklar olduğunu göstermektedir. YEM sonuçları ise Dini Yönelimin Sorumlu Finansal Davranış üzerinde Harcama ve Bütçeleme (SB) boyutu açısından doğrudan pozitif bir etkiye sahip olduğunu gösterirken, Sorumlu Finansal Davranışın Tasarruf, Yatırım ve Sigorta (SII) boyutu açısından pozitif bir etkiye sahip olmadığını göstermektedir. Bu çalışmanın bulguları özellikle Harcama ve Bütçeleme (SB) ile ilgili olarak Sorumlu Finansal Davranışın aracılık etkisi yoluyla Dini Yönelim ve Finansal Tatmin arasında anlamlı bir pozitif ilişki olduğuna işaret etmektedir. Benzer şekilde, Sorumlu Finansal Davranış ile Finansal Tatmin arasında hem Tasarruf, Yatırımlar ve Sigorta (SII) hem de Harcama ve Bütçeleme (SB) boyutlarında belirgin olan önemli bir pozitif ilişki vardır. Ancak, Tasarruf, Yatırım ve Sigorta (SII) boyutu açısından, Finansal Okuryazarlık ile Finansal Tatmin arasında Sorumlu Finansal Davranış aracı rolü vasıtasıyla anlamlı bir negatif ilişki olduğu görülmektedir.

**Anahtar Kelimeler:** Finansal tatmin, Finansal okuryazarlık, Sorumlu finansal davranış, Dini yönelim, Yapısal eşitlik modellemesi

## ABSTRACT

### FINANCIAL SATISFACTION THROUGH RESPONSIBLE FINANCIAL BEHAVIOUR

Patrice Racine DIALLO

Anadolu University, Institute of Postgraduate Education, October 2023

Supervisor: Assoc. Prof. Dr. Özlem SAYILIR

The purpose of this study is to explore the relationships between Responsible Financial Behavior, Religious Orientation, and Financial Literacy with Financial Satisfaction. Moreover, it aims to investigate the impacts of Religious Orientation and Financial Literacy on Financial Satisfaction through Responsible Financial Behavior. Non-parametric tests were applied to observe the variances in demographic variables and to discover whether the associated population means are significantly different. Besides, Structural Equation Modelling (SEM) was employed to analyze the paths for linear association between the main variables under the study. The results of the non-parametric tests demonstrate that there are significant differences in the Financial Satisfaction of distinct groups. SEM results indicate that Religious Orientation exerts a direct positive influence on Responsible Financial Behavior with respect to Spending and Budgeting (SB) dimension, but not with respect to Savings, Investments, and Insurance (SII) dimension of Responsible Financial Behavior. Further, the findings of the study imply a significant positive relationship between Religious Orientation and Financial Satisfaction through the mediating effect of Responsible Financial Behavior, especially regarding Spending and Budgeting (SB). Likewise, there is a significant positive association between Responsible Financial Behavior and Financial Satisfaction, which is evident in both Savings, Investments, and Insurance (SII), as well as Spending and Budgeting (SB) dimensions. However, there seems to be a significant negative relationship between Financial Literacy and Financial Satisfaction by means of the mediating role of Responsible Financial Behavior, precisely in terms of Savings, Investment, and Insurance (SII) dimension.

**Keywords:** Financial satisfaction, Financial literacy, Responsible financial behavior, Religious orientation, Structural equation modelling

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13/10/2023

**STATEMENT OF COMPLIANCE  
WITH ETHICAL PRINCIPLES AND RULES**

I hereby truthfully declare that this thesis is an original work prepared by me; that I have behaved in accordance with the scientific ethical principles and rules throughout the stages of preparation, data collection, analysis and presentation of my work; that I have cited the sources of all the data and information that could be obtained within the scope of this study, and included these sources in the references section; and that this study has been scanned for plagiarism with “scientific plagiarism detection program” used by Anadolu University, and that “it does not have any plagiarism” whatsoever. I also declare that, if a case contrary to my declaration is detected in my work at any time, I hereby express my consent to all the ethical and legal consequences that are involved.

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## 1. INTRODUCTION

The study of financial satisfaction and its determining factors attracted considerable interest in the recent past years. Looking into the elements that shape households' financial satisfaction turned into a key concern for policy makers and scholars as a solid connection is observed between an individual's financial satisfaction and entire satisfaction in numerous areas of life, including housing conditions, working conditions, work responsibilities, financial stability, earnings, neighborhood relations, job security, and family dynamics (Rojas, 2006).

Various factors may influence financial satisfaction. These factors comprise responsible financial behavior (Halim & Astuti, 2015; Joo & Grable, 2004; Powell et al., 2023; Xiao et al., 2009), financial literacy (Ali et al., 2015; Falahati et al., 2012; Hilgert et al., 2003; Mandell, 2008) and religious orientation (Kose & Cinar, 2020; Sarofim et al., 2020).

Prior research underlined the significance of responsible financial behavior in shaping personal financial satisfaction. Responsible financial behavior consists of making cautious economic decisions such as complying with good budgeting, saving, and investing habits; and preventing from unnecessary dues (O'Neill & Xiao, 2006; Xiao et al., 2006). Studies found out a positive association concerning responsible financial behavior and financial satisfaction, implying that people who embrace responsible financial habits are usually more satisfied with their financial position (Arifin, 2018; Prawitz et al., 2006). Further, positive economic behavior in earning, budgeting, spending, borrowing, and saving upgrades economic well-being (Xiao, 2013).

Religious orientation was also discovered as an important factor determining individuals' financial satisfaction. Religion intervenes as a critical element in the lives of individuals and reflect on their perspectives and manners regarding money and financial affairs (Bradshaw & Ellison, 201). Research proposed that religious oriented people present better financial satisfaction due to moral and ethical principles implanted in their religious faiths (Kose & Cinar, 2020; Sarofim et al., 2020).

Financial literacy, is an essential element of responsible financial behavior and financial satisfaction as financially literate people are better armed to oversee their finances, make wise investment decisions and plans, which will lead to a greater sense of financial satisfaction (Ali et al., 2015; Falahati et al., 2012). Financial literacy refers to individuals' knowledge and comprehension of financial notions and their capacity to

utilize this knowledge to reach desired financial decisions (Gallery et al., 2011; Hastings & Mitchell, 2020; Hilgert et al., 2003; Huston, 2010). High financial literacy implies greater financial satisfaction (Philippas & Avdoulas, 2020; Xiao et al., 2014).

Research on financial satisfaction is essential since it may illuminate the factors that shape the overall quality of life of individuals and economic well-being of families. Family economic well-being is described as the condition in which the family has economically sustainable resources to facilitate comfortable life. Subjective measure of financial satisfaction is used as an instrument to assess a family's economic well-being (Xiao, 2013).

By comprehending the drivers of financial satisfaction, policymakers, scholars, and households themselves can take valuable decisions to assist to personal satisfaction with financial status. Overall, financial satisfaction is a multifaceted construct shaped by elements such as responsible financial behavior, religious orientation, and financial literacy. Investigating and understanding these elements will assist individuals and society realize greater financial satisfaction and overall life fulfilment.

Although financial satisfaction has been the subject of several studies for decades, there seems to be a research gap with respect to the determinants of financial satisfaction. The simultaneous consideration of the above-mentioned elements i.e., financial literacy, religious orientation, responsible financial behavior in modelling financial satisfaction has been lacking. Our study attempts to fill the research gap by examining the above mentioned determinants as a whole and considering the mediating effects of some of these variables on financial satisfaction.

The purpose of this study is to explore the relationships between Responsible Financial Behavior, Religious Orientation, and Financial Literacy with Financial Satisfaction. Moreover, it aims to investigate the impacts of Religious Orientation and Financial Literacy on Financial Satisfaction through Responsible Financial Behavior. In this study we attempt to measure these latent variables (financial satisfaction and its determinants) to examine the relationships among them. Among these 4 latent variables 2 variables were considered as exogenous variables, namely Financial Literacy and Religious Orientation. The other 2 latent variables, which are Responsible Financial Behavior and Financial Satisfaction were treated as the endogenous variables in the current study.

This study may contribute to the prevailing literature by revealing the role of financial literacy, religious orientation, and responsible financial behavior in shaping financial satisfaction.

## **2. LITERATURE REVIEW**

What are the elements that can lead to financial satisfaction? The answer to this question has been investigated by various studies and the implications of these studies are summarized as follows:

### **2.1. Religious Orientation**

Religion indicates the connection that man has with divinity (or higher principle). This bond is manifested through a set of sacred practices and beliefs. This higher principle depends on our intellectual and moral attitude. However, religion is understood to be the relationship between God and man. There are several religions according to social groups. For this reason, our religious orientation refers to our belonging to a religion (religious dogmas or religious beliefs). In this way, the way we experience religion (religious orientation) must necessarily correspond to the teachings of religion. In other words, the religion, and the context influence how each person lives. Because the ways of living religion are multiple, they are particularized by each group and by each person within the group (Hunsberger & Jackson, 2005).

Multidimensional nature of religious orientation has been mentioned by several studies (Bergan & McConatha, 2001; Okulicz-Kozaryn, 2010; Pearce et al., 2017). According to these studies, religious orientation concept is too broad to be analyzed in a unidimensional way. As categorized by Allport and Ross in 1967, there are mainly two types of religious motivation (Gorsuch & McPherson, 1989). These are intrinsic religious orientation and extrinsic religious orientation. People who have intrinsic religious orientation use religion as an end (for example to pray in private). Religion is considered by these people as a fundamental motive of life, an axis, and an absolute criterion in their decisions. On the contrary, people who have extrinsic religious orientation aim to instrumentalize religion to achieve personal or social ends (for example to be accepted in a group). Religion is seen as utilitarian by these people. For them, it is a tool that serves their own interests and personal ends (i.e., security, social status, entertainment, or support for personal lifestyle). In other words, people with an intrinsic religious orientation consider their life to be motivated by religion, while those with an extrinsic religious orientation use religion for their benefits.

Most of the studies investigating the connection among religious orientation and psychological well-being or life satisfaction are published in psychology and sociology journals (A. E. Clark & Lelkes, 2005, 2009; Cohen, 2002; Dehejia et al., 2007; García-Alandete & Bernabé-Valero, 2013; Headey et al., 2010; Helliwell, 2003; Snoep, 2008). The principal conclusion of these research studies is that people who are more religion oriented tend to be happier in life. Hence, there is a strong connection between religious orientation and life satisfaction (Ferriss, 2002; Fiori et al., 2006; Lelkes, 2006; Ngamaba & Soni, 2018; Okulicz-Kozaryn, 2010; Sinnewe et al., 2015; Vang et al., 2019; Witter et al., 1985).

How economic behavior is impacted by religion appeared to be the subject of various research (Benjamin et al., 2016; Carvalho et al., 2019). For instance, Czerwonka (2014) indicated that religion had a vital function in individual investors' decisions with regard to socially responsible investing (SRI). SRI, refers to investment strategies which provide an investor with social changes besides satisfactory financial returns. Religious people tend to make more socially responsible investments compared to non-religious people. This denotes that religion has a major effect on personal financial decisions.

As stated by Sarofim et al. (2020), "religion is an indelible force in society, but research examining its impact on consumption, particularly in the context of financial well-being, is lacking". In other words, there seems to be research gap regarding the impact of religion on financial satisfaction. Sarofim et al. (2020) showed that religion (Christianity, Buddhism, and Islam) had an impact on financial satisfaction.

Several studies argue that religious conviction exert a direct impact on the financial assets of individuals, families, and communities. Religion seems to have a positive influence on personal finances and financial well-being (Bradshaw & Ellison, 2010) through financial decisions that involve risk taking (Mylonidis & Zioga, 2018), as well as the forms of borrowing, saving, investing and even giving in households (Sarofim et al., 2020).

Although there is a developing literature on the relationship concerning religious orientation and psychological well-being or life satisfaction, little research on how religious orientation can affect people's perspective on their economic satisfaction and personal financial situation subsists (Kose & Cinar, 2020).

In this study relevant hypotheses were constructed as follows:

H<sub>1</sub>: Religious Orientation demonstrates a positive effect on Financial Satisfaction

H<sub>2</sub>: Religious Orientation demonstrates a positive effect on Responsible Financial Behavior

## **2.2. Financial Literacy**

Literacy is the understanding and use of writing in everyday life in order to expand our intelligence and skills. Literacy is viewed as the skill to read, write and calculate alike. However, in the field of literacy, researchers have reconsidered the notion of literacy in the light of the rapid and deep transformations taking place in the fields of science and technology. The ability to be literate, not only promotes personal development and personal learning, but also has a considerable influence on academic performance and overall success in life (Rintaningrum, 2009).

Financial literacy is defined in different ways by different researchers and organizations. The President's Advisory Council on Financial Literacy (PACFL, 2008) identified financial literacy as "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being". Lusardi & Tufano (2015) explain financial literacy as "knowledge of basic financial concepts, such as the calculations related to compound interest, knowing the difference between nominal and real values, and the basic understanding of risk diversification".

Financial literacy relates to an individual's capacity to utilize his/her knowledge and skills, with the aim of managing financial resources effectively. In other words, it is individual's ability to oversee their personal finances competently in order to achieve financial welfare throughout his/her life. Financial literacy, therefore, alludes to economic, budgetary, and financial education (REMUND, 2010).

In fact, financial literacy is part of human capital. Human capital includes a person's intellectual capacities, knowledge, and skills he/she acquires during his/her life by education and training through which his/her performance is determined (Huston, 2010).

Attention paid to financial literacy intensified especially in current years due to the sophisticated financial services economy that requires households to be more implicated in the personal supervision of their finances. That is, the need for financial literacy is growing as people are today more in charge of making financial decisions that will touch their economic futures (Parrish & Servon, 2006).

De Beckker et al. (2019) conducted a thorough analysis regarding financial literacy with data from different countries. The study highlights the distinctive characteristics of respondents living in Belgium, Canada, Hong Kong, and New Zealand, who perform better in terms of financial literacy. However, a different outcome is observed for people from Croatia, Jordan, Malaysia, the Netherlands, Thailand, and the United Kingdom, who are more likely to be less financially literate. The study accentuates the need of taking country-specific contexts into account when understanding and addressing variations in financial literacy levels across populations. Further, in the U.S and other countries such as Australia, Japan, and Korea financial illiteracy is commonly observed issue for all age groups (young and older people), given the lack of basic economic concepts of financial products and practices among consumers (Lusardi & Mitchell, 2007). Yet, due to differences in socio-demographic and family characteristics, there are variances between people in terms of financial literacy levels. Lusardi et al. (2010) found that young people are the most illiterate. A young person who comes from a family with a great degree of financial literacy is prone to exhibit a great degree of financial literacy in contrast to a person coming from a family with a low degree of financial literacy. It implies the need to take enterprises to enhance the financial literacy especially for disadvantaged socio-economic groups (Refera et al., 2016).

The significant impacts of financial literacy on financial behavior were highlighted by various studies. For example, Perry & Morris (2005) argue that lack of financial information will lead to bankruptcy (trigger losses) and loan repayment problems (raise interest rates). Besides, Lusardi & Tufano (2015) argued that excessive borrowing is a function of the degree of financial knowledge. According to Hilgert et al. (2003) financial knowledge and experience can generate better financial behaviors. Excessive borrowing is mainly explained by the lack of financial knowledge. People with a great degree of financial knowledge are inclined not to overborrow and borrow at a low cost in comparison with people with a low degree of financial knowledge (Sevim et al., 2012).

Beyond a traditional job, a person with higher financial capabilities will know how to earn money in a variety of ways. He will also know how to spend it in a more optimal way, how to save it and how to increase it. Similarly, he will know how to invest his money profitably and by creating sources of passive income. Hence, there is an important link between how people oversee their money and their financial satisfaction.

If a person manages his/her money carefully, organizes it at regular intervals and uses it wisely, this will ensure that he/she is satisfied with the conditions in which he/she finds himself, which will lead to personal financial satisfaction (Arifin, 2018).

Equally, people with a high degree of financial literacy will display certain financial behavior and have a better level of financial satisfaction (Ali et al., 2015; Falahati et al., 2012; Hilgert et al., 2003; Mandell, 2008; SERVON & KAESTNER, 2008). In fact, limited financial knowledge can lead to bad economic choices that can lead to financial anxiety in one's lifetime (SAYILIR et al., 2019).

In this study relevant hypotheses were constructed as follows:

H<sub>3</sub>: Financial Literacy demonstrates a positive effect on Financial Satisfaction

H<sub>4</sub>: Financial Literacy demonstrates a positive effect on Responsible Financial Behavior

### **2.3. Responsible Financial Behavior**

The theories of classical finance and behavioral finance are different. They differ insofar as classical finance sees each individual as a “rational” decision maker, meaning that each individual will make the best decision regardless of the situation, while behavioral finance sees each individual as an “irrational” decision maker. According to behavioral finance theory, instincts and emotions tend to make every individual irrational. That is, individuals are driven to make irrational choices due to instincts and emotions. As a result, markets are not efficient as people are not totally rational (Ricciardi & Simon, 2000; Ritter, 2003; Shiller, 2003).

The “homo economicus theory” that perceived individuals as exclusively rational had been implemented by neoclassical economists for many decades. However, the latter half of the past century marked a return to behavioral finance because neoclassical economists had cut all ties with psychology. Due to the plentiful economic crises that the world has experienced, the need to understand the psychology of individuals has emerged. Behavioral finance theory was founded simply by the combination of economics, finance, and psychology. Behavioral finance has made huge strides over the past 30 to 40 years, during which the main publications and the most remarkable studies were concentrated (De Bondt et al., 2008; Schinckus, 2011).

Adam Smith is seen as one of the pioneers of behavioral finance. Towards the end of the 18th century Smith in his research entitled "Theory of Moral Sentiments" had studied individual and social psychological behavior. Towards a more recent past (1979), the two authors Daniel Kahneman and Amos Tversky of "Prospect Theory: An analysis of decision under risk" revolutionized behavioral finance. According to them, when an individual finds himself in a situation of risk, his economic decisions undergo important modifications. Most often, individuals aim to minimize losses or maximize gains when making decisions (Kahneman & Tversky, 1979).

Among the precursors of behavioral finance, Richard Thaler, who won the Nobel Prize in Economics in 2017, should be mentioned. His theory tells us that human beings make irrational choices in an economic environment.

Behavior refers our way of acting on a daily basis. Our habits of managing our finances comprise our financial behavior. Thus, financial behavior is based on how people behave in financial domains as a result of the decision-making processes with respect to specific financial matters. Financial behavior is viewed as any comportment pertinent to the managing of personal finances (Xiao, 2008). Furthermore, race and ethnicity intervene in a focal role in financial decision-making (PERRY & MORRIS, 2005). This means that an individual's behavior with regard to personal financial management may vary according to race and ethnicity. In addition, Perry & Morris (2005) demonstrate that responsible financial behaviors are mostly adopted by people with a high level of personal income.

Financial choices are conditioned by behavioral biases to a large extent. These biases may push individuals to make mistakes that have disastrous effects not only on themselves, but also on the financial markets. Therefore, one of the foremost purposes of behavioral finance is to detect and study misbehaviors and to know their origins. These misbehaviors can be harmful. Thus, identifying and studying these harmful misbehaviors assist us better comprehend the logic of the financial markets. Behavioral finance is therefore an essential tool for individuals, as it may facilitate them to optimize the management of personal savings and investments (Pompian, 2012).

According to Rasool & Ullah (2020) investors can diminish their behavioral biases through a great degree of financial literacy. People with advanced financial literacy will display responsible financial behavior in terms of understanding, dealing with and managing issues such as interest rates, loans, credit card bills, and investments. Hence,

they shall be competent to control their financial situation, pay their bills on time, do effective financial planning to meet their financial needs, save and buy insurance (GRABLE et al., 2009).

Responsible financial behavior corresponds to an individual's aptitude to make judicious financial choices that enhance their personal financial well-being (van Raaij, 2016, p. 127). Responsible financial behavior is one of the main contributing determinants of financial satisfaction. Financial problems and frustration with financial situation can provoke anxiety and unhappiness (Falahati et al., 2012). Thus, financial satisfaction through responsible financial behavior is essential to life satisfaction.

Moreover, responsible financial behavior acts as a mediating factor concerning financial literacy and financial satisfaction (Ali et al., 2015; Falahati et al., 2012; GRABLE et al., 2009). This implies that a person with a great degree of financial literacy will also demonstrate a great degree of responsible financial behavior.

In this study relevant hypotheses were constructed as follows:

H<sub>5</sub>: Responsible Financial Behavior is a mediating variable in the association between Religious Orientation and Financial Satisfaction

H<sub>6</sub>: Responsible Financial Behavior is a mediating variable in the association between Financial Literacy and Financial Satisfaction

#### **2.4. Financial Satisfaction**

The notion of satisfaction corresponds to the state of relief, contentment or pleasure felt after the fulfillment of a wish. It is simply defined as the well-being of oneself after the realization of what one has wished for. The concept of satisfaction can combine several elements, such as fulfillment with physical and mental health, fulfillment with the condition of life, fulfillment with work, but especially satisfaction with finances.

The satisfaction that one can derive from his financial situation refers to financial satisfaction. That is to say, financial satisfaction relates to a person's apprehension regarding their present financial condition (Ali et al., 2015). Financial satisfaction, for a person, is to have sufficient means to organize one's life independently, or to use and develop one's present and future capacities about personal finances. According to Joo (2008), financial satisfaction implies that people are relieved (good financial situation) and do not express any anxiety related to the management of their personal finances. It is

for the person to have an ability to be able to honor all their financial commitments and meet their needs while having the necessary current and future financial resilience. The goal is to be in control of our finances in the short, medium, and long term. For instance, in the short term, being disposed to settle bills on time and to deal with the unexpected events generate financial satisfaction, whereas in the long term, securing one's retirement generates financial satisfaction.

According to Plagnol (2011); financial satisfaction does not only depend on the earnings received, but also on the increase in assets and the decrease in liabilities over the long term. Financial satisfaction is also associated with a person's financial trouble (Prawitz et al., 2006; SAYILIR et al., 2019), financial stress (Joo & Grable, 2004), financial management behavior and money-oriented financial attitude (SAYILIR et al., 2019).

The modelling of the determining factors of financial satisfaction in the most complete way has been conducted by Joo & Grable (2004), who used trajectory analysis in an empirical analysis of 220 white collar employees. Education, financial knowledge, risk appetite, financial solvency, financial behaviors, financial stress are all financial factors that exert direct and indirect effects on financial satisfaction, while some demographic and socioeconomic factors such as home ownership, income, the number of financial dependents appear to exert indirect influences on financial satisfaction (Joo & Grable, 2004).

Furthermore, Diener & Biswas-Diener (2002) carried out a comprehensive examination of studies on the correlation between income and subjective well-being. Their analysis concluded that there is mainly a modest association between income and subjective well-being. The main conclusion is that among people in the middle- and upper-income brackets of economically developed countries, the potential increase in subjective well-being through the accumulation of new income remains relatively weak. It is imperative that people perceive that placing excessive emphasis on wealth accumulation can paradoxically be detrimental to happiness. So that, the pursuit of increased income comes with potential difficulties and pleasures. Similarly, Seghieri et al. (2006) indicated that, while wealthier people are inclined to be more satisfied with their financial situation than those with less financial resources, this tendency only holds true to a certain extent. In other words, a positive relationship between income and financial satisfaction is remarked up to a certain point. For this reason, an individual's

financial satisfaction does not solely depend on their income, or the success of their investment portfolio. In other words, financial stress affects all social strata (rich or poor), because financial stress relates to money and the type of expenses.

“Recent well-being research studies suggest that certain domain-specific behaviors contribute to satisfaction in that domain, which in turn contributes to an individual's overall satisfaction in life”. Financial satisfaction is closely related to other aspects of our satisfaction with life (Xiao et al., 2009). Financial satisfaction can increase personal satisfaction, and life satisfaction in a broader sense. Therefore, responsible financial behavior will probably automatically lead to financial satisfaction and even life satisfaction.

