



T.C.

ANKARA YILDIRIM BEYAZIT UNIVERSTY

A THESIS SUBMITTED TOTHE INSTITUTE OF SOCIAL SCIENCES

**A STUDY OF WOMEN 'S BEHAVIOURAL FINANCE IN
DIFFERENCES IN INVESTMENT DECISION-MAKING:
TURKEY, PAKISTAN AND JORDAN**

THE DEGREE OF MASTER

Sammar ABO AYASH

ORGANIZATION MANAGEMENT THE DEPARTMENT OF SOCIAL
SCIENCE

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Advisor: Merve Karacaer Ulusoy

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Approval Page

Approval of the Institute of Social Sciences

Assoc. Dr Seyfullah YILDIRIM

Manager of Institute

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Organization and Management.

Assoc. Dr. Özge GÖKBULUT ÖZDEMİR

Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Organization and Management.

Assist. Prof. Dr Merve Karacaer Ulusoy
Supervisor

Examining Committee Members

Assoc Prof. Dr. Burak Pirgaip Hacettepe University Department
of Business Administration.

Assist Prof. Dr. Seda Ekmen Özçelik. AYBU Department Of
International Trade and Business

Assist Prof. Dr. Merve Karacaer Ulusoy. AYBU Department Of
International Trade and Business

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ABSTRACT

The field of behavioural finance has attempted to explain a litany of biases present in human, financial attitude since its creation in the 1980s. The human decision-making process has been a productive field for academic researchers in both social science and natural science domains, as per the classical economic theory, humans are completely rational, decision-makers who carefully evaluate all facts and evidence before making decisions that aim at maximizing outcomes. However, it has been found that in real-life humans are not totally rational, rather they are influenced by various psychological and behavioural biases while making decisions.

According to researches males and females behave accordingly in investment decisions and, differently in some of their decisions. The main subjects is women from different countries and behavioural finance biases, Behavioural finance factors are divided into two parts which are emotional and cognitive biases. And they are measured by several dimensions to achieve the results.

Hence, a study has taken up to examine the impact of behaviour finance of senior-level working females decision making from different demographics regions, The population of the study is women investors from Pakistan, Turkey, and Jordan. Furthermore, the sample size is 150 individuals who work at the senior-level/ all of our participants working in foreign trade fields. The data are collected by a questionnaire. Then was analyzed by the SPSS program. The achieved results showed that women from different countries (Pakistan, Turkey, Jordan) in the decision-making behave accordingly in investment decisions and, differently in some of their decisions.

Keywords: Behavioral Finance, Behavioral Biases, Prospect Theory, overconfidence.
Traditional finance

ÖZET

Davranışsal finans alanı, 1980'lerde ortaya çıkmasından bu yana, insani, finansal tutumda mevcut olan önyargılar, buluşsal yöntemler ve verimsizliklerden oluşan bir unsuru açıklamaya çalıştı. İnsanın karar verme süreci, hem sosyal bilim hem de doğa bilimleri alanlarında akademik araştırmacılar için verimli bir alan olmuştur, klasik iktisat teorisine göre, insanlar tamamen rasyoneldir, karar vericilerdir, hedefe yönelik kararlar vermeden önce tüm gerçekleri ve kanıtları dikkatlice değerlendirir. Ancak, gerçek hayatta insanların tamamen rasyonel olmadıkları, bunun yerine karar verirken çeşitli psikolojik ve davranışsal önyargılardan etkilendikleri bulunmuştur. Yaygın önyargılardan bazıları sürü, doğrulama önyargısı, kullanılabilirlik önyargısı, aşırı güven ve kayıptan kaçınma önyargılarıdır.

Önceki aştırmalara göre, erkekler ve kadınlar yatırım kararlarında benzer hareket ederken bazı kararlarda farklı şekilde davranmaktadırlarlar. Bu tezin ana konusu farklı ülkelerden üst düzey kadınlar ve davranışsal finans önyargıları, Davranışsal finans faktörleri duygusal ve bilişsel önyargılar olmak üzere iki kısma ayrılmaktadır.

Bu nedenle, farklı demografik bölgelerden üst düzey çalışan kadınların karar vermelerinin davranış finansmanının etkisini incelemek için bir çalışma başlatılmıştır. Araştırmanın ana nüfusu Pakistan, Türkiye ve Ürdün'den kadın yatırımcılardır. Ayrıca, örneklem büyüklüğü üst düzey çalışan 150 kişi / dış ticaret alanlarında çalışan tüm katılımcılarımızdır. Veriler anket aracılığı ile toplanmıştır. Daha sonra toplanan veriler SPSS programı ile analiz edilmiştir. Elde edilen sonuçların, davranışsal finans faktörlerinin karar verme sürecini etkilediğini ve farklı ülkelerden kadın yatırımcılar arasında bir ilişki olduğunu ortaya koyarkenve karar alma sürecinde farklı ülkelerden ülkelerdeki (Pakistan, Türkiye, Ürdün) kadınlar arasında bir ilişki olmadığı gözlemlenmiştir.

Anahtar Kelimeler: Davranışsal Finans, Davranışsal Önyargılar, Beklenti Teorisi, aşırı güven. Geleneksel finans

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1. INTRODUCTION

1.1. Introduction

Behavioural finance plays a colossal part in most utmost domains of our life effectively at any level of individuals, associations or organization. Thus, behavioural finance has reached a stage when it should lead-related policy decisions.

Hammond (2015) stated that finance theorists firstly established At the beginning of the 1980s, finance theorists built to take on to examine the idea that the laws of investing were not completely as clear but as the technology of computer programs has become more robust it has become feasible to analyze mountains of data and demonstrate these thoughts true. From the collective messiness in failures of traditional finance theory, a new field within finance has grown. This new field has been called behavioural finance.

The difference in definitions of Behavioral finance that may reaffirm the idea that a researcher's background matters. behavioural finance theory has tried to explain a litany of biases, and inefficiencies noted in financial markets since its creation in the 1980s. (Pavlo, 2017)

In addition Meir (2014) mentioned his study, that behaviour finance explores spending and saving behaviour, whether by examining brains in fMRIs or examining wants, errors, preferences, and behaviour in questionnaires, tests, and the field. additionally explores financial decisions affected by culture, justice, social responsibility, and other expressive and emotional wants. In behavioral finance, we replace normal characters for rational characters in traditional or standard finance. Behavioural finance develops the domain of finance beyond portfolios and market efficiency. It investigates the behaviour of investors and managers in direct and indirect ways

Ricciardi and Simon (2000,p.2) stated rejection of Behavioural finance as a rational behaviour of market participants and tends to show market participants' irrational behaviour which comes from the influence of psychological factors on people's behaviours when it comes to making investment decisions.

There are many behavioural biases which impact people decision- making process. There are different categories of these factors that are divided according to different critics. For example, they are divided into macro behavioural finance biases and micro behavioural finance biases, in another point of view they are divided by the source where they come from into psychological biases and sociological biases., according to other classification there are two groups of biases which are cognitive biases and emotional biases for instance (Mahalakshmi, 2018) explained how the emotional process as a reasoning pattern of investors that influenced the decision-making process, Similar results have been found in other research on emotions play a vital role in the decision-making process consequently psychological biases also dominates the investment performance.

After the creation of several foundations and think-tanks, behavioural psychologists and finance theorists began to join forces to research anomalies in financial markets as Richard Thaler, Daniel Kahneman and Amos Tversky were doing, and the result of this research was the creation of the field of behavioural finance who is on the opposite side of traditional finance and shows how it can and demonstrate that people are not rational always, they make common errors because of the decisions are influenced by several factors, and behavioural finance identifies these factors.

Today, definitely behavioural finance researchers are needed. To take a step further and seeking even the most basic of finance laws as researchers try to discover out how investor biases affect the decision-making process to identify and understand these biases and help investors to avoid them.

1.2. Background

After many decades of supremacy, the hypothesis of Rational personality was examined by a study published on the subject in 1974 discussed “Judgement under Uncertainty: Heuristics and Biases”.of researchers leading by Amos Tversky and Daniel Kahneman, Further, Kahneman and Tversky cause to public attention their new “Prospect Theory” in the journal Econometrica, in 1979, which moreover examined the rationality argument and uniquely changed the way in which investment decision making was viewed upon. Prospect Theory observed behaviour patterns that had never been recognized by the proponents of rational decision making. One of the most fascinating and beneficial findings in the Prospect Theory of the psychologist duo Kahneman and Tversky was the asymmetry

between the way humans make decisions including gains and decisions involving losses. Kahneman and Tversky proposed and proved through multiple experiments that the same individual who is a risk averter for a decision involving gains becomes a risk seeker for a loss-avoiding decision.

Tversky and Kahneman in 1974 described three heuristics (representativeness, availability, and anchoring) that work when people make judgments under uncertainty. Tversky and Kahneman (1974) argued that cognitive biases happen due to an individual's use heuristics. Moreover, “These heuristics are economically usually effective”, and they pointed out that this leads to biases under certain circumstances.

When the prospect theory was published by Kahneman and Tversky in 1979, from that time the Behavioural economics theory began to arise and especially after Kahneman received the nobel prize for the economy because of prospect theory in 2002.

Later, there is some research which was done by De Bondt et al. (2010), Daniel et al. (2002), Glaser et al. (2004) and Garling et al. (2009) indicate that behavioural finance uses the corpus of work that demonstrates biases in human judgment and decision making to explain investor behaviour and market anomalies. Subrahmanyam (2010) studied behavioural finance. Charness and Gneezy (2012) had researched about gender differences in risk-taking and they found that women invest less and also women are more risk-averse than men. Zhang and Zheng (2015) studied investment behavioural-based financial decisions and their results of findings show that investors are not always rational as they are assumed in traditional finance. Chavali and Mohanraj (2016) studied the impact of demographic variables and risk tolerance on investment decisions and they found that gender has an impact on the investment pattern and decision making of respondents.

1.3. Problem Statement

Rajalakshumi and Manivannan (2017) assert In the Decision-Making Behaviour study that investment behaviour is concerned with investors ability to forecast, judge, evaluate and review the formalities for financial decision making. and Gender has a significant influence on investors behaviour. Selection of investments by male investors showed that they preferred risky assets as compared with female investors.

In the light of Shukla (2016) the investment preference for working women. The study found that women's investment preferences were greatly influenced by their ability to invest in a variety of investment instruments. It turns out that women are primarily interested in investing in financial assets rather than physical ones.

Financial assets consist of the stock, bond, life insurance, mutual funds, and various deposits. Working women at present have more income earning potential and more impact over investment decisions than ever before. According to the results, working women generally invest in the form of bank deposits, gold and real estate, among a variety of investment alternatives. In addition, a handful of working women can invest in the stock and derivatives markets and invest in company securities. The working woman was hesitant about very risky investments and concluded to focus on short and medium-term investments.

After many researchers generating considerable interest in the different factors impact on female and male investors' decisions, Despite this interest, and as far as we know there are not enough studies to the best of our knowledge on factors that impact the Same Gender.

In order to understand these differences between the same Gender There is still a need for more studies, for this purpose in this paper, we intended to focus on the working women from different countries (Pakistan, Turkey and Jordan) and investigating if they are impacts by behavioral finance Biases in the same way same on women from different countries or are there some differences? Which factors have the same impact on working women investors' decisions? Is there any relationship between women from different countries and any factor of behavioural factors?

The influence of friends, family, specialists can help us to know about their financial behaviour and overcome the obstacles to investment.

Financial specialists must be able to diagnose irrational behaviours and guide their clients accordingly.

1.4. The Importance of Study

In fact, we can recently observe an increase in behavioural finance literature concerning focusing on psychological forces that make individuals act differently from what

traditional models predict The relevance of studying investors' behaviour has increased over the last few decades, especially when and how behavioural patterns (Blasco et al., 2009).

In addition, the relationship between gender and behaviour Finance quite frequently has been studied. as (Campbell, 2006) demonstrate that men are less risk-averse than women. as a determinant of household investments, also as observed by Albaity & Rahman (2012) women are more risk-averse than men. due to women's nature in being more comprehensive in information processing than men and tend to provide more weight to negative information, consequently, leading them to be more risk-averse than men.

As addressed by Bernasek and Shwiff (2001) from investment decisions perspective the differences between men and women are a significant factor in explaining individual behavioural, And they found that women are more traditional than men when allocating assets to retirement accounts.

Behavioural finance has made advances in explaining the behaviour of markets. It focuses on the irrational behaviour of the individuals in the economy. Other observations indicate that culture and beliefs influence how individuals perform an economic decision as well as investment decisions (Hong et al., 2004; Huang, 2008; Chui et al., 2010; Beugelsdijk and Frijns, 2010; Guiso et al. 2006 and 2008). moreover, "Behavioural finance investigates to clarify and increase understanding of reasoning patterns of investors, including the emotional manners involved and the degree to which they influence the decision-making process." as mentioned by Ricciardi and Simon (2000) .

In particular, in this behavioural literature, we didn't find several studies related to women behavioural finance, which is the phenomenon we want to analyse, since it may explain bubbles and similar extreme situations. most of the papers were discussing Gender differences in Behavioral finance

In fact, Women as a part of market participants who have a great role in finance and investment, besides, The more innumerable working women increase lead to more improvement and increase in family income, previously only comes from the husband, so Women who work will contribute to the increase of family income, and it can encourage family investment (Mincer & Polachek, 1974).

Also have an important role in increasing market efficiency which leads us to the need of considering the contributions of women behavioural finance to try to understand if there are differences between behavioural finance and investment among females investors. Accordingly, understanding and gain knowledge about these differences and female decision making is an important role in increasing market efficiency.

To expanding research area in behavioural finance.in our study, we try to understand the differences in the impact of behavioural finance between working women from different countries in the decision making process



2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1. Overview

Finance is the act of providing funds for commercial activities. Finance describes the administration, creation and study of money. In words, we can conclude that all commercial activities depend on the financial field, whether the business is large or small. The science of financial management for individuals is presented through rational or irrational finance (behavioral finance).

The rational finance paradigm covers some theories that define human economic decisions, for example, such as Bernoulli's portfolio theory and the von Neumann and Morgenstern theory of expected utility, where the key assumption of all these theories is that the activities of every human being are rational. and its main objective is to maximize

Profit.

The expected profit theory showing that people tend to maximize their profits, the portfolio theory that investors have to make the decision to choose a combination of investments. To develop this theory, Friedman expounded the theory of permanent income, after this theory one of the important theories that was expounded in the field of finance is the efficient market theory. In the 1980s, the efficient market model began to be questioned, and excess volatility was one of the problems that caused an efficient market model to have complete acceptance problems. At that time, behavioral researchers and scholars began to use research from the science of psychology to develop behavioral models of finance. They documented a variety of decision-making behaviors that were called biases. They have shown how these biases can affect all kinds of decision making, and they also have particular implications in relation to investment and money decisions. The purpose of this chapter is to have a review of the theoretical framework of the field of finance, different perspectives and theories of finance, and the main focus of this chapter is about behavioral finance and the impact of behavioral biases on women investment decisions.

2.2. Previous Studies

The results from the study of the sample of 152 respondents, investigated the segment of the investor on the basis of demographic and lifestyle characteristics. The study conducted by Warren et al. (1990) showed the segmented investors on the basis of their investment behaviour. light and heavy investors as well as Active and passive investors. At the end of the 1990s Johnsson, Lindblom & Platan (2002), examined the behavioural finance and investor behaviour during the speculative bubble throughout a survey of a private investor in Sweden. The study points out that overconfidence, earnings, the profitability of companies are the main reasons for the fall in market values after 2000.

Massa M (2002), concentrated on two features of investors behaviour, first is risk-taking which covers loss aversion, house money effect and mental accounting and second is stock picking with information based familiarity and pure familiarity. For analyzing the impact of behavioural biases on risk-taking and stock picking, the author focused on holding & long-term behaviour of investors with annual horizons. The findings show that there was an influence of previous gain/losses on investors risk-taking without an influence on mental accounting. And from the study of Barberis N & Thaler R. (2003) which described behavioural finance, prospect theory, market efficiency, limits to arbitrage, investor psychology, and investor behaviour & beliefs in detail. The study also concentrated on behavioural finance application in various fields like the stock market, corporate finance and investor behaviour.

A study made by Wood and Zaichkowsky (2004), which classified and identified individual investors into a segment based on their investing behaviour and attitude using the sample of 90 respondents. The study concluded that tolerant traders, confident traders, loss-averse traders, and conservative long-term trader were identified. In addition to the Merikas et. al (2004) investigated the factors that impact the behaviour of an investor in Greece stock exchange using 150 respondents from the Athens stock exchange with Factor analysis. The study found that the variable identified by the classic wealth maximization criteria.

Al-Ajmi (2008), restricted the risk tolerance of individual investors in Bahrain using 1,484 individual investors. The study inferred that Investors with more financial commitment show a decline towards risk tolerance. Zoghami and Matoussi (2009) identified the psychological factor that influences the investor's behaviour in Tunisia using the sample

of 92 brokers. The study concluded that Precaution, underconfidence, conservatism, under optimism and informational inferiority complex is the factor that impacts on the behaviour of investors. Hood et. al (2011) examined the factors that influenced the investment decision of socially responsible investors in U. S. Sample Chosen from Nationwide discount brokerage list from 1991 to 1996. The study described that Social characteristics and personal values had an impact on stock owned by an individual investor.

During the 2007-2009 financial crisis Thomas, Joost M. (2011) widely investigated a study using records of clients and the monthly questionnaire data, by reviewing the investor's behaviour change and their impact during this crisis, the study estimated that investors who have a lower risk level have less turnover than investors with a higher level of risk perception

Bikas E., Jureviciene D. et. al. (2012), examined the impact of behavioural factors like emotional tolerance, recognition, and psychological impact the financial decisions of non-professional investors. The author used historical- the orientation perspective through descriptive and comparison method.

Coffie (2013), demonstrated the implications of individual stock investors being influenced by behavioural finance models and to study whether there are any positive relationships between major behavioural finance theories and stock investment strategies Wolverhampton (England). The outcomes of the survey revealed minor correlations between certain strategies and

There is a considerable study conducted in Kenya studied behavioural biases that influence the individual investor's decision by using primary data gathered from 30 individual investors through a snowball sampling technique. The study concluded that Representative, an illusion of control, cognitive, dissonance; herd instinct and hindsight biases presented significantly relationship with individual investor's decision whereas loss aversion, regret aversion, self-attribution and over-optimism bias were not, Athur A. (2014), The study in Coimbatore using 482 respondents conducted between (2011 - 2015) proved the fact that the investment strategies of the investors are mainly affected by the socio-economic factors and it extra exposes that the behavioural bias plays an active role in delimiting the investment process of Individual investors.

Fakhry B. (2016), set up on the review of existing literature related to behavioural finance and Efficient Market Hypothesis (EMH). and by using evidence from 38 countries

Dessi R & Zhao (2017) describes overconfidence, cultural differences, stability, investment, and cultural transmission. Moreover, Greg Fibeck et. al (2017) implemented a panel discussion on, behavioural biases, behavioural finance portfolio management, and their influences on different perspectives held at Sandestin, Florida on Nov 2017.