In this study relevant hypotheses were constructed as follows:

H7: Responsible Financial Behavior demonstrates a positive effect on Financial Satisfaction

**Table 2. 1.** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
<b>1. Financial Literacy</b>			
Amagir et al. (2020)	<b>Data:</b> 15-year-old high school students (N = 2025) <b>Country:</b> Netherlands	ANOVA and a post hoc Tukey test. Multilevel analysis	Students with low grades especially in mathematical subjects and immigrant students tend more to express low level of financial literacy
Aren & Zengin (2016)	<b>Data:</b> Survey method (collected via e-mail and in person). 94 respondents <b>Country:</b> Turkey	One-way ANOVA test and Duncan test	Investment preferences are conditioned by factors such as the level of financial literacy and risk perception
Gallery et al. (2011)	<b>Data:</b> Review <b>Countries:</b> Australia and overseas	Systematic framework	Financial literacy has a direct influence on individuals' investment choices
Hastings & Mitchell (2020)	<b>Data:</b> Encuesta de Protección Social (EPS or Social Protection Survey) <b>Country:</b> Chile	Financial literacy index	People's retirement plans are connected with their level of financial literacy
Huston (2010)	<b>Data:</b> Data sets (N=52) <b>Country:</b> U.S.	Review of literature	Financial issues individuals and families face are alleviated through financial education programs as part of financial literacy

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
Kadoya & Khan (2020)	<b>Data:</b> Osaka University's Preference Parameter Study <b>Country:</b> Japan	Linear regression model and Generalized linear model (GLM)	Age, gender, occupation, socioeconomic status etc. affect the financial literacy of general population
Lusardi, Mitchell & Curto (2010)	<b>Data:</b> From the 1997 National Longitudinal Survey of Youth <b>Country:</b> U.S.	A multivariate analysis	Financial illiteracy is mostly found in young people
Lusardi & Mitchell (2007)	<b>Data:</b> Surveys <b>Country:</b> U.S.	Review	Financial illiteracy exists in all age groups (young and older people)
Shusha (2017)	<b>Data:</b> Questionnaire. 386 respondents <b>Country:</b> Egypt	Hierarchical regression analysis	Gender, age etc. impact on investors' risk tolerance level through the mediating role of financial literacy
Xiao et al. (2015)	<b>Data:</b> Data from the 2012 National Financial Capability Study <b>Country:</b> U.S.	ANOVAs and multiple OLS regressions	Older people demonstrate higher levels of financial literacy compared to younger people
Xu & Zia (2012)	<b>Data:</b> Worldwide <b>Countries:</b> High-income countries and low-income countries	A practitioner-oriented overview of the recent research, drawing mainly on what they have learned from surveys, impact evaluations, and other empirical work.	Financial literacy is found lower in developing and low-income countries compared to developed countries
<b>2. Religious Orientation</b>			
Bergan & McConatha (2001)	<b>Data:</b> Gathered at local community events, senior centers, school events and through neighborhood contacts (Questionnaires) <b>Country:</b> U.S.	Analyses of variance, multiple regression analysis	The older people get, the more religious they are disposed to be. Also, women tend to be more religious than men
Okulicz-Kozaryn (2010)	<b>Data:</b> World Values Survey data <b>Countries:</b> Worldwide (79 countries)	Multilevel analysis	Religion enables people to be either very satisfied or very dissatisfied with their lives. Also, religion allows people living in religious countries to live happier

**Table 2.1. (Continued) Summary of Literature Review**

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
Pearce et al. (2017)	<b>Data:</b> From two waves of the National Study of Youth and Religion <b>Country:</b> U.S.	Longitudinal structural equation modeling	The notion of religiosity is too vast to be investigated in a one-dimensional way
<b>3. Responsible Financial Behavior</b>			
O'Neill & Xiao (2003)	<b>Data:</b> 2,155 respondents using an online Financial Fitness Quiz <b>Country:</b> U.S.	Non-parametric Kruskal-Wallis test and ANOVA test	Responsible financial behavior is a combination of financial management, saving and investing, insurance and estate planning, credit, and shopping practices
Xiao (2006)	<b>Data:</b> National sample of consumers from a cross-section survey <b>Country:</b> U.S.	Linear regression models, bivariate and multivariate analyses	The financial behavior of consumers is impacted in its hierarchy by credit counselling
<b>4. Financial Satisfaction</b>			
Joo (2008)	<b>Data:</b> Review research on basic concepts and theories <b>Country:</b> U.S.	Personal financial wellness. In Handbook of consumer finance research (pp. 21-33)	Financial satisfaction implies that people are relieved of any anxiety related to the management of their personal finances
Joo & Grable (2004)	<b>Data:</b> From a random sample of white-collar clerical workers (N = 220) <b>Country:</b> U.S.	Path analysis method	Education, financial knowledge, financial risk tolerance (risk appetite), financial solvency, financial behaviors, financial stress are all financial factors that have both direct and indirect effects on financial satisfaction.
Plagnol (2011)	<b>Data:</b> From the second and third waves of the US National Survey of Families and Households <b>Country:</b> U.S.	Life course patterns and regression analyses	Financial satisfaction does not only depend on the income received but also depends on the increase in assets and the decrease in liabilities over the long term
Vera-Toscano et al. (2006)	<b>Data:</b> From the 2003 Survey on Living Conditions and Poverty <b>Country:</b> Spain	Ordered probit models	Financial status (income) plays a key role in assessing households' financial satisfaction

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
<b>5. Financial Literacy &amp; Responsible Financial Behavior</b>			
Grable et al. (2009)	<b>Data:</b> Sample of native-born Americans and South Koreans Living in the United States (n=153) <b>Country:</b> U.S.	Regression model and Sobel test of mediation	Individuals with high level of financial knowledge manifest more responsible financial management behaviors
O2 et al. (2003)	<b>Data:</b> University of Michigan's monthly Surveys of Consumers conducted in November and December 2001 <b>Country:</b> U.S.	Indexes were produced	Financial literacy creates a difference between households in the responsible management of their finances
Perry & Morris (2005)	<b>Data:</b> From the 1999 Freddie Mac Consumer Credit Survey <b>Country:</b> U.S.	Regression Model	Lack of financial information will lead to bankruptcy and raise in interest rates
Rasool & Ullah (2020)	<b>Data:</b> 300 observations using questionnaires from individual investors <b>Country:</b> Pakistan	Regression Analysis	A high level of financial literacy helps investors avoid behavioral biases
Sevim et al. (2012)	<b>Data:</b> Questionnaire administered to a sample of 550 people <b>Country:</b> Turkey	Factor analysis	People with a high level of financial knowledge tend not to overborrow and borrow at a low cost compared to people with a low level of financial knowledge
Lusardi & Tufano (2009)	<b>Data:</b> Sample of 1,000 Residents using surveys <b>Country:</b> U.S.	Multinomial Logit Analyses	Excessive borrowing is mainly explained by the lack of financial knowledge
Borden et al. (2008)	<b>Data:</b> College students (N = 93) (The Credit Wise Cats project) <b>Country:</b> U.S.	Pre-test and post-test	Financial knowledge programs such as seminars can have a positive effect on financial behavior
<b>6. Financial Literacy &amp; Financial Satisfaction</b>			
Xiao et al. (2014)	<b>Data:</b> From the 2009 US State-by-State Survey of Financial Capability <b>Country:</b> U.S.	Bivariate Analyses and Multiple OLS Regressions	Financial literacy is found to have a positive relationship with financial satisfaction through the mediating function of financial capability

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
Philippas & Avdoulas (2020)	<b>Data:</b> Questionnaire to a random sample of 456 university students <b>Country:</b> Greece	Cross-tabulations, chi-square tests, logistic regressions, and marginal effect analysis	Financially literate people are better able to confront unforeseen financial crisis. Yet financially literate people are more likely to express an increased level of financial satisfaction compared to financially illiterate people
<b>7. Financial Literacy &amp; Responsible Financial Behavior &amp; Financial Satisfaction</b>			
Ali et al. (2015)	<b>Data:</b> Survey data from 1,957 respondents <b>Country:</b> Malaysia	Partial least squares analyses	Financial literacy has an indirect influence on financial satisfaction through the mediating role of financial behaviors
Arifin, A. Z. (2018)	<b>Data:</b> Primary data with 450 respondents and the Online Google Questionnaire has been used <b>Country:</b> Indonesia	Outer model (validity and reliability test) and inner model (structural model)	The relationship between financial knowledge and financial satisfaction with financial behavior as an intervening variable is observed
Falahati et al. (2012)	<b>Data:</b> Self-administered questionnaire. 700 university students from 11 universities using stratified sampling method <b>Country:</b> Malaysia	Structural Equation Modelling (SEM)	Higher level of financial literacy cause a better financial behavior and a lower level of financial strain which in turn result in higher level of financial satisfaction
Prawitz, A. et al. (2006)	<b>Data:</b> Based on a review of the literature and input from 30 professors and 18 financial education experts in business <b>Country:</b> U.S.	Delphi study, validity criteria and testing, factor analysis, Cronbach's alpha coefficients.	Financial education programs bring about changes in people's financial behaviors, which in turn lead to a reduction in financial distress and an increase in financial satisfaction
<b>8. Religious Orientation &amp; Responsible Financial Behavior</b>			
Mylonidis & Zioga (2018)	<b>Data:</b> Dutch survey data from the LISS (Longitudinal Internet Studies for the Social sciences) panel over the period 2008 – 2014 <b>Country:</b> Netherlands	Panel ordered probit regression models	Religious households exhibit different financial behaviors than non-religious households. For example, less often prayers take more risks
Benjamin et al. (2016)	<b>Data:</b> 827 Cornell University students (Questionnaires were used) <b>Country:</b> U.S.	Regression models	Religious identity is identified to have an effect on individuals' economic choices

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
Czerwonka (2014)	<b>Data:</b> Survey (Questionnaire) with 361 Polish individual investors <b>Country:</b> Poland	Fisher's Exact Test	Religious people are more open to the idea of Socially Responsible Investing compared to non-religious people.
<b>9. Religious Orientation &amp; Financial Satisfaction</b>			
Bradshaw & Ellison (2010)	<b>Data:</b> From the 1998 US NORC General Social Survey <b>Country:</b> U.S.	Ordinary Least Squares (OLS) regression techniques	Refuge in religion enables people to cope with financial difficulties
Kose & Cinar (2020)	<b>Data:</b> The global World Values Survey data via a multilevel estimation framework covering years 2010–2014 <b>Countries:</b> Worldwide (52 Countries)	Principal component analyses, quadratic empirical models	Financial satisfaction is shown to be influenced mostly by individual religiosity
Sarofim et al. (2020)	<b>Data:</b> These studies followed a semi-structured format and employed convenience sampling <b>Countries:</b> U.S. and New Zealand	Discussion questions	Religious orientation influences individuals' financial decisions. It is also understood that religion has a positive effect on people's forms of borrowing, saving, investing and even donation
<b>10. Religious Orientation &amp; Life Satisfaction</b>			
Clark & Lelkes (2005)	<b>Data:</b> European Social Survey 2002/2003 <b>Country:</b> Europe	Regression techniques	Religious people are more satisfied with their lives
Clark & Lelkes (2009)	<b>Data:</b> European Social Survey 2003/2007. Pooled survey data (90 000 individuals) <b>Countries:</b> 26 European countries	Regression model (Ordered logit estimation)	In more religious regions, people are more satisfied
Cohen (2002)	<b>Data:</b> From the General Social Survey (National Opinion Research Center) <b>Country:</b> U.S.	Mean differences and ANOVA	Religion is a necessary element in predicting people's happiness
Dehejia, DeLeire, & Luttmer (2007)	<b>Data:</b> From the Consumer Expenditure Survey (CEX) and the National Survey of Families and Households (NSFH) <b>Country:</b> U.S.	Measurement error	Participation in the activities of religious organizations helps promote happiness

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
Ferriss (2002)	<b>Data:</b> From the 1972–1996 General Social Survey Cumulative File <b>Country:</b> U.S.	A factor analysis	The level of attendance at religious services is important in assessing happiness
Fiori et al. (2006)	<b>Data:</b> Wave 1 of the Americans’ Changing Lives dataset <b>Country:</b> U.S.	Structural Equation Modelling	Life satisfaction acquired through religious practices varies by age and gender
García-Alandete, J. & Bernabé-Valero, G. (2013)	<b>Data:</b> 180 undergraduates <b>Country:</b> Spain	Multiple regression analysis	There is a positive relationship between the intrinsic religious orientation and people's well-being
Headey et al. (2010)	<b>Data:</b> From the German Socio-Economic Panel Survey <b>Country:</b> Germany	OLS regressions	The most religious people obtain long-term life satisfaction
Helliwell (2003)	<b>Data:</b> World Values Survey <b>Countries:</b> Worldwide	Least squares	Those who accept that God has a significant place in their lives, achieve higher life satisfaction
Lelkes (2006)	<b>Data:</b> Hungarian survey data <b>Country:</b> Hungary	Multivariate regression	People’s well-being is positively related to their religious engagement
Ngamaba & Soni (2018)	<b>Data:</b> World Value Survey (from 1981 to 2014) <b>Countries:</b> Worldwide (100 countries)	ANOVA and Multilevel mixed-effects regression analysis	People's satisfaction with life is a function of their religiosity and the development of the country of stay
Sinneve et al. (2015)	<b>Data:</b> From the 2003, 2007, and 2011 waves of the German Socio-Economic Panel <b>Country:</b> Germany	Cross-Sectional Regression and Panel Regression	It seems to have a connection between people's life satisfaction and their level of attendance at religious services
Snoep (2008)	<b>Data:</b> World Values Survey (2000) <b>Countries:</b> USA, Netherlands, and Denmark	Bi-variate correlational analysis	The effects of religion on happiness are found to be not the same in every region
Vang et al. (2019)	<b>Data:</b> General Social Survey (GSS) <b>Country:</b> Canada	OLS regression models	A high level of religiosity is associated with a higher level of satisfaction with life
Witter et al. (1985)	<b>Data:</b> Manual and computer searches and review by a panel of experts <b>Country:</b> U.S.	Quantitative research synthesis (meta-analysis)	Religion is positively associated with perceptions of life satisfaction

**Table 2.1. (Continued)** *Summary of Literature Review*

<b>Authors</b>	<b>Data and Country</b>	<b>Methods</b>	<b>Main findings</b>
<b>11. Responsible Financial Behavior &amp; Financial Satisfaction</b>			
Dew & Xiao (2011)	<b>Data:</b> From the Familial Response to Financial Instability Study (Survey) <b>Country:</b> U.S.	Factor Analysis, Reliability Analysis and Validity Analysis	Financial behavior is found to be related to financial decisions (cash management, credit management, savings and investments, and insurance)
Powell et al. (2023)	<b>Data:</b> Survey from the general Australian Public <b>Country:</b> Australia	Structural equation modelling and nonparametric Mann–Whitney <i>U</i> test	Financially Responsible budgeting and planning and compulsive buying behaviors have a significant impact financial wellbeing
Xiao (2008)	<b>Data:</b> Review research on basic concepts and theories <b>Country:</b> U.S.	Applying behavior theories to financial behavior. In Handbook of consumer finance research (pp. 69-81).	Financial behavior is viewed as any human behavior pertinent to the management of personal finances
Xiao et al. (2009)	<b>Data:</b> A web-based survey was employed. Sample of undergraduate students <b>Country:</b> U.S.	Structural equation modeling	Responsible financial behavior will guarantee a financial satisfaction and even a satisfaction with life

### 3. DATA AND METHODOLOGY

The present study aims to analyze the direct links between responsible financial behavior, religious orientation, and financial literacy with financial satisfaction. Additionally, it tends to verify the impacts of religious orientation and financial literacy on financial satisfaction through responsible financial behavior.

Details about the sample, sample composition, pilot survey statistics, descriptive and inferential analysis of data along with the data collection method and the reliability and validity measures of the instrument employed in the study are discussed in detail in this section.

#### 3.1. Sample

The population of Türkiye is estimated at 85.279.553 in 2022.<sup>1</sup> The banked population in Türkiye is about 69%, i.e., 58 million. The unbanked population of women is forecasted to be around 60% (*The Fintech market in Turkey the fintech sector and its potential and financial health in Turkey*, 2019). Age group of 18-64 represents the largest segment of population in Türkiye. Hence, our sample did not consider:

- Population below 18 years
- Unbanked population

The population in the age bracket 18-64 is above 67.9% in Türkiye. For this reason, the sample takes into the consideration adults, i.e., population above 18 years of age. Table 3.1 presents the key population statistics. Other details about the population of Türkiye are briefly attached in Appendix 1.

Present study tends to analyze the financial satisfaction of different individuals with different employment/work backgrounds, age, income level, gender, marital status, and academic qualification. The research relies on raw data gathered via organized questionnaires.

To represent different socioeconomic groups and demographic characteristics in the study, the multistage random sampling method was chosen. By using this method, a more effective and representative sampling process is enabled when dealing with a large and diverse population, and approaching the study's results from a more comprehensive

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<sup>1</sup> <https://data.tuik.gov.tr/Bulten/Index?p=49685>

perspective is made possible. As a result, it is expected that the findings will encompass a wide range of diverse individuals, making them more reliable and generalizable.

**Table 3.1.** *Population Statistics of Türkiye*<sup>23</sup>

<b>Country</b>	<b>Türkiye</b>
Population	85.28 million
Literate Population	97%
Age wise population groups (%)	
0-14 years	22%
15-64 years	68.1%
Above 65	9.9%
Economy	Upper Middle Income

### **3.2. Pilot Study**

Pilot study was undertaken in order to assess the accuracy of the scales used in the study. Consistent with previous research (In, 2017; Lancaster et al., 2004), a pilot study is explained as an independent check-up for the main study. The main intention of a pilot survey is to ameliorate the content and wording of the survey based on feedback received from various respondents. In addition, the pilot study helps to assess the consistency of the scales used for each variable. It helps narrow down the target audience and makes it easier to identify a more specific sample. Furthermore, it plays a crucial role in identifying potential difficulties faced by respondents, such as difficulties in understanding certain terminologies or in identifying any errors or flaws in the questionnaire (Srinivasan et al., 2017). 64 respondents participated in the pilot study. As a general rule, 30 or more representatives/respondents are enough for pilot examination (Johanson & Brooks, 2010; Thabane et al., 2010).

#### **3.2.1. Descriptive Statistics related to Pilot Study**

Descriptive statistics reveals about the composition and features of the data. The descriptive statistics of the pilot data revealed that male respondents have major share in sample i.e., 39/64 males. Besides, the respondents having an Education level of

<sup>2</sup> <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=TR>

<sup>3</sup> [https://en.wikipedia.org/wiki/Demographics\\_of\\_Turkey](https://en.wikipedia.org/wiki/Demographics_of_Turkey)

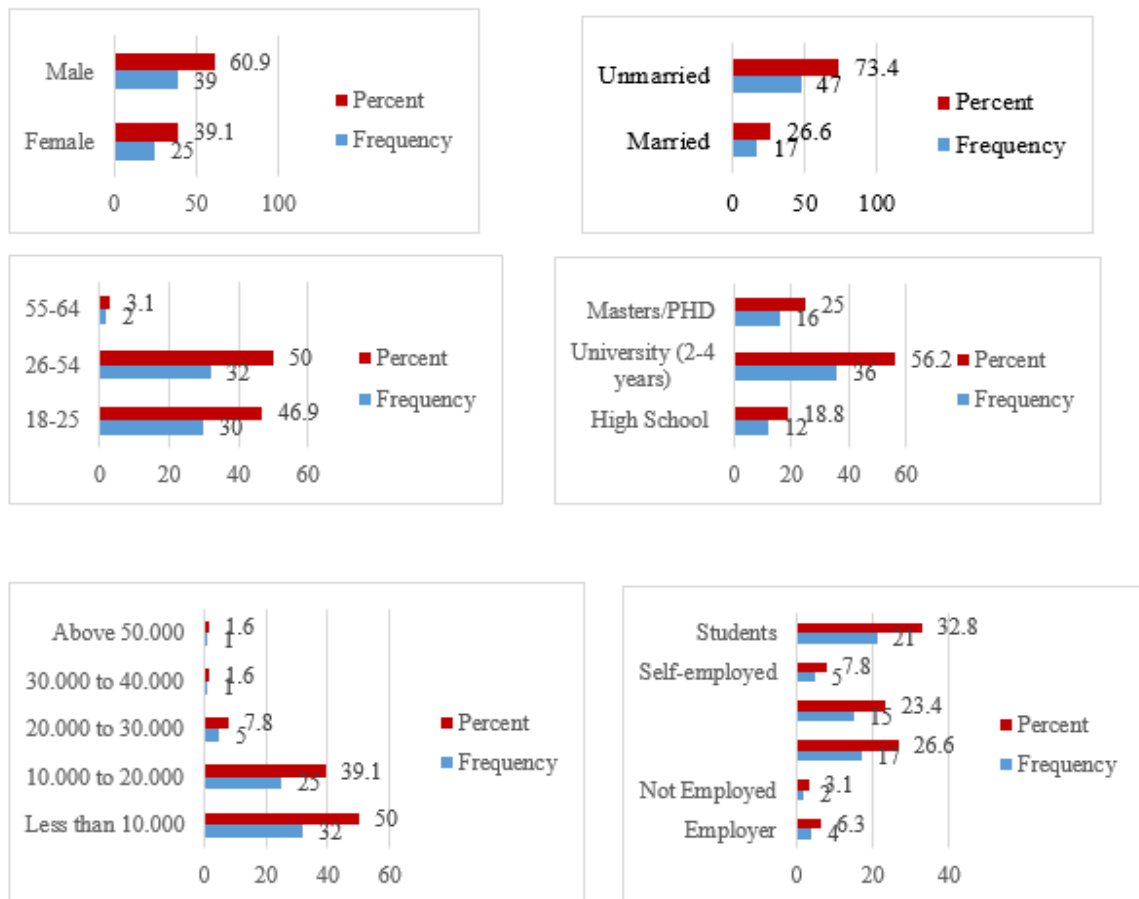
University (2-4 years) were dominating. Sample was comprised mostly of the age groups 18-25 and 26-54. The occupation variable has “students” and “Working in the Public Sector” as a highly reported trait. The income groups “less than 10.000” and “10.000 to 20.000” are dominating the samples. The other details are exposed in Table 3.2.

**Table 3.2.** *Descriptive Analysis of Demographics*

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
3a: Gender		
Female	25	39.1
Male	39	60.9
Total	64	100.0
3b: Marital Status		
Married	17	26.6
Unmarried	47	73.4
Total	64	100.0
3c: Age		
18-25	30	46.9
26-54	32	50.0
55-64	2	3.1
Total	64	100.0
3d: Education level		
High School	12	18.8
University (2-4 years)	36	56.2
Masters/PHD	16	25.0
Total	64	100.0
3e: Average Monthly Income		
Less than 10.000	32	50.0
10.000 to 20.000	25	39.1
20.000 to 30.000	5	7.8
30.000 to 40.000	1	1.6
Above 50.000	1	1.6
Total	64	100.0
3f: Occupation		
Employer	4	6.3
Not Employed	2	3.1
Working in the Public Sector	17	26.6
Working in the Private Sector	15	23.4
Self-employed	5	7.8
Students	21	32.8
Total	64	100.0

**Note:** The above table represents the descriptive statistics of variables Gender, Marital Status, Age, Education Level, Average Monthly Income and Occupation used in Pilot survey.

Figure 3.1 represent the histograms of “Demographic” variables. A histogram is “a graphical representation of categorical data with rectangular bars having heights or lengths proportional to the values that they represent”. The graph provides visual information of different categories in a variable.



**Figure 3.1.** Pilot study data: Visualization of descriptive statistics

Table 3.3 displays an overview of the descriptive analysis of main variables.

**Table 3.3.** *Descriptive Analysis of Main Variables*

Statistics	Financial Satisfaction	Responsible Financial Behavior	Religious Orientation	Financial Literacy
Mean	2.513	2.6375	2.8326	1.8875
Std. Error of Mean	0.10722	0.07668	0.10847	0.02992
Median	2.5	2.5	2.9643	1.9
Mode	1.83	2.33	3	1.7
Std. Deviation	0.85774	0.61342	0.86777	0.23938
Variance	0.736	0.376	0.753	0.057
Skewness ( <i>a</i> )	0.202	0.209	0.058	0.116
Std. Error of Skewness ( <i>b</i> )	0.299	0.299	0.299	0.299
z-score* ( <i>a/b</i> )	0.675585284	0.698996656	0.193979933	0.387959866
Kurtosis ( <i>c</i> )	-0.928	-0.585	-0.248	-0.925
Std. Error of Kurtosis ( <i>d</i> )	0.59	0.59	0.59	0.59
z score** ( <i>c/d</i> )	-1.572881356	-0.991525424	-0.420338983	-1.56779661
Range	3.17	2.73	3.93	0.9
Minimum	1	1.2	1	1.5
Maximum	4.17	3.93	4.93	2.4
Sum	160.83	168.8	181.29	120.8
<i>N</i>	Valid	64	64	64
	Missing	0	0	0

### 3.2.2. Inferential Analysis of the Pilot Study

To determine the substantive significance of an instrument designed to accurately measure the underlying construct, examination of the validity and reliability of the tool must be conducted (Manville et al., 2012; McCroskey, 1992; Neuendorf, 2011; Revelle & Condon, 2019). Three distinct forms are recognized within the domain of validity: content, criterion, and construct. Content validity involves an independent assessment of an instrument's adequacy, usually verified by consulting the scholarly literature and subject matter experts. This evaluation aims to define the extent to which the items making up the construct adequately encompass the crucial facets of the targeted domain. Criterion validity aids as a means of assessing the degree of consistency between the employed construct and a traditional construct used to explain a similar concept. For instance, the financial literacy scale comprises the notions of inflation, interest, and

diversification as gauges of investors' literacy, consequently measuring their level of financial knowledge. Accurately assessing the criterion validity in the social sciences poses challenges due to its intrinsically “relative” nature.

On the contrary, construct validity is formed when the operational definition aligns with the actual measurement, establishing a form of internal validity. In particular, construct validity portrays the extent to which the items, experiment, or test effectively capture the proposed measurement construct. Sometimes examining inter-item correlations is used as a method to assess construct validity (Srinivasan et al., 2017).

Reliability, on the other hand, relates to the consistency of the results received from a given measuring instrument. Cronbach's Alpha coefficient is a valuable criterion for assessing the reliability of the instrument (Ercan et al., 2007). To verify the internal consistency of a scale, three methods are useful:

- Inter Item Correlation, “r”
- Cronbach’s Coefficient Alpha. “ $\alpha$ ”
- Item Total Correlation

Table 3.4 to Table 3.8 contain elements concerning the reliability and validity of the various constructs or concepts used in the pilot study. Although it is necessary to mention that the information derived from Cronbach's alpha is affected by the sample size used, with larger samples yielding more accurate population estimates (Javali et al., 2011; Yurdugül, 2008). It nevertheless provides an understanding of the accuracy of the instrument (Aminu & Shariff, 2015).

**Table 3.4.** *Questionnaire Items’ Reliability for Pilot Data*

<b>Case summary</b>		
Cases	<i>N</i>	%
Valid	64	100.0
Excluded	0	.0
Total	64	100.0

**Table 3.5.** *Reliability Statistics*

<b>Cronbach’s Alpha</b>	<b>Cronbach’s Alpha based on Standardized Items</b>	<b>No. of Items</b>
.814	.780	51

Table 3.5 depicts the questionnaire's overall Cronbach's alpha, which is calculated as .814. The acceptable range for Cronbach's alpha extends from .6 to 1, with .6 being considered a suitable cut-off (Daud et al., 2018; Hays et al., 1989; Ponterotto & Ruckdeschel, 2007; Ursachi et al., 2015). To assess the reliability of a multi-item scale and improve its attribute, the item-total correlation plays a fundamental role. It measures the association between an individual item and the total score obtained by excluding that specific item. Henrysson (1963) proposes that item-total correlation values ranging from .2 to .7 are recommended. A value less than .2 signifies low discriminating power of the items, while values between .2 and .7 show satisfactory discrimination.

The last column of these tables presents the correlations, reliability and validity of Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy respectively. Item-Total Correlation separately.

**Table 3.6.** *Reliability and Validity of Financial Satisfaction (FS)*

Reliability	6 items						.799
	Inter-Item Correlation Matrix						
Items	FS1	FS2	FS3	FS4	FS5	FS6	Total Score Financial Satisfaction (Validity measure)
FS1	1	.566*	.379**	.135**	.394**	.360**	.784
FS2		1	.380**	.352**	.540*	.463*	.753
FS3			1	.036**	.553*	.496**	.782
FS4				1	.378*	.366**	.827
FS5					1	.738**	.714
FS6						1	.732

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

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

**Table 3.7.** Reliability and Validity of Responsible Financial Behavior (RFB)

Reliability	15 items															.702
Inter-Item Correlation Matrix																
Items	RFB1	RFB2	RFB3	RFB4	RFB5	RFB6	RFB7	RFB8	RFB9	RFB10	RFB11	RFB12	RFB13	RFB14	RFB15	Total Score Responsible Financial Behavior (Validity measure)
RFB1	1	.223*	.359*	-.068	.282*	-.091	-.02	.243	-.07	-.004	.003	.118	.009	-.067	.3	.704
RFB2		1	.084*	.226*	.476*	-.239	-.19	.19	.343	.338	.113	.225	.009	.207	-.048	.688
RFB3			1	.061*	.202*	-.134	-.05	.404	.071	.112	.068	.306	.113	-.044	-.017	.695
RFB4				1	.353*	-.143	-.2	.125	.228	.107	.048	.301	.06	.204	.104	.697
RFB5					1	-.318	-.38	.383	.214	.263	.175	.339	.208	.324	.156	.673
RFB6						1	.434	-.198	-.24	-.216	-.022	-.219	-.074	-.13	-.111	.745
RFB7							1	-.116	-.16	-.208	-.158	-.205	-.041	-.282	-.197	.76
RFB8								1	.559	.43	.259	.44	.201	.296	.17	.656
RFB9									1	.715	.242	.462	.15	.286	.146	.667
RFB10										1	.435	.344	.234	.453	.208	.66
RFB11											1	.324	.407	.567	.383	.668
RFB12												1	.23	.259	.313	.658
RFB13													1	.534	.614	.668
RFB14														1	.533	.656
RFB15															1	.677

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

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

**Table 3.8.** Reliability and validity of Religious Orientation (RO)

Reliability	14 items														.866
Inter-Item Correlation Matrix															
Items	RO1	RO2	RO3	RO4	RO5	RO6	RO7	RO8	RO9	RO10	RO11	RO12	RO13	RO14	Total Score Religious Orientation (Validity measure)
RO1	1	.364	-.326	.605	.57	.638	.627	.657	.678	.317	.314	.472	.301	.014	.850
RO2		1	-.114	.302	.303	.422	.494	.287	.308	.409	.494	.412	.579	.025	.858
RO3			1	-.241	-.117	-.231	-.377	-.226	.215	-.033	-.082	-.394	.043	.407	.894
RO4				1	.685	.5281	.635	.595	.600	.436	.131	.497	.188	-.065	.851
RO5					1	0.62	.553	.598	.540	.330	.049	.387	.247	.057	.851
RO6						1	.662	.749	.584	.304	.282	.498	.292	.001	.848
RO7							1	.623	.646	.409	.365	.723	.412	-.056	.846
RO8								1	.637	.309	.360	.551	.364	.025	.846
RO9									1	.417	.307	.594	.399	.034	.847
RO10										1	.347	.365	.322	.285	.857
RO11											1	.606	.763	.187	.859
RO12												1	.436	-.059	.851
RO13													1	.271	.856
RO14														1	.880

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

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

### **3.3. Survey of the Study**

The major objective of the current study is to analyze the direct links between responsible financial behavior, religious orientation, and financial literacy with financial satisfaction. Additionally, it tends to verify the impacts of religious orientation and financial literacy on financial satisfaction through responsible financial behavior. Structural equation modeling has been used to investigate the relationships between the exogenous and endogenous variables of the study.

Additionally, the potential differences among various demographic characteristics (e.g., gender) in terms of financial satisfaction, responsible financial behavior, religious orientation, and financial literacy scores have been examined. For this purpose, non-parametric tests, namely the Kruskal-Wallis test, Dunn-Bonferroni test, Mann-Whitney U test, and Spearman's rho correlation coefficient, were utilized since the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests indicate non-normality.

This part of the study is structured into sections containing the descriptive statistics of the survey study, the construction and administration of the questionnaire, and an assessment of the questionnaire's reliability.

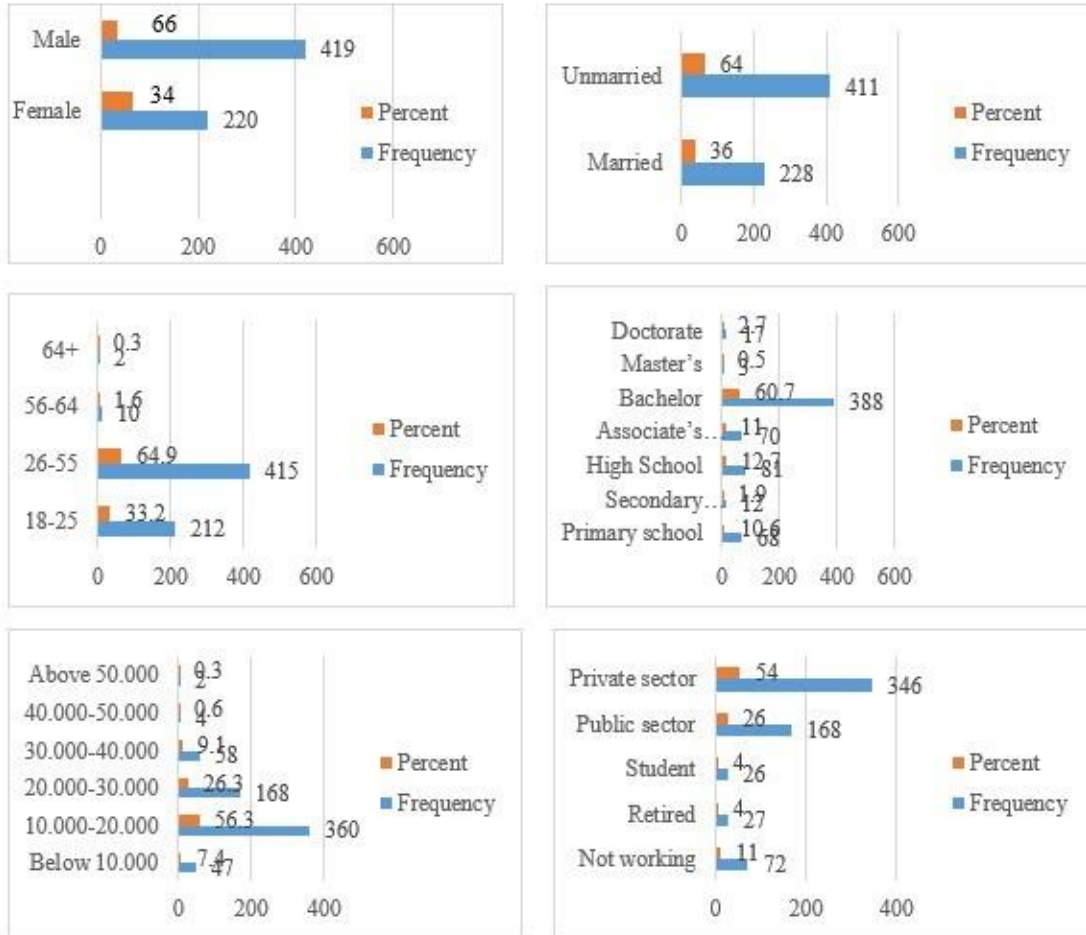
#### **3.3.1. Descriptive Statistics related to Survey Study**

Table 3.9 presents the sample composition in terms of demographic variables. The sample encompasses 639 individuals with variety of backgrounds, age and occupation and includes 419 (66 %) males and 220 (34 %) females. Respondents' age group of 26-55 are dominating, implying that most of the respondents are young or in the middle age. Slightly more than half of the respondents (54.14%) of the respondents are part of the private sector. Almost 72% have university degree below Ph.D./MS level and above high school. Most of the respondents are between the two salary bands of 10.000-20.000 (56%) and 20.000-30.000 (26%).

**Table 3.9.** *Descriptive Statistics of Demographic Variables*

<b>N = 639</b>	<b>Gender</b>		<b>Marital Status</b>		<b>Age</b>		<b>Education level</b>		<b>Average Monthly Income</b>		<b>Occupation</b>	
Frequency	Male	419	Married	228	18-25	212	Primary school	68	Below 10.000	47	Not working	72
	Female	220	Unmarried	411	26-55	415	Secondary school	12	10.000-20.000	360	Retired	27
					56-64	10	High School	81	20.000-30.000	168	Student	26
					64+	2	Associate's degree	70	30.000-40.000	58	Public sector	168
							Bachelor	388	40.000-50.000	4	Private sector	346
							Master's	3	Above 50.000	2		
							Doctorate	17				
Mode	1		1		24		3		2		2	
Std. Deviation	0.475507732		0.479432605		8.846920538		0.977293334		0.803242774		1.053419831	
Variance	0.226107603		0.229855623		78.268003		0.955102261		0.645198954		1.109693339	
Skewness	0.656985918		0.599216952		1.103339484		0.781322988		0.857858736		1.168622706	
Std. Error of Skewness	0.096673886		0.096673886		0.096673886		0.096673886		0.096673886		0.096673886	
Kurtosis	-1.573303608		-1.646100997		1.184625429		1.397284472		1.196671189		0.778974501	
Std. Error of Kurtosis	0.1930492		0.1930492		0.1930492		0.1930492		0.1930492		0.1930492	
Minimum	1		1		19		1		1		1	
Maximum	2		2		65		7		6		5	

Figure 3.2 represent bar charts of demographic variables. The data is almost virtually identical to those of the pilot survey.



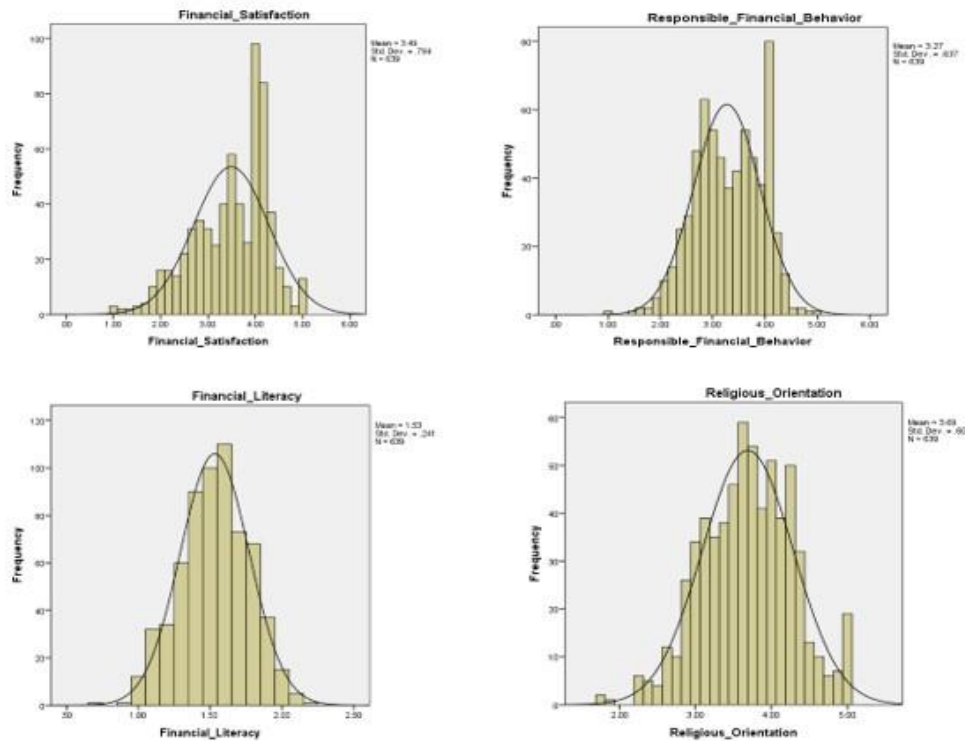
**Figure 3.2.** Survey Data: Visualization of descriptive statistics

Descriptive statistics for the main variables are given in Table 3.10.

**Table 3.10.** Descriptive Statistics of Main variables

Statistics	Financial Satisfaction	Responsible Financial Behavior	Religious Orientation	Financial Literacy
Mean	3.491	3.270	3.688	1.532
Std. Error of Mean	.031	.025	.024	.010
Median	3.667	3.231	3.75	1.5
Mode	4	4	3.625	1.6
Std. Deviation	.794	.637	.600	.241
Variance	.631	.406	.360	.058
Skewness	-.634	-.191	-.101	-.131
Std. Error of Skewness	.097	.097	.097	.097
Kurtosis	-.081	-.547	-.072	-.245
Std. Error of Kurtosis	.193	.193	.193	.193
Range	4	4	3.25	1.5
VIF	-	1.104	1.036	1.127
Minimum	1	1	1.75	.7
Maximum	5	5	5	2.2
N Valid	639	639	639	639
Missing	0	0	0	0

Figure 3.3 exhibits the histograms of the main variables.

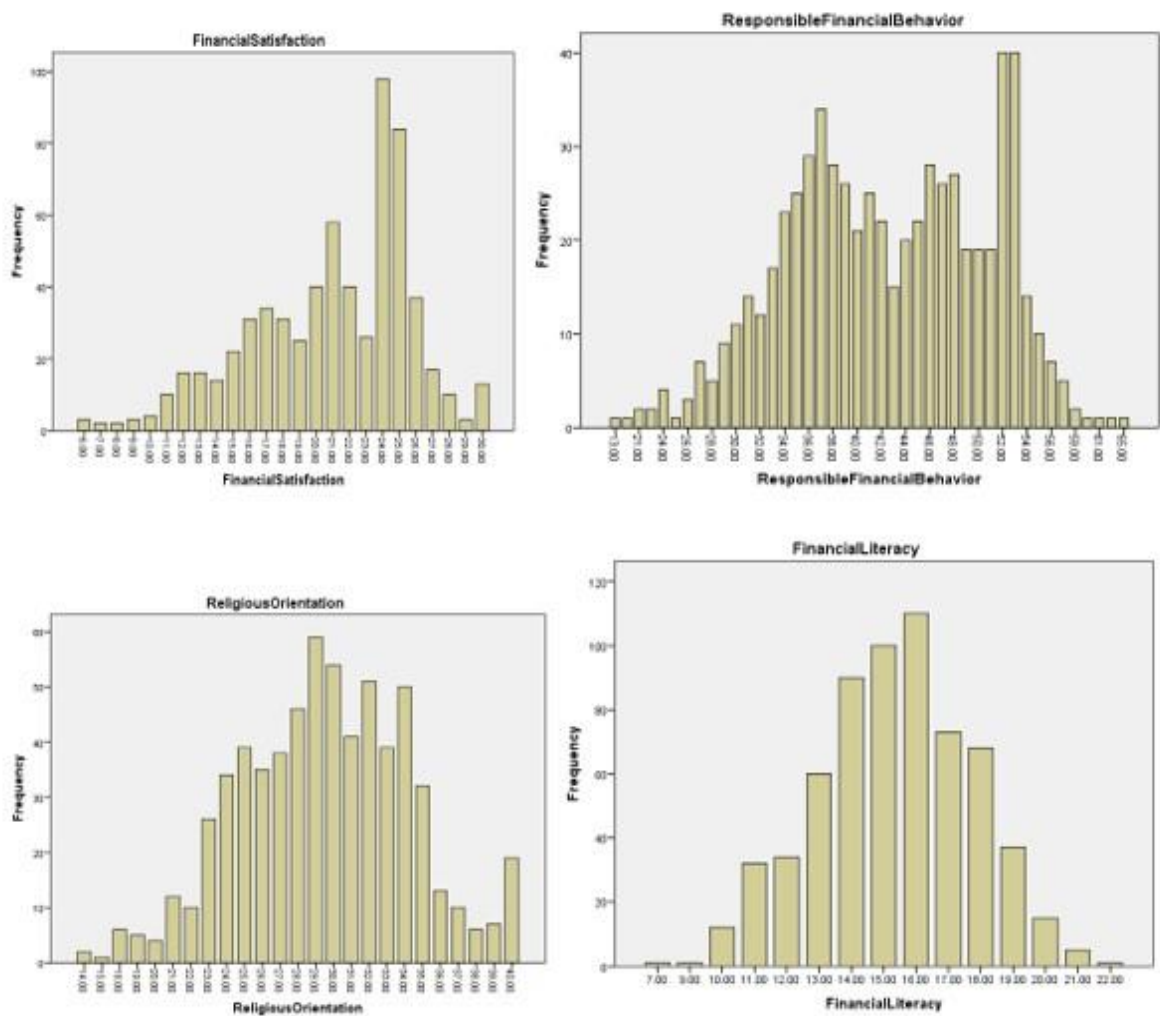


**Figure 3.3.** Survey Data: histograms of the main variables

For the main variables i.e., Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy, descriptive statistics were examined.

With respect to financial satisfaction, more than 50% of respondents scored 3 or above ( $M= 3.49$ ,  $SD= .79$ ). The mean value of Responsible Financial Behavior is 3.27, slightly inclined towards the upper end. Religious Orientation variable has a mean value of 3.69 with a minimum score of 1.75 and a maximum score of 5. With regard to Financial Literacy, the mean value is 1.53 and the standard deviation is .241.

Figure 3.4 represent scores of the variables in graphical form.



**Figure 3.4.** Survey Data: scores of the main variables

Furthermore, to assess the presence of multicollinearity, the Variance Inflation Factor (VIF) is used. Generally, VIF values are interpreted as follows (Daoud, 2017):

- VIF of 1 suggests no correlation between the variables.
- VIF between 1 and 5 suggest a reasonable correlation between the variables.
- VIF greater than 5 indicate a robust correlation between the variables.

In the present study, the VIF values observed in the sample are close to 1 as presented in Table 3.10, which signifies the absence of problems related to multicollinearity.

### **3.3.2. Questionnaire Construction and Administration**

After examining the related literature, a structured questionnaire was developed. The questionnaire of the study covers 4 constructs, and it was developed by combining different scales. The items included in the questionnaire were already pre-tested and validated in several studies in the past. Demographic information related to gender, marital status, age, qualification, average monthly income of family, socio-economic level of family and occupation was also included.

The questionnaire was specifically constructed by keeping in mind the following subjective measures:

- It can be applicable to people with different education and income levels as well as different levels of financial experience. The pilot survey results confirmed that questionnaire items can be successfully applied to diverse populations within countries. Scales from already tested published studies are implied within the survey to avoid waste of time and resources.
- The questionnaire is developed by keeping in mind the definition of all constructs used in the study. Within a single construct, questions are carefully designed to cover a wide variety of concepts especially with respect to general behaviors, attitudes, and knowledge.
- Each of the core questions provides useful information. The language of questions was kept simple i.e., no complex terminology is used to make the questionnaire easily understandable.

The questionnaire designed for data collection has been translated to Turkish and checked by 3 experts in the finance field. The 52-item questionnaire and associated explanations is given in Appendix 2.

The scales which were used to measure the constructs of the study are outlined in the table below.

**Table 3.11.** *Scale Used and Questionnaire Items Description*

<b>Variables</b>	<b>Scale used</b>
Demographic Variables	7 Questions
Financial Satisfaction	Berger et al. (1988) (6 items)
Responsible Financial Behavior	Dew & Xiao (2011) (15 items)
Religious Orientation	Gorsuch & McPherson (1989) (14 items)
Financial Literacy	Houts & Knoll (2020) (10 items)

- ***Financial Satisfaction Construct***

Although several financial satisfaction scales are available, most of these scales are single-item scales. Therefore, we chose to employ *Berger et al. (1988)'s comprehensive Financial Satisfaction Scale*, which includes multiple items measuring the individual's assessment of his/her financial situation. The instrument's alpha reliability coefficient was determined as .87.

- ***Responsible Financial Behavior Construct***

We utilized *Dew & Xiao (2011)'s Financial Management Behavior Scale* for measuring responsible financial behavior. Compared to other existing measures of financial management behavior, this scale is more comprehensive and helps measure different domains of financial management behavior as every specific domain might express a significant influence on family life. The instrument's alpha reliability coefficient was reported as .81.

- ***Religious Orientation Construct***

For the assessment of religious orientation, we used the *Revised Religious Orientation Scale* developed by *Gorsuch & McPherson (1989)*. This scale was preferred for its vigorous psychometric properties and its acknowledgment as the most consistent measure of religious orientation at present (Judd, 2009), implying its enduring importance in the field of psychology of religion over the past four decades (Tiliopoulos et al., 2007). Further, it has undergone standardization across various population groups, displaying

good levels of reliability (Johnston, 2012). The instrument's alpha reliability coefficients for intrinsic subscale and extrinsic subscale were documented as .83 and .65 respectively.

- ***Financial Literacy Construct***

For the purpose of evaluating financial literacy, we used the short version of the ***Houts & Knoll, (2020)'s Financial Knowledge Scale***. This scale offered a more succinct and precise measure of financial knowledge in comparison with other prevailing measures. Moreover, it has attracted consideration in modern literature, occupying a prominent place in studies inspecting financial well-being (SCHMEISER & SELIGMAN, 2013), financial sophistication (LUSARDI et al., 2014), as well as alternative approaches to measure financial literacy and capability (Fernandes et al., 2014). The instrument's alpha reliability coefficient was reported as .70.