2.3. Traditional finance

The Traditional economic theories pointed out that always investor behaves rationally in the investment decision-making process. Pioneers of behavioural finance strongly argue that investor may not be rational while taking investment decisions and he will be controlled by several psychological factors. These psychological factors divided into four groups such as Heuristic Bias, Prospect Bias, Market Bias and Availability Bias. Indian share market price fluctuations can be well predicted by understanding the extent to which these four factors influence the individual investors' decision making and performance at Indian stock exchanges. Fundamental aspects of the finance theory are studied by dividing into two fundamental bases i.e., standard finance and behavioural finance. Standard finance further divided as traditional finance and modern finance. The traditional finance believe that rationality of an investor, where his decision is based on expected utility. Modern finance on the other hand supports the individual investor's attempt to maximize the utility function of wealth based on informal efficiency of the market. The basic assumption of modern theories is that activities of an economic human being are rational and is backed with the core objective of profit maximization.(Nayak & Kumar, 2020)

Modern Portfolio Theory (MPT) (Markowitz, 1952), Life Cycle Hypothesis (Modigliani & Brumberg, 1954), Permanent Income Hypothesis (Friedman, 1957), Efficient Market Hypothesis (EMH) by (Fama, 1991) these theories can be defined as a way that formed rational finance filed

2.4. Behavioral Finance Theories

Interestingly, during the next two decades, precisely, when economics decided to isolate itself from the other social sciences, psychology underwent a so-called cognitive revolution, which sought to undermine the dominance of behaviorism (Mirowski, 1992). While the former assumed that the only things that are real are the things one can see and observe (we cannot observe the mind at work, but we can see how people act, react, and

behave), the latter provided new insights into the mechanics of the mind and focused on internal psychological processes (Sent, 2004) .

The rise of behavioural finance was hardly predicted beforehand (thaler, 2015) as financial models populated with econs were the most elegant and they had been applied to a real-world with what at that time was considered as an enormous success. also, because financial markets were seen as the most efficient markets of all, it was expected that individual errors would have a negligent effect at the aggregate level. Nonetheless, in hindsight, it seems that financial decision-making is one of the least natural for humans. Thus, there is room for behavioural mistakes in this domain. Finally, the availability of high-quality data in finance eventually made these mistakes easy to uncover.

Similar to behavioural economics, behavioural finance needed two ingredients for its development: examples of deviation from predictions of normative theories and some ready-made explanations of such deviations. the latter was provided by ideas from behavioral economics, but the former required an approach different from the one used in behavioral economics where it was enough to show the examples of behavior that do not conform to the model of homo economicus. one of the distinct features of finance is that if people will not act as econs, they will lose money and disappear from financial markets. Thus, individual mistakes cannot reject the assumptions of traditional finance. As a result, to show the importance of behavioral mistakes it was important to point to the existence of market anomalies, i.e., some unexpected market-wide phenomena contradicting the predictions of the existent theory. For behavioral finance to be born, researchers needed to find such market anomalies and successfully explain them with the help of insights from behavioral economics.

The exact date when it happened is a matter of disagreement and depends on personal perspective. some point to the year of 1994 while others conclude that the beginnings lie in the late 1950s (Bikas et al., 2012). however, the cross-disciplinary consensus points to the year 1985 and the publication of de Bondt and thaler's (1985) paper on stock market overreaction.

De Bondt and thaler expanded on an already well-known value anomaly. however, they were the first to use a convincing behavioral explanation of the anomaly. It is also worth noting that 1985 saw the publication of two more seminal papers (Shefrin and Statman

defined the now well-established "disposition effect", while Mehra and Prescott uncovered the so-called "equity premium puzzle"). additionally, 1985 was a year when the behavioral approach attracted serious academic attention for the first time during a conference at the university of chicago, where such heavyweights as robert lucas, Merton Miller, and eugene Fama debated daniel Kahneman, amos tversky, richard thaler, and robert shiller (thaler, 2015).

Alternatively, if we want to highlight the importance of research on market anomalies as the origins of behavioral finance, then history also points to the shiller (1981) paper showing that the volatility of a stock market is much greater than can be explained by rational factors. While Shiller's paper was not the first to explore market anomalies, it was the first to generate academia-wide discussion. In general, research on market anomalies has much deeper roots and can be traced back at least to the 1960s. For example, famous hedge fund manager victor niederhoffer, during his academic career at Berkeley in the 1960s, published a series of papers on anomalies in stock market behavior. in the late 1970s, Basu (1977) was the first to formulate and test the value anomaly, i.e., the positive relationship between such valuation metrics as price to earnings ratio and average stock returns, while Banz (1981) later described the related so-called size anomaly: the negative relationship between stock returns and the market capitalization of a firm. And if we want to highlight the psychological underpinnings of behavioural finance, then we may conclude that behavioural finance started with Slovic's (1972) paper summarizing psychological findings related to investment decision-making, such as the existence of cognitive limitations in processing information and biases in judgments of probability.

Behavioural finance reached several significant milestones in the late 1990s and early 2000s. thaler (1999a) proclaimed the end of behavioural finance in the sense that the field had already become a part of the mainstream. By that time, behavioural finance provided convincing behavioural explanations for many anomalies and proposed a range of behavioural models which had advantages in explaining real world phenomena. at the same time, Brad Barber and terrence odean started a new wave of research in behavioural finance by documenting behavioral mistakes of individual investors using the data from brokerage accounts. For example, in the seminal paper, Barber and odean (2001) provide evidence that individual investors achieved sub-par investment results and explained this finding by

proposing that overconfidence leads to excessive trading, noting that there is a clear gender difference in the attitude toward trading activity (men are more prone to excessive trading).

In 2000, Robert Shiller published his famous book *irrational exuberance*, Shiller's book was instrumental in spreading ideas of behavioral finance to a wider audience, and Andrei Shleifer published the seminal textbook *Inefficient Markets: An Introduction to behavioral finance*. what was required to compare the efficient market approach with the insights of behavioural finance? he described the role of noise traders (financial market participants whose behavior was different from econs)

In 2001 George akerlof, Michael spence, and Joseph stiglitz shared the nobel Prize "for their analyses of markets with asymmetric information", and a year later the nobel Prize was shared by daniel Kahneman "for having integrated insights from psychological research into economic science, especially concerning human judgment and decision-making under uncertainty".

Mounika (2017) used the behavioural biases impact on investors to examine the importance of behavioural finance in investment decisions using behavioural biases impact on investors. The study concluded that investors do not always act in rational and behavioural biases have an impact on investor's decision making,

Behavioural finance has two subtopics Macro and Micro Behavioural Finance, Behavioural Finance Macro (BFMA) defines and represents anomalies in the efficient market hypothesis that behavioural models may explain. (BFMI) Behavioural Finance Micro examines behaviours or biases of individual investors that differentiate them from the rational actors envisioned in classical economic theory as stated by Pompian (2006) Moreover, There are three main foundations of analysis in Behavioral finance addressed by Schindler (2007) are psychology, finance and sociology. Psychology is the study of behaviour and mental processes, that is influenced by human's physical, mental, and outside environments, Finance is the discipline concerned with determining the value and making decisions. The finance function allocates capital, including the acquisition and allocation. Finally, Sociology is defined as the study of human social behaviour and societies, and the impact of the social relationship on behaviour and attitude.

2.4.1. Prospect Theory

Originally The Prospect theory was created by Kahneman and Tversky (1979) and following findings in Daniel Kahneman being awarded The Nobel Prize for economics. The theory identifies two phases in the decision process: the initial phase of framing (or editing) and the consequent phase of evaluation. Tversky and Kahneman, by developing the prospect theory, demonstrated how individuals manage risk and uncertainty. In essence, the theory emphasises the apparent irregularity in human behaviour when evaluating risk under uncertainty (Subash 2012). People set much more weight on the results that are perceived more certain than that is viewed merely probable, a hallmark is known as the “certainty effect” (Kahneman & Tversky, 1979)

2.4.2. Heuristic Theory

Daniel Kahneman addressed “Heuristics are simple effective rules of the thumb which have been proposed to explain how people make decisions, come to judgments, and solve problems, usually when facing complicated problems or incomplete information. These rules work well under most circumstances and situations, but in certain cases lead to systematic cognitive biases” (Parikh, 2011).

Tversky and Kahneman (1981) identified the impact of human heuristics on the decision-making process. Tversky defined heuristic as a strategy, which can be implemented to a variety of problems, that habitually—but not regularly—yields a correct solution. individuals usually use heuristics (or shortcuts) that reduce the complex problem solving to more simple judgmental processes

The heuristic decision is the rule by which the individual finds things out for themselves, normally by experiment and failure, which lead to the evolution of the rules of thumb. By way of explanation, it relates to rules of thumb, where individuals use it to make a decision in difficult, uncertain environments (Brabazon, 2000).

2.5. Traditional Finance and Behavioural Finance

Number of studies conducted by researchers where behavioural finance has been added with traditional analysis to assess the differences in the investment decision. The

impacts, estimations & application of behavioural finance in investment decision making have been originated by academicians

Regarding Traditional (Standard) finance theory supposes that investors are ‘Rational’. and as (Barberies 2005) stated Rationality means two things :

Firstly, when people receive new information, agents update their beliefs accurately, in the manner described by Bayes’s law. Second, given their beliefs, agents make choices that are normatively acceptable, in the sense that they are consistent with Savage’s notion of Subjective Expected Utility Theory (SEU).

According to Montier (2002), the rational construct estimates that individuals, both investors, and managers are able to understand vastly complicated problems and manage unlimited instantaneous optimizations. Due to such thinking, the concept of market efficiency comes into existence. and from Jensen and Merckling (1994) argues, Traditional finance theory stands directly on the notion of the ‘Rational persons’, a person who is much different from other individuals.

The new field-behavioural finance is the study of psychology, sociology, and finance. It mainly considers how one’s taste, perception, and thoughts impact on their financial and investing decisions. Some of the key definitions of behavioural finance are discussed here. According to Hirschey and Nofsinger (2008), behavioral finance is the study of cognitive errors and emotions in financial decisions”.

It is also known as the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on the market (Sewell, 2007). behavioral finance relaxes the traditional assumptions of financial economics by incorporating these observable, systematic, and very human departures from rationality into standard models of financial markets. The tendency for human beings to be overconfident causes the first bias in investors and the human desire to avoid regret prompts the second (Barber and Odean, 1999).

2.6. Behavioral Finance

Behavioural finance is about how individuals make decisions both personally and collectively which can be classified into behavioural finance macros (BMFA) that explained

the anomalies occurs in the efficient market hypothesis and behavioural finance micro (BMFI) that discusses the behavioural biases of individual investors (Pompian, 2006).

As reported by Baker & Nofsinger (2002) In micro behavioural finance, investor behaviour bias is gathered within how investors think (heuristics/rules of thumb) and how investors feel (emotions), in the other hand it reported by Pompian (2006) and Hirschey & Nofsinger (2008) are classified into cognitive bias and emotional bias. This behaviour bias influences individuals in making decisions (Zahera & Bansal, 2018). Cognitive bias is decision making by using the rule of thumb for facts or information. Cognitive bias as stated by Baker & Nofsinger (2002) contains representativeness bias, cognitive dissonance, familiarity bias, mood and optimism, overconfidence, endowment, the effect status quo bias, reference points and anchoring, the law of small amounts and mental accounting, and according to Pompian (2006) consisted of heuristics, representativeness, overconfidence, cognitive dissonance, self-attribution bias, availability, conservatism, mental accounting, the illusion of control, ambiguity aversion, confirmation bias, recency bias, hindsight bias, and framing bias.

Emotional bias is decision making build on feelings or emotions. Emotional bias describes errors in decision making because it ignores information or facts. The use of feelings as a basis for decision making illustrates an error or bias because it ignores information or facts that should be processed correctly and objectively. Shefrin (2002) stated that investors are influenced by fear and greed in making decisions proves that emotional factors affect how humans think and act. as conforming to Baker & Nofsinger (2002) Emotional bias contain the disposition impact, bias attachment, changing risk preferences, whereas stated by Pompian (2006) comprises of loss of aversion bias, endowment bias, optimism self-control bias, regret aversion bias, and status quo bias.

Based on literature about the cognitive and emotional bias that influenced decision making and that could be applied in cryptocurrency, a conceptual model for understanding behavioral bias that affects investing in cryptocurrency is proposed. The biases are optimism, gamblers' fallacy, loss aversion herding, confirmation bias, and. Overconfidence.

2.6.1. Confirmation Bias

When the price drops temporarily and rises again, confirmation bias or joint may occur at the eruption stage. This bias takes the form of a person's tendency to seek information that supports his opinion or overrules information that does not support his belief (Pompian, 2006). Confirmation bias is one of the cognitive biases that affects not only how people gather information but also influences how to interpret and remember information to fit their opinions or beliefs. Duong, Pescetto, & Santamaria (2014) who researched stock trading listing on the UK stock exchange during 1991-2007 found evidence of confirmation bias on stock investors in responding to good and bad information. Park et al. (2010) who observed the behaviour of 502 investors in South Korea proved that investors experienced confirmation bias when processing information from message boards. This confirmation bias does not only occur in people's behaviour but also in news or information. Nelson (2014) who conducted a study on economic articles found stereotyping, publication bias, and confirmation bias in the economic literature that discussed gender and risk aversion. Investors are looking for information and opinions that support their belief that investing in Bitcoin is the right thing. They discard and deny negative opinions about investment decisions of them self

2.6.2. Herding

Herding has been identified according to (Baddeley, 2010) is the individuals who prefer to follow others, imitate or follow group behaviour in making decisions instead of deciding on their own. Moreover, it can be characterised as reciprocal imitation causing to a convergence of action (Hirshleifer and Teoh, 2003). The animal spirit is the concept that herding term word has been taken from, which is a group of animals heading in a direction.

The behaviour of animals through groups is to avoid the pursuit of predators. Herding is proven to be the most well-known behavioural bias in the capital market (Kumar & Goyal, 2015) both in developed countries such as the US (Hwang & Salmon, 2004), furthermore, is the most prevalent mistake where individuals favour to follow the investment decisions taken by the majority, which clearly point that the influenced by peers is on of the main reasons behind why the individual who believes he must take action facing a strong psychological pressure abstaining him to do so(Scharfstein and Stein, 1990)

The study by Ajaz & Kumar (2018) proved the occurrence of herding on cryptocurrency. By using the CSAD method from the six major cryptocurrency and CCI30 market indexes from August 2015 to January 2018, they prove the existence of herding behaviour in the cryptocurrency market. This behaviour depends on the market activity where when the momentum of price increases investors will buy assets, and vice versa. following the same study Bouri et al., (2018), Poyser (2018), and Vidal-Tomás et al., (2018) declared that findings show that there is herding behaviour in cryptocurrency as evidenced. Herding on bubbles can happen in the Stealth phase. When few individuals start understanding about bitcoins whose prices start to grow, they start purchasing these assets as investment instruments or even speculation by following other individuals' behaviour (follow the crowds). Investment in an asset that is not understood but due to following or being affected by another person indicates a trailing behaviour. Public figures through celebrity endorsement are examples that show the influence of other parties in making decisions (Hasanah, 2017). Complex cryptocurrency technology makes most people not know what is happening. Moreover, as stated by Baur and Dimpfl (2018), there is information imbalance from cryptocurrency trades. There is a "fear of missing out" (FOMO) phenomenon in those who don't have enough information. The action of others who buy Bitcoin is used as a social proof guide by doing the same thing.

2.6.3. Optimism

Optimism bias is the tendency of someone to overestimate the possibility that positive things will happen and underestimate the potential for unpleasant events (Pompian, 2006). Optimistic bias is a false belief that you are less likely to experience negative situations and less likely to experience positive events. will be higher than other people. Emotional bias in the form of optimism influences investment decisions. Jacobsen et al. (2014)

Optimism bias happens in the Awareness stage. that individuals starting to recognise there was a new tool started to bring attention.

2.6.4. Overconfidence

Overconfidence is the belief of a person who thinks he knows better and has better information (Pompian, 2006). In the economic literature, Barber and Odean (2000), Odean (1999) and Barber Odean (2001) found that investors trading too much will experience low

returns even after controlling for tax-loss selling rebalancing and other variables. They concluded in their article Barber and Odean (2001) that this phenomenon of trading too much and earning low returns can be explained by overconfidence.

Overconfidence is often associated with several terms, namely miscalibration, better than average effect, the illusion of control, and unrealistic optimism (M Glaser & Weber, 2007). Some studies have shown that overconfidence is related to investment decisions where someone who is overconfident according to Fischhoff, Slovic, & Lichtenstein (1977) tends to make decisions by weighting excessive valuation on knowledge and information that is owned and ignoring available public information. Barber & Odean (2001) have addressed the illusion of control, the illusion of knowledge, and self-attribute bias as factors that help individuals to be overly confident. According to Barber & Odean (2001) and Odean (1998), people who are overly confident appear to be trading more stocks. Overconfidence is most likely related to risky investments in Bitcoin. According to Xia, Wang, & Li (2014), overconfidence is associated with risky investment behaviour. This result is consistent with the study of Weber & Camerer (1998) and proved that overconfident individuals tend to like dangerous activities.

That overconfident investors tend to overestimate the precision of the information leading them to overestimate their gains which cause them to trade too much and earn lower returns. There is also a link between individualism and overconfidence, which Markus and Kitayama (1991) describe as the tendency of people in “individualistic cultures to think positively about themselves and focus on their own internal attributes, such as their abilities”. Indeed, a large body of psychology literature finds that individualistic cultures people, like the United States, believe that their abilities are above average, unlike people in collectivistic cultures, like Japan (Markus and Kitayama, 1991; Heine et al., 1999). It also suggests that “people in individualistic cultures are likely to be more overconfident about the precision of their information than are people in collectivistic cultures”. In addition, Barber and Odean (2001), Lundeberg, Fox and Puncochar (1994) claim that there exist gender differences in overconfidence bias. Both men and women exhibit the overconfidence bias by trading excessively however, men tend to be more overconfident than women. Women being less overconfident than men can be linked to their risk aversion behaviour in general.

2.6.5. Gambler's Fallacy

Shefrin (2000, p. 254) explained that gambler errors stem from two kinds of confusion. First, people have a very poor intuition about the behaviour of random events. I expect the gambler's error to happen more often than it actually does. The second source of confusion stems from dependence on representation. Most investors are likely to be exposed to the "gambler's error". Some investors may assume that the opportunity is self-correcting. Montier (2003, p. 4) noted that annual returns in the financial markets are examples of the random process of flipping coins.

According to Hirschey and Nofsinger, gamblers' fallacy is a belief that correction will occur in a fair gamble (negative recency effect). On August 18, 1913, players at the Monte Carlo casino lost a lot of money because (mistakenly) that after so many events (black) in a row, a 'correction' would occur which is the fall of the ball in red. But their estimates missed because the ball still fell in black. The study by Xu & Harvey (2014) of 565,915 sports bets conducted by 776 online gamblers in 2010 showed that they experienced gamblers' fallacy.

Gambling errors are false beliefs that affect people's decisions. According to this belief, if something happens more often now, it will not happen more often in the future.

2.6.6. Loss Aversion

Loss avoidance is a bias that was originally explained by prospect theory. Prospect theory is used to explain how people make decisions between different choices or prospects, especially in uncertain conditions. In Prospect Theory, attitudes to profits differ from attitudes to losses in which individuals make decisions based on perceived profits rather than perceived losses. If both selections produce the same, but one is displayed in the profit frame and the other is displayed in the loss frame, the profit frame is selected. It gives the same result, but the emotional impact of the loss is greater than the benefit. People tend to lose more weight than profit. People tend to focus on how much they lose, not how much they receive. Such prejudice manifests itself as an action that can survive as an asset in a lossy position, as it hopes the situation will be profitable. People cannot stand profits, but they want to survive against losses. This phenomenon was first described by Shefrin & Statman (1985), and most people have tended to sell assets that have just provided profits immediately but have observed that they can survive without selling assets in disadvantaged

locations. According to Rau (2014), loss avoidance triggers a foreclosure effect, which keeps stock losses so that investors don't feel sorry.

2.6.7. Regret Biases /Los Aversion

Regret or anticipated regret is one of the factors that are associated with risk-taking in behavioural economics. Regret could lead to either risk aversion or risk-seeking. Inman and Zeelenberg (2002), Zeelenberg et al (1996), Zeelenberg and Beattie (1997) and Zeelenberg (1999) found evidence that supports both risks seeking and risk aversion with regret is involved in decision making. The logic of the dual relationship is that people tend to embark in regret minimizing process whenever a decision has to be made. This regret minimizing theory leads people to either become risk-averse or risk lover. In the regret minimizing-risk maximizing the relationship is established when the individual are asked to how future regret will influence their current decisions (i.e. how would you feel in the future if you made the wrong decision now?). People tend to shield themselves against future regret by avoiding risk now hence opt for the less risky decision. On the other hand, regret could lead to risk-seeking behaviour.

This would happen if the individual is faced with two options or more where one is riskier than the others and there is always feedback on the outcome of the riskier option. Therefore if an individual is faced with two choices where one is riskier than the other, opting for the less risky option leads to regret if the riskier option turned out to be better than the less risky option (Larrick and Boles (1995) and Ritov (1996). However, the anticipated regret will disappear if there is no feedback on what would have been Boles and Messick (1995) and Ritov and Baron (1995).

2.6.8. Anchoring

Hirsheilfer (2001) defines anchoring as "a phenomenon in which agents tend to be excessively influenced in their estimates by an arbitrary quantity mentioned in the formulation of the problem, even when these quantities are clearly meaningless". According (Hadbaa & Boutti, 2019) «it is a mental process by which people give more importance to their previous views or predictions to the detriment of new information» as defined by Edward (1968),. This bias describes the fact that individuals base their estimates on a given problem based on a data taken as reference. Indeed, these individuals overweight past

information to the detriment of recent information. This implies that the weight they assign to past data is too high and that new information cannot have an impact on decision-making. Mussweiler and Strack (2000) addressed the question of the relationship between uncertainty and anchoring phenomena. They said that when uncertain individuals have to analyze a situation, they tend to build their judgment based on familiar reference points.

On the other hand, This bias comes into play when people have to estimate an unknown value or magnitude. Here people start their estimation by guessing some initial value or an “anchor”. This anchor is then adjusted and refined to arrive at the final estimate (Prosad, J. M. 2014). According to Kudryavtsev, A., & Cohen, G. (2011), women exhibit stronger anchoring bias. It might be explained using psychological literature that men tend to think more independently, whereas women are more willing to cooperate and follow the ideas suggested by others.

2.6.9. Representativeness Bias / Rewrite

Representativeness Bias Representative bias occurs when the similarity of objects is confused with the probability of an outcome, meaning people incorrectly believe that two common-sounding events are believed to be more closely correlated than they are.

As stated by (Hadbaa & Boutti , 2019) usually, individuals refer to the complicated condition of decision making to mental shortening rather than carrying out lengthy analytic treatment. Representativeness is the generalization of a situation from a particular known case. Indeed, individuals tend to evaluate the occurrence of a certain future event by the degree to which it resembles a recent observed phenomenon. Kahneman and Tversky (1974) define the basic assumption on which the representativeness heuristic is based: « The agents evaluate the probability of an uncertain event or sample by its degree of similarity between the fundamental properties of the sample and its parent population, and by the way in which it reflects the salient features of the process by which it has been generated».

In other words, if individuals base their decisions on similarities, they diverge from rational reasoning. These authors explain that a person follows the representativeness heuristic if he evaluates the probability of an uncertain event or a sample by the degree to which it is similar in its essential properties to the mother population, and respects the main characteristics of the process by which it is produced. Basically, the representativeness bias

is based on stereotypes to produce irrational opinions quickly (Shefrin, 2005). Based on representativeness, investors tend to overlook the basic probabilities and follow the similarities observed with other typical or representative events. The representativeness heuristic is very important but can nevertheless cause serious bias like the neglect of base rates and of sample size.

2.6.10. Framing Bias/ Rewrite

Framing. Framing is how financial planners and advisors present a financial service or investment product to a client based on specific word association. Roszkowski and Snelbecker (1990) examine the influence of the framing process by comparing the gains and losses of 200 financial planners. Although financial professionals commonly exhibit similar framing effects, they are more conservative in their approach to managing the client's investments than their own money. Planners who select the positive frame in the form of a gain reveal risk-avoidance behaviour; other planners who choose the negative frame in the form of a loss are more inclined to risk-seeking behaviour. **Worry.** Both finance professionals and their clients commonly suffer from worry. Worry reduces past memories and visions of future decisions that change both short- and longterm judgments about investments. Ricciardi (2011) finds that a large majority of investors associate the term "worry" with stocks rather than bonds. A higher degree of worry for a stock increases its perceived risk, lowers the degree of risk tolerance among investors, and decreases the likelihood of owning the investment.

2.6.11. Self-Attribution Bias

Investors who suffer from self-attribution bias tend to attribute successful outcomes to their own actions and bad outcomes to external factors. They often exhibit this bias as a means of self-protection or self-enhancement. Investors afflicted with self-attribution bias may become overconfident, which can lead to overtrading and underperformance. Keeping track of personal mistakes and successes and developing accountability mechanisms such as seeking constructive feedback from others can help investors gain awareness of self-attribution bias.

2.6.12. Availability Bias

Decisions depend on the level of importance of information, investors weigh the information with respect to importance and then make decisions on these assigned weights of information, in this way less return gain but sometimes loss can bear.

2.6.13. Self-control Bias

Self-control bias is something we've all experienced. Just like this woman staring at the candy jar and not being able to eat just one.

Self-control bias is really, in an investing context, an inability to pursue long-term goals, which is most commonly represented by insufficient saving. So if you see on the exam a passage with a 50-year-old who's unable to save, ding ding ding! Self-control bias.

It's also related to this idea, we talked about in Reading 5 around the marginal propensity to consume in which there's this tradeoff between short-term gratification and long-term, less immediate goals. With self-control bias you lean towards making yourself feel good in the now.

Consequences: You might overemphasize income over total return. You might take excessive risks to overcome some of the things you've done, like not save enough, exactly. You mitigate it through budgeting, clearly defined plans, and financial planning.

3. METHODOLOGY

3.1. Introduction

According to Campbell the studies of the financial decisions are hard to implement due to the obstacle that comes across in obtaining reliable data, this is problematic since data surveys jointly rely on individuals' inclination to take apart and on the accuracy of the answers they provide. as mentioned by von Gaudecker (2015), moreover, The problem with the data survey is that the information acquired from surveys tends to be crude. To overcome these problems Campbell (2006) suggests some standards that ought to be achieved by an ideal dataset. For example, reporting of the data must be highly accurate and the sample in the data has to be representative.

The general purpose of this study is to investigate behavioral biases and investors' decision-making process in the case of investment and compare the impact of these biases on senior-level female investors' investment decisions.

In the methodology chapter, we will focus on the methods of data collection, data processing, sampling design, data analysis and research tools related to this study. An in-depth discussion of each element is carried out in the next section.

3.2. Research Design

Quantitative research methods apply to this study, as they can quantify behavior numerically and generalize the results of the sample. To determine the relationship between the dependent and independent variables, the survey is distributed to target respondents. This method allows for collecting data from many participants.

Technical and correlation studies are applied throughout the design of quantitative studies. Descriptive research is often an appropriate way to explain the behavioral patterns of a target group of choice by researchers. moreover, the non-experimental study used to define statistical relationships between variables.

According to behavioral finance, psychology plays a big role in investor behavior and their decisions, the reasons behind irrational decisions is the several psychological factors

that influence the investor's decision the study attempts to identify these factors among senior-level - female investors in Turkey, Pakistan, and Jordan

To date, there are several behavioral biases that have been confirmed by scholars. These biases are classified into different groups. According to one of these categories, there are two groups which are emotional biases and cognitive biases which our study was designed accordingly. and tries to explain the impact of these biases in the decision-making process. **Dependent** variables are emotional and cognitive biases, **Independent** variables are senior women from Turkey, Pakistan, and Jordan.

3.3. Data Collection Method

Deciding the tool of data collection depends on many circumstances like the availability of facilities, the degree of needed accuracy, the researcher's expertise, the time frame for the study, and the availability of costs and resources to conduct the data collection process.

The method of data collection used in this study is face-to-face questionnaire distribution to targeted respondents. The survey will be conducted based on a random sampling method. The targeted respondents are women senior managers working in the export position in Turkey, Pakistan, and the Jordanian market. Questions will be asked to ensure the respondents are at a senior level and still involved in the market. To avoid interface, a short briefing or explanation will be given before the respondents fill up the survey form. Each set of questionnaires will take around 8 minutes. The data collection process is on a volunteer basis.

3.4. Sampling Design

3.4.1. Target Populations

The targeted population in this study is senior-level women working in an international Trade position from Turkish Pakistan and Jordan markets.

3.4.2. Sampling Frame and Sampling Locations

The sampling locations of this study are Turkey, Pakistan, and Jordan. The study population included 150 respondents working in the import and export field, Turkish Pakistani and Jordanian market. 150 questionnaires will be distributed among participants face to face interview.

3.4.3. Sampling Element

Sampling Technique

In the process of data collection. Simple random sampling is a technique of sampling that every sample has an equal probability or chance of being chosen from the population. It is easy to be conducted and has a high level of accuracy at the same time (Saunders, Lewis & Thornhill, 2012). Moreover, this method is suitable to be applied when the sampling size is over a hundred.

The sampling location should be expanded so that the data accuracy increases. Besides that, the targeted respondent should not only focus on one market. Other market participants such as the Automotive market Medical market should be involved so that they are able to provide a more complete view of the women's Decision-makers. The study is based on a sample of 150 respondents from 150 company/organization.

3.5. Hypothesis Research Questions

Behavioral finance is about understanding how people make decisions, both individually and collectively. By understanding the behavior of individuals in the market, you can modify or adapt these behaviors to improve economic outcomes. In other words, the way an investor thinks and feels affects the way they act when making investment decisions. Some of these actions are unconsciously influenced by past experiences and personal beliefs. Even intelligent investors can be free from logic and reason.

Emotional and cognitive biases work when investors make investment decisions. This study demonstrates the impact of these biases on the decision-making process and decision outcomes of individual investors and examines the relationship between the effects of these

biases and senior-level women from Turkey, Jordan, and Pakistan. The main hypotheses of the study are:

H1: There is a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making.

H2: There is a relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making.

And accordingly, the research's questions are as below:

H1: There is a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making?

H2: There is a relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making?

3.6. Measurement and Questionnaires

The main part of this study is to measure the cognitive and emotional biases through two parts, the demographic questions are the first part and in the second part we measured the financial biases, These biases were assessed by 28 questions.

Emotional biases were covered by three dimensions which were over-optimism, loss averse, and regret and pride. Over-optimism bias was measured by 2 items, loss-averse bias was measured by 4 items, pride and regret bias was covered by 3 items. And cognitive biases were covered by 10 dimensions which were herding, hindsight, overconfidence, self-attribution, representativeness, conservatism, gamble fallacy, familiarity, considering the past, and confirmation. Herding bias was covered by 2 items, hindsight bias was measured by 1 item, overconfidence bias was measured by 3 items, self-attribution bias was measured by 2 items, representativeness bias was covered by 2 items, conservatism bias was covered by 4 items, gamble fallacy bias was covered by 1 item, familiarity bias was covered by 2 items, considering the past was measured by 1 item, and confirmation bias was covered by 1 item.

Likert Scale is applied in the data measurement of this study. It proposes a variety of choices, which from strongly disagree to strongly agree for respondents. Five-point Likert

Scale is applied in the answers option of every question. Table,,,,, shows the answer to the options. According to Finstad (2010), a five-point Likert Scale is fitting for large respondents which are more than 100. Therefore, the time consuming for respondents to a full-up questionnaire will diminish.

Participants were asked to choose the appropriate option among the five scales (strongly agree, agree, undecided, disagree, and strongly disagree).



4. DATA ANALYSIS AND IMPLICATION

4.1. Data Analysis and Implication

This study aims to explore the impact of behavioral biases on Senior-level women's decision-making in Turkey, Pakistan, and Jordan. Hitherto, the findings of the study are analyzed in this chapter.

Descriptive analysis is a process that transforms raw data into a form for readers for better understanding and the author for characterized and summarized. The data can be converted by a common descriptive technique such as calculating the average, percentage and frequency distribution. After data collection,

Collected data were analyzed by the Statistical Package for Social Scientist (SPSS). The data which were collected by the questionnaire divided into three sections which were demographic and personal information, investors' financial profile, and behavioral biases. Descriptive statistics were used to analyze demographic and personal information and financial profile information, and independence t-test was used to test

4.2. Demographic and Personal Information

Respondents' demographics and personal information include 15 questions about respondents' age, marital status, education level, job status, income type, residence, family income, monthly average income, and family average monthly. Income, monthly savings, economic status. I have a table that shows statistical data about demographics and personal information. This table includes the frequency, percentage, effective percentage, and cumulative percentage.

4.2.1. Gender of Respondents

Table 4.1. The population of respondents by gender is 100% of respondents are female.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	pakistan	50	100,0	100,0	100,0
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	pakistan	50	100,0	100,0	100,0
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Turkey	50	100,0	100,0	100,0

4.2.2. Age of Respondents

The study findings between Pakistani, Jordanian and Turkish participants showed The followings:

For the pakistani participant the majority (68 %) indicated that their age bracket was between 33 and 42 years. Analysis of findings also indicated that 26% of the respondents were between the age of 23 and 32 years of age,4.% were between 53 and 62 years, while the remaining 1% were between 43 and 52 years.

For Jordanian participants showed that the majority (58 %) indicated that their age bracket was between 33 and 42 years. Analysis of findings also indicated that 16% of the respondents were between the age of 43 and 52 years of age,16.% were between 53 and 62 years, while the remaining 10% were between 23 and 32 years.

And for Turkish participants showed that the majority 66 % indicated that their age bracket was between 43 and 52 years. Analysis of findings also indicated that 18% of the respondents were between the age of 23 and 32 years of age.

The finding, therefore, implies that the respondents were old enough to provide valuable responses that pertain to the effects of behavioral factors on investor choice.

Table 4.2. Participant age.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23 - 32	13	26,0	26,0	26,0
	33 - 42	34	68,0	68,0	94,0
	43 - 52	1	2,0	2,0	96,0
	53 - 62	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23 - 32	5	10,0	10,0	10,0
	33 - 42	29	58,0	58,0	68,0
	43 - 52	8	16,0	16,0	84,0
	53 - 62	8	16,0	16,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23 - 32	8	16,0	16,0	16,0
	33 - 42	33	66,0	66,0	82,0
	43 - 52	9	18,0	18,0	100,0
	Total	50	100,0	100,0	

4.2.3. The Marital Status

The table displays demographic information according to the marital status of the respondents.

Table 4.3. Marital status of participant.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	43	86,0	86,0	86,0
	single	7	14,0	14,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	31	62,0	62,0	62,0
	single	19	38,0	38,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	married	30	60,0	60,0	60,0
	single	20	40,0	40,0	100,0
	Total	50	100,0	100,0	

4.2.4. Respondents' Education Level

Table (4) shows four classifications to determine the education level for respondents. As the table shows for pakistani respondents 96% of respondents' education level is Bachelor degree, 4.% of them have a master degree. In the other hand the table shows that Jordanian respondents 88% have bachelor, 12.% have master degree and For Turkish Respondents the table shows 94% have bachelor, 6.% have a master degree.

Table 4.4. Education level of participant.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	48	96,0	96,0	96,0
	master	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	44	88,0	88,0	88,0
	master	6	12,0	12,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor	47	94,0	94,0	94,0
	master	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

4.2.5. Respondents' Job Groups

The job groups of respondents are shown in table 5. As table shows, respondents pakistan 96%(48) are private sector employee, 4%(2) have own business, in the other hand the respondents form Jordan 96%(48) are private sector employee, 4%(2) have own business, and the respondents from Turkey 100%(50) are private sector employee, and as the tables shows that the valid are 100%(150) From 150

Table 4.5. Job.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	private sector employee	48	96,0	96,0	96,0
	own business	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	private sector employee	50	100,0	100,0	100,0

4.2.6. Respondents' Type of Income

Table (6) shows the respondents income type, for the pakistani respondents 96%(48) of them have a regular income, 4%(2) of them have irregular income whereas for the jordanian 86%(43) of them have regular income and 14%(7) have irregular income, but from the turkish respondents 86%(43) of them have regular income and 14%(7) have irregular income.

The validity is 100% (150) from 150.

Table 4.6. Do you have regular income.

/pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes i have regular income	48	96,0	96,0	96,0
	no have irregular income	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes i have regular income	43	86,0	86,0	86,0
	no have irregular income	7	14,0	14,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes i have regular income	43	86,0	86,0	86,0
	no have irregular income	7	14,0	14,0	100,0
	Total	50	100,0	100,0	

4.2.7. The Average of Monthly Income

Table (7) showed the average of respondent's monthly income, and the valid responses were 100% (150). From 150 respondents the average of monthly income for Pakistani respondents is 68%(34) of them is between 701 - 1200 for 10%(5) of them is between 500 and 700, for 10%(5) of them is between 1701 - 2000, for 8%(4) of them is between 1201 - 1700, and for 4%(2) of them is 2000 and more.

The average of monthly income for Jordanian respondents is 72%(36) of them is between 701 - 1200 for 14%(4) of them is between 1201 - 1700, for 4%(2) of them is between 1701 - 2000 , and for 10%(5) of them is 2000 and more.

And the average monthly income for Turkish respondents is 50%(25) of them is between 500 and 700 for 44%(22) of them is between 701 - 1200, for 6%(3) of them is between 1701 - 2000.

Table 4.7. The average of your monthly income.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500 - 700	5	10,0	10,0	10,0
	701 - 1200	34	68,0	68,0	78,0
	1201 - 1700	4	8,0	8,0	86,0
	1701 - 2000	5	10,0	10,0	96,0
	2000 or more	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	701 - 1200	36	72,0	72,0	72,0
	1201 - 1700	7	14,0	14,0	86,0
	1701 - 2000	2	4,0	4,0	90,0
	2000 or more	5	10,0	10,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	500 - 700	25	50,0	50,0	50,0
	701 - 1200	22	44,0	44,0	94,0
	1701 - 2000	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

4.2.8. The Average of Family Monthly Income

Table (8) showed the average of the family monthly income, and the valid responses were 100% (150). From 150 respondents the average of monthly income for Pakistani respondents 36%(18) of them is between 1701 - 2000, for 34%(17) of them is between 2001 - 3000, for 16%(8) of them is between 1201 - 1700, for 10%(5) of them is between 701 - 1200, and for 4%(2) of them is 3000 or more. In the other hand the finding for Jordanian respondents 32%(16) of them is between 1701 - 2000, for 48%(24) of them is between 2001 - 3000, for 8%(4) of them is between 1201 - 1700, and for 12%(6) of them is 3000 or more. And for Turkish respondents 24%(12) of them is between 701 - 1200, for 30%(15) of them is between 1201 - 1700, for 30%(15) of them is between 1701 - 2000, and for 16%(8) of them is 2001 - 3000.