Financial Satisfaction was assessed with 6 questions by utilizing a 5-point Likert scale ranging from 1 (extremely dissatisfied) to 5 (extremely satisfied). Responsible Financial Behavior was measured with a questionnaire composed of 15 questions based on a 5-point Likert scale varying from 1 (never) to 5 (always). Religious Orientation was assessed with 14 questions by using a by using a 5-point Likert scale varying from 1 (strongly disagree) to 5 (strongly agree). To measure Financial Literacy, the overall literacy score is calculated by combining individual scores of 10 items.

After the approval of the questionnaire by the "Ethics Committee of Anadolu University", it was translated to Turkish language and then circulated for a pilot study. Following the pilot study, the questionnaire was distributed to 668 respondents using the multistage random sampling method. Data of 29 respondents were excluded as they were detected as outliers.

The questionnaire was distributed to 668 respondents and administered to a group of respondents face to face, while another group of respondents completed it online in April 2023-May 2023. At the beginning of the survey, the research objectives were briefly described, and participant consent was requested. Hence, 639 complete responses were obtained. For data analysis, LISREL and SPSS were used.

In general, a suitable sample size is determined by the ratio of respondents to items, with a suggested guideline of a sample size greater than 300 or a ratio of 10:1

(Lenth, 2001; Osborne & Costello, 2004; Vasileiou et al., 2018; Yurdugül, 2008). This criterion guarantees a sufficient number of participants in relation to the number of study items, as recommended by numerous researchers in the field. For this reason, the sample size seems adequate for data analysis.

### 3.3.3. Questionnaire Reliability

To assess the internal reliability of questionnaire items, Cronbach's alpha ( $\alpha$ ) is frequently applied as a consistent measure. This coefficient assists as a gauge of the reliability of the scale. In the fields of psychology and social sciences, values above .6 are commonly considered adequate (Ponterotto & Ruckdeschel, 2007). Nonetheless, the specific value of  $\alpha$  also depends on the number of items composing a construct (Ercan et al., 2007; Javali et al., 2011). Although Alpha is frequently employed, it is not the most accurate reliability coefficient available (Brunner & Süß, 2005; Cho, 2016). Therefore, composite reliability (CR) is also calculated as an additional measure.

To evaluate the interrelation between the observed elements, a composite reliability score is used. This score is computed dividing the total of items (n) by the sum of the squared loads of the items. Required values are usually between .7 and .9, while a value above .6 is judged acceptable (Ab Hamid et al., 2017). Moreover, for the inter-item correlation, values ranging from .15 to .50 are deemed acceptable (L. A. Clark & Watson, 2016). It is vital to remark that in cross-cultural analyses, the issue of non-equivalence may occur. Some items may perform well in one country, but not perform well in another, even if the overall data shows satisfactory performance (Byrne & de Vijver, 2010).

Table 3.12 provides detailed information on Cronbach's alpha of the main variables.

**Table 3.12.** *Cronbach's  $\alpha$  of constructs*

	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Financial Satisfaction	.886	6
Responsible Financial Behavior	.844	13
Religious Orientation	.772	8
Financial Literacy	-	-
Total	.874	27

### **3.4. Non-parametric Tests**

Since the results of Kolmogorov-Smirnov and Shapiro-Wilk test indicated non-normality, non-parametric tests, namely the Kruskal-Wallis test, Dunn-Bonferroni test, Mann-Whitney U test, and Spearman's rho correlation coefficient, were applied to observe the variances in demographic variables to discover whether "the associated population means are significantly different",

The current study used non-parametric tests to compare the means of the following variables:

- a) Income
- b) Education
- c) Gender
- d) Occupation
- e) Marital Status

Furthermore, Spearman's rho correlation coefficient was used to examine the relationship between age and the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy).

The Kruskal-Wallis test is a recommended tool in situations where conventional parametric tests, for example one-way analysis of variance, cannot be employed because of assumptions about the data distribution (Ostertagova et al., 2014). This test plays an essential role in statistical analysis, providing a robust and adaptable alternative to parametric tests. Its aptitude for treating non-normal data, ordinal variables and ease multiple group comparisons makes it an essential tool for researchers in a variety of disciplines (Elliott & Hynan, 2011). The statistical procedure Dunn-Bonferroni post-hoc test is employed to compare several pairs of means in a group of data. The aim of the Dunn-Bonferroni test is to discover pairs of means that are significantly different from each other. Researchers from a wide range of disciplines lean on its capabilities to perform robust and meaningful data analysis. The Mann-Whitney U test is used to compare two independent groups (Nachar & others, 2008). Its importance resides in its capability to handle non-normal data, to work with ordinal variables, to measure differences between groups, to resist outliers and to find large application in various fields of research (McKnight & Najab, 2010). In short, it guarantees valid and reliable comparisons between groups, making it essential in statistical analysis. Spearman's rho correlation

coefficient is employed to evaluate the strength of the association between variables (Hauke & Kossowski, 2011). It plays a crucial role in quantifying relationships between variables when traditional correlation measures are not appropriate.

Thus, the alternative hypotheses with respect to demographic variables are as follows:

- ***Income***

H<sub>1a</sub>: Financial Satisfaction differs significantly across Income Level groups.

H<sub>1b</sub>: Responsible Financial Behavior differs significantly across Income Level groups.

H<sub>1c</sub>: Religious Orientation differs significantly across Income Level groups.

H<sub>1d</sub>: Financial Literacy differs significantly across Income Level groups.

- ***Education***

H<sub>2a</sub>: Financial Satisfaction differs significantly across Education Level groups.

H<sub>2b</sub>: Responsible Financial Behavior differs significantly across Education Level groups.

H<sub>2c</sub>: Religious Orientation differs significantly across Education Level groups.

H<sub>2d</sub>: Financial Literacy differs significantly across Education Level groups.

- ***Gender***

H<sub>3a</sub>: Financial Satisfaction differs significantly across Gender groups.

H<sub>3b</sub>: Responsible Financial Behavior differs significantly across Gender groups.

H<sub>3c</sub>: Religious Orientation differs significantly across Gender groups.

H<sub>3d</sub>: Financial Literacy differs significantly across Gender groups.

- ***Occupation***

H<sub>4a</sub>: Financial Satisfaction differs significantly across Occupation groups.

H<sub>4b</sub>: Responsible Financial Behavior differs significantly across Occupation groups.

H<sub>4c</sub>: Religious Orientation differs significantly across Occupation groups.

H<sub>4d</sub>: Financial Literacy differs significantly across Occupation groups.

- ***Marital Status***

H<sub>5a</sub>: Financial Satisfaction differs significantly across Marital Status groups.

H<sub>5b</sub>: Responsible Financial Behavior differs significantly across Marital Status groups.

H<sub>5c</sub>: Religious Orientation differs significantly across Marital Status groups.

H<sub>5d</sub>: Financial Literacy differs significantly across Marital Status groups.

- **Age**

H<sub>6a</sub>: Financial Satisfaction is positively related with Age.

H<sub>6b</sub>: Responsible Financial Behavior is positively related with Age.

H<sub>6c</sub>: Religious Orientation is positively related with Age.

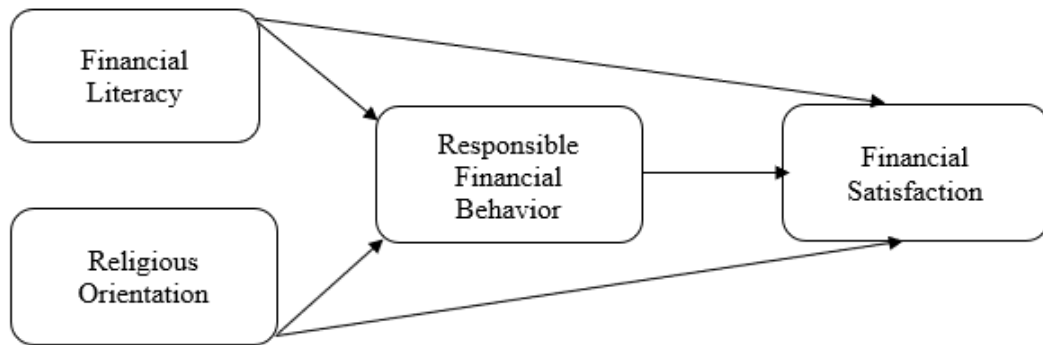
H<sub>6d</sub>: Financial Literacy is positively related with Age.

### **3.5. Theoretical Model**

In the current study, Structural Equation Modelling (SEM) is used to analyze the direct links between responsible financial behavior, religious orientation, and financial literacy with financial satisfaction. Additionally, SEM is employed to verify the indirect impacts of religious orientation and financial literacy on financial satisfaction through responsible financial behavior.

SEM is a robust statistical procedure extensively exploited in the social sciences, human psychology, and other disciplines to appraise and interpret sophisticated relationships between variables. It furnishes a thorough cadre for hypothesizing and analyzing both observed and latent variables, enabling scientists to consider multifaceted causal paths and hypothesized relationships within a single methodical model (Byrne, 2013). Moreover, SEM incorporates path analysis and factor analysis to gauge and confirm structural relationships between variables and ease the examination of the direct and indirect effects of variables (Kline, 2015). Using Confirmatory Factor Analysis (CFA), SEM facilitates models to be estimated to confirm consistent and valid measurement of latent variables and estimate model fit indices (Byrne, 2013; Hooper et al., 2008). In a nutshell, the main benefit of SEM exists in its capacity to examine at the same time sophisticated models involving several interdependent concepts.

In the current study, we attempt to measure these latent variables (financial satisfaction and its determinants) and to explore the relationships between them. 2 variables were considered as exogenous variables, namely Financial Literacy and Religious Orientation. The other 2 latent variables, which are Responsible Financial Behavior and Financial Satisfaction were treated as endogenous variables. Figure 3.5 depicts the theoretical model of the study.

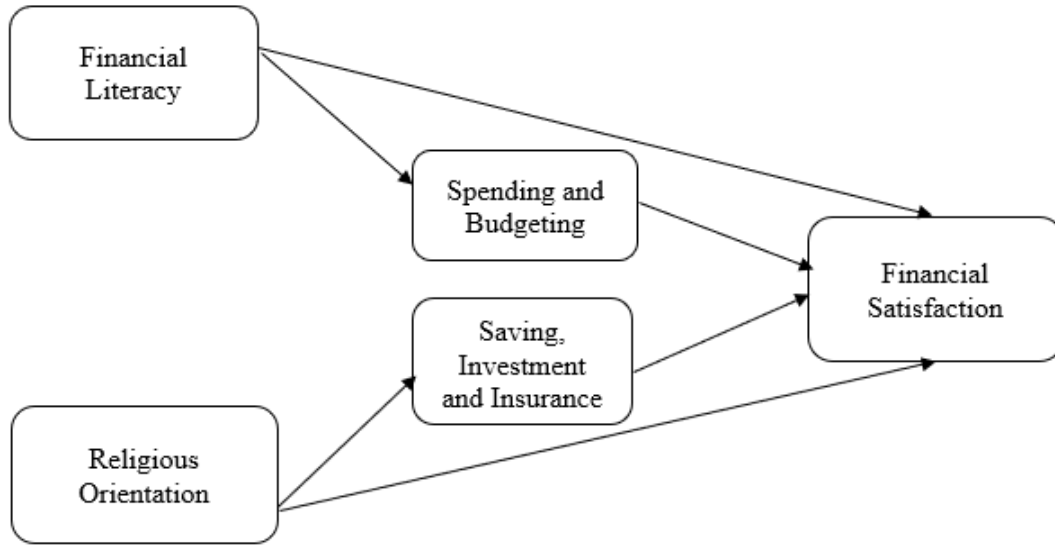


**Figure 3.5.** *Theoretical Model*

However, some items related to Responsible Financial Behavior were proved unsuitable for the Turkish context. Thus, Responsible financial behavior has been categorized into two main groups of items as described below.

- The first group includes items regarding Spending and Budgeting which are as follows:
  - “Comparison shopped when purchasing a product or service”,
  - “Paid all your bills on time”,
  - “Kept a written or electronic record of your monthly expenses”,
  - “Stayed within your budget or spending plan”,
  - “Paid off credit card balance in full each month”.
- The second group includes items regarding Savings, Investment and Insurance which are as follows:
  - “Began or maintained an emergency savings fund”,
  - “Saved money from every paycheck”,
  - “Saved for a long-term goal such as a car, education, home, etc.”,
  - “Contributed money to a retirement account”,
  - “Bought bonds, stocks, or mutual funds”,
  - “Maintained or purchased an adequate health insurance policy”.
  - “Maintained or purchased adequate property insurance like auto or homeowners insurance”,
  - “Maintained or purchased adequate life insurance”.

Consequently, a new model, as illustrated in Figure 3.6, was designed, retaining the existing items while taking into account the specific requirements of the Turkish context.



**Figure 3.6.** *New Theoretical Model*

Although financial satisfaction has been the subject of several studies for decades, there seems to be a research gap with respect to the determinants of financial satisfaction. In fact, several explanatory factors of financial satisfaction exist. Yet, the simultaneous consideration of the above-mentioned elements i.e., Financial Literacy, Religious Orientation and Responsible Financial Behavior (Spending and Budgeting; and Savings, Investments, and Insurance dimensions of Responsible Financial Behavior) modelling Financial Satisfaction has been lacking. Therefore, this study may contribute to the prevailing literature by inspecting the role of Financial Literacy, Religious Orientation, and Responsible Financial Behavior in shaping Financial Satisfaction.

### **3.5.1. Hypothesis**

Within the context of the current study, 7 main hypotheses were generated based on several supportive links from the literature, which are given below:

H<sub>1</sub>: Religious Orientation demonstrates a positive effect on Financial Satisfaction (Bradshaw & Ellison, 2010; Kose & Cinar, 2020; Sarofim et al., 2020)

H<sub>2</sub>: Religious Orientation demonstrates a positive effect on Responsible Financial Behavior (both in terms of Spending and Budgeting; and Saving, Investment, and Insurance) (Benjamin et al., 2016; Czerwonka, 2014; Mylonidis & Zioga, 2018)

H<sub>3</sub>: Financial Literacy demonstrates a positive effect on Financial Satisfaction (Philippas & Avdoulas, 2020; Xiao et al., 2014)

H<sub>4</sub>: Financial Literacy demonstrates a positive effect on Responsible Financial Behavior (both in terms of Spending and Budgeting; and Saving, Investment, and Insurance) (Borden et al., 2008; GRABLE et al., 2009; Hilgert et al., 2003; LUSARDI et al., 2014; PERRY & MORRIS, 2005; Rasool & Ullah, 2020; Sevim et al., 2012)

H<sub>5</sub>: Responsible Financial Behavior (both in terms of Spending and Budgeting; and Saving, Investment, and Insurance) is a mediating variable in the association between Religious Orientation and Financial Satisfaction (Benjamin et al., 2016; Czerwonka, 2014; Mylonidis & Zioga, 2018)

H<sub>6</sub>: Responsible Financial Behavior (both in terms of Spending and Budgeting; and Saving, Investment, and Insurance) is a mediating variable in the association between Financial Literacy and Financial Satisfaction (Ali et al., 2015; Arifin, 2018; Falahati et al., 2012; Prawitz et al., 2006)

H<sub>7</sub>: Responsible Financial Behavior (both in terms of Spending and Budgeting; and Saving, Investment, and Insurance) demonstrates a positive effect on Financial Satisfaction (Dew & Xiao, 2011; Xiao, 2008; Xiao et al., 2009)

### **3.5.2. Correlation Analysis**

Table 3.13 gives an overview of the interdependencies among variables. Correlation allows the evaluation of linear relations between two random variables in a range of -1 to 1. Using the correlation coefficient ( $r$ ), the degree and direction of these relations can be assessed. A positive relationship represents simultaneous increases in one variable and another, while a negative relationship means an inverse relationship, in which an increase

in one variable corresponds to a decrease in the other. Nevertheless, it is vital to mention that the correlation coefficients do not offer evidence about the specific direction of the association between the variables.

Correlation analysis reveals a positive relationship between the variables except for Financial Literacy. The correlation coefficients between Financial Literacy and other variables are negative. Also, a negative correlation coefficient was found between Religious Orientation and Responsible Financial Behavior in terms of Saving, Investment, and Insurance.

**Table 3.13.** *Correlation Matrix of Latent Variables*

Variables	Financial Satisfaction	Spending and Budgeting	Saving, Investment and Insurance	Religious Orientation	Financial Literacy
Financial Satisfaction	1				
Spending and Budgeting	.55	1			
Saving, Investment and Insurance	.58	.24	1		
Religious Orientation	.22	.43	-.11	1	
Financial Literacy	-.15	-.02	-.26	-.02	1

The correlation between Financial Satisfaction and Responsible Financial Behavior in terms of Spending and Budgeting ( $r = .55$ ) and in terms of Saving, Investment, and Insurance ( $r = .58$ ) shows a moderate positive relationship. A weak positive association is observed between Financial Satisfaction and Religious Orientation ( $r = .22$ ). Yet, the coefficient correlation between Financial Satisfaction and Financial Literacy shows a weak negative relationship ( $r = -.15$ ).

## **4. FINDINGS**

After completion of the analyses, numerous important findings arise, which deserve to be underlined. In section 1, findings related to non-parametric hypothesis testing (i.e., income, education, gender, occupation, marital status, and age) are presented, while findings related to measurement model testing and structural model testing were presented in section 2.

### **4.1. Findings related to Non-parametric Hypothesis Testing**

The following sections summarize the results of the non-parametric hypothesis testing regarding Income, Education, Gender, Occupation, Marital Status and Age.

#### **4.1.1. Income**

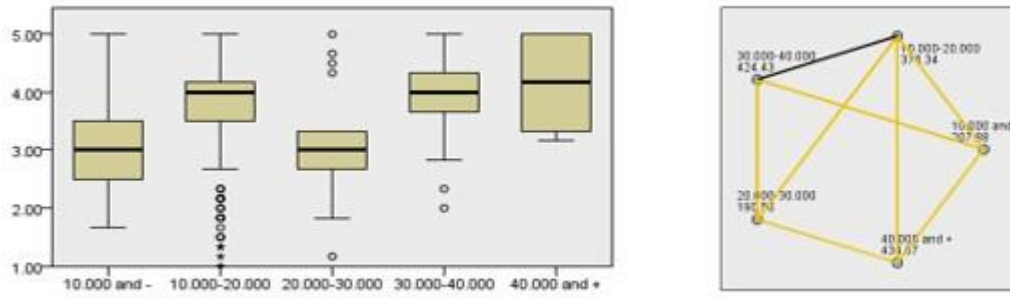
The scores of the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation, and Financial Literacy) were examined for any differences when considering the Monthly Average Income. The Kruskal-Wallis Test was used to evaluate potential associations, as it was determined that the data did not follow a normal distribution.

Table 4.1 to Table 4.4 (See appendix 3) provide information regarding basic statistics, normality test, Kruskal-Wallis test, and Post-Hoc test. Kruskal-Wallis test results confirm that there is a significant difference between the scores of main variables according to Average Monthly Income. In other words, all relationships are meaningful. Moreover, Pair-wise comparisons (Dunn-Bonferroni test from Post-Hoc tests) were made to see in which income groups in particular this difference exist. All Post-Hoc tests exhibit the groups where the difference is significant.

- $H_{1a}$ : Financial Satisfaction differs significantly across Income Level groups.

Post-Hoc (Dunn-Bonferroni) test result shows that “10.000-20.000”, “30.000-40.000” groups as well as the “Above 40.000” group seem to differ significantly from the “20.000-30.000” and “Below 10.000” groups.

Figure 4.1 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction by Income level.

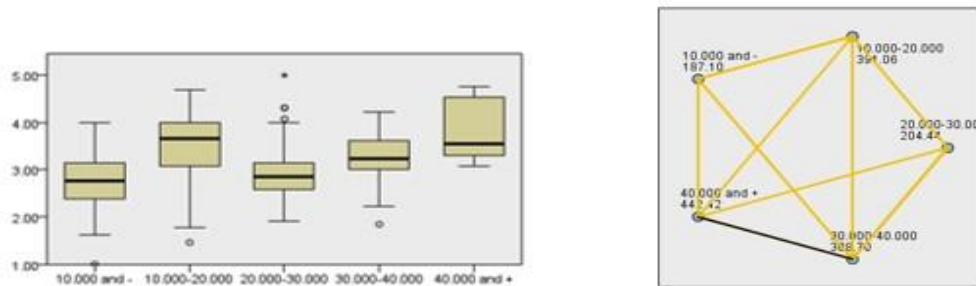


**Figure 4.1.** Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction

- $H_{1b}$ : Responsible Financial Behavior differs significantly across Income Level groups.

Post-Hoc (Dunn-Bonferroni) test result demonstrated that “30.000-40.000”, “10.000-20.000” and “Above 40.000” groups present different scores compared to “Below 10.000” and “20.000-30.000” groups.

Figure 4.2 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior by Income level.

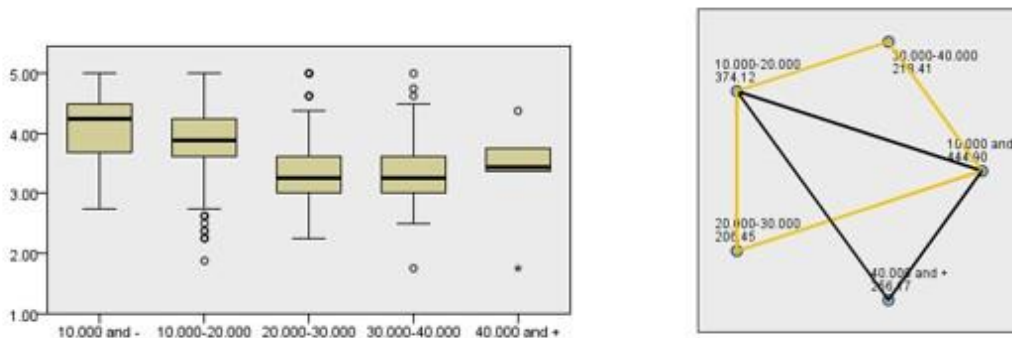


**Figure 4.2.** Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior

- $H_{1c}$ : Religious Orientation differs significantly across Income Level groups.

According to Post-Hoc (Dunn-Bonferroni) test result, “Below 10.000” and “10.000-20.000” groups exhibit different scores compared to “20.000-30.000” and “30.000-40.000” groups. In all pairwise comparisons, it is seen that the religious orientation score decreases as income increases.

Figure 4.3 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation by Income level.

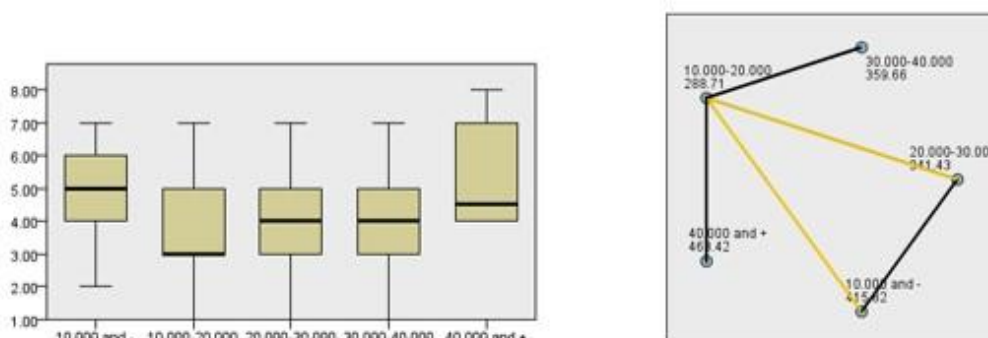


**Figure 4.3.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation*

- $H_{1d}$ : Financial Literacy differs significantly across Income Level groups.

Post-Hoc (Dunn-Bonferroni) test result shows that “10.000-20.000” group exhibit different scores compared to “20.000-30.000” and “Below 10.000” groups.

Figure 4.4 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy by Income level.



**Figure 4.4.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy*

#### 4.1.2. Education

Since normality was not achieved in the Kolmogorov-Smirnov and Shapiro-Wilk test results, the Kruskal-Wallis Test (nonparametric tests), was employed to verify whether there was a difference between the scores of the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy) according to Education Level.