Table 4.8. The average of monthly income in your family.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	701 - 1200	5	10,0	10,0	10,0
	1201 - 1700	8	16,0	16,0	26,0
	1701 - 2000	18	36,0	36,0	62,0
	2001 - 3000	17	34,0	34,0	96,0
	3000 or more	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1201 - 1700	4	8,0	8,0	8,0
	1701 - 2000	16	32,0	32,0	40,0
	2001 - 3000	24	48,0	48,0	88,0
	3000 or more	6	12,0	12,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	701 - 1200	12	24,0	24,0	24,0
	1201 - 1700	15	30,0	30,0	54,0
	1701 - 2000	15	30,0	30,0	84,0
	2001 - 3000	8	16,0	16,0	100,0
	Total	50	100,0	100,0	

4.2.9. Respondent's Saving

The validity for this question was 100% - 150 from 150, 146 from the total respondents answered yes and just 4 of them from the pakistan respondents answering no/ do not save money

Table 4.9. Do you save money.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	46	92,0	92,0	92,0
	no	4	8,0	8,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	50	100,0	100,0	100,0
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	50	100,0	100,0	100,0

4.2.10. Respondents' Saving Amount

Table (10) shown The respondents monthly saving amount, From the pakistani respondents the finding showed that the average of monthly save for 30%(15) of them is between 250 or less, for 20%(10) of them is between 205 - 50, for 30%(15) of them is between 501 - 750, for.2%(1) of them is between 751 - 1000, and for 18%(9) of them is 1001 and more. And the findings for jordanian respondents showed that the average of monthly save for 2%(1) of them is between 250 or less, for 12%(6) of them is between 205 - 50, for 2 %(5) of them is between 501 - 750, for.52%(26) of them is between 751 - 1000, and for 32%(16) of them is 1001 and more

Table 4.10. If you answer yes to above question how much your monthly saving

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	250 or less	15	30,0	30,0	30,0
	205 - 500	10	20,0	20,0	50,0
	501 - 750	15	30,0	30,0	80,0
	751 - 1000	1	2,0	2,0	82,0
	1001 and more	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	250 or less	1	2,0	2,0	2,0
	205 - 500	6	12,0	12,0	14,0
	501 - 750	1	2,0	2,0	16,0
	751 - 1000	26	52,0	52,0	68,0
	1001 and more	16	32,0	32,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	250 or less	21	42,0	42,0	42,0
	205 - 500	10	20,0	20,0	62,0
	501 - 750	13	26,0	26,0	88,0
	751 - 1000	1	2,0	2,0	90,0
	1001 and more	5	10,0	10,0	100,0
	Total	50	100,0	100,0	

4.2.11. Economic Status of Respondents.

The economic status of respondents is shown in table (11). As the table shows the valid responses are 100%(150). From 150 respondents, the economic status for 39,333%(59) is not satisfactory, for 1,333%(2) is not satisfactory, not unsatisfactory, for 59,333%(92) of them is satisfactory.

Table 4.11. How do you evaluate your economic situation.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not satisfactory	17	34,0	34,0	34,0
	not satisfactory not unsatisfactory	2	4,0	4,0	38,0
	satisfactory	31	62,0	62,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not satisfactory	8	16,0	16,0	16,0
	satisfactory	42	84,0	84,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not satisfactory	34	68,0	68,0	68,0
	satisfactory	16	32,0	32,0	100,0
	Total	50	100,0	100,0	

4.3. Respondents Financial Profiles

The information about respondents' financial profiles was collected by 11 questions.

4.3.1. The Preferences of Investment Assets

According to our findings the chart shown the investment assets are preferred by respondents, the most preferred investment instrument is gold with 39,33% (59) referencement percent, real estate with 32,33% (48) , bank deposit with 14 % (21), foreign currency with 14,66%(22), other option there were no respondents.

Table 4.12. Which of the following investment types do you prefer besides stock? you can have several choices.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bank Deposit	2	4,0	4,0	4,0
	Foreign currency	8	16,0	16,0	20,0
	Gold	31	62,0	62,0	82,0
	Estate	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bank Deposit	5	10,0	10,0	10,0
	Gold	21	42,0	42,0	52,0
	Estate	24	48,0	48,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bank Deposit	14	28,0	28,0	28,0
	Foreign currency	14	28,0	28,0	56,0
	Gold	7	14,0	14,0	70,0
	Estate	15	30,0	30,0	100,0
	Total	50	100,0	100,0	

4.3.2. The Financial Assets With the Highest Return in Long Time Periods

Table 4.13. Which asset normally gives the highest return when it is considered that an investment has been made for a long period of time?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Real estate	36	72,0	72,0	72,0
	Glod	7	14,0	14,0	86,0
	i do not know	7	14,0	14,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Real estate	44	88,0	88,0	88,0
	Glod	6	12,0	12,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Real estate	46	92,0	92,0	92,0
	Glod	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

4.3.3. Respondents Financial and Investment Knowledge

Regarding the respondent's description of themselves, the Table (14) shows that the valid responses are 100%(150). As the table shows from 150 respondents, from the pakistani respondents 4%(2) of them are finance or banking professionals, 68%(34) of them are individual investors receiving professional help, and 28%(14) of them are individual investors without receiving professional help, in the other hand from the jordanian respondents 16%(8) of them are finance or banking professionals, 10%(5) of them are individual investors receiving professional help, and 74%(37) of them are individual investors without receiving professional help.

Table 4.14. Which of the following phrases describe you most accurately as an investor?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	finance or banking professional	2	4,0	4,0	4,0
	individual investor receiving professional help	34	68,0	68,0	72,0
	an individual investor without receiving professional help	14	28,0	28,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	finance or banking professional	8	16,0	16,0	16,0
	individual investor receiving professional help	5	10,0	10,0	26,0
	an individual investor without receiving professional help	37	74,0	74,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Real estate	46	92,0	92,0	92,0
	Glod	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

4.3.4. The Respondents' Portfolio Size

The table (14) shows the portfolio size of respondents for the valid responses to the question “Do you create a portfolio from your investments? (Do you invest in more than one investment tools)” are for pakistani respondents. 20%(10) of respondents make a portfolio

and 80%(40) of them do not make a portfolio. Out of 50 respondents that make a portfolio 22.%(11) of them have a portfolio containing 2 assets, 2%(1) of them have a portfolio containing 3 assets, 76% (83) of missing values.

For jordanian respondents. 280%(14) of respondents make a portfolio and 72%(63) of them do not make a portfolio. Out of 50 respondents that make a portfolio 30.%(15) of them have a portfolio containing 2 assets, 70% (35) of missing values

For Turkish respondents. 16%(8) of respondents make a portfolio and 84%(42) of them do not make a portfolio. Out of 50 respondents that make a portfolio 16.%(8) of them have a portfolio containing 2 assets, 2%(1) of them have a portfolio containing 3 assets, 82% (41) of missing values.

Table 4.15. Do you make a portfolio from your investments? Do you invest in more than one investment tool?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	10	20,0	20,0	20,0
	no	40	80,0	80,0	100,0
	Total	50	100,0	100,0	
Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	11	22,0	91,7	91,7
	3	1	2,0	8,3	100,0
	Total	12	24,0	100,0	
Missing	System	38	76,0		
Total		50	100,0		
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	14	28,0	28,0	28,0
	no	36	72,0	72,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	15	30,0	100,0	100,0
Missing	System	35	70,0		
Total		50	100,0		
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	8	16,0	16,0	16,0
	no	42	84,0	84,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	8	16,0	88,9	88,9
	3	1	2,0	11,1	100,0
	Total	9	18,0	100,0	
Missing	System	41	82,0		
Total		50	100,0		

4.3.6. Following the Financial Market Development

Table (16) shows how often the respondents follow the financial market's development. The table shows the valid responses are 100%(150),. From 150 response, from pakistani respondents 6.%(3) of them do not follow the financial market development,50%(25.) of them follow daily, 14%(7) of them follow weekly, 30%(15) follows monthly, and 0%(0) follows the development of the financial market yearly.

In the other hand the answers from jordanian respondents was 18.%(9) of them do not follow the financial market development,28%(14) of them follow daily, 28%(14) of them follow weekly, 26%(13) follows monthly, and 0%(0) follows the development of the financial market yearly.

For turkish respondents 24%(12) of them do not follow the financial market development,10%(5.) of them follow daily, 42%(21) of them follow weekly, 22%(11) follows monthly, and 2%(1) follows the development of the financial market yearly.

Table 4.16. How often do you follow the profit/loss situation in your investments?/pakistan

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i don't follow	3	6,0	6,0	6,0
	daily	25	50,0	50,0	56,0
	weekly	7	14,0	14,0	70,0
	monthly	15	30,0	30,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i don't follow	9	18,0	18,0	18,0
	daily	14	28,0	28,0	46,0
	weekly	14	28,0	28,0	74,0
	monthly	13	26,0	26,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i don't follow	12	24,0	24,0	24,0
	daily	5	10,0	10,0	34,0
	weekly	21	42,0	42,0	76,0
	monthly	11	22,0	22,0	98,0
	yearly	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

4.3.7. Information Resources

The information resources that respondents use when they want to make investment decisions are shown in the chart (1) for pakistani respondents. As the chart shows the percentage of using newspaper among respondents is 0%, TV is 2%, internet is 2%, investment expert opinion is 12%, company's reports and explanation is 0%, their own analyses is 22%, social environment advances is 60% and other resources is 2%.

In chart (2) for Jordanian respondents. As the chart shows the percentage of using newspaper among respondents is 6%, TV is 0%, internet is 30%, investment expert opinion is 30%, company's reports and explanation is 0%, their own analyses is 16%, social environment advances is 20% and other resources is 12%.

In chart (3) for Turkish respondents. As the chart shows the percentage of using newspaper among respondents is 4%, TV is 2%, internet is 12%, investment expert opinion is 16%, company's reports and explanation is 0%, their own analyses is 28%, social environment advances is 32% and other resources is 6%.

4.3.8. Respondents' Expectation of Making a New Investment Decision

Respondents' most basic expectation when making a new investment decision is shown in table 17. The table shows the valid responses are 100%(150) and the missed responses are 0%(0). From pakistani respondents, 68%(34) of them indicated to high return as the biggest expectations in investments, whereas 8%(4) of them indicated capital maintenance, 0%(0) of them indicated to perpetual annuity, 14%(7) of them indicated to reduction of portfolio risk, and 10%(5) indicated to "other" option.

From Jordanian respondents, 32%(16) of them indicated to high return as the biggest expectations in investments, whereas 6%(2) of them indicated capital maintenance, 0%(0) of them indicated to perpetual annuity, 58%(29) of them indicated to reduction of portfolio risk, and 4%(2) indicated to "other" option.

From pakistani respondents, 64%(32) of them indicated to high return as the biggest expectations in investments, whereas 4%(2) of them indicated capital maintenance, 0%(0) of them indicated to perpetual annuity, 32%(16) of them indicated to reduction of portfolio risk, and 0%(0) indicated to "other" option.

Table 4.17. What is your most important expectation when making a new investment decision?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high return	34	68,0	68,0	68,0
	capital maintenance	4	8,0	8,0	76,0
	reduction of portfolio risk	7	14,0	14,0	90,0
	other	5	10,0	10,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high return	16	32,0	32,0	32,0
	capital maintenance	3	6,0	6,0	38,0
	reduction of portfolio	29	58,0	58,0	96,0
	other	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high return	32	64,0	64,0	64,0
	capital maintenance	2	4,0	4,0	68,0
	reduction of portfolio risk	16	32,0	32,0	100,0
	Total	50	100,0	100,0	

4.3.9. The Most Important Factor for High Return in Investment

Table 18 shows the options that are required for the high return on investments. As the table shows the valid responses are 100%(150). From 150 respondents, the finding from pakistani respondents was 60%(30) of them indicated to information as the most important factor to receive high return on investments, 10.%(5) of them indicated to experience, 0%(0) of them indicated risk-taking, 6.%(3) of them select walk on eggshells (act cautiously) option, and 24%(12) of them indicate chance.

In the other hand the the finding from Jordanian respondents was 22%(11) of them indicated to information as the most important factor to receive high return on investments, 46.%(23) of them indicated to experience, 28%(14) of them indicated risk-taking, 0%(0) of them select walk on eggshells (act cautiously) option, and 4%(22) of them indicate chance.

And the finding from Turkish respondents was 40%(20) of them indicated to information as the most important factor to receive high return on investments, 32.%(16) of

them indicated to experience, 8%(40) of them indicated risk-taking, 6.%(3) of them select walk on eggshells (act cautiously) option, and 20%(10) of them indicate chance.

Table 4.18. What is the most important factor of the basic factors required for high return in investment?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	information	30	60,0	60,0	60,0
	experience	5	10,0	10,0	70,0
	walk on eggshells (act cautiously)	3	6,0	6,0	76,0
	chance	12	24,0	24,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	information	11	22,0	22,0	22,0
	experience	23	46,0	46,0	68,0
	risk taking	14	28,0	28,0	96,0
	chance	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	information	20	40,0	40,0	40,0
	experience	16	32,0	32,0	72,0
	risk taking	4	8,0	8,0	80,0
	chance	10	20,0	20,0	100,0
	Total	50	100,0	100,0	

4.3.10. Respondents' Comparison of Themselves with Other Investors

Table 19 Shows how respondents find themselves in investment decisions than other investors. As the table shows the valid responses are 100%(150). From 150 respondents, the finding from pakistani respondents was 70%(35) of them asserted they are better than average, 8%(4) of them asserted they are at average level, 8%(4) of them asserted they are worse than average, and 8%(4) of them did not have any idea.

The finding from jordanian respondents was 18%(9) of them asserted they are better than average, 14%(7) of them asserted they are at average level, 66%(4) of them asserted they are worse than average, and 2%(1) of them did not have any idea.

The finding from Jordanian respondents was 54%(27) of them asserted they are better than average, 20%(10) of them asserted they are at average level, 10%(5) of them asserted they are worse than average, and 16%(8) of them did not have any idea.

Table 4.19. How do you find yourself in your investment decision success than other investors ?

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i am better than average	35	70,0	70,0	70,0
	average level	4	8,0	8,0	78,0
	am worse than average	4	8,0	8,0	86,0
	no idea	7	14,0	14,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i am better than average	9	18,0	18,0	18,0
	average level	7	14,0	14,0	32,0
	i am worse than average	33	66,0	66,0	98,0
	no idea	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	i am better than average	27	54,0	54,0	54,0
	average level	10	20,0	20,0	74,0
	i am worse than average	5	10,0	10,0	84,0
	no idea	8	16,0	16,0	100,0
	Total	50	100,0	100,0	

4.4. Behavioral Finance Factors Influence Investment Decisions

Behavioral finance factors influence individual investment decisions were divided into two groups which were emotional biases and cognitive biases. Emotional biases were measured by 3 dimensions and the cognitive biases were measured by 10 dimensions. Each dimension was measured by one or more 5likert questions and respondents were asked to indicate the degree of their agreement to the statements.

Table 4.20. Behavioral finance factors.

Behavioral finance	Measurement	Questions
Emotional Biases	Over-optimism	Q25, Q26
	Regret and Pride	Q16,Q22,Q23
	Loss Averse Bias	Q4,Q5,Q6, Q17
Cognitive biases	Herding	Q7, Q13
	Hindsight	Q2
	Overconfidence	Q8,Q15,Q18
	Self-attribution	Q1,Q28
	Representativeness	Q3,Q9
	Conservatism	Q10,Q19,Q20,Q21
	Gamble Fallacy	Q11
	Familiarity	Q12,Q14
	Considering the Past	Q24
	Confirmation	Q27

4.4.1. Emotional Biases

Behavioural finance studies the impact of psychology on investor behaviour. It deals with the impact of emotional factors on individual investment decisions. It also includes subsequent effects on financial markets.

Emotional bias is a bias that arises from an individual's feelings and sources of emotion and influences investment decisions. We chose to measure three dimensions of emotional bias: overly optimistic bias, regret and pride bias, and loss aversion bias. This dimension was measured with 9 5 Likert questions.

4.4.1.1. Over-Optimism Bias

Over-optimism bias influences individual investors' decisions in several ways. Two statements were designed to measure over-optimism influences on decisions. Respondents were asked to indicate the degree of their agreement to the statements. The first statement was “I think the economic growth that will take place in the local and international markets in the coming period will be positive.” As it is shown in table 21 the valid responses to this question are 100%(150). From 150 pakistani respondents, 0%(0) of them strongly agreed, 0%(0) agreed, 22%(11) were undecided, 24%(12) disagreed, and 54%(27) strongly disagreed. For the jordanian respondents, 0%(0) of them strongly agreed, 0%(0) agreed,

0%(0) were undecided, 8%(4) disagreed, and 92%(46) strongly disagreed. On the other hand the turkish respondents, 0%(0) of them strongly agreed, 0%(0) agreed, 0%(00) were undecided, 20%(10) disagreed, and 80%(40) strongly disagreed.

Table 4.21. I think that the economic growth that will take place in the local and international markets in the coming period will be positive.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	undecided	11	22,0	22,0	22,0
	disagree	12	24,0	24,0	46,0
	strongly disagree	27	54,0	54,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	4	8,0	8,0	8,0
	strongly disagree	46	92,0	92,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	10	20,0	20,0	20,0
	strongly disagree	40	80,0	80,0	100,0
	Total	50	100,0	100,0	

The second statement of over-optimism was “I have a strong expectation that my financial investment instruments will gain in the next period”. As is shown in table 21 the valid responses are 100%(150) . From 150 respondents from Pakistan 52%(26) of them strongly agreed, 30%(15) agreed, 18%(9) were undecided, 0%(0) disagreed, and 0%(0) of them strongly disagreed. respondents from Jordan 50%(25) of them strongly agreed, 46%(23) agreed, 4%(2) were undecided, 0%(0) disagreed, and 0%(0) of them strongly disagreed. And for Turkish respondents 50%(25) of them strongly agreed, 36%(18) agreed, 14%(7) were undecided, 0%(0) disagreed, and 0%(0) of them strongly disagreed.

Table 4.22. I have a strong expectation that my financial investment will gain in the next period.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	26	52,0	52,0	52,0
	agree	15	30,0	30,0	82,0
	undecided	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	25	50,0	50,0	50,0
	agree	23	46,0	46,0	96,0
	undecided	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	25	50,0	50,0	50,0
	agree	18	36,0	36,0	86,0
	undecided	7	14,0	14,0	100,0
	Total	50	100,0	100,0	

4.4.1.2. Regret and Pride Bias

Three statements were selected to measure regret and pride bias. The first statement was “In investing subject, not losing value is more important than its gain/return.” Table 22 shows that the valid responses are 100%(150). From 150 responses from Pakistan 0%(0) of them strongly agreed to the statement, 48%(24) agreed, 36%(18) were undecided, 30%(15) disagreed, and 0%(0) strongly disagreed. And the Jordanian response was 0%(0) of them strongly agreed to the statement, 40%(20) agreed, 30%(15) were undecided, 30%(15) disagreed, and 0%(0) strongly disagreed. The Turkish respondents' answers were 0%(0) of them strongly agreed to the statement, 24%(12) agreed, 46%(23) were undecided, 30%(15) disagreed, and 0%(0) strongly disagreed.

Table 4.23. In investing subject not losing value is more important that its gain/return.

pakistn		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	24	48,0	48,0	48,0
	undecided	18	36,0	36,0	84,0
	disagree	8	16,0	16,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	20	40,0	40,0	40,0
	undecided	15	30,0	30,0	70,0
	disagree	15	30,0	30,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	12	24,0	24,0	24,0
	undecided	23	46,0	46,0	70,0
	disagree	15	30,0	30,0	100,0
	Total	50	100,0	100,0	

The second statement of regret and pride bias was **“If I have lost from investment instruments, I sell that instrument as soon as possible.”** Table 23 shows the valid responses are 100%(150) From 150 respondents, pakistani respondents 2%(1) of them strongly agreed, 34%(17) agreed, 0%(0) were undecided, 60%(30) disagreed, and 4%(2) strongly disagreed.

Jordanian respondents is 0%(0) of them strongly agreed, 14%(7) agreed, 0%(0) were undecided, 64%(32) disagreed, and 22%(11) strongly disagreed. And for the Turkish Jordanian respondents is 2%(1) of them strongly agreed, 20%(10) agreed, 0%(0) were undecided, 74%(37) disagreed, and 4%(2) strongly disagreed.

Table 4.24. If lose by my investment instrument i sell that tool as soon as possible.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	1	2,0	2,0	2,0
	agree	17	34,0	34,0	36,0
	disagree	30	60,0	60,0	96,0
	strongly disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	7	14,0	14,0	14,0
	disagree	32	64,0	64,0	78,0
	strongly disagree	11	22,0	22,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	1	2,0	2,0	2,0
	agree	10	20,0	20,0	22,0
	disagree	37	74,0	74,0	96,0
	strongly disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

The last statement about regret and pride bias was “**When I realize the market is going down, I completely deduct/sell the investment instruments.**” Table 24 shows the valid responses are 100%(150. From 150 respondents,from pakistani respondents 2%(1) of them strongly agreed, 52%(26) agreed, 0%(0) were undecided, 42%(21) disagreed,and 4%(2) strongly disagreed. In the other hand the finding of jordanian respondents 22%(11) of them strongly agreed, 48%(26) agreed, 2%(1) were undecided, 26%(13) disagreed,and 2%(1) strongly disagreed. And for the turkish respondents 20%(10) of them strongly agreed, 40%(20) agreed, 0%(0) were undecided, 40%(20) disagreed,and 0%(0) strongly disagreed.

Table 4.25. When i realize that the market is going down i completely deduct/sell the investment instruments.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	1	2,0	2,0	2,0
	agree	26	52,0	52,0	54,0
	disagree	21	42,0	42,0	96,0
	strongly disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	11	22,0	22,0	22,0
	agree	24	48,0	48,0	70,0
	undecided	1	2,0	2,0	72,0
	disagree	13	26,0	26,0	98,0
	strongly disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	10	20,0	20,0	20,0
	agree	20	40,0	40,0	60,0
	disagree	20	40,0	40,0	100,0
	Total	50	100,0	100,0	

4.4.1.3. Loss Averse Bias

The loss averse bias was measured by four statements. The first statement was **“If I have a portfolio of two financial instruments, A and B, I would sell a B product that lost 15% instead of A, which earn 15% of those instruments with the same cost when I needed immediate cash.”** Table 25 shows the valid responses are 100%(150). From 150 respondents for pakistani respondents 24%(12) of them strongly agreed, 60%(30) agreed, 16%(8) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed. And the jordanian response was 10%(5) of them strongly agreed, 90%(40) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed. in the other hand the turkish senior-women response was And the jordanian response was 28%(14) of them strongly agreed, 62%(31) agreed, 8%(4) were undecided, 2%(1) disagreed, and 0%(0) strongly disagreed.

Table 4.26. If I have a portfolio of two financial instruments A and B I would sell a B product that lost 15% instead of A which earn 15% of those instrument with the same cost when i needed immediate cash.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	24,0	24,0	24,0
	agree	30	60,0	60,0	84,0
	undecided	8	16,0	16,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	10,0	10,0	10,0
	agree	45	90,0	90,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	14	28,0	28,0	28,0
	agree	31	62,0	62,0	90,0
	undecided	4	8,0	8,0	98,0
	disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

The second statement of loss averse bias was “**I prefer low risk / low return investment instruments more than high risk / high return investment instruments.**” Table 26 shows the valid responses are 100%(1505). From 150 respondents from pakistani respondents 35.1%(142) of them strongly agreed, 25.2%(102) agreed, 11.6%(47) were undecided, 21.7%(88) disagreed, and 6.4%(26) strongly disagreed. Data show 60.2%(244) of respondents agreed when 28.1%(114) of them disagreed.

Table 4.27. I prefer low risk / low return investment instruments more than high risk / high return investment instrument.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	36	72,0	72,0	72,0
	agree	6	12,0	12,0	84,0
	undecided	7	14,0	14,0	98,0
	disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	26	52,0	52,0	52,0
	agree	13	26,0	26,0	78,0
	undecided	1	2,0	2,0	80,0
	disagree	10	20,0	20,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	26	52,0	52,0	52,0
	agree	15	30,0	30,0	82,0
	undecided	5	10,0	10,0	92,0
	disagree	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

The **third statement** about loss averse was “**Low risk is the most fundamental factor I consider when I choose an investment instrument.**” Table 26 shows the valid responses are 100%(150). As is shown in the table from 150 respondents, Regarding respondents from pakistan they had 70.0%(35) of them strongly agreed, 26%(13) agreed, 0%(0) were undecided, 4%(2)disagreed, and 0%(0) strongly disagreed. And for the jordanian respondens 36%(18) of them strongly agreed, 56%(28) agreed, 2%(1) were undecided, 6%(3)disagreed, and 0%(0) strongly disagreed, in the other hand the turkish response was 46%(23) of them strongly agreed, 44%(22) agreed, 4%(2) were undecided, 6%(3)disagreed, and 0%(0) strongly disagreed

Data show about 56.3%(228) of respondents agreed and about 32.4%(131) of them disagreed.

Table 4.28. Low risk is the most fundamental factor i consider when i choose an investment instrument.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	35	70,0	70,0	70,0
	agree	13	26,0	26,0	96,0
	disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	18	36,0	36,0	36,0
	agree	28	56,0	56,0	92,0
	undecided	1	2,0	2,0	94,0
	disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	23	46,0	46,0	46,0
	agree	22	44,0	44,0	90,0
	undecided	2	4,0	4,0	94,0
	disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

The fourth statement about loss averse was “**The sadness I feel in my investments when I lose is more effective than the joy I feel when I win.**” Table 29 shows the valid responses are 100%(150). The table shows from 150 respondents. For respondents from pakistan 34%(17) of them strongly agreed, 46%(23) agreed, 0%(0) were undecided, 20%(10) disagreed, and 0%(0) strongly disagreed. In the other hand the jordanian 22%(11) of them strongly agreed, 44%(22) agreed, 0%(0) were undecided, 34%(17) disagreed, and 0%(0) strongly disagreed. And for the turkish respondents 16%(8) of them strongly agreed, 44%(22) agreed, 0%(0) were undecided, 38%(19) disagreed, and 2%(1) strongly disagreed.

Table 4.29. The sadness i feel in my investments when i lose is more effective than the joy i feel when i win.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	34,0	34,0	34,0
	agree	23	46,0	46,0	80,0
	disagree	10	20,0	20,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	11	22,0	22,0	22,0
	agree	22	44,0	44,0	66,0
	disagree	17	34,0	34,0	100,0
	Total	50	100,0	100,0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	16,0	16,0	16,0
	agree	22	44,0	44,0	60,0
	disagree	19	38,0	38,0	98,0
	strongly disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

4.4.2. Cognitive Biases

Cognitive biases can influence various steps or stages of general decision-making, and depending on the type of information processing, different forms of bias may influence decision- making process. Here, in this study 10 factors of cognitive biases were selected to study their impacts on individuals' decision-making.

4.4.2.1. Herding Bias

Herding bias is the behavior of following other. Individual investors show this behavior when they make an investment decision by following other investors' investment decisions. To measure herding bias 2 statements were selected. The first statement was “**The investment decisions of people I communicate with, are influential on my investment decisions.**” Table 29 shows the valid responses are 100%(150). From 150 respondents, respondents from pakistan have 34.0%(17) of them strongly agreed to the statement, 38%(19) agreed, 4%(2) were undecided, 18%(9) disagreed, and 6%(3) strongly disagreed.

Also for the Jordanian respondents have 6%(3) of them strongly agreed to the statement, 48%(24) agreed, 0%(0) were undecided, 20%(10) disagreed, and 26%(23) strongly disagreed. And the finding from Turkish respondents 20%(10) of them strongly agreed to the statement, 56%(28) agreed, 0%(0) were undecided, 24%(12) disagreed, and 0%(0) strongly disagreed.

Table 4.30. The investment decisions of people i communicate with are influential in my investment decisions.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	34,0	34,0	34,0
	agree	19	38,0	38,0	72,0
	undecided	2	4,0	4,0	76,0
	disagree	9	18,0	18,0	94,0
	strongly disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	3	6,0	6,0	6,0
	agree	24	48,0	48,0	54,0
	disagree	10	20,0	20,0	74,0
	strongly disagree	13	26,0	26,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	10	20,0	20,0	20,0
	agree	28	56,0	56,0	76,0
	disagree	12	24,0	24,0	100,0
	Total	50	100,0	100,0	

The **second statement** about herding was “The preferences of other investors in The market are important to me and I follow them in my investment decisions.” According to table 31, the valid responses are 100%(150). From 150 respondents, from Pakistani respondents 42%(21) of them strongly agreed, 54%(27) agreed, 4%(2) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed. In the other hand the Jordanian respondents finding showed 56%(28) of them strongly agreed, 40%(20) agreed, 2%(1) were undecided, 2%(1) disagreed, and 0%(0) strongly disagreed. And the finding from Turkish respondents showed 40%(20) of them strongly agreed, 54%(27) agreed, 4%(2) were undecided, 2%(1) disagreed, and 0%(0) strongly disagreed.



Data show that about 69.4%(281) of respondents agreed when 17.3%(70) of them disagreed.

Table 4.31. The preferences of other investors in the market are important to me and i follow them in my investment decisions.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	42,0	42,0	42,0
	agree	27	54,0	54,0	96,0
	undecided	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	28	56,0	56,0	56,0
	agree	20	40,0	40,0	96,0
	undecided	1	2,0	2,0	98,0
	disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40,0	40,0	40,0
	agree	27	54,0	54,0	94,0
	undecided	2	4,0	4,0	98,0
	disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

4.4.2.2. Hindsight Bias

Hindsight bias was measured by one question. The statement about hindsight bias was **“I have this belief that I have known the performance of the financial investment instruments of past period, before that period.”** As table 30 shows the valid responses are 100%(405). Table shows from 405 respondents about 34.3%(139) of them strongly agreed to the statement, 50.6%(205) agreed, 12.1%(49) were undecided, 2.2%(9) disagreed, and 0.7%(3) strongly disagreed. Data show that about 84.9%(344) of respondents agreed when 2.9%(12) of them disagreed.

Table 4.32. I have this belief that i have known the performance of the financial investment instruments of past period before that period.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	50	100,0	100,0	100,0
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	50	100,0	100,0	100,0
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	50	100,0	100,0	100,0

4.4.2.3. Overconfidence Bias

Overconfidence bias was measured by 3 questions. The first item was “**I think my information is more valuable than the information of other investors during the finance investments.**” Table 33 shows the valid responses are 100%(150). From 150 respondents. Pakistanian respondents about 2%(1) of them strongly agreed, 46%(23) agreed, 0%(0) were undecided, 50%(254) disagreed, and 2%(1) strongly disagreed. The finding after jordanian respondents 6%(3) of them strongly agreed, 20%(10) agreed, 8%(4) were undecided, 62%(31) disagreed, and 4%(2) strongly disagreed. And the finding from turish respondents 6%(3) of them strongly agreed, 18%(9) agreed, 0%(0) were undecided, 66%(33) disagreed, and 10%(5) strongly disagreed.

Table 4.33. I think that my information is more valuable than the information of other investors during the finance investments.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	1	2,0	2,0	2,0
	agree	23	46,0	46,0	48,0
	disagree	25	50,0	50,0	98,0
	strongly disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	3	6,0	6,0	6,0
	agree	10	20,0	20,0	26,0
	undecided	4	8,0	8,0	34,0
	disagree	31	62,0	62,0	96,0
	strongly disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	3	6,0	6,0	6,0
	agree	9	18,0	18,0	24,0
	disagree	33	66,0	66,0	90,0
	strongly disagree	5	10,0	10,0	100,0
	Total	50	100,0	100,0	

The **second statement about overconfidence** was “**I am completely self-reliant in making right decisions about my financial investment instruments.**” As table 34 shows the valid responses are 100%(150). From 150, pakistani respondents about 24%(12) of them strongly agreed, 26%(23) agreed, 0%(0) were undecided, 50%(25) disagreed, and 0%(0) strongly disagreed. jordanian respondents found 40%(20) of them strongly agreed, 42%(21) agreed, 0%(0) were undecided, 18%(9) disagreed, and 0%(0) strongly disagreed. Turkish respondents about 304%(15) of them strongly agreed, 50%(25) agreed, 0%(0) were undecided, 20%(10) disagreed, and 0%(0) strongly disagreed.

Table 4.34. I am completely self reliant in making right decisions about my financial investments.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	24,0	24,0	24,0
	agree	13	26,0	26,0	50,0
	disagree	25	50,0	50,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40,0	40,0	40,0
	agree	21	42,0	42,0	82,0
	disagree	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	30,0	30,0	30,0
	agree	25	50,0	50,0	80,0
	disagree	10	20,0	20,0	100,0
	Total	50	100,0	100,0	

The third question about overconfidence was “In investment decisions, I trust my experiences more than new information.” Table 35 shows that valid responses are 100%(150). Table shows from 150. Pakistanian respondents finding 0%(0) of them strongly agreed, 24%(12) agreed, 0%(0) were undecided 38%(19) disagreed, and 0% (0) strongly disagreed. And for jordanian respondents finding that 18%(9) of them strongly agreed, 26%(13) agreed, 0%(0) were undecided, 56%(28) disagreed, and 0% (0) strongly disagreed. In the other hand the Turkish respondents finding 10%(5) of them strongly agreed, 28%(14) agreed, 0%(0) were undecided 62%(28) disagreed, and 0% (0) strongly disagreed.

Table 4.35. In investment decision i trust my experiences more than new information.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	12	24,0	24,0	24,0
	disagree	38	76,0	76,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	18,0	18,0	18,0
	agree	13	26,0	26,0	44,0
	disagree	28	56,0	56,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	10,0	10,0	10,0
	agree	14	28,0	28,0	38,0
	disagree	31	62,0	62,0	100,0
	Total	50	100,0	100,0	

4.4.2.4. Self-attribution Bias

Two questions were designed to measure self-attribution bias. The first statement was **“My financial instruments' lost is related to bad luck or other external factors.”** Table 36 shows that valid responses are 100% (150). From 150. For pakistani respondents about 4%(2) of them strongly agreed, 30%(15) agreed, 14%(7) were undecided, 34%(17) disagreed, and 18%(9) strongly disagreed. For jordanina respondents about 8%(4) of them strongly agreed, 20%(10) agreed, 16%(8) were undecided, 16%(8) disagreed, and 40%(20) strongly disagreed. Moreover the Turkish respondents about 32%(16) of them strongly agreed, 50%(25) agreed, 0%(0) were undecided, 8%(4) disagreed, and 10%(5) strongly disagreed.

Table 4.36. Investment instrument is lost is related to bad luck or other external factors

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	2	4,0	4,0	4,0
	agree	15	30,0	30,0	34,0
	undecided	7	14,0	14,0	48,0
	disagree	17	34,0	34,0	82,0
	strongly disagree	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	4	8,0	8,0	8,0
	agree	10	20,0	20,0	28,0
	undecided	8	16,0	16,0	44,0
	disagree	8	16,0	16,0	60,0
	strongly disagree	20	40,0	40,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	32,0	32,0	32,0
	agree	25	50,0	50,0	82,0
	disagree	4	8,0	8,0	90,0
	strongly disagree	5	10,0	10,0	100,0
	Total	50	100,0	100,0	

The second statement about self-attribution was “**If my investment decisions are successful, I relate this result to my competences and abilities.**” Table 37 shows that valid responses are 100%(150). From 150, pakistani respondents about 16%(8) of them strongly agreed, 52%(26) agreed, 6%(3) were undecided, 26%(13) disagreed, and 0%(0) strongly disagreed, but the Jordanian respondents was about 32%(16) of them strongly agreed, 60%(30) agreed, 2%(1) were undecided, 6%(3) disagreed, and 0%(0) strongly disagreed. and for Turkish respondents about 56%(28) of them strongly agreed, 14%(7) agreed, 0%(0) were undecided, 30%(15) disagreed, and 0%(0) strongly disagreed.

Table 4.37. If investment decisions are successful this result relate to participant competencies and abilities

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	16,0	16,0	16,0
	agree	26	52,0	52,0	68,0
	undecided	3	6,0	6,0	74,0
	disagree	13	26,0	26,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	32,0	32,0	32,0
	agree	30	60,0	60,0	92,0
	undecided	1	2,0	2,0	94,0
	disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	28	56,0	56,0	56,0
	agree	7	14,0	14,0	70,0
	disagree	15	30,0	30,0	100,0
	Total	50	100,0	100,0	

4.4.2.5. Representativeness Bias

Two questions were designed to measure representativeness bias. The first one was “**I Keep positive performance or positive information about a investment instrument in my mind and use it when I want to make a decision about my next investment.**” Table 36 shows valid responses are 100%(150). From 150. The Pakistanian respondents about 36%(18) of them strongly agreed, 64%(32) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0.0%(0) strongly disagreed. For the Jordanian respondents about 42%(21) of them strongly agreed, 58%(23) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0.0%(0) strongly disagreed. And For Turkish respondents about 70%(35) of them strongly agreed, 30%(15) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0.0%(0) strongly disagreed.