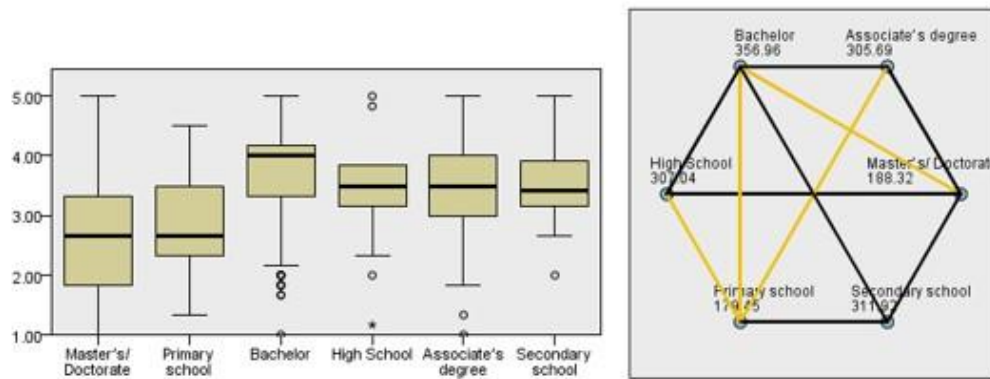
Table 4.5 to Table 4.8 (See appendix 3) provide information regarding basic statistics, normality test, Kruskal-Wallis test and Post-Hoc test. Kruskal-Wallis test results indicate that there is a significant difference between the scores of the main

variables according to Education Level. Moreover, Pairwise comparisons (Dunn-Bonferroni test from Post-Hoc tests) were conducted to see in which Education Level groups in particular this difference exist. All Post-Hoc tests exhibit the groups where the difference is significant.

- H<sub>2a</sub>: Financial Satisfaction differs significantly across Education Level groups.

The test result shows that Associate’s degree, High School and Bachelor graduates exhibit different scores compared to Primary school and Master’s/Doctorate graduates.

Figure 4.5 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction by Education level.

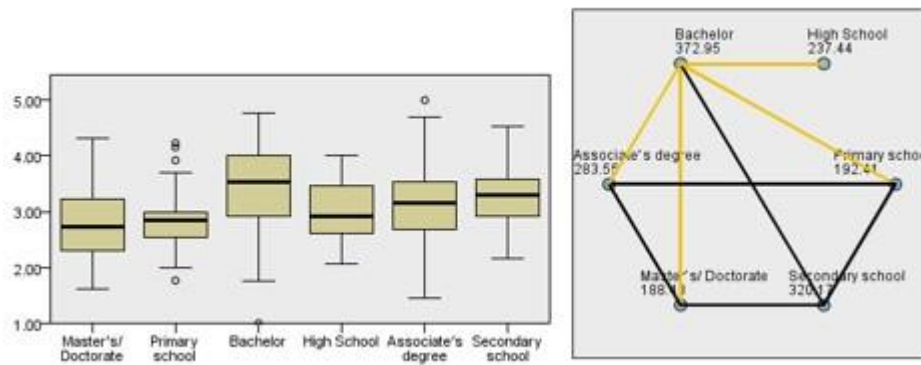


**Figure 4.5.** Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction

- H<sub>2b</sub>: Responsible Financial Behavior differs significantly across Education Level groups.

Post-Hoc (Dunn-Bonferroni) demonstrated that Bachelor graduates present different scores compared to other graduate groups.

Figure 4.6 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior by Education level.

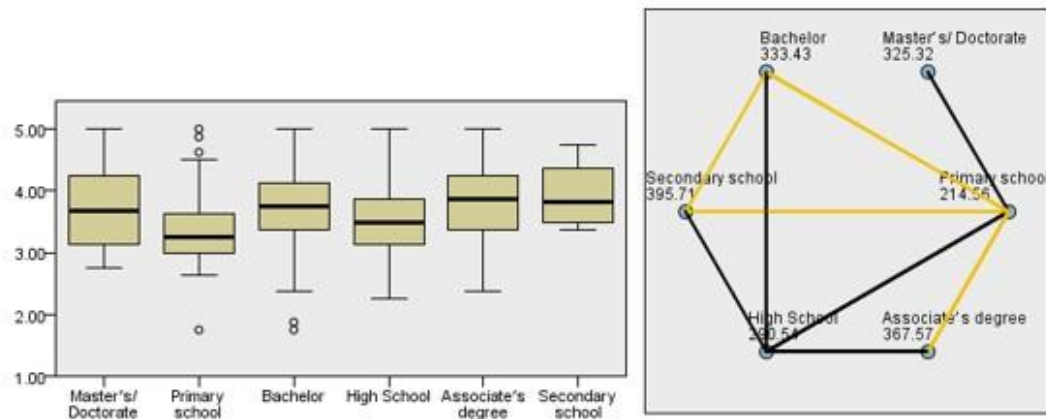


**Figure 4.6.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior*

- H<sub>2c</sub>: Religious Orientation differs significantly across Education Level groups.

According to the test result, Primary school graduates exhibit different scores compared to Secondary Education, Associate's degree and Bachelor graduates. The religious orientation scores of primary school graduates were lower than the others.

Figure 4.7 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation by Education level.

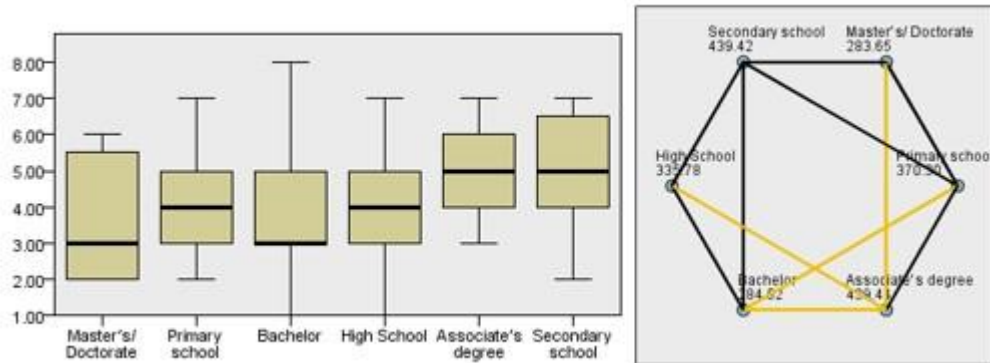


**Figure 4.7.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation*

- H<sub>2d</sub>: Financial Literacy differs significantly across Education Level groups.

The test result shows that Associate's degree and Primary school graduates exhibit different scores compared to Master's/ Doctorate, Bachelor and High School graduates.

Figure 4. 8 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy by Education level.



**Figure 4. 8.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy*

### 4.1.3. Gender

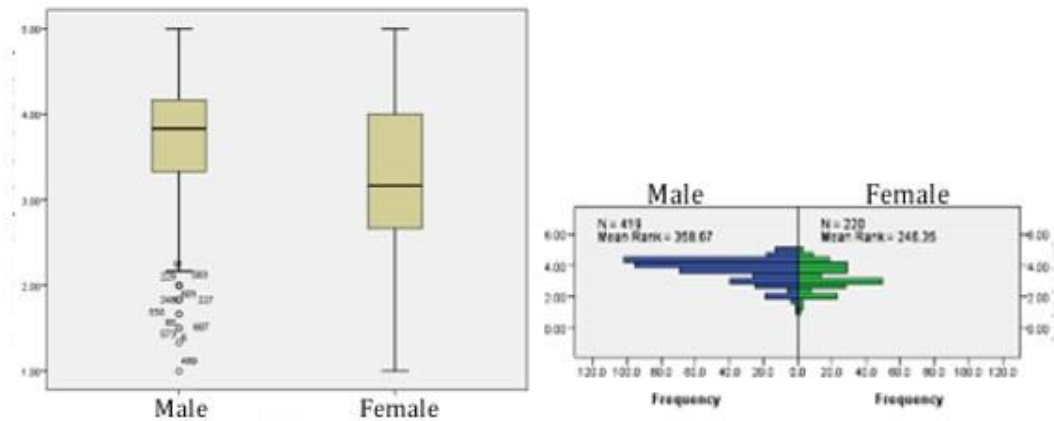
Since the Kolmogorov-Smirnov and Shapiro-Wilk test results did not provide normality, the Mann-Whitney U Test (one of the nonparametric tests) was performed to check whether there was a difference between the scores of the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy) according to gender.

Table 4. 9 to Table 4. 16 (See appendix 3) provide information regarding basic statistics, normality test and Mann-Whitney U test. The test results imply that there is a significant difference between the main variables scores according to gender.

- $H_{3a}$ : Financial Satisfaction differs significantly across Gender groups.

The test result shows that males tend to have higher financial satisfaction scores compared to females.

Figure 4. 9 provides information regarding Independent-Samples Mann-Whitney U Test for Financial Satisfaction by Gender.

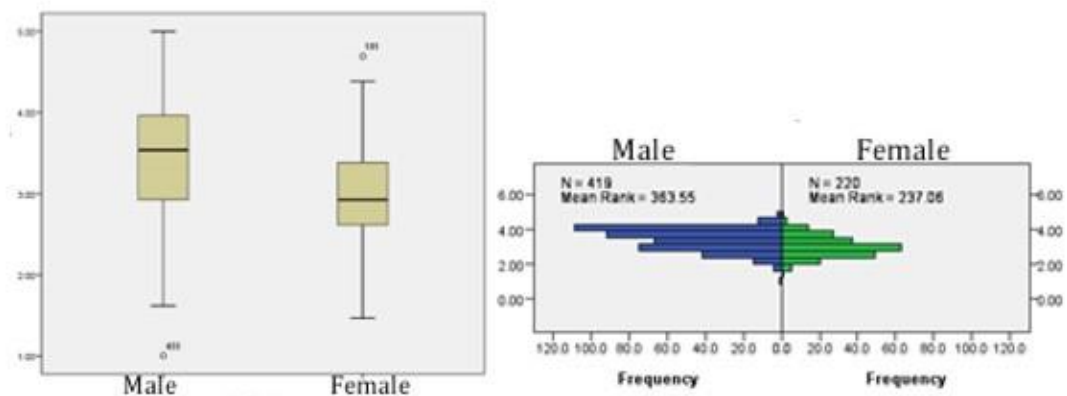


**Figure 4.9.** *Independent-Samples Mann-Whitney U Test for Financial Satisfaction*

- H<sub>3b</sub>: Responsible Financial Behavior differs significantly across Gender groups.

Mann-Whitney U Test result demonstrates that males seem to exhibit more responsible financial behavior compared to females.

Figure 4. 10 provides information regarding Independent-Samples Mann-Whitney U Test for Responsible Financial Behavior by Gender.

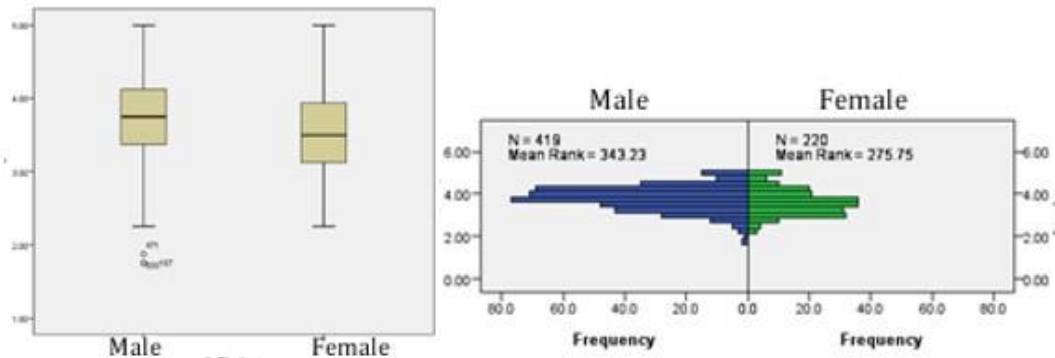


**Figure 4.10.** *Independent-Samples Mann-Whitney U Test for Responsible Financial Behavior*

- H<sub>3c</sub>: Religious Orientation differs significantly across Gender groups.

According to the Mann-Whitney U Test result, a significant difference exists between religious orientation scores according to gender. It is observed that males religious orientation scores were higher than females.

Figure 4. 11 provides information regarding Independent-Samples Mann-Whitney U Test for Religious Orientation by Gender.

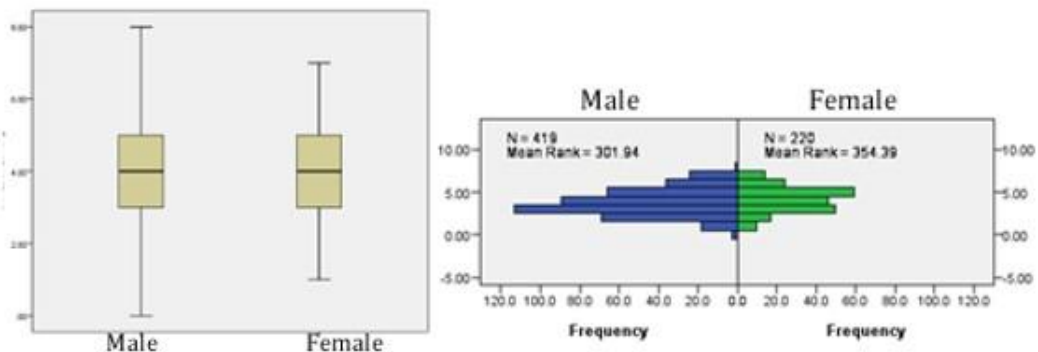


**Figure 4.11.** *Independent-Samples Mann-Whitney U Test for Religious Orientation*

- $H_{3d}$ : Financial Literacy differs significantly across Gender groups.

According to the Mann-Whitney U Test result, there is a significant difference between the financial literacy scores of males and females. Females score higher than males in the financial literacy scale.

Figure 4.12 provides information regarding Independent-Samples Mann-Whitney U Test for Financial Literacy by Gender.



**Figure 4.12.** *Independent-Samples Mann-Whitney U Test for Financial Literacy*

#### 4.1.4. Occupation

Kruskal-Wallis Test was performed to verify whether there was a difference between the scores of the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy) according to the working status.

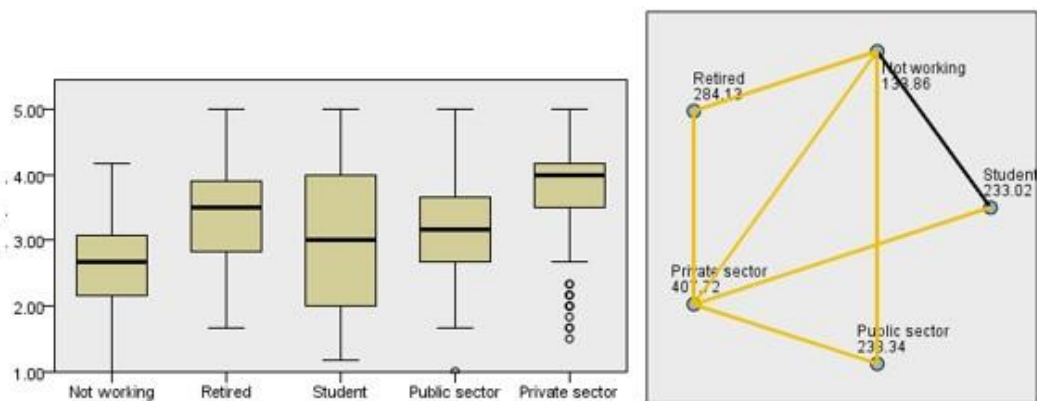
Table 4.17 to Table 4.20 (See appendix 3) provide information regarding basic statistics normality test, Kruskal-Wallis test, and Post-Hoc test. As a result of the Kruskal-

Wallis test, it was observed that there is a significant difference between the scores of main variables across different occupations.

- H<sub>4a</sub>: Financial Satisfaction differs significantly across Occupation groups.

Kruskal-Wallis Test result shows that there is a significant difference between financial satisfaction scores according to the working status.

Figure 4. 13 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction by Occupation.

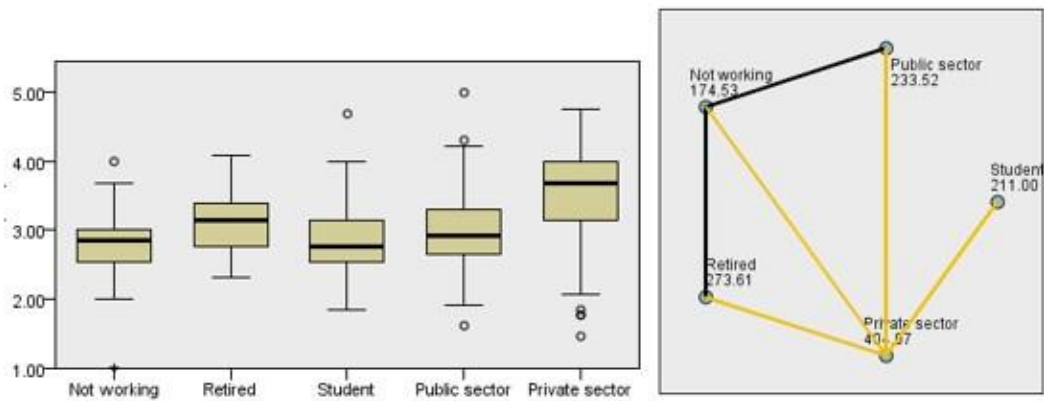


**Figure 4.13.** Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Satisfaction

- H<sub>4b</sub>: Responsible Financial Behavior differs significantly across Occupation groups.

Kruskal-Wallis Test demonstrated that there is a significant difference between responsible financial behavior scores according to the working status.

Figure 4. 14 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior by Occupation.

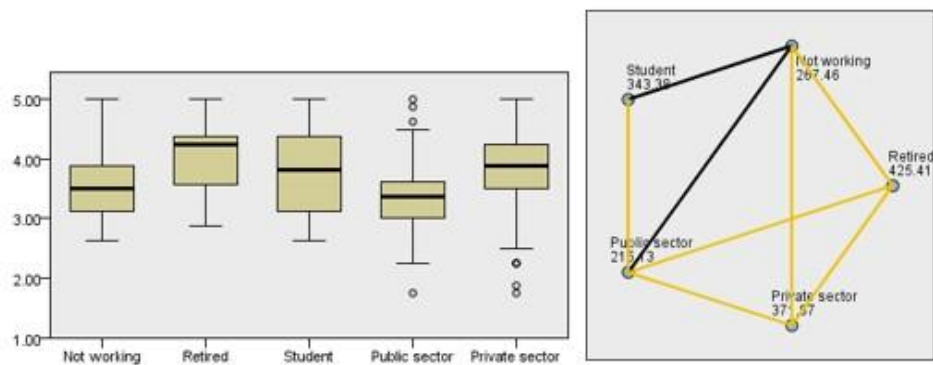


**Figure 4.14.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Responsible Financial Behavior*

- $H_{4c}$ : Religious Orientation differs significantly across Occupation groups.

According to the test result, Religious Orientation scores differ significantly between the Public Sector and Students, Private Sector and Retired, and between the Non-working groups and the Private Sector and Retired. While the group with the lowest religious orientation score is Public Sector employees, the group with the highest score is Retired.

Figure 4. 15 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation by Occupation.

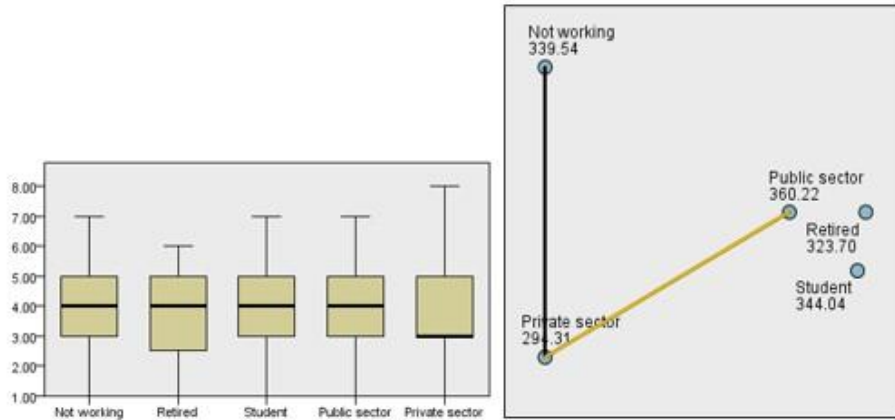


**Figure 4. 15.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Religious Orientation*

- $H_{4d}$ : Financial Literacy differs significantly across Occupation groups.

The test result shows that there is a significant difference between financial satisfaction scores according to the working status.

Figure 4. 16 provides information regarding Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy by Occupation.



**Figure 4.16.** *Independent-Samples Kruskal-Wallis Test and Pair-wise Comparisons for Financial Literacy*

#### 4.1.5. Marital Status

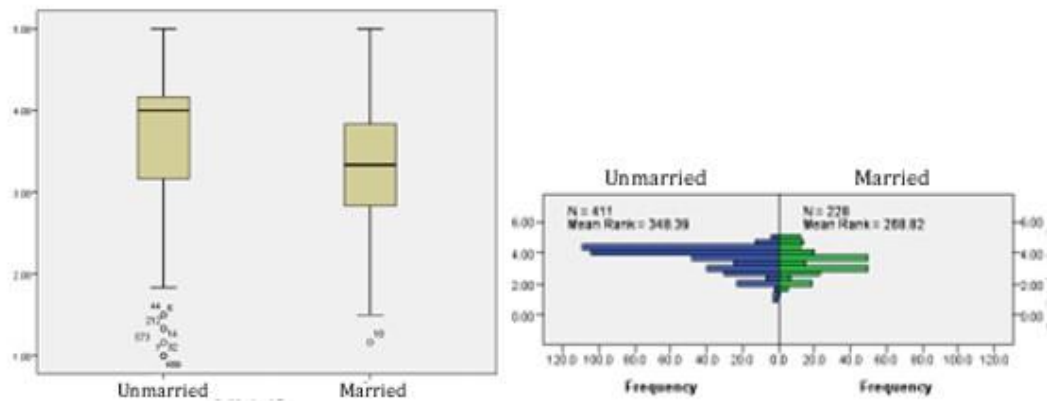
Mann-Whitney U Test was applied to verify whether there was a difference between the scores of the main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy) according to marital status.

Table 4. 21 to Table 4. 28 (See appendix 3) provide information regarding basic statistics, normality test and Mann-Whitney U test.

- H<sub>5a</sub>: Financial Satisfaction differs significantly across Marital Status groups.

The test result shows that there is a significant difference between financial satisfaction scores according to marital status. Unmarried people tend to be more satisfied financially compared to married people.

Figure 4. 17 provides information regarding Independent-Samples Mann-Whitney U Test for Financial Satisfaction by Marital Status.

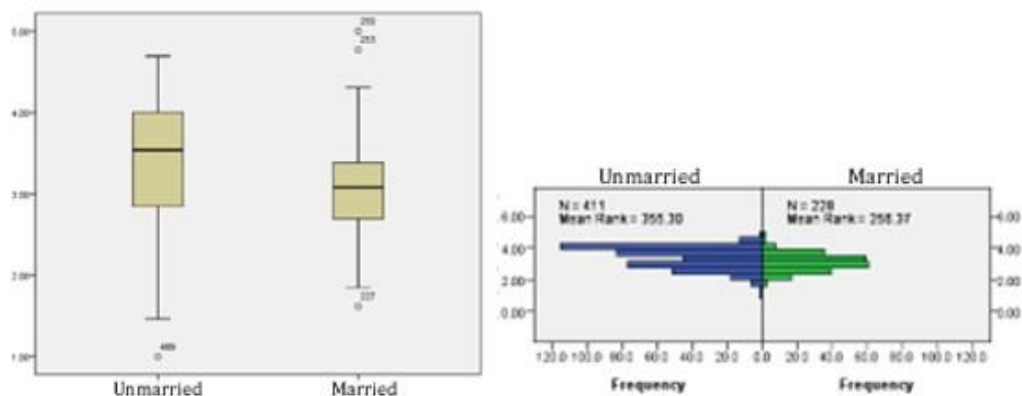


**Figure 4.17.** *Independent-Samples Mann-Whitney U Test for Financial Satisfaction*

- H<sub>5b</sub>: Responsible Financial Behavior differs significantly across Marital Status groups.

Mann-Whitney U Test result demonstrates that there is a significant difference between responsible financial behavior scores according to marital status. Unmarried people exhibit more responsible financial behavior compared to married people.

Figure 4.18 provides information regarding Independent-Samples Mann-Whitney U Test for Responsible Financial Behavior by Marital Status.