Table 4.38. keep positive performance of positive information about a financial investment instrument in my memory and use it when i want to make a decision about my next investment.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	18	36,0	36,0	36,0
	agree	32	64,0	64,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	42,0	42,0	42,0
	agree	29	58,0	58,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	35	70,0	70,0	70,0
	agree	15	30,0	30,0	100,0
	Total	50	100,0	100,0	

The second item about representativeness was “**The stocks of big and well- known companies are good and they always have a high return.**” Table 37 shows that valid responses are 100%(150). Table shows from 150. Regarding the pakistani respondents finding was about 0%(0) of them strongly agreed, 28%(14) agreed, 48%(24) were undecided, 24%(12) disagreed, and 0%(0) strongly disagreed. the finding for jordanina respondents finding was about 0%(0) of them strongly agreed, 8%(4) agreed, 70%(35) were undecided, 22%(11) disagreed, and 0%(0) strongly disagreed. And for the Turkish respondents finding was about 10%(5) of them strongly agreed, 30%(15) agreed, 50%(15) were undecided, 10%(5) disagreed, and 0%(0) strongly disagreed.

Table 4.39. The stocks of big and well known companies are good and they always have a high return.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	14	28,0	28,0	28,0
	undecided	24	48,0	48,0	76,0
	disagree	12	24,0	24,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	4	8,0	8,0	8,0
	undecided	35	70,0	70,0	78,0
	disagree	11	22,0	22,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	5	10,0	10,0	10,0
	agree	15	30,0	30,0	40,0
	undecided	25	50,0	50,0	90,0
	disagree	5	10,0	10,0	100,0
	Total	50	100,0	100,0	

4.4.2.6. Conservatism Bias

To measure the conservatism bias 4 items were designed. The first item was “**The new information about an investment instrument does not affect my investment decision.**” Table 38 shows that valid responses are 100%(150). The table shows from 150, for Pakistanian respondents the finding was about 0%(0) of them strongly agreed, 0%(0) agreed, 0%(0) were undecided, 84%(42) disagreed, and 16%(8) strongly disagreed. for jordanian respondents the finding was about 0%(0) of them strongly agreed, 0%(0) agreed, 0%(0) were undecided, 66%(33) disagreed, and 34%(17) strongly disagreed. And for Turkish respondents the finding was about 0%(0) of them strongly agreed, 0%(0) agreed, 0%(0) were undecided, 54%(27) disagreed, and 46%(23) strongly disagreed.

Table 4.40. The new information about an investment instrument does not affect my investment decision.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	42	84,0	84,0	84,0
	strongly disagree	8	16,0	16,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	33	66,0	66,0	66,0
	strongly disagree	17	34,0	34,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	27	54,0	54,0	54,0
	strongly disagree	23	46,0	46,0	100,0
	Total	50	100,0	100,0	

The second statement about conservatism was **“I do not change my investment instrument, even if there are instruments with more gain or return.”** Table 42 shows that valid responses are 100%(150). From pakistani respondents about 0%(0) of them strongly agreed, 58%(29) agreed, 0%(0) were undecided, 26%(13) disagreed, and 16%(8) strongly disagreed. And from Jordanian respondents about 26%(13) of them strongly agreed, 46%(23) agreed, 0%(0) were undecided, 28%(14) disagreed, and 0%(0) strongly disagreed. And from Turkish respondents about 18%(9) of them strongly agreed, 52%(26) agreed, 0%(0) were undecided, 24%(12) disagreed, and 6%(3) strongly disagreed.

Table 4.41. I do not change my investment instruments even if there are instrument with more profit of return.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	29	58,0	58,0	58,0
	disagree	13	26,0	26,0	84,0
	strongly disagree	8	16,0	16,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	13	26,0	26,0	26,0
	agree	23	46,0	46,0	72,0
	disagree	14	28,0	28,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	9	18,0	18,0	18,0
	agree	26	52,0	52,0	70,0
	disagree	12	24,0	24,0	94,0
	strongly disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

The third statement about conservatism was “**I will not change my mind about the investment instrument that I believe it will win, even if it begins to lose.**” Table 40 shows that valid responses are 100%(150). The table shows from pakistani respondents about 84%(42) of them strongly agreed, 6%(3) agreed, 0%(0) were undecided, 10%(5) disagreed, and 0%(0) strongly disagreed. And from Jordanian respondents about 52%(26) of them strongly agreed, 28%(14) agreed, 0%(0) were undecided, 20%(10) disagreed, and 0%(0) strongly disagreed. from Turkish respondents about 64%(32) of them strongly agreed, 12%(6) agreed, 2%(1) were undecided, 22%(11) disagreed, and 0%(0) strongly disagreed.

Table 4.42. I will not change my mind about the investment instruments that i believe it will win even if it begins to löse.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	42	84,0	84,0	84,0
	agree	3	6,0	6,0	90,0
	disagree	5	10,0	10,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	26	52,0	52,0	52,0
	agree	14	28,0	28,0	80,0
	disagree	10	20,0	20,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	32	64,0	64,0	64,0
	agree	6	12,0	12,0	76,0
	undecided	1	2,0	2,0	78,0
	disagree	11	22,0	22,0	100,0
	Total	50	100,0	100,0	

The fourth statement about conservatism was **“The winning investment instrument in the past, that is losing is present, will win again in future”** Table 41 shows that valid responses are 100%(150) The table shows from pakistani respondents about 0%(00) of them strongly agreed, 42%(21) agreed, 32%(16) were undecided, 24%(12) disagreed, and 4%(2) strongly disagreed. And from Jordanian respondents about 0%(00) of them strongly agreed, 62%(31) agreed, 14%(7) were undecided, 20%(10) disagreed, and 2%(1) strongly disagreed. And Turkish respondents about 0%(00) of them strongly agreed, 48%(24) agreed, 8%(4) were undecided, 30%(15) disagreed, and 14%(7) strongly disagreed.

Table 4.43. The winning investment instrument in the past that is losing in present will win again in future.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	21	42,0	42,0	42,0
	undecided	16	32,0	32,0	74,0
	disagree	12	24,0	24,0	98,0
	strongly disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	31	62,0	62,0	62,0
	undecided	7	14,0	14,0	76,0
	disagree	10	20,0	20,0	96,0
	strongly disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	24	48,0	48,0	48,0
	undecided	4	8,0	8,0	56,0
	disagree	15	30,0	30,0	86,0
	strongly disagree	7	14,0	14,0	100,0
	Total	50	100,0	100,0	

- Gambles Fallacy Bias

One question was designed to measure the gamble fallacy bias. The statement was “**If a financial instrument wins for several periods regularly, it will lose soon, and if it loses several periods regularly, it will soon win.**” Table 42 shows that valid responses are 100%(150). The table shows the pakistani respondents about 16%(8) of them strongly agreed, 14%(7) agreed, 70%(35) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed. The jordanian finding was pakistani respondents about 24%(12) of them strongly agreed, 28%(14) agreed, 46%(23) were undecided, 2%(1) disagreed, and 0%(0) strongly disagreed. In the other hand the finding from turkish respondents about 14%(7) of them strongly agreed, 34%(17) agreed, 46%(23) were undecided, 6%(3) disagreed, and 0%(0) strongly disagreed.

Table 4.44. If financial tool earns for several periods regularly it will lose soon and if it loses several periods regularly it will soon gain.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	8	16,0	16,0	16,0
	agree	7	14,0	14,0	30,0
	undecided	35	70,0	70,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	12	24,0	24,0	24,0
	agree	14	28,0	28,0	52,0
	undecided	23	46,0	46,0	98,0
	disagree	1	2,0	2,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	7	14,0	14,0	14,0
	agree	17	34,0	34,0	48,0
	undecided	23	46,0	46,0	94,0
	disagree	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

4.4.2.6. Familiarity Bias

Two questions were designed to measure the familiarity bias. The first statement was **“When I am undecided between two investment instruments , I select the one that I have more information about”** Table 43 shows that valid responses are 100%(150). The table shows from pakistani respondents about 20%(10) of them strongly agreed, 80%(40) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed. The finding from jordanian respondents about 42%(21) of them strongly agreed, 54%(27) agreed, 0%(0) were undecided, 4%(2) disagreed, and 0%(0) strongly disagreed.and from the turkish respondents about 40%(20) of them strongly agreed, 60%(30) agreed, 0%(0) were undecided, 0%(0) disagreed, and 0%(0) strongly disagreed

Table 4.45. When i am undecided between two financial investment instrument i choose the one that i have more information about.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	10	20,0	20,0	20,0
	agree	40	80,0	80,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	42,0	42,0	42,0
	agree	27	54,0	54,0	96,0
	disagree	2	4,0	4,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40,0	40,0	40,0
	agree	30	60,0	60,0	100,0
	Total	50	100,0	100,0	

The second statement was “**I invest in the stocks of the companies where I reside.**” Table 44 shows that valid responses are 100%(405). The table shows the pakistani respondents about 8%(4) of them strongly agreed, 36%(18) agreed,6%(3) were undecided, 32%(16) disagreed, and 18.0%(9) strongly disagreed. And the finding from jordanian respondents is about 0%(0) of them strongly agreed, 0%(0) agreed,12%(6) were undecided, 48%(24) disagreed, and 40%(20) strongly disagreed and the answers of the Turkish respondents about 14%(7) of them strongly agreed, 26%(13) agreed,10%(5) were undecided, 50%(25) disagreed, and 0%(0) strongly disagreed

Table 4.46. I invest in the stocks of the companies where i reside.

pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	4	8,0	8,0	8,0
	agree	18	36,0	36,0	44,0
	undecided	3	6,0	6,0	50,0
	disagree	16	32,0	32,0	82,0
	strongly disagree	9	18,0	18,0	100,0
	Total	50	100,0	100,0	
jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	undecided	6	12,0	12,0	12,0
	disagree	24	48,0	48,0	60,0
	strongly disagree	20	40,0	40,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	7	14,0	14,0	14,0
	agree	13	26,0	26,0	40,0
	undecided	5	10,0	10,0	50,0
	disagree	25	50,0	50,0	100,0
	Total	50	100,0	100,0	

4.4.2.7. Considering the Past Bias

One question was designed to measure the considering the past. The statement was “**I am willing to take more risk when I get easy gains in investments.**” Table 45 shows that valid responses are 100%(150). The table shows that from the pakistani respondents about 62%(31) of them strongly agreed, 38%(19) agreed, 0%(0) were undecided,.0%(0) disagreed, and 0%(0) strongly disagreed. And the finding from jordanina respondents about 76%(38) of them strongly agreed, 24%(12) agreed, 0%(0) were undecided,.0%(0) disagreed, and 0%(0) strongly disagreed.and the Turkish respondents was 62%(31) of them strongly agreed, 38%(19) agreed, 0%(0) were undecided,.0%(0) disagreed, and 0%(0) strongly disagreed.

Table 4.47. I am willing to take more risk when i gent easy gains in investments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	31	62,0	62,0	62,0
	agree	19	38,0	38,0	100,0
	Total	50	100,0	100,0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	38	76,0	76,0	76,0
	agree	12	24,0	24,0	100,0
	Total	50	100,0	100,0	
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	31	62,0	62,0	62,0
	agree	19	38,0	38,0	100,0
	Total	50	100,0	100,0	

4.4.2.8. Confirmation Bias

One question was designed to measure the confirmation bias. The statement was “A remarkable performance of an investment instrument will have an effect on my decision process when I want to invest again in the same type of investment instrument” Table 46 shows that valid responses are 100%(150). The table shows from the pakistani respondents about 32%(16) of them strongly agreed, 68%(34) agreed,%(0) were undecided, 0%(0) disagreed, and 0 %(0) strongly disagreed. And from jordania respondents about 68%(34) of them strongly agreed, 32%(16) agreed,%(0) were undecided, 0%(0) disagreed, and 0 %(0) strongly disagreed. And in the turkish respondents' feedback , about 40%(20) of them strongly agreed, 60%(30) agreed,%(0) were undecided, 0%(0) disagreed, and 0 %(0) strongly disagreed.

Table 4.48. A remarkable performance of a investment instrument will have an effect on my decision process when i want to invest again in the same type of investment instrument.

Pakistan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	16	32,0	32,0	32,0
	agree	34	68,0	68,0	100,0
	Total	50	100,0	100,0	
Jordan		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	34	68,0	68,0	68,0
	agree	16	32,0	32,0	100,0
	Total	50	100,0	100,0	
Turkey		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	20	40,0	40,0	40,0
	agree	30	60,0	60,0	100,0
	Total	50	100,0	100,0	

5. THE TESTS OF HYPOTHESES

5.1. Introduction

The main purpose of this chapter is to test hypotheses and answer the researcher's questions. First, the reliability test was done to select the suitable test according to data. The result of the reliability test was $\alpha=0,764$ ($\alpha>0,7$) (reference), therefore data were parametric. Independence ANOVA /A Tukey post hoc Test, **Regration test**, crosstable/ Chi-Square Tests was used to test the hypotheses.

5.2. Tests of Hypotheses

There are 2 hypotheses that each hypothesis is about the relationship between Senior-level women from different countries and factors of Behavioral Biases. All tests were done at a 95% level of confidence and 0,05 Alpha value.

Table 5.1. Behavioral finance factors influence investment decisions.

<i>Behavioral finance</i>	<i>Measurement</i>	<i>Questions</i>
<i>Emotional Biases</i>	Over-optimism	Q25, Q26
	Regret and Pride	Q16, Q22, Q23
	Loss of Averse Bias	Q4, Q5, Q6, Q17
<i>Cognitive biases</i>	Herding	Q7, Q13
	Hindsight	Q2
	Overconfidence	Q8, Q15, Q18
	Self-attribution	Q1, Q28
	Representativeness	Q3, Q9
	Conservatism	Q10, Q19, Q20, Q21
	Gamble Fallacy	Q11

H1: There is a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making.

5.3. Emotional Biases

A one-way between subjects ANOVA was conducted to compare the effect of Emotional Biases (Over-optimism, Regret and Pride, Loss of Averse Bias) on Senior- level women Decision making from.

Herding, Hindsight, Overconfidence, Self-attribution, Representativeness, Conservatism Gamble Fallacy

5.3.1. Over Optimism

1- I think that the economic growth that will take place in the local and international markets in the coming period will be positive.

A Tukey post hoc test revealed that there is a statistically significant difference between Pakistan and Jordan. Pakistan and Turkey ($P = .000$). But There was no statistically significant difference between Jordan and Turkey ($P = .522$) , by one-way ANOVA ($F(2,147) = 16,627, P = .000$). there was a statistically significant difference between country groups that were determined which indicates there is a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (accepted).

2- I have a strong expectation that my financial investment will gain in the next period

A Tukey post hoc test revealed that there is no statistically significantly difference between the participants from three countries Jordan and Turkey ($P = .753$)/ Pakistan, Jordan ($P = .665$) , Pakistan/Turkey ($P = .989$), by one-way ANOVA ($F(2,147) = .427, P = .653$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (rejected)

Table 5.2. Anova test for over optimism.

ANOVA						
		Sum of Squares	df	F	Sig.	Statisticaically relations
<i>i think that the economic growth that will take place in the local and international markets in the coming period will be positive</i>	Between Groups	10,080	2	16,627	,000	Statistaically difference
	Within Groups	44,560	147			
	Total	54,640	149			
<i>i have a strong expectation that my financial investment will gain in the next period</i>	Between Groups	,413	2	,427	,653	No statistically difference
	Within Groups	71,160	147			
	Total	71,573	149			

5.3.2. Regret and Pirde

1- If I lose by my investment instrument i sell that tool as soon as possible.

There was a statistically significant difference between country groups that were determined. A Tukey post hoc test revealed that there are statistically significantly differences between Pakistan and Jordan ($P = ,003$). but There was no statistically significant difference between Jordan and Turkey ($P = ,150$), and Pakistan and Turkey ($P = ,314$), by one-way ANOVA ($F(2,147) = 5,583$, $P = ,005$). There is a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (accepted).

2- when I realize that the market is going down i completely deduct/sell the investment instruments

A Tukey post hoc test revealed that there is a statistically significantly difference between Pakistan and Jordan ($P = ,044$). but There was no statistically significant difference between Jordan and Turkey ($P = ,609$), and Pakistan and Turkey ($P = ,308$), by one-way ANOVA ($F(2,147) = 5,583$, $P = ,054$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (rejected)

3- if lose by my investment instrument i sell that tool as soon as possible.

A Tukey post hoc test revealed that there is a statistically significant difference between Pakistan and Turkey ($P = ,040$). but There was no statistically significant difference between Jordan and Turkey ($P = ,557$), Jordan and Pakistan ($P = ,333$), by one-way ANOVA ($F(2,147) = 3,033$, $P = ,051$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (rejected)

Table 5.3. Anova test for regret and pirde.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>if I lose by my investment instrument i sell that tool as soon as possible</i>	Between Groups	10,293	2	5,583	,005	Statistically difference
	Within Groups	135,500	147			
	Total	145,793	149			
<i>when i realize that the market is going down i completely deduct/sell the investment instruments</i>	Between Groups	7,960	2	2,976	,054	No statistically difference
	Within Groups	196,600	147			
	Total	204,560	149			
<i>in investing subject not losing value is more important than its gain/return</i>	Between Groups	3,640	2	3,033	,051	No statistically difference
	Within Groups	88,200	147			
	Total	91,840	149			

5.3.3. Lose of Averse

1- If I have a portfolio of two financial instruments A and B I would sell a B product that lost 15% instead of A which earned 15% of those instruments with the same cost when I needed immediate cash.

A Tukey post hoc test revealed that there is no statistically significant difference between Pakistan and Jordan ($P = ,982$). Jordan and Turkey ($P = ,850$), and Pakistan and Turkey ($P = ,750$), by one-way ANOVA ($F(2,147) = ,284$, $P = ,753$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (rejected)

2- I Prefer low risk / low return investment instruments more than high risk / high return investment instrument

A Tukey post hoc test revealed that there is no statistically significant difference between Pakistan and Jordan ($P = ,069$). Jordan and Turkey ($P = ,696$), and Pakistan and Turkey ($P = ,332$), by one-way ANOVA ($F(2,147) = 2,558$, $P = ,081$). There was no statistically significant difference between country groups that were determined, that indicate No relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (rejected)

3- low risk is the most fundamental factor I consider when I choose an investment instrument

A Tukey post hoc test revealed that there is a statistically significant difference between Jordan and Pakistan ($P = ,025$) but There was no statistically significant difference between Jordan and Turkey ($P = ,859$), Pakistan and Turkey ($P = ,092$). by one-way ANOVA ($F(2,147) = 3,880$, $P = ,023$). there was a statistically significant difference between country groups that were determined, that indicate relationships between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (accepted)

4- the sadness I feel in my investments when I lose is more effective than the joy I feel when I win

A Tukey post hoc test revealed that there is a statistically significant difference between Pakistan and Turkey ($P = ,028$). but There was no statistically significant difference between Jordan and Turkey ($P = ,663$), Jordan and Pakistan ($P = ,197$), by one-way ANOVA ($F(2,147) = 3,492$, $P = ,033$). there was a statistically significant difference between country groups that were determined, that indicate relationships between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making. (accepted)

Table 5.4. Anova test for lose of averse.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>if I have a portfolio of two financial instruments A and B I would sell a B product that lost 15% instead of A which earn 15% of those instrument with the same cost when I needed immediate cash</i>	Between Groups	,173	2	,284	,753	No Statistically difference
	Within Groups	44,900	147			
	Total	45,073	149			
<i>I prefer low risk / low return investment instruments more than high risk / high return investment instrument</i>	Between Groups	4,960	2	2,558	,081	No statistically difference
	Within Groups	142,540	147			
	Total	147,500	149			
<i>low risk is the most fundamental factor I consider when I choose an investment instrument</i>	Between Groups	4,480	2	3,880	,023	statistically difference
	Within Groups	84,860	147			
	Total	89,340	149			
<i>the sadness I feel in my investments when I lose is more effective than the joy I feel when I win</i>	Between Groups	9,333	2	3,492	,033	statistically difference
	Within Groups	196,460	147			
	Total	205,793	149			

5.4. Cognitive Biases

A one-way between subjects ANOVA was conducted to compare the effect of Cognitive Biases from (Herding, Hindsight, Overconfidence, Self-attribution, Representativeness, Conservatism, Gamble Fallacy) on Senior- level women Decision making

H2: There is a relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making.