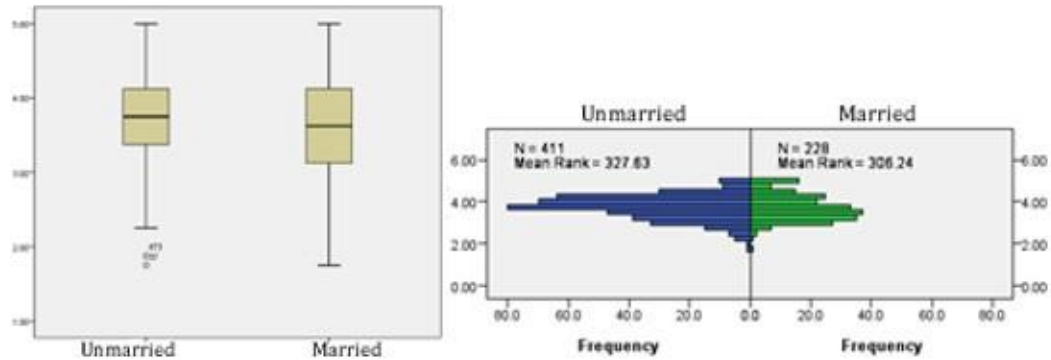


**Figure 4.18.** *Independent-Samples Mann-Whitney U Test for Responsible Financial Behavior*

- H<sub>5c</sub>: Religious Orientation differs significantly across Marital Status groups.

As a result of this test, it was observed that there was no significant difference between religious orientation scores according to marital status.

Figure 4. 19 provides information regarding Independent-Samples Mann-Whitney U Test for Religious Orientation by Marital Status.

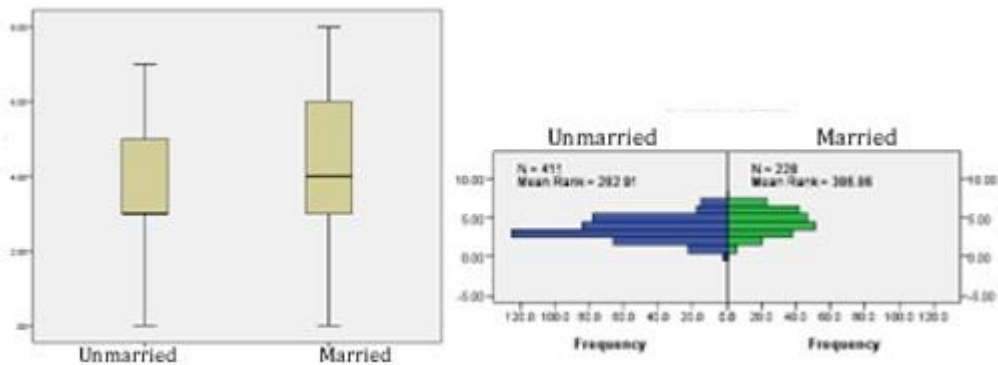


**Figure 4. 19.** *Independent-Samples Mann-Whitney U Test for Religious Orientation*

- $H_{5d}$ : Financial Literacy differs significantly across Marital Status groups.

The test result shows that there is a significant difference between financial satisfaction scores according to marital status. Married people score higher in the financial literacy scale compared to unmarried people.

Figure 4. 20 provides information regarding Independent-Samples Mann-Whitney U Test for Financial Literacy by Marital Status.



**Figure 4. 20.** *Independent-Samples Mann-Whitney U Test for Financial Literacy*

#### 4.1.6. Age

The relationship between age and main variables (Financial Satisfaction, Responsible Financial Behavior, Religious Orientation and Financial Literacy) was examined with Spearman's rho correlation coefficient, as it was not possible to establish normality.

Table 4. 29 to Table 4. 32 (See appendix 3) provide information regarding basic statistics, normality test and Spearman's rho correlation coefficients of the main variables.

- H<sub>6a</sub>: Financial Satisfaction is positively related with Age.

As a result of the test, a significant low negative correlation was observed between Financial Satisfaction and Age.

- H<sub>6b</sub>: Responsible Financial Behavior is positively related with Age.

As a result of the test, a significant low negative correlation was observed between Responsible Financial Behavior and Age.

- H<sub>6c</sub>: Religious Orientation is positively related with Age.

As a result of the test, a significant low negative correlation was observed between Religious Orientation and Age.

- H<sub>6d</sub>: Financial Literacy is positively related with Age.

As a result of the test, a significant low positive correlation was observed between Financial Literacy and Age.

#### **4.2. Findings related to Measurement Model Testing and Structural Model Testing**

Prior to SEM analyses, multivariate normality was performed using the LISREL program, and a Mardia Captcha value of 1537 ( $p < .001$ ) was found. Given the non-normality of the data, Robust Maximum Likelihood method of estimation (RML) was employed to test the measurement model and structural model.

##### **4.2.1. Measurement Model Testing**

$\chi^2/sd$ , RMSEA, SRMR, NFI, NNFI, CFI, GFI, and AGFI, are extensively known as the main measures of model fit (Schermeleh-Engel et al., 2003). A  $\chi^2/sd$  value of 3 or less indicates good fit, while values up to 5 indicate acceptable fit (Kline, 2015; Marsh & Hocevar, 1988). GFI, AGFI and CFI values more than .90 are considered acceptable; when they exceed .95, this indicates satisfactory survey adaptation (Hu & Bentler, 1999; Schermelleh-Engel et al., 2003). Regarding the RMSEA and SRMR indices, values below .05 indicate a close and robust fit of the model to the data. Values up to .08 are generally considered to indicate an acceptable model fit, while values  $\geq .10$  suggest a substantial

mismatch between the model and the observed data (Browne & Cudeck, 1992; Schermelleh-Engel et al., 2003).

Two frequently utilized measures, namely RMSEA (Root Mean Square Error of Approximation) and SRMR (Standardized Root Mean Square Residual) evaluate the distribution of residuals in statistical analysis. RMSEA assesses how far the hypothetical model deviates from a perfect model, while the SRMR is defined as the difference between the observed correlation and the model implied correlation matrix (Schermelleh-Engel et al., 2003).

The model fit indices indicate that all the values are in the acceptable range as shown in Table 4. 33.

**Table 4. 33.** *Critical Values of the Baseline/ Default model*

Fit Measure	Good Fit	Acceptable Fit	Model Value	Fit
$\chi^2/sd$	$0 \leq \chi^2/sd < 2$	$2 \leq \chi^2/sd \leq 5$	5.67	Acceptable Fit
RMSEA	$0 \leq RMSEA < .05$	$.05 \leq RMSEA \leq .08$	.086	Acceptable Fit
SRMR	$0 \leq SRMR < .05$	$.05 \leq SRMR \leq .10$	.095	Acceptable Fit
NFI	$.95 < NFI \leq 1$	$.90 \leq NFI \leq .95^a$	.89	Acceptable Fit
NNFI	$.97 < NNFI \leq 1$	$.95 \leq NNFI \leq .97^b$	.90	Acceptable Fit
CFI	$.97 < CFI \leq 1$	$.95 \leq CFI \leq .97$	.91	Acceptable Fit
GFI	$.95 < GFI \leq 1$	$.90 \leq GFI \leq .95$	.80	Acceptable Fit
AGFI	$.90 < AGFI \leq 1$	$.85 \leq AGFI \leq .90$	.77	Acceptable Fit

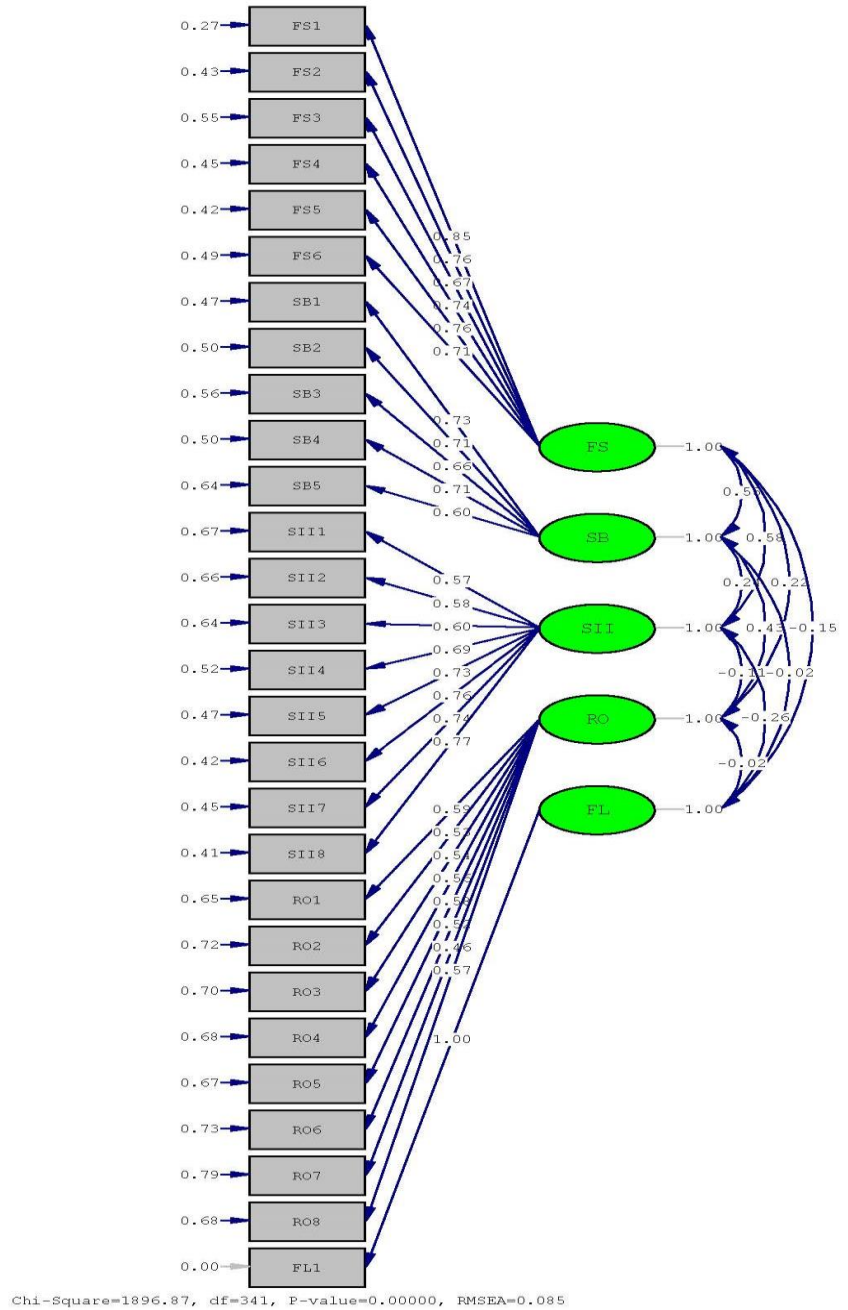
<sup>a</sup> Especially in small samples, even if the determined model is correct, NFI 1.0 should not be

<sup>b</sup> Unless the NNFI is normed, its values may sometimes fall outside of the 0 – 1 range

Accordingly, the values obtained for the fit indices are within acceptable range. It can therefore be concluded that the necessary criteria have been met, and the overall model fit is confirmed.

The hypothetical relationships between observed indicators and latent factors are confirmed or rejected with the help of Confirmatory Factor Analysis (CFA). This can be done by testing the model's goodness-of-fit to examine if the model fits well the empirical data (Brown & Moore, 2012; Harrington, 2009). By performing CFA, we can gain an understanding about the dimensionality of the construct and determine how closely observed variables align with their predicted latent factors. Additionally, CFA is frequently utilized in survey development, psychometric assessment, and concept testing. CFA also provides an approach to inspect the structural validity of measurement

instruments and latent constructs (Brown & Moore, 2012; Cole, 1987; Finney, 2007; Suhr, 2006). Figure 4. 21 represents Confirmatory Factor Analysis (CFA) results.



**Figure 4. 21.** *Confirmatory Factor Analysis (CFA).*  
*FS: Financial Satisfaction; SB: Spending and Budgeting; SII: Saving, Investment and Insurance; RO: Religious Orientation; FL: Financial Literacy*

The standard loads, t-values,  $R^2$  values, Composite Reliability and Average Variance Extracted values obtained for the items through confirmatory factor analysis are presented in Table 4. 34.

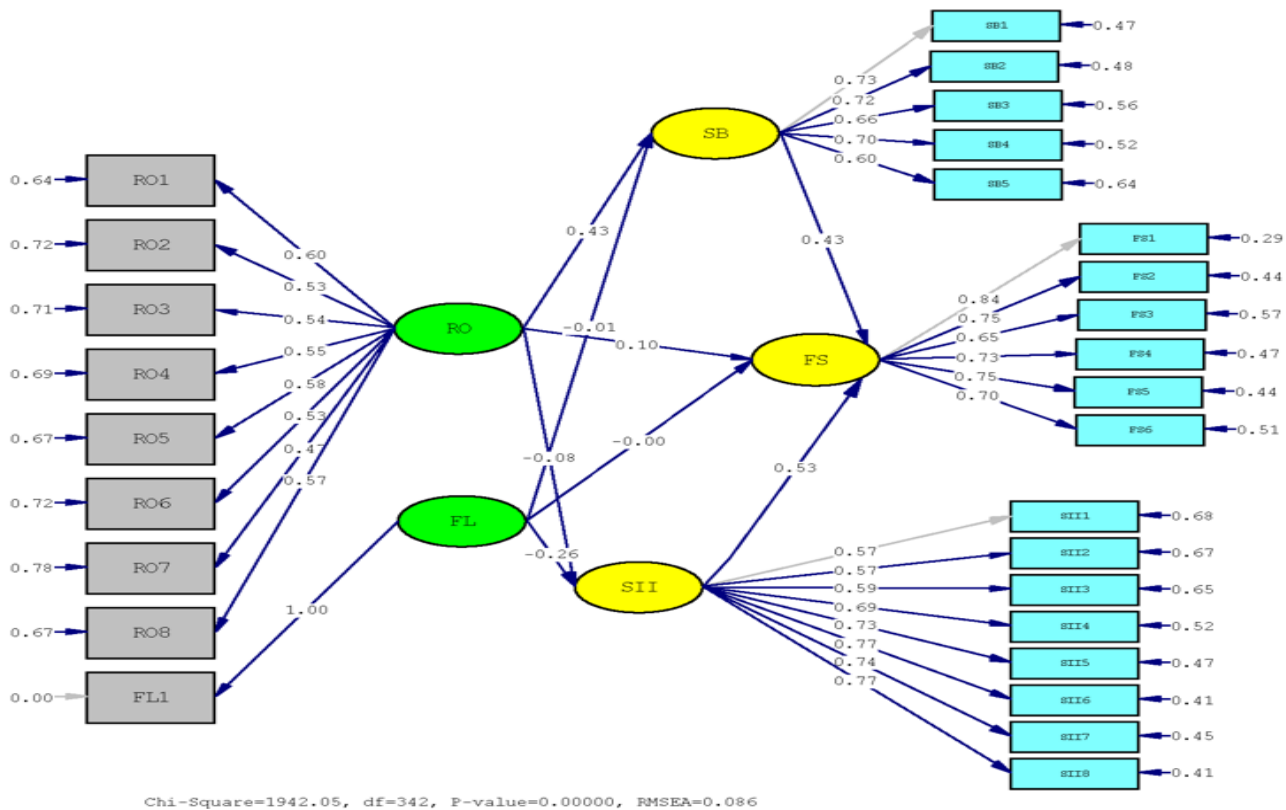
**Table 4. 34.** *Test Results Related to the Items in the Measurement Model*

<b>Factors / Items</b>	<b>Standard loads</b>	<b>t-value</b>	<b><math>R^2</math></b>	<b>Composite Reliability</b>	<b>Average Variance Extracted</b>
<b>Factor FS: Financial Satisfaction</b>				<b>.88</b>	<b>.56</b>
FS1	.85	29.87	.73		
FS2	.76	21.88	.57		
FS3	.67	16.81	.45		
FS4	.74	24.55	.55		
FS5	.76	23.71	.58		
FS6	.71	20.62	.51		
<b>Factor RFB: Responsible Financial Behavior in terms of Spending and Budgeting (SB)</b>				<b>.81</b>	<b>.47</b>
SB1	.73	22.27	.53		
SB2	.71	20.65	.50		
SB3	.66	18.36	.44		
SB4	.71	21.35	.50		
SB5	.60	16.90	.36		
<b>Factor RFB: Responsible Financial Behavior in terms of Saving, Investment, and Insurance (SII)</b>				<b>.87</b>	<b>.47</b>
SII1	.57	14.10	.33		
SII2	.58	14.81	.34		
SII3	.60	15.19	.36		
SII4	.69	19.36	.48		
SII5	.73	22.26	.53		
SII6	.76	24.66	.58		
SII7	.74	20.49	.55		
SII8	.77	26.00	.59		
<b>Factor RO: Religious Orientation</b>				<b>.77</b>	<b>.30</b>
RO1	.59	18.11	.35		
RO2	.53	12.99	.28		
RO3	.54	14.57	.30		
RO4	.56	14.93	.32		
RO5	.58	14.51	.33		
RO6	.52	12.72	.27		
RO7	.46	9.29	.21		
RO8	.57	14.16	.32		
<b>Factor FL: Financial Literacy</b>				<b>1</b>	<b>1</b>
FL1	1	41.38	1		

#### 4.2.2. Structural Model Testing

Multivariate normality was performed using the LISREL program, and a Mardia Captcha value of 1537 ( $p < 0.001$ ) was found. Given the non-normality of the data, Robust Maximum Likelihood method of estimation (RML) was employed to test the measurement model and structural model. In this section, the relations among proposed variables was tested using structural model, and the model was found to be acceptable.  $\chi^2/sd = 1942.05/342 = 5.67$ , Normed Fit Index (NFI) = .89, Non-Normed Fit Index (NNFI) = .90, Comparative Fit Index (CFI) = .91, Root Mean Square Error of Approximation (RMSEA) = .086.

Figure 4. 22 presents the pathway diagram, which shows the direct relations between Financial Literacy, Responsible Financial Behavior, Religious Orientation and Financial Satisfaction. In addition, the diagram displays the indirect associations concerning financial literacy and religious orientation, also concerning financial literacy and financial satisfaction.



**Figure 4. 22.** Structural Equation Modelling (SEM).  
 FS: Financial Satisfaction; SB: Spending and Budgeting; SII: Saving, Investment and Insurance; RO: Religious Orientation; FL: Financial Literacy.

Table 4. 35 presents the test results for the unmediated and mediated effects of the baseline/default model. The main findings obtained from the test of the structural model are as follows:

- Religious Orientation has a positive unmediated impact on Responsible financial behavior, but only in terms of Spending and Budgeting (SB) ( $\beta$  is .43).
- Financial Literacy has a negative unmediated impact on Responsible Financial Behavior in terms of Saving, Investment, and Insurance (SII) ( $\beta$  is -.26).
- Religious Orientation has a positive impact on Financial Satisfaction with the mediating role of Responsible Financial Behavior in terms of Spending and Budgeting (SB) ( $\beta$  is .18).
- Financial literacy has a negative impact on Financial Satisfaction through the mediating role of Responsible Financial Behavior in terms of Saving, Investment, and Insurance (SII) ( $\beta$  is -.14).
- Responsible Financial Behavior has a positive unmediated impact on Financial Satisfaction, both in terms of Saving, Investment, and Insurance (SII) and Spending and Budgeting (SB) ( $\beta$  is .43 and .53 respectively).

**Table 4. 35.** *Summary of Hypothesis Testing*

Hypothesized Paths	Standardized	Standardized	Total Effect	t- statistics	Relations
	Estimates (SEs)	Estimates (SEs)			
	Direct Effect	Indirect Effect			
H1: Religious Orientation → Financial Satisfaction	0.1	-	-	2.01	Not Supported
H2a: Religious Orientation → Responsible Financial Behavior (Spending and Budgeting)	0.43	-	-	7.84	Supported
H2b: Religious Orientation → Responsible Financial Behavior (Saving, Investment, and Insurance)	-0.08	-	-	-1.43	Not Supported
H3: Financial Literacy → Financial Satisfaction	0	-	-	-1.13	Not Supported
H4a: Financial Literacy → Responsible Financial Behavior (Spending and Budgeting)	-0.01	-	-	-0.2	Not Supported
H4b: Financial Literacy → Responsible Financial Behavior (Saving, Investment, and Insurance)	-0.26	-	-	-5.9	Supported

\*\*\*p < .01 (t > 2,58), \*\*p < .05 (t > 1,96)

**Table 4. 35. (Continued) Summary of Hypothesis Testing**

Hypothesized Paths	Standardized	Standardized	Total Effect	t- statistics	Relations
	Estimates (SEs)	Estimates (SEs)			
	Direct Effect	Indirect Effect			
H5b: Religious Orientation → Responsible Financial Behavior (Saving, Investment, and Insurance) → Financial Satisfaction	-0.08	0.53	-0.04	-	Not Supported
H6a: Financial Literacy → Responsible Financial Behavior (Spending and Budgeting) → Financial Satisfaction	-0.01	0.43	0	-	Not Supported
H6b: Financial Literacy → Responsible Financial Behavior (Saving, Investment, and Insurance) → Financial Satisfaction	-0.26	0.53	-0.14	-	Supported
H7a: Responsible Financial Behavior (Spending and Budgeting) → Financial Satisfaction	0.43	-	-	10.1	Supported
H7b: Responsible Financial Behavior (Saving, Investment, and Insurance) → Financial Satisfaction	0.53	-	-	9.46	Supported

\*\*\*p < .01 (t > 2,58), \*\*p < .05 (t > 1,96)

## 5. DISCUSSION

Structural Equation Modelling results of the study denote that Religious Orientation exerts a direct positive influence on Responsible Financial Behavior (precisely Spending and Budgeting (SB) dimension of Responsible Financial Behavior). These results are consistent with earlier investigations of Mylonidis & Zioga (2018), Benjamin et al. (2016) and Czerwonka (2014).

Likewise, the present study corroborates a positive association between Responsible Financial Behavior and Financial Satisfaction (Xiao, 2008), (both Savings, Investments, and Insurance (SII) and Spending and Budgeting (SB) dimensions of Responsible Financial Behavior). It can be inferred that responsible financial behavior is a central determining factor of financial satisfaction, with potential implications for overall life satisfaction (Xiao et al., 2009).

SEM results also confirm a positive relationship between Religious Orientation and Financial Satisfaction, operating through the mediating position of Responsible Financial Behavior, especially regarding Spending and Budgeting (SB) dimension. These results show similarity with the studies of Benjamin et al. (2016) and Czerwonka (2014). Moreover, as postulated by Mylonidis & Zioga (2018), households with religious attachments present divergent financial behaviors compared to those without religious attachments.

Finally, it is detected that Financial Literacy expresses a negative unmediated impact on Responsible Financial Behavior, regarding savings, investment, and insurance (SII) dimension. Moreover, Financial Literacy also seems to have a negative impact on Financial Satisfaction, by virtue of the mediating role of Responsible Financial Behavior (precisely Savings, Investment, and Insurance (SII) dimension of Responsible Financial Behavior). Yet, this finding contrasts with the prevailing literature. In general, an increased level of financial literacy provokes improved financial behavior and alleviates the presence of financial stress, thus resulting in a high level of financial satisfaction (Falahati et al., 2012; Prawitz et al., 2006). A possible reason for the negative association found between Financial Literacy, Savings, Investment, and Insurance dimension of Responsible Financial Behavior and between Financial Literacy and Financial Satisfaction through this dimension could be that low financial literacy may be associated with low financial risk tolerance (Bayar et al., 2020; Zakaria et al., 2017) and therefore more saving and insurance, which may lead to higher financial satisfaction.

The results of the study show that “Above 40.000” income group exhibit the highest financial satisfaction and responsible financial behavior scores. This finding is in line with the existing literature, as people with a higher level of income score higher in terms of financial satisfaction (Vera-Toscano et al., 2006) and responsible financial behavior (O’Neill & Xiao, 2006). However, the extant literature has also revealed divergent results, signifying that financial satisfaction has a modest association with income (Diener & Biswas-Diener, 2002), and that individuals' financial behaviour remains unaffected by their income level (Arifin, 2018). “Above 40.000” income group scores the highest in the financial literacy scale. This result agree with the study of Beal & Delpachitra (2003), who found that people’s financial literacy advances with work experience and income. In all pairwise comparisons, it is seen that the religious orientation score decreases as income increases, which is in line with the findings of Lipford & Tollison (2003).

Bachelor graduates score the highest in the financial satisfaction and responsible financial behavior scales. This finding is in line with the finding of O’Neill & Xiao (2006), which asserts that people with a higher level of education score higher in terms of responsible financial behavior. However, an indirect effect of education on financial satisfaction was claimed by Joo & Grable (2004), who indicate that people’s education level influences their behaviors, which in turn impacts their financial satisfaction.

In the current study, males were found to have higher financial satisfaction, responsible financial behavior and religious orientation scores compared to females like previous similar studies (Fan & Babiarz, 2019; Loewenthal et al., 2002; O’Neill & Xiao, 2006; Škrebliin Kirbiš et al., 2017). However, in this study females scored higher than males in the financial literacy scale. This result is similar to the results of Jayaraman & Jambunathan (2018), while it contrasts with other research studies which report lower level of financial knowledge among women (Atkinson & Messy, 2012; Lusardi & Mitchell, 2007; Škrebliin Kirbiš et al., 2017). A possible justification for females surpassing males in terms of financial literacy scale in the context of this research could be the prevailing socio-cultural patterns seen within Turkish society. Explicitly, in the Turkish cultural environment, women generally play a notable role in the family, as actively engaging in the daily household activities. This active involvement encourages greater insight into matters relating to family financial matters, which can lead to a greater degree of financial literacy among the female cohort.

Unmarried people tend to be more satisfied financially and exhibit more responsible financial behavior compared to married people. This finding contrast with current research studies, implying that married people tend to be more financially satisfied than unmarried people (Kalra Sahi, 2013). According to Stack & Eshleman (1998), marriage increases happiness through the promotion of financial satisfaction among both men and women. Marriage brings stability and encourages more systematic planning of financial activities, leading to better financial management practices and therefore greater financial satisfaction (Kalra Sahi, 2013). It was observed that there was no significant difference between religious orientation scores according to marital status. However, married people scored higher in the financial literacy scale compared to unmarried people, similar to the studies of Aguiar-Diaz & Zagalaz-Jiménez (2022) and Baglioni et al. (2018). A probable interpretation of this result lies in the comparatively higher levels of spending that characterize married couples who assume responsibility for dependents. This dynamic also generates a greater need for financial planning than is the case for single individuals, with a view to meeting future requirements. This trend can be understood through the conceptual prisms of the theory of financial socialization within the family structure. According to this theory, individuals fortify their financial skills through interactions with others, particularly their spouse, a process that acts as a catalyst for broadening their financial knowledge (Aguiar-Diaz & Zagalaz-Jiménez, 2022).

There is a significant low negative correlation between Financial Satisfaction and Age. This finding is inconsistent with the literature, which has demonstrated a positive and significant association between age and financial satisfaction (Kalra Sahi, 2013; Xiao et al., 2006). The main reason behind the negative association between financial satisfaction and age may be that people tend to retire at a younger age in Türkiye compared to developed countries and the income level of the retirees diminish significantly during the retirement stage. Moreover, the majority of the working population can not accumulate enough wealth before retirement to compensate for the deterioration of their purchasing power during retirement due to lower wages and salaries in Türkiye compared to developed countries.

## 6. CONCLUSION

The purpose of this study is to explore the relationships between Responsible Financial Behavior, Religious Orientation, and Financial Literacy with Financial Satisfaction. Moreover, it aims to investigate the impacts of Religious Orientation and Financial Literacy on Financial Satisfaction through Responsible Financial Behavior.

Structural Equation Modelling (SEM) was employed to analyze the paths for linear associations between the main variables under the study. Besides, non-parametric tests were applied to observe the variances in demographic variables and to discover whether the associated population means are significantly different.

Religious Orientation exerts a direct positive influence on Responsible Financial Behavior with respect to Spending and Budgeting (SB) dimension, but not with respect to Savings, Investments, and Insurance (SII) dimension of Responsible Financial Behavior. These results are consistent with earlier investigations showed by Mylonidis & Zioga (2018), Benjamin et al. (2016) and Czerwonka (2014).

Further, the findings of the study show a positive relationship between Religious Orientation and Financial Satisfaction, operating through the mediating role of Responsible Financial Behavior, especially regarding Spending and Budgeting (SB) dimension. These results show similarity with prior scientific investigations Benjamin et al. (2016) and Czerwonka (2014). Moreover, as postulated by Mylonidis & Zioga (2018), households with religious attachments present divergent financial behaviors compared to those without religious attachments.

Likewise, there is a significant positive association between Responsible Financial Behavior and Financial Satisfaction, which is evident in both Savings, Investments, and Insurance (SII), as well as Spending and Budgeting (SB) dimensions. It can be inferred that responsible financial behavior is a central determining factor of financial satisfaction, with potential implications for overall life satisfaction (Xiao et al., 2009).

However, there seems to be a significant negative relationship between Financial Literacy and Financial Satisfaction by means of the mediating role of Responsible Financial Behavior, precisely in terms of Savings, Investment, and Insurance (SII) dimension of Responsible Financial Behavior.

The results of the non-parametric tests demonstrate that there are significant differences in the Financial Satisfaction, Responsible Financial Behavior, Religious

Orientation and Financial Literacy of distinct groups in terms of income, education, gender, occupation, and marital status.

This study has probable implications for several concerned parties, such as policymakers, scholars, and households themselves, providing multiple opportunities for benefits. Policymakers, can use the results to update their decision-making processes, taking into consideration the influence of religion on financial behavior and financial well-being. Society's overall financial satisfaction will be enhanced by encouraging responsible financial behaviors. Therefore, the results of this research are pertinent and of interest to scholars, policy makers, and households as they endeavor to cultivate financial satisfaction through responsible financial behavior.

The results derived from this study have limitations due to the sample under study, which is predominantly made up of male, implying the need for future research to incorporate a more balanced representation of female participants. Such an approach would allow for a fuller investigation of their characteristics and financial behavior, easing a reflective understanding of these dimensions in a more meaningful way.

The assessment of financial literacy in this study was carried out using the Houts & Knoll (2020) questionnaire, which proposes a comprehensive assessment tool. Nonetheless, it is necessary to recognize that this questionnaire omits some aspects of modern fintech. Exclusively, it focuses principally on evaluating basic understanding rather than advanced financial knowledge. Therefore, future researchers could take this study further by looking into dimensions associated with investors' knowledge of digital currency, in addition to their understanding of fintech. Such an extension would contribute to a more complete study of financial literacy in the context of modern financial circumstances.

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## APPENDICES

### Appendix 1

#### Sample Selection

Total Population 85.28 Million

Literate Population = 82 Million

Below Poverty ==12 Million (14%) (World Bank: Poverty and Equity Brief Europe and Central Asia Türkiye April 2023)

Employed population 31 Million (Data TÜİK, Labour Force Statistics, March 2023)

People who hold accounts = 69% of individuals over 15

Unbanked Population = 26 Million

## Appendix 2

### ***Doctoral Dissertation Research Questionnaire Form***

*The applied doctoral dissertation research of our Turkey Scholarships student Patrice Racine DIALLO with individual investors in Turkey aims to reveal the relationship between Religious Orientation and Responsible Financial Behavior and Financial Satisfaction.*

*It takes approximately 10-15 minutes to answer the survey questions. Your identity information will not be questioned in the questions you answer with voluntary participation, your data will be kept confidential and the research data will only be used for academic purposes.*

*Thank you very much for your valuable participation.*

*Contact information:*

*Assoc. Prof. Dr. Özlem SAYILIR  
Anadolu University, Faculty of Business Administration*

*Patrice Racine DIALLO  
Anadolu University, Institute of Social Sciences, PhD student*

### **Demographic Variables**

1.	<b>Gender:</b> <input type="checkbox"/> Male <input type="checkbox"/> Female
2.	<b>Marital Status:</b> <input type="checkbox"/> Married <input type="checkbox"/> Unmarried
3.	<b>Age:</b> (.....)
4.	<b>Education Level:</b> <input type="checkbox"/> Primary School <input type="checkbox"/> Secondary School <input type="checkbox"/> High School <input type="checkbox"/> Associate's degree <input type="checkbox"/> Bachelor <input type="checkbox"/> Master's <input type="checkbox"/> Doctorate
5.	<b>Average Monthly Income (TL):</b> <input type="checkbox"/> Below 10.000 <input type="checkbox"/> 10.000-20.000 <input type="checkbox"/> 20.000-30.000 <input type="checkbox"/> 30.000-40.000 <input type="checkbox"/> 40.000-50.000 <input type="checkbox"/> Above50.000
6.	<b>What is the socio-economic level of your family? In which group do you feel yourself?</b> <input type="checkbox"/> Social elite (A) <input type="checkbox"/> Under Superior (B) <input type="checkbox"/> Above the middle (C1) <input type="checkbox"/> Bottom of Center (C2) <input type="checkbox"/> Above Gold (D) <input type="checkbox"/> Under Gold (E)
7.	<b>Occupation:</b> <input type="checkbox"/> Public Sector <input type="checkbox"/> Private Sector <input type="checkbox"/> Retired <input type="checkbox"/> Not working <input type="checkbox"/> Student <input type="checkbox"/> Other .....

**A. Below are statements regarding your level of satisfaction with your financial situation.**

Please mark your opinion about your satisfaction level.

- ① I am Extremely Dissatisfied ② I am Dissatisfied  
 ③ Partly satisfied/Partly dissatisfied ④ Satisfied ⑤ Extremely satisfied

1.	Your level of income	①	②	③	④	⑤
2.	Money for family/personal necessities	①	②	③	④	⑤
3.	Your ability to handle financial emergencies	①	②	③	④	⑤
4.	Amount of money you owe (mortgage, loans, credit cards)	①	②	③	④	⑤
5.	Level of savings	①	②	③	④	⑤
6.	Money for future needs of household	①	②	③	④	⑤

**B. Below are various financial behaviors. Please indicate how often you have performed these behaviors in the last 6 months.**

① Never      ② Seldom      ③ Sometimes      ④ Often      ⑤ Always

1.	Comparison shopped when purchasing a product or service	①	②	③	④	⑤
2.	Paid all your bills on time	①	②	③	④	⑤
3.	Kept a written or electronic record of your monthly expenses	①	②	③	④	⑤
4.	Stayed within your budget or spending plan	①	②	③	④	⑤
5.	Paid off credit card balance in full each month	①	②	③	④	⑤
6.	Maxed out the limit on one or more credit cards	①	②	③	④	⑤

7.	Made only minimum payments on a loan	①	②	③	④	⑤
8.	Began or maintained an emergency savings fund	①	②	③	④	⑤
9.	Saved money from every paycheck	①	②	③	④	⑤
10.	Saved for a long-term goal such as	①	②	③	④	⑤

	a car, education, home, etc.					
11.	Contributed money to a retirement account	①	②	③	④	⑤
12.	Bought bonds, stocks, or mutual funds	①	②	③	④	⑤
13.	Maintained or purchased an adequate health insurance policy	①	②	③	④	⑤
14.	Maintained or purchased adequate property insurance like auto or homeowners insurance	①	②	③	④	⑤
15.	Maintained or purchased adequate life insurance	①	②	③	④	⑤

**C. The following are various expressions of religious orientation. Please indicate your level of agreement with these statements.**

① Strongly Disagree ② Disagree ③ Neutral ④ Agree ⑤ Strongly Agree

1.	I enjoy reading about my religion	①	②	③	④	⑤
2.	I go to the mosque because it helps me to make friends	①	②	③	④	⑤
3.	It doesn't much matter what I believe so long as I am good	①	②	③	④	⑤
4.	It is important to me to spend time in private thought and prayer	①	②	③	④	⑤
5.	I have often had a strong sense of God's presence	①	②	③	④	⑤
6.	I pray mainly to gain relief and protection	①	②	③	④	⑤
7.	I try hard to live all my life according to my religious beliefs	①	②	③	④	⑤
8.	What religion offers me most is comfort in times of trouble and sorrow	①	②	③	④	⑤
9.	Prayer is for peace and happiness	①	②	③	④	⑤
10.	Although I am religious, I don't let it affect my daily life	①	②	③	④	⑤
11.	I go to the mosque mostly to spend time with my friends	①	②	③	④	⑤
12.	My whole approach to life is based on my religion	①	②	③	④	⑤

13.	I go to the mosque mainly because I enjoy seeing people I know there	①	②	③	④	⑤
14.	Although I believe in my religion, many other things are more important in life	①	②	③	④	⑤

**D. Please answer the following questions about financial literacy.**

1.	<p>Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?</p> <p>a. More than today b. Exactly the same as today c. Less than today</p>
2.	<p>If the interest rates rise, what should happen to bond prices?</p> <p>a. They should rise b. They should fall c. They should stay the same</p>
3.	<p>Considering a long time period (for example 10 or 20 years), which asset described below normally gives the highest return?</p> <p>a. Savings accounts b. Bonds c. Stocks</p>
4.	<p>Normally, which asset described below displays the highest fluctuations over time?</p> <p>a. Savings accounts b. Bonds c. Stocks</p>

5.	<p>When an investor spreads his or her money among different assets, does the risk of losing a lot of money increase, decrease, or stay the same?</p> <p>a. Increase b. Decrease c. Stay the same</p>
6.	<p>Do you think the following statement is true or false? "If you were to invest \$1000 in a stock mutual fund, it would be possible to have less than \$1000 when you withdraw your money."</p> <p>a. True. b. False</p>

7.	<p>Do you think the following statement is true or false? "'Whole life' insurance has a savings feature while 'term' insurance does not."</p> <p>a. True b. False</p>
8.	<p>Do you think the following statement is true or false? "A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less."</p> <p>a. True b. False</p>
9.	<p>Do you think the following statement is true or false? "Housing prices in the United States can never go down."</p> <p>a. True b. False</p>
10.	<p>Suppose you owe \$3,000 on your credit card. You pay a minimum payment of \$30 each month. At an Annual Percentage Rate of 12% (or 1% per month), how many years would it take to eliminate your credit card debt if you made no additional new charges?</p> <p>a. Less than 5 years. b. Between 5 and 10 years. c. Between 10 and 15 years. d. Never, you will continue to be in debt.</p>

### **Doktora Tez Arařtırması Anket Formu**

*Türkiye Bursları öğrencimiz Patrice Racine DIALLO'nun, Türkiye'deki bireysel yatırımcılarla gerçekleřtirdiđi uygulamalı doktora tez arařtırması ile; Dini Yönelim ve Sorunlu Finansal Davranıřla Finansal Memnuniyet arasındaki iliřki ortaya çıkarılacaktır.*

*Arařtırmanın anket sorularının yanıtlanması yaklaşık 10-15 dakika sürmektedir. Gönüllü katılım ile yanıtladıđınız sorularda kimlik bilgileriniz sorgulanmayıp verileriniz gizli tutulacak ve arařtırma verileri sadece akademik amaçlarla kullanılacaktır.*

*Deđerli katılımınız için çok teřekkür ederiz.*

*İletişim bilgileri:*

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*Patrice Racine DIALLO  
Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü doktora öğrencisi*

#### **Demografik Bilgiler**

1.	<b>Cinsiyet:</b> <input type="checkbox"/> Erkek <input type="checkbox"/> Kadın
2.	<b>Medeni Durum:</b> <input type="checkbox"/> Evli <input type="checkbox"/> Bekar
3.	<b>Yaş:</b> (.....)
4.	<b>Eđitim Düzeyi:</b> <input type="checkbox"/> İlköđretim <input type="checkbox"/> Ortaöđretim <input type="checkbox"/> Lise <input type="checkbox"/> Önlisans <input type="checkbox"/> Lisans <input type="checkbox"/> Yüksek Lisans ( )Doktora
5.	<b>Ailenizin aylık Ortalama Geliri (TL):</b> <input type="checkbox"/> 10.000 altı <input type="checkbox"/> 10.000-20.000 <input type="checkbox"/> 20.000-30.000 <input type="checkbox"/> 30.000-40.000 <input type="checkbox"/> 40.000-50.000 <input type="checkbox"/> 50.000 üstü
6.	<b>Ailenizin sosyo-ekonomik düzeyi nedir? Kendinizi hangi grupta hissediyorsunuz?</b> <input type="checkbox"/> En Üst (A) <input type="checkbox"/> Üstün Altı (B) <input type="checkbox"/> Ortanın Üstü (C1) <input type="checkbox"/> Ortanın Altı (C2) <input type="checkbox"/> Altın Üstü (D) <input type="checkbox"/> Altın Altı (E)
7.	<b>Meslek:</b> <input type="checkbox"/> Kamu Sektörü <input type="checkbox"/> Özel Sektör <input type="checkbox"/> Emekli <input type="checkbox"/> Çalışmıyor <input type="checkbox"/> Öđrenci <input type="checkbox"/> Diđer .....

**A. Aşağıda finansal durumunuz hakkında memnuniyet seviyenize ilişkin ifadeler yer almaktadır.**

Memnuniyet seviyenize ilişkin düşüncenizi işaretleyin lütfen.

- ① Son Derece Memnuniyetsizim ② Memnuniyetsizim  
③ Kısmen memnunum/Kısmen memnuniyetsizim ④ Memnunum ⑤ Son derece memnunum

8.	Gelir seviyeniz	①	②	③	④	⑤
9.	Aile/kişisel ihtiyaçlar için ayrılan para	①	②	③	④	⑤
10.	Finansal acil durumlarla başa çıkabilme durumunuz	①	②	③	④	⑤
11.	Borçlu olduğunuz para miktarı (ipotek, krediler, kredi kartları)	①	②	③	④	⑤
12.	Tasarruf/Birikim düzeyi	①	②	③	④	⑤
13.	Hane halkının gelecekteki ihtiyaçları için ayrılan para	①	②	③	④	⑤

**B. Aşağıda çeşitli finansal davranışlar yer almaktadır. Bu davranışları son 6 ay içinde ne sıklıkla gerçekleştirdiğinizi belirtin lütfen.**

- ① Hiçbir Zaman ② Bazen ③ Ara Sıra ④ Sıklıkla ⑤ Her zaman

14.	Bir ürün veya hizmet satın alırken karşılaştırmalar yaptım.	①	②	③	④	⑤
15.	Tüm faturalarımı zamanında ödedim.	①	②	③	④	⑤
16.	Aylık harcamalarımın yazılı veya elektronik kaydını tuttum.	①	②	③	④	⑤
17.	Bütçemi veya harcama planımı aşmadım.	①	②	③	④	⑤
18.	Her ay kredi kartımın/kartlarımın borç bakiyesinin tamamını zamanında ödedim.	①	②	③	④	⑤
19.	Bir veya daha fazla kredi kartımda, kredi kart limitimi aştım.	①	②	③	④	⑤
20.	Bir ya da birden fazla kredi kartımda, kredi kartı ekstresindeki minimum/asgari tutarı ödedim.	①	②	③	④	⑤
21.	Bir acil durum fonu (kara gün parası) oluşturdum veya daha önce oluşturduğum acil durum fonuna ilave para yatırdım.	①	②	③	④	⑤
22.	Her ay maaşımın bir kısmını biriktirdim.	①	②	③	④	⑤
23.	Araba, eğitim, ev vb. gibi uzun vadeli bir hedef için para biriktirdim.	①	②	③	④	⑤
24.	Bireysel Emeklilik Sistemi'ne katıldım (Emekliliğe yönelik kişisel birikim ve yatırım yaptım).	①	②	③	④	⑤
25.	Tahvil, hisse senedi veya yatırım fonlarına yatırım yaptım.	①	②	③	④	⑤
26.	Özel sağlık sigortası veya tamamlayıcı sağlık sigortası yaptırdım/mevcut sigortamı yeniledim.	①	②	③	④	⑤
27.	Araç ve/veya konut sigortası yaptırdım/ mevcut sigortalarımı yeniledim.	①	②	③	④	⑤
28.	Özel hayat sigortası yaptırdım / mevcut sigortamı yeniledim.	①	②	③	④	⑤

C. Aşağıda dini yönelime ilişkin çeşitli ifadeler yer almaktadır. Bu ifadelere katılım derecenizi işaretleyin lütfen.

- ① Kesinlikle Katılmıyorum    ② Katılmıyorum    ③ Kısmen katılıyorum/katılmıyorum  
④ Katılıyorum    ⑤ Kesinlikle Katılıyorum

29.	Dinimle ilgili bir şeyler okumaktan zevk alırım.	①	②	③	④	⑤
30.	Camiye/İbadethaneye gidiyorum, çünkü arkadaş edinmeme yardımcı oluyor.	①	②	③	④	⑤
31.	İyi bir insan olduğum sürece neye inandığım önemli değildir.	①	②	③	④	⑤
32.	Tek başına dua / ibadet ederek zaman geçirmek benim için önemlidir.	①	②	③	④	⑤
33.	Tanrı'nın/Allah'ın varlığına dair çoğunlukla güçlü bir önseziye sahibim.	①	②	③	④	⑤
34.	Temel olarak rahatlamak ve manevi korunma sağlamak için ibadet ederim.	①	②	③	④	⑤
35.	Tüm hayatımı dini inançlarıma göre yaşamak için çaba gösteririm.	①	②	③	④	⑤
36.	Dinin bana en büyük faydası, sıkıntılı ve üzüntülü zamanlarda beni rahatlatmasıdır.	①	②	③	④	⑤
37.	İbadet, huzur ve mutluluk içindir.	①	②	③	④	⑤
38.	Dindar olmama rağmen, dinin günlük hayatımı etkilemesine izin vermem.	①	②	③	④	⑤
39.	Camiye/İbadethaneye, çoğunlukla arkadaşlarımla vakit geçirmek için giderim.	①	②	③	④	⑤
40.	Hayata karşı yaklaşımım dinime dayanır.	①	②	③	④	⑤
41.	Camiye/İbadethaneye, çoğunlukla tanıdığım insanları görmekten hoşlandığımdan giderim.	①	②	③	④	⑤
42.	Dinime inansam da, hayatta dinden daha önemli şeyler vardır.	①	②	③	④	⑤

D. Finansal okuyazarlıkla ilgili aşağıdaki soruları yanıtlayın lütfen.

43.	Mevduat hesabınızın getirisinin yıllık %15 olduğunu ve yıllık enflasyonun %20 olarak gerçekleştiğini varsayalım. Bu durumda 1 yıl sonra alabileceğiniz mal ve hizmetler ne kadar olur? a. Bugünden daha fazla b. Bugünkü kadar c. Bugünden daha az
44.	Faiz oranları arttığında, tahvil/bono fiyatları nasıl etkilenir? a. Artar b. Azalır c. Aynı kalır
45.	10 yıl veya 20 yıl gibi uzun vade söz konusu olduğunda, hangi yatırım aracı en fazla getiri sağlar? a. Mevduat Hesabı b. Tahvil/Bono c. Hisse Senedi
46.	Normalde, aşağıdaki yatırım araçlarından hangisi zaman içinde daha fazla dalgalanma gösterir? a. Mevduat Hesabı b. Tahvil/Bono c. Hisse Senedi

47.	Bir yatırımcı parasını farklı yatırım araçlarına/finansal varlıklara dağıttığında, çok para kaybetme riski nasıl etkilenir? a. Artar b. Azalır c. Aynı kalır
48.	“1000 TL’yi yatırım fonlarına yatırdığınızda ve paranızı çekmek istediğinizde, yatırımınızın 1000 TL’den daha az olması mümkündür.” a. Doğru b. Yanlış
49.	Tam kapsamlı hayat sigortalarında birikim/tasarruf özelliği varken, vadeli hayat sigortalarında yoktur. a. Doğru b. Yanlış
50.	“5 yıl vadeli bir konut kredisinin aylık ödemeleri, 10 yıl vadeli konut kredisinden daha yüksek olur. Ancak, kredi vadesi boyunca ödenen toplam faiz, 5 yıl vadeli olan için 10 yıl vadeli olandan daha düşük olur.” a. Doğru b. Yanlış
51.	Sizce şu ifade doğru mudur yanlış mıdır? “Ev fiyatları asla düşmez.” a. Doğru b. Yanlış
52.	Varsayalım, 3000 TL kredi kartı borcunuz var. Her ay 30 TL ödeme yapmanız ve aylık %1 faiz uygulanması durumunda, ilave harcama yapılmaması şartıyla, borcunuzun sıfırlanması kaç yıl sürer? a. 5 yıldan az b. 5-10 yıl c. 10-15 yıl d. Borç sonsuza kadar devam eder