5.4.1. Herding

1- I think that the economic growth that will take place in the local and international markets in the coming period will be positive.

A Tukey post hoc test revealed that there is statistically significantly difference between Jordan and Turkey ($P = ,003$) also Pakistan and Jordan ($P = ,002$), But There was no statistically significant difference between the Pakistan and Turkey ($P = ,986$), by one-

way ANOVA ($F(2,147) = 7,875$, $P = ,001$). there was a statistically significant difference between country groups that were determined, that indicate relationships between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

2- I have a strong expectation that my financial investment will gain in the next period

A Tukey post hoc test revealed that there is no statistically significant difference between the participants from three countries Jordan and Turkey ($P = ,322$)/ Pakistan, Jordan ($P = ,602$), Pakistan/Turkey ($P = ,880$), by one-way ANOVA ($F(2,147) = 1,080$, $P = ,342$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (rejected)

Table 5.5. Anova test for cognitive biases.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>the investment decisions of people i communicate with are influential in my investment decisions</i>	Between Groups	24,693	2	7,875	,001	Statistically difference
	Within Groups	230,480	147			
	Total	255,173	149			
<i>the preferences of other investors in the market are important to me and i follow them in my investment decisions</i>	Between Groups	,840	2	1,080	,342	No statistically difference
	Within Groups	57,160	147			
	Total	58,000	149			

5.4.2. Over Confidence

1- if lose by my investment instrument i sell that tool as soon as possible.

A Tukey post hoc test revealed that there is statistically significant difference pakıstan and Turkey ($P = ,043$). but There was no statistically significant difference between Jordan and Turkey ($P = ,678$), and Pakistan and Jordan ($P = ,253$) by one-way ANOVA ($F(2,147) = 3,050$, $P = ,050$). there was a statistically significant difference between country groups that were determined, that indicate relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

2- When I realize that the market is going down i completely deduct/sell the investment instruments

A Tukey post hoc test revealed that there is statistically significant difference between Pakistan and Jordan ($P = ,002$), and Pakistan and Turkey ($P = ,013$). but there was no statistically significant difference between Jordan and Turkey ($P = ,815$). by one-way ANOVA ($F(2,147) = 6,932$, $P = ,001$), there was a statistically significant difference between country groups that were determined, that indicate relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

3- if lose by my investment instrument i sell that tool as soon as possible.

A Tukey post hoc test revealed that there is a statistically significant difference between Pakistan and Jordan ($P = ,025$). but There was no statistically significant difference between Jordan and Turkey ($P = ,635$), Turkey and Pakistan ($P = ,198$), by one-way ANOVA ($F(2,147) = 3,598$, $P = ,030$). there was a statistically significant difference between country groups that were determined, that indicate relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

Table 5.6. Anova test for over confidence.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>i think that my information is more valuable than the information of other investors during the finance investments</i>	Between Groups	6,973	2	3,050	,050	Statistaically difference
	Within Groups	168,020	147			
	Total	174,993	149			
<i>i am completely self reliant in making right decisions about my financial investments</i>	Between Groups	18,253	2	6,932	,001	statistically difference
	Within Groups	193,540	147			
	Total	211,793	149			
<i>in investment decision i trust my experiences more than new information</i>	Between Groups	8,680	2	3,598	,030	statistically difference
	Within Groups	177,320	147			
	Total	186,000	149			

5.4.3. Self Attribution

1- If I lose by my investment instrument I sell that tool as soon as possible.

A Tukey post hoc test revealed that the Pakistani participant statistically significantly different than Pakistan and Turkey ($P = ,000$) also Jordan and Turkey ($P = ,000$), But There was no statistically significant difference between Pakistan and Jordan ($P = ,522$), by one-way ANOVA ($F(2,147) = 18,168$, $P = ,000$), here was a statistically significant difference between country groups that were determined, that indicate relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

2- When I realize that the market is going down i completely deduct/sell the investment instruments

A Tukey post hoc test revealed that there is participant statistically significantly difference Pakistan and Jordan ($P = ,016$). But There was no statistically significant difference between the Jordan and Turkey ($P = ,563$), and Pakistan and Turkey ($P = ,183$), by one-way ANOVA ($F(2,147) = 3,996$, $P = ,020$), here was a statistically significant difference between country groups that were determined, that indicate relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

Table 5.7. Anova test for self attribution.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>my investment instrument is lost is related to bad luck or other external factors</i>	Between Groups	60,040	2	18,168	,000	Statistically difference
	Within Groups	242,900	147			
	Total	302,940	149			
<i>if my investment decisions are successful i relate this result to my competences and abilities</i>	Between Groups	9,213	2	3,996	,020	statistically difference
	Within Groups	169,480	147			
	Total	178,693	149			

5.4.4. Representativeness

1- If lose by my investment instrument i sell that tool as soon as possible.

A Tukey post hoc test revealed that there is a statistically significant difference between Jordan and Turkey ($P = ,012$), Pakistan and Turkey ($P = ,002$), was no statistically significant difference between Pakistan and Jordan ($P = ,808$), by one-way ANOVA ($F(2,147) = 7,078$, $P = ,001$). there was a statistically significant difference between country groups that were determined, that indicate relationships between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

2- When I realize that the market is going down i completely deduct/sell the investment instruments

A Tukey post hoc test revealed that there is a statistically significant difference between Jordan and Turkey ($P = ,000$), Pakistan and Turkey ($P = ,030$), was no statistically significant difference between Pakistan and Jordan ($P = ,405$), by one-way ANOVA ($F(2,147) = 7,724$, $P = ,001$), here was a statistically significant difference between country groups that were determined, that indicate relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

Table 5.8. Anova test for representativeness.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>i keep positive performance of positive information about a financial investment instrument in my memory and use it when i want to make a decision about my next investment</i>	Between Groups	3,293	2	7,078	,001	Statistically difference
	Within Groups	34,200	147			
	Total	37,493	149			
<i>the stocks of big and well known companies are good and they always have a high return</i>	Between Groups	7,560	2	7,724	,001	statistically difference
	Within Groups	71,940	147			
	Total	79,500	149			

5.4.5. Conservatism

1- The new information about an investment instrument does not affect my investment decision

A Tukey post hoc test revealed that there are statistically significant differences between turkey and pakistan ($P = ,003$). but There was no statistically significant difference between Jordan and Turkey ($P = ,386$), and Pakistan and Jordan ($P = ,121$), by one-way ANOVA ($F(2,147) = 5,520$, $P = ,005$). there was a statistically significant difference between country groups that were determined, that indicate relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

2- I do not change my investment instruments even if there are instrument with more profit of return

A Tukey post hoc test revealed that there are statistically significant differences between Pakistan and Jordan ($P = ,011$). but There was no statistically significant difference between Jordan and Turkey ($P = ,080$), and Pakistan and Turkey ($P = ,733$), by one-way ANOVA ($F(2,147) = 4,603$, $P = ,012$). there was a statistically significant difference between country groups that were determined, that indicate relationships between women from turkey, Jordan, and Pakistan and cognaitve biases in investment decision-making. (accepted)

3- i will not change my mind about the investment instruments that i believe it will win even if it begins to lose

A Tukey post hoc test revealed that there was no statistically significant difference between Pakistan and Turkey ($P = ,101$). Jordan and Turkey ($P = ,961$) , Jordan and Pakistan($P = ,054$) by one-way ANOVA ($F(2,147) = 3,265$, $P = ,041$). there was a statistically significant difference between country groups that were determined, that indicate relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (accepted)

4- The winning investment instrument in the past that is losing in present will win again in future

A Tukey post hoc test revealed that there was no statistically significant difference between Pakistan and Turkey ($P = ,452$). Jordan and Turkey ($P = ,073$) , Jordan and

Pakistan($P = ,575$), by one-way ANOVA ($F(2,147) = 2,448$, $P = ,090$). there was no statistically significant difference between country groups that were determined, that indicate No relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (rejected)

Table 5.9. Anova test for conservatism.

ANOVA						
		Sum of Squares	df	F	Sig.	Relationship
<i>the new information about an investment instrument does not affect my investment decision</i>	Between Groups	2,280	2	5,520	,005	Statistically difference
	Within Groups	30,360	147			
	Total	32,640	149			
<i>i do not change my investment instruments even if there are instrument with more profit of return</i>	Between Groups	13,213	2	4,603	,012	statistically difference
	Within Groups	210,980	147			
	Total	224,193	149			
<i>i will not change my mind about the investment instruments that i believe it will win even if it begins to lose</i>	Between Groups	8,093	2	3,265	,041	Statistically difference
	Within Groups	182,180	147			
	Total	190,273	149			
<i>the winning investment instrument in the past that is losing in present will win again in future</i>	Between Groups	4,853	2	2,448	,090	No statistically difference
	Within Groups	145,740	147	,991		
	Total	150,593	149			

5.4.6. Gamble Fallacy

1- If financial tool earns for several periods regularly it will lose soon and if it loses several periods regularly it will soon gain

A Tukey post hoc test revealed that there is no statistically significant difference between the three groups Jordan and Pakistan ($P = ,198$). but There was no statistically significant difference between the Jordan and Turkey ($P = ,508$), and Pakistan and Turkey ($P = ,811$), by one-way ANOVA ($F(2,147) = 1,536$, $P = ,219$), there was a no statistically significant difference between country groups that were determined, that indicate No relationship between women from Turkey, Jordan, and Pakistan and cognitive biases in investment decision-making. (rejected)

Table 5.10. Anova test for gamble fallacy.

ANOVA <i>if financial tool earns for several periods regularly it will lose soon and if it loses several periods regularly it will soon gain</i>					
	Sum of Squares	df	F	Sig .	Relationship
<i>Between Groups</i>	2,013	2	1,536	,219	No Statistically difference
<i>Within Groups</i>	96,360	147			
<i>Total</i>	98,373	149			

5.5. Regression Test

As shown by Table (11), ($P = ,000$) that indicates There is a relationship between women from Turkey, Jordan, and Pakistan and behavioral finance biases in investment decision-making.

Table 5.11. Regression test.

REGRESSION				
	Sum of Squares	df	F	Sig.
REGRESSION	56,876	27	5,959	,000(a)
RESIDUAL	43,124	122		
TOTAL	100,000	149		

Table (11)

5.6. Crosstable / Achi-Square test

A chi-square test of independence showed that there was significant association between women from turkey, Jordan, and Pakistan and behavioral finance in investment decision-making. The relation between these variables was significant, as Shown by Table (12) all cognitive Biases $P < .05$ in the other hand the Emotional Biases 55.555% ($P < .05$). as a Total

Table 5.12. Achi-Square test.

Chi-Square Tests

<i>Emotional Biases</i>	<i>Pearson Chi-Square - Asymp. Sig. (2-sided)</i>	<i>Cognitive Biases</i>	<i>Pearson Chi-Square - Asymp. Sig. (2-sided)</i>
<i>country group * if I have a portfolio of two finanacial instruments A and B I would sell a B product that lost 15% instead of A which earn 15% of those instrument with the same cost when i needed immediate cash</i>	,006	<i>country group * i keep positive performance of positive information about a financial investment instrument in my memory and use it when i want to make a decision about my next investment</i>	,001
<i>country group * I prefer low risk / low return incestmnt instruments more than high risk / high return investment instrument</i>	,004	<i>country group * my investment instrument is lost is related to bad luck or other external factors</i>	,000
<i>country group * low risk is the most fundamental factor i consider when i choose an investment insurment</i>	,033	<i>country group * low risk is the most fundamental factor i consider when i choose an investment instrument</i>	,033
<i>country group * in invsting subject not losing value is more important that its gain/return</i>	,080	<i>country group * i think that my information is more valuable than the information of other investors during the finance investments</i>	,004
<i>country group * the sadness i feel in my investments when i lose is more effective thamn the joy i feel when i win</i>	,207	<i>country group * the stocks of big and well known companies are good and they always have a high return</i>	,001
<i>country group * i think that the economic growth that will take place in the local and international markets in the coming period will be positive</i>	,000	<i>country group * the new information about an investment instrument does not affect my investment decision</i>	,005
<i>country group * i have a strong expectation that my financial investment will gain in the next period</i>	,191	<i>country group * if financial tool earns for several periods regularly it will lose soon and if it loses sevral periods regularly it will soon gain</i>	,047
<i>country group * if l ose by my investment instrument i sell that tool as soon as possible</i>	,008	<i>country group * i am completely self reliant in making right decisions about my financial investments</i>	,002
<i>country group * when i realize that the market is going down i completely deduct/sell the investment instruments</i>	,056	<i>country group * the preferences of other investors in the market are important to me and i follow them in my investment decisions</i>	,626
		<i>country group * in investment decision i trust my experiences more than new information</i>	,033
		<i>country group * i do not change my investment instruments even if there are instrument with more profit of return</i>	,001
		<i>country group * i will not change my mind about the investment instruments that i believe it will win even if it begins to lose</i>	,010
		<i>country group * the winning investment instrument in the past that is losing in present will win again in future</i>	,006
		<i>country group * if my investment decisions are successful i relate this result to my competences and abilities</i>	,000

- CONCLUSION AND RECOMMENDATIONS

The purpose of this thesis is to enhance the understanding of the financial decisions for senior-level women. The questionnaire collects data from the 150 individuals as a representative of the whole population which was individual investors in Pakistan, Jordan, and Turkey, The collected data was analyzed by SPSS and according to these analyzed some of the key findings of the study are as follow:

Data was parametric and the division was normal according to the value of $\alpha(=0,764)$. 100% of respondents were female, 50 respondents from each of Turkey, Jordan, and Pakistan. About 68,0% of Pakistani respondents.58,0% of/ Jordanian respondents and 66,0% Turkish respondents were between 33 and 42 years old, and about 96% Pakistani respondents, 88% Jordanian respondent and 94% Turkish respondents of them have a bachelor degree, the biggest group of job groups was private sectors employee that was about 96% of Pakistani respondent, and 100% of Jordanian respondent In the subject of income, about 96% of Pakistani respondents 86% of Jordanian respondent and 86% of Turkish respondents them stated that have a regular income, and the income of 36% of Pakistani respondents was between 1701 - 2000. 30% of Turkish respondents were between 1701 - 2000. 48% of Jordanian respondents were between 2001 – 3000. 30% of Pakistani respondents had saving amounts 501 - 750, 52% of Jordanian respondents had saving amounts 751 - 1000. 42% of Turkish respondents had savings of 250 or less in the subject of economic status, about 62,0% of Pakistani respondents stated their economic status satisfactory and 84% of Jordanian respondents is satisfactory while 68% is not satisfactory. Gold was the most preferred investment tool among Pakistani respondents 68%. Estate was the most preferred investment tool among Jordanian48% and Turkish respondents by 30% only 20% of Pakistani respondents, only 22% of Jordanian respondents and only 28% of Turkish respondents made portfolios however. Most of the Pakistani respondents daily follow the profit/loss situation in their investment by 50%, and most Jordanian and Turkish respondents weekly following the profit/loss situation in their investments by 28% for Jordanian and 42% for Turkish respondents. social environment advances are 60% was the most favorable and useable for Pakistani respondents but in the Jordanian respondent's expert opinion by 30%, in the other hand the Turkish respondents indicate social environment advances by 32%, the most important factor for high return was information

from Pakistani and Turkish respondents by 60% and 40%, in the other hand Jordanian respondents indicated experience by 46%

The results of the first hypotheses Tested by ANOVA tests show the acceptance of hypotheses (the relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making.) for the Over-optimism in Q1, Regret and Pride in Q1/Loss of Averse Q2&Q4, In the other hand there were rejected in the hypotheses Over-optimism in Q2, Regret and Pride in Q2&Q3, Loss of Averse Q1&Q2

The finding from ANOVA test for the second hypothesizes to test the cognitive biases (the relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making.) the finding shows that there was acceptance in the relationship for Herding Q2, Overconfidence Q1&Q2&Q3, Self-attribution Q1&Q2, Representativeness Q1&Q2, Conservatism Q1&Q2&Q3, In the other hand the relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making rejected on Herding Q1, Conservatism Q4, Gamble Fallacy Q1

A simple linear regression was calculated to predict the dependent variable based on independent variables. a significant equation was found ($F(72,122) = 5,959$, $P = ,000$).

Behavioral finance is the study of psychological and behavioral factors in the decision-making process. There are several factors that are perceived as factors that influence an individual's decision. In this study, nine factors were selected and studied.

As the data have shown in the fifth chapter, 9 hypotheses were tested. Hypothesizes testing results show that there are three biases from the emotional hypotheses that were accepted which show a relationship between women from Turkey, Jordan, and Pakistan and emotional biases in investment decision-making by Over-optimism.

Regret biases, Pride, Loss of Averse Bias. And 5 hypothesizes from cognitive biases were accepted that shows there a relationship between women from turkey, Jordan, and Pakistan and emotional biases in investment decision-making Herding Overconfidence

Self-attribution Representativeness, Conservatism. in the other hand the finding shows after testing the Gamble fallacy biases for the three groups that there is no relationship between women from turkey, Jordan, and Pakistan and cognitive biases in investment decision-making

The Recommendation able to provide some useful ideas or guides for a future researcher that not only solve certain problems but also result in beneficial outcomes, Behavioral finance is a new perspective in finance and needs to be studied more and more.

Firstly, future researchers are recommended to use other types of research methods for data collection other than questionnaires such as personal interview, telephone survey or mail survey. A structured interview is one of the types of the interview which differs from the questionnaire. It allows the researcher to ask more complicated questions furthermore, the questionnaire is filled in via researchers, instead of the respondents. At the same time,, we can verify the data during the data collection process to enhance the quality of data also the Interviews can be conducted within several different types of data sources like by telephone or in-person. Besides that, a telephone survey can contain some short and simple questions and explain it to respondents through the telephone. It has more chance to get to the respondents at anywhere or any place and able to save a lot of travel time and cost compared to another method

Next, there is only one city from every country which are Ankara, Karachi and Amman to be chosen in this research which might not totally represent all the perspectives of women investors in Turkey, Pakistan and Jordan. In order to get more precision or accuracy of data, future researchers are recommended to increase the sample size and number of the questionnaire and conduct the research that covers all the cities of these countries. in order to have research can able to provide a more complete view of women investors

Limitation of study is very important for future researchers to investigate those similar topics in a more comprehensive way. There are some limitations to this research that might affect the reliability and credibility of the result and get more accurate results. Firstly, the limited sample size included in this research which might not fully explain the impact of behavioural finance Biases on women investors in the market of Pakistan, Jordan and Turkey. Moreover, the targeted sample size of investors that conducted in this research was 150 participants, and only one city from every country was chosen for the destination to distribute the questionnaire which included Amman, Karachi, Ankara. However, many of these counties do not cover this research. The credibility and reliability of data might not be accurate since the sample size does not totally represent all the perspectives of women investors in Turkey, Pakistan and Jordan.