### Appendix 3

#### Non-parametric Test Results

**Table 4.1.** *Assessing Financial Satisfaction by Income: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Average Monthly Income	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Financial Satisfaction	Below 10.000	47	1.00	5.00	2.97	.91	.13
	10.000-20.000	360	1.00	5.00	3.71	.73	.04
	20.000-30.000	168	1.17	5.00	3.00	.61	.05
	30.000-40.000	58	2.00	5.00	3.93	.61	.08
	Above 40.000	6	3.17	5.00	4.14	.89	.36
Average Monthly Income		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Financial Satisfaction	Below 10.000	.071	47	.200	.986	47	.823
	10.000-20.000	.217	360	.000	.859	360	.000
	20.000-30.000	.084	168	.005	.984	168	.057
	30.000-40.000	.149	58	.003	.934	58	.003
	Above 40.000	.282	6	.147	.785	6	.042
Kruskal-Wallis Test		Chi-Square		df	p.		
Financial Satisfaction		155.645		4	<.001		
Post-Hoc (Dunn-Bonferroni)							
I	J	Mean Difference (I-J)		Standard error	p		
20.000-30.000	10.000-20.000	185.839		17.180	<.001		
20.000-30.000	30.000-40.000	-233.934		28.003	<.001		
20.000-30.000	Above 40.000	-244.170		76.395	.014		
Below 10.000	10.000-20.000	-168.453		28.518	<.001		
Below 10.000	30.000-40.000	-216.548		36.087	<.001		
Below 10.000	Above 40.000	-226.784		79.714	.044		

**Table 4.2.** *Assessing Responsible Financial Behavior by Income: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Average Monthly Income	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Responsible Financial Behavior	Below 10.000	47	1.00	4.00	2.76	.63	.09
	10.000-20.000	360	1.46	4.69	3.51	.60	.03
	20.000-30.000	168	1.92	5.00	2.90	.49	.04
	30.000-40.000	58	1.85	4.23	3.23	.47	.06
	Above 40.000	6	3.08	4.77	3.79	.69	.28
Average Monthly Income		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Below 10.000		.086	47	.200	.978	47	.525

Responsible Financial Behavior	10.000-20.000	.123	360	.000	.939	360	.000
	20.000-30.000	.120	168	.000	.953	168	.000
	30.000-40.000	.087	58	.200	.971	58	.184
	Above 40.000	.311	6	.071	.861	6	.193
Kruskal-Wallis Test		Chi-Square		df		p.	
Responsible Financial Behavior		146.611		4		<.001	
Post-Hoc (Dunn- Bonferroni)							
	I	J	Mean Difference (I-J)		Standard error	p	
	Below 10.000	30.000-40.000	-121.603		36.202	.008	
	Below 10.000	10.000-20.000	-203.963		28.609	<.001	
	Below 10.000	Above 40.000	-255.321		79.696	.014	
	20.000-30.000	30.000-40.000	-104.255		28.093	.002	
	20.000-30.000	10.000-20.000	186.615		17.235	<.001	
	20.000-30.000	Above 40.000	-237.973		76.639	.019	
	30.000-40.000	10.000-20.000	82.360		26.099	.016	

**Table 4. 3.** *Assessing Religious Orientation by Income: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Average Monthly Income	N	Min	Max	Mean	Standard Deviation	Standard Error Mean	
Religious Orientation	Below 10.000	47	2.75	5.00	4.11	.61	.09	
	10.000-20.000	360	1.88	5.00	3.85	.52	.03	
	20.000-30.000	168	2.25	5.00	3.35	.54	.04	
	30.000-40.000	58	1.75	5.00	3.39	.58	.08	
	Above 40.000	6	1.75	4.38	3.35	.87	.36	
	Average Monthly Income	Kolmogorov-Smirnov Statistics			sd	p	Shapiro-Wilk Statistics	
Religious Orientation	Below 10.000	.128	47	.051	.948	47	.038	
	10.000-20.000	.091	360	.000	.974	360	.000	
	20.000-30.000	.094	168	.001	.960	168	.000	
	30.000-40.000	.133	58	.012	.953	58	.026	
	Above 40.000	.343	6	.026	.858	6	.182	
Kruskal-Wallis Test		Chi-Square		df		p.		
Religious Orientation		134.866		4		<.001		
Post-Hoc (Dunn- Bonferroni)								
	I	J	Mean Difference (I-J)		Standard error	p		
	20.000-30.000	Below 10.000	238.458		30.398	<.001		
	20.000-30.000	10.000-20.000	167.669		17.212	<.001		
	30.000-40.000	Below 10.000	226.490		36.154	<.001		
	30.000-40.000	10.000-20.000	155.701		26.065	<.001		

**Table 4.4.** Assessing Financial Literacy by Income: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test

Variable	Average Monthly Income	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Financial Literacy	Below 10.000	47	1.00	7.00	4.66	1.58	.23			
	10.000-20.000	360	.00	7.00	3.65	1.54	.08			
	20.000-30.000	168	1.00	7.00	4.06	1.45	.11			
	30.000-40.000	58	.00	7.00	4.16	1.46	.19			
	Above 40.000	6	4.00	8.00	5.33	1.75	.71			
Average Monthly Income		Kolmogorov-Smirnov Statistics			sd	p	Shapiro-Wilk Statistics		sd	p
Financial Literacy	Below 10.000		.224	47	.000	.878	47	.000		
	10.000-20.000		.197	360	.000	.939	360	.000		
	20.000-30.000		.137	168	.000	.950	168	.000		
	30.000-40.000		.182	58	.000	.942	58	.008		
	Above 40.000		.277	6	.168	.800	6	.059		
Kruskal-Wallis Test		Chi-Square			df	p.				
Financial Literacy		32.782			4	<.001				
Post-Hoc (Dunn-Bonferroni)										
I	J	Mean Difference (I-J)			Standard error	p				
20.000-30.000	10.000-20.000	52.719			16.926	.018				
Below 10.00	10.000-20.000	-127.109			28.096	<.001				

**Table 4.5.** Assessing Financial Satisfaction by Education: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test

Variable	Education level	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Financial Satisfaction	Master's/ Doctorate	20	1.00	5.00	2.76	1.17	.26			
	Bachelor	388	1.00	5.00	3.64	.69	.04			
	Associate's degree	70	1.00	5.00	3.45	.93	.11			
	High School	81	1.17	5.00	3.50	.70	.08			
	Secondary school	12	2.00	5.00	3.56	.87	.25			
	Primary school	68	1.33	4.50	2.86	.77	.09			
Education level		Kolmogorov-Smirnov Statistics			sd	p	Shapiro-Wilk Statistics		sd	p
Financial Satisfaction	Master's/ Doctorate		.113	20	.200	.951	20	.383		
	Bachelor		.224	388	.000	.899	388	.000		
	Associate's degree		.118	68	.019	.970	68	.102		
	High School		.095	81	.066	.975	81	.116		
	Secondary school		.095	70	.193	.973	70	.128		
	Primary school		.199	12	.200	.938	12	.477		

Kruskal-Wallis Test		Chi-Square	df	p.
Financial Satisfaction		66.511	5	<0.001
Post-Hoc (Dunn-Bonferroni)				
I	J	Mean Difference (I-J)	Standard error	p
Primary school	Associate's degree	-126.244	31.308	.001
Primary school	High School	-127.595	30.242	<.001
Primary school	Bachelor	-177.508	24.173	<.001
Master's/Doctorate	Bachelor	-168.631	42.162	.001

**Table 4.6.** Assessing Responsible Financial Behavior by Education: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test

Variable	Education level	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Responsible Financial Behavior	Master's/ Doctorate	20	1.62	4.31	2.80	.67	.15
	Bachelor	388	1.00	4.77	3.45	.61	.03
	Associate's degree	70	1.46	5.00	3.13	.70	.08
	High School	81	2.08	4.00	3.01	.48	.05
	Secondary school	12	2.15	4.54	3.29	.59	.17
	Primary school	68	1.77	4.23	2.84	.49	.06
Education level		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Responsible Financial Behavior	Master's/ Doctorate	.125	20	.200	.964	20	.631
	Bachelor	.110	388	.000	.953	388	.000
	Associate's degree	.138	68	.003	.966	68	.062
	High School	.117	81	.008	.968	81	.039
	Secondary school	.097	70	.172	.988	70	.738
	Primary school	.163	12	.200	.958	12	.755
Kruskal-Wallis Test		Chi-Square	df	p.			
Responsible Financial Behavior		93.627	5	<0.001			
Post-Hoc (Dunn-Bonferroni)							
I	J	Mean Difference (I-J)	Standard error	p			
Master's/ Doctorate	Bachelor	-184.472	42.297	<.001			
Primary school	Bachelor	-180.535	24.250	<.001			
High School	Bachelor	135.509	22.534	<.001			
Associate's degree	Bachelor	89.397	23.954	.003			

**Table 4.7.** *Assessing Religious Orientation by Education: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Education level	N	Min	Max	Mean	Standard Deviation	Standard Error Mean	
Religious Orientation	Master's/ Doctorate	20	2.75	5.00	3.71	.64	.14	
	Bachelor	388	1.75	5.00	3.72	.56	.03	
	Associate's degree	70	2.38	5.00	3.85	.66	.08	
	High School	81	2.25	5.00	3.63	.64	.07	
	Secondary school	12	3.38	4.75	3.94	.49	.14	
	Primary school	68	1.75	5.00	3.37	.60	.07	
Education level			Kolmogorov-Smirnov			Shapiro-Wilk		
			Statistics	sd	p	Statistics	sd	p
Religious Orientation	Master's/ Doctorate		.148	20	.200	.945	20	.304
	Bachelor		.089	388	.000	.982	388	.000
	Associate's degree		.154	68	.000	.930	68	.001
	High School		.142	81	.000	.965	81	.025
	Secondary school		.113	70	.026	.972	70	.118
	Primary school		.156	12	.200	.900	12	.160
Kruskal-Wallis Test			Chi-Square			df		
Religious Orientation			33.124			5		
Post-Hoc (Dunn-Bonferroni)								
I		J		Mean Difference (I-J)	Standard error		p	
Bachelor		Primary school		118.873	24.218		<.001	
Associate's degree		Primary school		153.013	31.366		<.001	
Secondary school		Primary school		181.150	57.680		.025	

**Table 4.8.** *Assessing Financial Literacy by Education: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Education level	N	Min	Max	Mean	Standard Deviation	Standard Error Mean	
Financial Literacy	Master's/ Doctorate	20	2.00	6.00	3.65	1.66	.37	
	Bachelor	388	.00	8.00	3.59	1.45	.07	
	Associate's degree	70	1.00	7.00	4.94	1.49	.18	
	High School	81	.00	7.00	3.99	1.65	.18	
	Secondary school	12	2.00	7.00	5.00	1.65	.48	
	Primary school	68	2.00	7.00	4.29	1.32	.16	
Education level			Kolmogorov-Smirnov			Shapiro-Wilk		
			Statistics	sd	p	Statistics	sd	p
Master's/ Doctorate			.252	20	.002	.801	20	.001

Financial Literacy	Bachelor	.187	388	.000	.949	388	.000
	Associate's degree	.160	68	.000	.936	68	.002
	High School	.138	81	.001	.956	81	.007
	Secondary school	.179	70	.000	.912	70	.000
	Primary school	.144	12	.200	.927	12	.350
Kruskal-Wallis Test		Chi-Square		df	p		
Financial Literacy		57.186		5	<0.001		
Post-Hoc (Dunn-Bonferroni)							
I	J	Mean Difference (I-J)		Standard error	p		
Master's/ Doctorate	Associate's degree	-155.786		45.931	.010		
Bachelor	Primary school	85.778		23.815	.005		
Bachelor	Associate's degree	-154.913		23.524	<.001		
High School	Associate's degree	-103.658		29.563	.007		

**Table 4. 9.** Assessing Financial Satisfaction by Gender: Basic Statistics and Normality Test

Variable	Gender	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Financial Satisfaction	Female	220	1.00	5.00	3.18	.83	.06			
	Male	419	1.00	5.00	3.66	.72	.04			
		Kolmogorov-Smirnov Statistics				sd	p	Shapiro-Wilk Statistics		
Financial Satisfaction	Female	.095				220	.000	.986	220	.027
	Male	.174				419	.000	.929	419	.000

**Table 4. 10.** Assessing Financial Satisfaction by Gender: Mann-Whitney U

	Mann-Whitney U			
	Statistics	Standard Error	Standardized Test Statistics	Asymptotic p (2-tail)
Financial Satisfaction	29887	2208	-7.337	<.001

\* The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 11.** Assessing Responsible Financial Behavior by Gender: Basic Statistics and Normality Test

Variable	Gender	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Responsible Financial Behavior	Female	220	1.46	4.69	2.99	.58	.04			
	Male	419	1.00	5.00	3.42	.62	.03			
		Kolmogorov-Smirnov Statistics				sd	p	Shapiro-Wilk Statistics		
Responsible Financial Behavior	Female	.091				220	.000	.988	220	.059
	Male	.093				419	.000	.965	419	<.001

**Table 4. 12.** *Assessing Responsible Financial Behavior by Gender: Mann-Whitney U*

	Mann-Whitney U			
	Statistics	Standart Error	Standartsized Test Statistics	Asymptotic p (2-kuyruk)
Responsible Financial Behavior	27842	2215	-8.236	<.001

\* The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 13.** *Assessing Religious Orientation by Gender: Basic Statistics and Normality Test*

Variable	Gender	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Religious Orientation	Female	220	2.25	5.00	3.57	.62	.04			
	Male	419	1.75	5.00	3.75	.58	.03			
				Kolmogorov-Smirnov			Shapiro-Wilk			
		Gender			Statistics	sd	p	Statistics	sd	p
Religious Orientation	Male				.085	220	.001	.975	220	.001
	Female				.076	419	.000	.983	419	<.001

**Table 4. 14.** *Assessing Religious Orientation by Gender: Mann-Whitney U*

	Mann-Whitney U			
	Statistics	Standart Error	Standartsized Test Statistics	Asymptotic p (2-tail)
Religious Orientation	36355	2.212	-4.4	<.001

\*The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 15.** *Assessing Financial Literacy by Gender: Basic Statistics and Normality Test*

Variable	Gender	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Financial Literacy	Female	220	1.00	7.00	4.16	1.49	.10			
	Male	419	.00	8.00	3.75	1.56	.08			
				Kolmogorov-Smirnov			Shapiro-Wilk			
		Gender			Statistics	sd	p	Statistics	sd	p
Financial Literacy	Female				.155	220	<.001	.949	220	<.001
	Male				.170	419	<.001	.950	419	<.001

**Table 4. 16.** *Assessing Financial Literacy by Gender: Mann-Whitney U*

Mann-Whitney U			
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	Statistics	Standart Error	Standartized Test Statistics	Asymptotic p (2-tail)
Financial Literacy	53656	2175	3.478	.001

\*The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 17.** *Assessing Financial Satisfaction by Occupation: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Occupation	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Financial Satisfaction	Not working	72	1.00	4.17	2.63	.70	.08
	Retired	27	1.67	5.00	3.36	.81	.16
	Student	26	1.17	5.00	3.03	1.07	.21
	Public sector	168	1.00	5.00	3.20	.68	.05
	Private sector	346	1.50	5.00	3.85	.60	.03
Occupation		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Financial Satisfaction	Not working	.102	72	.062	.985	72	.525
	Retired	.118	27	.200	.974	27	.700
	Student	.119	26	.200	.961	26	.414
	Public sector	.062	168	.200	.993	168	.544
	Private sector	.229	346	.000	.891	346	.000
Kruskal-Wallis Test		Chi-Square		df		p.	
Financial Satisfaction		192.517		4		<0.001	
Post-Hoc (Dunn-Bonferroni)							
	I	J	Mean Difference (I-J)	Standard error		p	
	Not working	Public Sector	-104.475	25.900		.001	
	Not working	Retired	-150.269	41.494		.003	
	Not working	Private sector	-273.860	23.818		<.001	
	Student	Private sector	-174.702	37.391		<.001	
	Public Sector	Private sector	-169.385	17.291		<.001	
	Retired	Private sector	-123.591	36.741		.008	

**Table 4. 18.** *Assessing Responsible Financial Behavior by Occupation: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Occupation	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Responsible Financial Behavior	Not working	72	1.00	4.00	2.78	.45	.05
	Retired	27	1.85	4.08	3.11	.53	.10
	Student	26	1.62	4.69	2.89	.69	.14
	Public sector	168	1.62	5.00	2.99	.51	.04

	Private sector	346	1.46	4.77	3.55	.59	.03
	Occupation	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Responsible Financial Behavior	Not working	.156	72	.000	.941	72	.002
	Retired	.087	27	.200	.983	27	.925
	Student	.147	26	.156	.957	26	.333
	Public sector	.077	168	.016	.983	168	.039
	Private sector	.129	346	.000	.931	346	.000
Kruskal-Wallis Test		Chi-Square		df	p.		
Responsible Financial Behavior		164.362		4	<.001		
Post-Hoc (Dunn-Bonferroni)							
	I	J	Mean Difference (I-J)	Standard error	p		
	Not working	Private sector	-229.538	23.894	<.001		
	Student	Private sector	-193.072	37.511	<.001		
	Public sector	Private sector	-170..554	17.346	<.001		
	Retired	Private sector	-130.461	36.859	.004		

**Table 4. 19.** Assessing Religious Orientation by Occupation: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test

Variable	Occupation	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Religious Orientation	Not working	72	2.63	5.00	3.55	.58	.07
	Retired	27	2.88	5.00	4.04	.54	.10
	Student	26	2.63	5.00	3.82	.78	.15
	Public sector	168	1.75	5.00	3.37	.52	.04
	Private sector	346	1.75	5.00	3.83	.56	.03
	Occupation	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Religious Orientation	Not working	.116	72	.018	.950	72	.006
	Retired	.169	27	.047	.948	27	.196
	Student	.158	26	.093	.925	26	.059
	Public sector	.076	168	.018	.986	168	.092
	Private sector	.096	346	.000	.968	346	<.001
Kruskal-Wallis Test		Chi-Square		df	p.		
Religious Orientation		96.992		4	<0.001		
Post-Hoc (Dunn-Bonferroni)							
	I	J	Mean Difference (I-J)	Standard error	p		
	Public sector	Student	128.254	38.823	.010		
	Public sector	Private sector	-156.739	17.323	<.001		
	Public sector	Retired	210.276	38.195	<.001		

Not working	Private sector	-104.412	23.862	<.001
Not working	Retired	-157.949	41.572	.001

**Table 4. 20.** *Assessing Financial Literacy by Occupation: Basic Statistics, Normality Test, Kruskal-Wallis Test, and Post-Hoc Test*

Variable	Occupation	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Financial Literacy	Not working	72	1.00	7.00	4.07	1.45	.17
	Retired	27	1.00	6.00	3.89	1.53	.29
	Student	26	1.00	7.00	4.04	1.87	.37
	Public sector	168	1.00	7.00	4.21	1.43	.11
	Private sector	346	.00	8.00	3.69	1.57	.08
		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Financial Literacy	Not working	.187	72	.000	.937	72	.001
	Retired	.159	27	.079	.913	27	.027
	Student	.158	26	.092	.928	26	.070
	Public sector	.137	168	.000	.949	168	.000
	Private sector	.181	346	.000	.949	346	.000
Kruskal-Wallis Test		Chi-Square		df	p.		
Financial Literacy		16.547		4	.001		
Post-Hoc (Dunn-Bonferroni)							
I		J		Mean Difference (I-J)	Standard error		p
Public sector		Private sector		-65.911	17.035		.001

**Table 4. 21.** *Assessing Financial Satisfaction by Marital Status: Basic Statistics and Normality Test*

Variable	Marital Status	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Financial Satisfaction	Unmarried	411	1.00	5.00	3.59	.76	.04
	Married	228	1.17	5.00	3.31	.82	.05
		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Financial Satisfaction	Unmarried	.218	411	.000	.889	411	.000
	Married	.078	228	.002	.985	228	.017

**Table 4. 22.** *Assessing Financial Satisfaction by Marital Status: Mann-Whitney U*

		Mann-Whitney U			
		Statistics	Standard Error	Standardized Test Statistics	Asymptotic p (2-tail)
Financial Satisfaction	35185	2226	-5.241	<.001	

\* The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 23.** *Assessing Responsible Financial Behavior by Marital Status: Basic Statistics and Normality Test*

Variable	Marital Status	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Responsible Financial Behavior	Unmarried	411	1.00	4.69	3.38	.66	.03			
	Married	228	1.62	5.00	3.07	.53	.04			
					Kolmogorov-Smirnov			Shapiro-Wilk		
		Marital Status			Statistics	sd	p	Statistics	sd	p
Responsible Financial Behavior	Unmarried				.122	411	.000	.949	411	.000
	Married				.044	228	.200	.991	228	.193

**Table 4. 24.** *Assessing Responsible Financial Behavior by Marital Status: Mann-Whitney U*

Mann-Whitney U				
	Statistics	Standart Error	Standartsized Test Statistics	Asymptotic p (2-tayruk)
Responsible Financial Behavior	32345	2233	-6.50	<.001

\* The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 25.** *Assessing Religious Orientation by Marital Status: Basic Statistics and Normality Test*

Variable	Marital Status	N	Min	Max	Mean	Standard Deviation	Standard Error Mean			
Religious Orientation	Unmarried	411	1.75	5.00	3.70	.58	.03			
	Married	228	1.75	5.00	3.67	.63	.04			
					Kolmogorov-Smirnov			Shapiro-Wilk		
		Marital Status			Statistics	sd	p	Statistics	sd	p
Religious Orientation	Unmarried				.090	411	.000	.983	411	<.001
	Married				.089	228	.000	.974	228	<.001

**Table 4. 26.** *Assessing Religious Orientation by Marital Status: Mann-Whitney U*

Mann-Whitney U				
	Statistics	Standart Error	Standartsized Test Statistics	Asymptotic p (2-tail)
Religious Orientation	43717	2230	-1.4	.16

\*The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 27.** *Assessing Financial Literacy by Marital Status: Basic Statistics and Normality Test*

Variable	Marital Status	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Financial Literacy	Unmarried	411	.00	7.00	3.57	1.43	.07
	Married	228	.00	8.00	4.47	1.58	.10

	Marital Status	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Financial Literacy	Unmarried	.182	411	<.001	.946	411	<.001
	Married	.127	228	<.001	.954	228	<.001

**Table 4. 28.** *Assessing Financial Literacy by Marital Status: Mann-Whitney U*

	Mann-Whitney U			
	Statistics	Standard Error	Standardized Test Statistics	Asymptotic p (2-tail)
Financial Literacy	62098	2194	6.95	<.001

\*The homogeneity of the variances was taken into account when performing the t test.  $\alpha = 0.05$

**Table 4. 29.** *Assessing Financial Satisfaction by Age: Basic Statistics, Normality Test and Spearman's rho Correlation Coefficient*

Variable	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Age	639	19	65	31	9	0
Financial Satisfaction	639	1.00	5.00	3.49	.79	.03

Marital status	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	sd	p	Statistics	sd	p
Age	.149	639	.000	.954	639	.000
Financial Satisfaction	.137	639	.000	.910	639	.000

Correlation I	Spearman's rho J	Correlation Coefficient (I vs J)	N	p (2-tailed)
Financial Satisfaction	Age	-0.303	639	<.001

**Table 4. 30.** *Assessing Responsible Financial Behavior by Age: Basic Statistics, Normality Test and Spearman's rho Correlation Coefficient*

Variable	N	Min	Max	Mean	Standard Deviation	Standard Error Mean
Age	639	19	65	31	9	0
Responsible Financial Behavior	639	1.00	5.00	3.27	.64	.03

Marital status	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	sd	p	Statistics	sd	p
Age	.070	639	.000	.980	639	<.001
Responsible Financial Behavior	.137	639	.000	.910	639	<.001

Correlation I	Spearman's rho J	Correlation Coefficient (I vs J)	N	p (2-tailed)
Responsible Financial Behavior	Age	-0.412	639	<.001

**Table 4. 31.** *Assessing Religious Orientation by Age: Basic Statistics, Normality Test and Spearman's rho Correlation Coefficient*

Variable	N	Min	Max	Mean	Standard Deviation	Standard Error Mean	
Age	639	19	65	31	9	0	
Religious Orientation	639	1.75	5.00	3.69	.60	.02	
Marital status		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Age		.137	639	.000	.910	639	<.001
Religious Orientation		.055	639	.000	.990	639	<.001
Correlation	Spearman's rho		Correlation Coefficient (I vs J)		N	p (2-tailed)	
I	J						
Religious Orientation	Age	-.174		639	<.001		

**Table 4. 32.** *Assessing Financial Literacy by Age: Basic Statistics, Normality Test and Spearman's rho Correlation Coefficient*

Variable	N	Min	Max	Mean	Standard Deviation	Standard Error Mean	
Age	639	19	65	31	9	0	
Financial Literacy	639	.00	8.00	3.89	1.54	.06	
Marital status		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	sd	p	Statistics	sd	p
Age		.157	639	<.001	.955	639	<.001
Financial Literacy		.137	639	<.001	.910	639	<.001
Correlation	Spearman's rho		Correlation Coefficient (I vs J)		N	p (2-tailed)	
I	J						
Financial Literacy	Age	.274		639	<.001		