6. REFERENCES

- Agarwal, S., Chiu, I., Liu, C., & Rhee, S. G. (2011). The Brokerage Firm Effect in Herding: Evidence from Indonesia. *Journal of Financial Research*, 34(3), 461–479.
- Ajaz, T., & Kumar, A. S. (2018). Herding In Crypto-Currency Markets. *Annals of Financial Economics*, 13(02), 1850006.
- Al-Ajmi, Jasim Y. (2008). Risk Tolerance of Individual Investor in an Emerging Market. *International Research Journal of Finance and Economics*, vol. 17, pp. 1-26.
- Albaity, M.O.H.A.M.E.D & Rahman, M.A.H.F.U.Z. (2012). Behavioural Finance and Malaysian Culture . *THE JOURNAL OF FINANCE*, 5(11)
- Ani, A.N.I & Özarı, Ç.I.ğ.D.E.M. (2020). Behavioral Finance: Investors Psychology. *IOSR Journal of Economics and Finance (IOSR-JEF)* , 11(1), 46-50.
- Athur, A. D. (2014). Effect of Behavioral Biases on Investment Decisions of Individual Investors in Kenya. *School of Business, University of Nairobi*, (November), 1–98.
- Baddeley, A.L.A.N. (2010). Working memory. *Current Biology*, 20(4), 136-140.
- Baker, K., & Nofsinger, J. (2002). Psychological Biases of Investors. *Financial Services Review*, 11, 97–116.
- Banz, R.W. (1981). The relationship between return and market value of common stocks. *Journal of Financial Economics*, 9(1), 3–18.
- Barber B. M. and Odean T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, 116(1), pp. 261-292.
- Barber B. M. and Odean T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, 116(1), pp. 261-292.
- Barber Brad M., and Odean, Terrance. (1999). The Courage of Misguided Convictions. *Financial Analysts Journal*, vol. 55(6).

Barber, Brad M. and Terrance Odean, 2000, Trading is hazardous to your wealth: The common stock investment performance of individual investors, *Journal of Finance* 55, 773-806.

Barberis N. and Richard Thaler. (2005). In *Advances in Behavioral Finance*. Survey of Behavioural Finance. vol II chap. 1A, pp. 1

Barberis, N., Thaler, R. (2003), A survey of behavioral finance. *Handbook of the Economics of Finance*, 1, 1053-1128.

Basu S. (1977). Investment performance of common stocks in relation to their price earnings ratios: A test of the efficient market hypothesis. *The journal of Finance*, 32(3), pp. 663-682.

Baur, D. G. & Dimpfl, T. (2018). Price Discovery in Bitcoin Spot or Futures? Available at SSRN: <https://ssrn.com/abstract=3171464> or <http://dx.doi.org/10.2139/ssrn.3171464>

Bernasek A and Shwiff Stephanie (2001) “Gender, risk and retirement” *Journal of Economics issues* Vol. XXXV No. 2 pp. 345-356

Bernasek, A., and S. Shwiff. 2001. “Gender, Risk, and Retirement.” *Journal of Economic Issues* 35 (2): 345–356. doi:10.1080/00213624.2001.11506368.

Beugelsdijk, S., & Frijns, B. (2010). A cultural explanation of the foreign bias in international asset allocation. *Journal of Banking and Finance*, 34, 2121-2131. <http://dx.doi.org/10.1016/j.jbankfin.2010.01.020>.

Bikas E., Jureviciene D. et. al. (2012). Behavioural Finance: The Emergence and Development Trends. *Procedia - Social and Behavioral Sciences* 82. pp. 870 – 876.

Blasco, N., Corredor, P. and Ferreruela, S. (2009), “Generadores de comportamiento imitador en el mercado de valores español”, *Revista Española de Financiación y Contabilidad*, Vol. 38, No. 142, pp. 265-291

Bouri, E., Gupta, R., & Roubaud, D. (2018). Herding behaviour in cryptocurrencies. *Finance Research Letters*. <https://doi.org/https://doi.org/10.1016/j.frl.2018.07.008>

Bowe, M., & Domuta, D. (2004). Investor herding during financial crisis: A clinical study of the Jakarta Stock Exchange. *Pacific-Basin Finance Journal*, 12(4), 387–418.

Brabazon, Tony. 2000. Behavioral Finance: A new sunrise or a false dawn?. University of Limerick: 1-7.

Campbell, J.O.H.N. (2006). Household Finance. THE JOURNAL OF FINANCE, LXI(4), 1553-1604.

Charness, G.A.R.Y & Gneezy, U.R.I. (2012). Strong Evidence for Gender Differences in Risk Taking. Journal of Economic Behavior & Organization , 83(1), 50-58.

Chavali, K., & Mohanraj, M. P. (2016). Impact of demographic variables and risk tolerance on investment decisions: An empirical analysis. International journal of economics and financial issues, 6(1), pp. 169-175.

Chavali, K., & Mohanraj, M. P. (2016). Impact of Demographic Variables and Risk Tolerance on Investment Decisions: An Empirical Analysis. International Journal of Economics and Financial Issues, 6(1), 169-175.

Chui, A. C. W., Titman, S., & Wei, K. C. J. (2010). Individualism and Momentum around the World. The Journal of Finance, 65(1), 361-392. <http://dx.doi.org/10.1111/j.1540-6261.2009.01532.x>.

Coffie, W.I.L.L.I.A.M. (2013). Theseus. Retrieved 12/07/2020, from <https://www.theseus.fi/handle/10024/69765>.

Daniel, K., Hirshleifer, D. and Teoh, S.H. (2002), "Investor psychology in capital markets: evidence and policy implications", Journal of Monetary Economics, Vol. 49 No. 1, pp. 139-209.

De Bondt W. F. and Thaler, R. (1985). Does the stock market overreact? The Journal of finance, 40(3), pp. 793-805

De Bondt, W. F. M., Forbes, W., Hamalainen, P., & Muradoglu, Y. G. (2010). What can Behavioural Finance Teach us About Finance? Qualitative Research in Financial Markets, 2(1), 29-36.

Duong, C., Pescetto, G., & Santamaria, D. (2014). How value-glamour investors use financial information: UK evidence of investors' confirmation bias. The European Journal of Finance, 20(6), 524-549. <https://doi.org/10.1080/1351847X.2012.722117>

Fakhry, B. (2016) A Literature Review of Behavioural Finance. *Journal of Economics Library*, Vol. 3, pp. 458-465.

Fama, E. F., 1991. Efficient Capital Markets: II. *The Journal of Finance*, 46(5), pp. 1575-1617.

Fischhoff, B., Slovic, P. & Lichtenstein, S. (1977). Knowing with certainty: The appropriateness of extreme confidence. *Journal of Experimental Psychology: Human Perception and Performance*, 3(4), 552–564.

Friedman and Friedman, 1957] Friedman, W. F. and Friedman, E. S. (1957). *The Shakespearean Ciphers Examined*. Cambridge University Press, Cambridge

Gärling, T., Kirchler, E., Lewis, A. and van Raaij, F. (2009), “Psychology, financial decision making, and financial crises”, *Psychological Science in the Public Interest*, Vol. 10 No. 1, pp. 1-47.

Glaser, M., North, M. and Weber, M. (2004), “Behavioral finance”, in Koehler, D.J. and Harvey, N. (Eds), *Blackwell Handbook of Judgment and Decision Making*, Blackwell, Oxford, pp. 527-46.

Glaser, M.A.R.K.U.S & Weber, M.A.R.T.I.N. (2007). Overconfidence and trading volume. *The Geneva Association*, 32(0), 1–36.

Graham, J. F., Stendardi, E. J., Myers, J. K., & Graham, M. J. (2002). Gender difference in investment strategies: an information processing perspective. *International journal of bank marketing* 20 (1), pp. 17-26.

GregFibeck et al. (2017). Behavioral finance: A panel discussion. *Journal of behavioral and experimental finance* vol.15, page no. 52-58.

Guiso, L., Sapienza, P., & Zingales, L. (2006). Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives*, 20(2), 23-48. <http://dx.doi.org/10.1257/jep.20.2.23>

Guiso, L., Sapienza, P., & Zingales, L. (2008). Alfred Marshall Lecture - Social Capital as Good Culture. *Journal of the European Economic Association*, 6(2-3), 295-320. <http://dx.doi.org/10.1162/JEEA.2008.6.2-3.295>

- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives*, 20(2), 23-48. <http://dx.doi.org/10.1257/jep.20.2.23>
- Guiso, L., Sapienza, P., & Zingales, L. (2008). Alfred Marshall Lecture - Social Capital as Good Culture. *Journal of the European Economic Association*, 6(2-3), 295-320. <http://dx.doi.org/10.1162/JEEA.2008.6.2-3.295>.
- Hadbaa, H., & Boutti, R. (2019). Behavioral Biases Influencing the Decision Making of Portfolio Managers of Capital Securities and Traders in Morocco. *Financial Markets, Institutions and Risks*, 3(1), 92-105. doi: [http://DOI.org/10.21272/fmir.3\(1\).92-105.2019](http://DOI.org/10.21272/fmir.3(1).92-105.2019).
- Hammond, Robert Christopher, "Behavioral finance: Its history and it's future" (2015). Selected Honors Theses. Paper 30
- Hirschey, Mark, and John Nofsinger. (2008). *Investments: Analysis and Behaviour*. Published by Tata McGraw Hill. Ed. SIE, pp. 210
- Hirshleifer D. (2001). Investor psychology and asset pricing. *Journal of Finance*, 64, 1533–1597.
- Hirshleifer, D., and S. H. Teoh. 2003. Limited Attention, Information Disclosure, and Financial Reporting. *Journal of Accounting and Economics* 36 (1-3):337-386.
- hoffmann, A.R.V.I.D, Post , T.H.O.M.A.S & Pennings, J.O.O.S.T. (2013). Individual Investors and the Financial Crisis: How Perceptions Change, Drive Behavior, and Impact Performance . *Journal of Banking & Finance*, 37(0), 60–74.
- Hong, B. K., Chan, K., & Ng, A. (2004). Invisibility and return volatility. *Journal of Financial Economics*, 71, 239-263. [http://dx.doi.org/10.1016/S0304-405X\(03\)00166-1](http://dx.doi.org/10.1016/S0304-405X(03)00166-1).
- Huang, P. H. (2008). How do Securities Laws Influence Affect, Happiness, & Trust? *Journal of Business & Technology Law*, 257-308.
- Hwang, S. & Salmon, M. (2004). Market Stress and Herding. *Journal of Empirical Finance*.11, 585-616.
- Hwang, S., & Salmon, M. (2004). Market stress and herding. *Journal of Empirical Finance*, 11(4), 585–616.

Inman, J., & Zeelenberg, M. 2002. Regret in repeat purchase versus switching decisions: The attenuating role of decision justifiability. *Journal of Consumer Research*, 29: 116–128.

Jensen, Michael C., and William H. Meckling. (1994). The Nature of Man. *Journal of Applied Corporate Finance*. Vol. 7(2), pp. 4–19.

Johnson, M., Lindblom, H., & Platan, P. (2002). Behavioral Finance: And the change of investor behavior during and after the specul

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.

Kumar, S., & Goyal, N. (2015). Behavioral biases in investment decision making—a systematic literature review. *Qualitative Research in financial markets*, 7(1), 88-108

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets*, 7(1), 88– 108. <https://doi.org/doi:10.1108/QRFM-07-2014-0022>.

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets*, 7(1), 88– 108. <https://doi.org/doi:10.1108/QRFM-07-2014-0022>.

Mahalakshmi TN, & Anuradha N. (2018). Factors affecting Investment Decision making & Investment Performance among Individual Investors in India. *International Journal of Pure and Applied Mathematics*, 118(18), 1667–1675.

Markowitz, Harry M. (1952). Portfolio selection, *Journal of Finance*, 7 (1), 77-91.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224 – 253. <http://dx.doi.org/10.1037/0033-295X.98.2.224>

Massa, M.A.S.S.I.M.O & Simonov, A.N.D.R.E.I. (2005). Behavioral Biases and Investment. *Oxford Academic*, 9(4), 483–507.

Meir, S.T.A.T.M.A.N. (2014). Behavioral finance: Finance with normal people. *Borsa Istanbul Review*, 14(2), 65-73.

Merikas et al.. (2004). Economic Factors And Individual Investor Behavior: The Case Of The Greek Stock Exchange. *Journal of Applied Business Research* , 20(4), 93-98.

Mincer , J.A.C.O.B & Polachek, S.O.L.O.M.O.N. (1974). Family Investment in Human Capital: Earnings of Women. *Journal of Political Economy*, 82(2).

Mirowski P. (1992). *Against mechanism: protecting economics from science*. Rowman & Littlefield Publishers, Lanham

MODIGLIANI, F. and R. H. BRUMBERG (1954), “Utility analysis and the consumption function: an interpretation of cross-section data”, in K.K. Kurihara ed., *Post Keynesian Economics*, Rutgers University Press, New Brunswick, pp. 388-436.

Montier, James. 2002. Cognitive Dissonance. <http://cognitive-dissonance.Behaviouralfinance.net/> Retrieved : February, 2012.

Mussweiler, T., Strack, F. and Pfeiffer, T. (2000), Overcoming the Inevitable Anchoring Effect: Considering the Opposite Compensates for Selective Accessibility, in: *Personality and Social Psychology*, 26(9), 1142–1150.

Nelson, B. (2014). The data on diversity. *Communications of the ACM*, 57(11), 86-95. doi:10.1145/2597886

Parikh, Parag. 2011. *Value Investing and Behavioral Finance*. New Delhi : Tata Mcgraw Hill.

Park, J.H., Konana, P., Gu, B., Kumar, A., and Raghunathan, R. (2010), “Confirmation Bias, Overconfidence, and Investment Performance: Evidence from Stock Message Boards”, *McCombs Research Paper Series No. IROM-07-10*.

Pompian, M. (2016). Risk Profiling through a Behavioral Finance Lens. *Research Foundation Briefs*, 2(1), 1-18.

Prosad, J.M., Kapoor, S., & Sengupta, J. 2014. Behavioral Biases in Indian Investors: a Survey of Delhi-NCR Region. *Qualitative research in financial markets*. Vol. 7 : 230-263. doi : 10.1108/QRFM-04-2014-0012.

- Rajalakshumi, C., & Manivannan, L. (2017). A Study on Influence of Investors' Demographic Characteristics on Investment Pattern. *International Journal of Innovative Research in Management Studies*, 2(2), 16-20.
- Rau, H. A. (2014). The disposition effect and loss aversion: Do gender differences matter? *Economics Letters*, 123(1), 33–36.
- Ricciardi, V. and Simon, H. (2000), "What is behavioral finance?", *The Business, Education and Technology Journal*, Vol. 2 No. 1, pp. 26-34.
- Ricciardi, V., & Simon, H. (2000, September). What is behavioural finance? *Business, education and technology journal*, pp. 1-9.
- Ricciardi, V., & Simon, H. (2000, September). What is behavioural finance? *Business, education and technology journal*, pp. 1-9.
- Schindler, M. (2007). *Rumors in financial markets: Insights into behavioral finance*. John Wiley & Sons, 413.
- Sent E.-M. (2004). Behavioral economics: how psychology made its (limited) way back into economics. *History of Political Economy*, 36(4), pp. 735-760.
- Sewell, M. (2007). Behavioural Finance: Introduction. *European Financial Management*, 13(3), 389–393. <https://doi.org/10.1111/j.1468-036x.2007.00365.x>
- Shefrin H. and Statman M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of finance*, 40(3), pp. 777-790.
- Shefrin H. and Statman M. (2000). Behavioral portfolio theory. *Journal of financial and quantitative analysis*, 35(02), pp. 127-151.
- Shiller R. (1981a). Do stock prices move too much to be justified by subsequent changes in dividends? *American Economic Review*, 71(3), pp. 421-436.
- Shukla, A. (2016, January). A study on the association of gender of investors and herd behaviour of investors. *Global journal for research analysis*, 5(1), pp. 152-153.
- Slovic P. (1972). Psychological study of human judgment: Implications for investment decision making. *The Journal of Finance*, 27(4), pp. 779-799.

Spyrou, S. (2013). Herding in financial markets: a review of the literature. *Review of Behavioral Finance*, 5(2), 175–194. <https://doi.org/doi:10.1108/RBF-02-2013-0009>

Subash, R. (2012). Charles University in Prague Faculty of Social Sciences Institute of Economic Studies Role of Behavioral Finance in Portfolio Investment Decisions : Evidence from India.

Thaler R. H. (1999a). The end of behavioral finance. *Financial Analysts Journal*, 55(6), pp. 12-17.

Thaler R. H. (2015). *Misbehaving: The making of behavioral economics*. WW Norton & Company, New York.

Tversky, A., & Kahneman, D. (2017). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.

Tversky, A., & Kahneman, D. Judgment and uncertainty: Heuristics and biases, *Science* (1974) pp. 1124-1131.

Tversky, Amos. and Kahneman, Daniel. 1981. The framing of decisions and the psychology of choice. *Science* 211(4481): 453 – 458.

Veni, P & Kandregula, R.A.J.A.N.I. . (2020). EVOLUTION OF BEHAVIORAL FINANCE. *International Journal of Scientific Development and Research (IJS DR)*, 5(3), 213.

Von Gaudecker, H.-M. “How Does Household Portfolio Diversification Vary with Financial Literacy and Financial Advice?” *Journal of Finance*, 2015, 70, pp. 489-507.

Warren, W. E., Stevens, R. E., & McConkey, C. W. (1990). Using demographic and lifestyle analysis to segment individual investors. *Financial Analysts Journal*, 46(2), 74-77.

Weber, M., Camerer, C. (1998). The disposition effect in securities trading: An experimental analysis. *Journal of Economic Behavior & Organization* 33: 167–184.

Wood, R. and Zaichkowsky, L. Z. (2004). Attitudes and Trading Behavior of stock Market Investors: A Segmentation Approach. *Journal of Behavioral Finance* 5(3): 170-179.

Zeelenberg, M., 1999. Anticipated regret, expected feedback and behavioral decision making. *Journal of Behavioral Decision Making* 12, 93-106.

Zeelenberg, M., Beattie, J., van der Pligt, J., de Vries, N.K., 1996. Consequences of regret aversion: Effects of expected feedback on risky decision making. *Organizational Behavior and Human Decision Processes* 65, 148-158.

Zhang, Y.U. & Zheng, X.I.A.O.S.O.N.G. (2015). A STUDY OF THE INVESTMENT BEHAVIOR BASED ON BEHAVIORAL FINANCE. *European Journal of Business and Economics*, 10(1), 1-5.

Zoghami, F. & H. Matoussi. (2009). A Survey of Tunisians Investors Behavior. *International Research Journal of Finance and Economics*, 31: 66-82.

8. APPENDIX

Dear participant;

The questionnaire you will fill out is designed to investigate women financial decisions in behavioural finance perspective. The obtained data from this survey will be used in the master thesis. Your participation is very important for completing this academic research.

Thank you in advance for your participation.

2-Age:

- 23-32 ()
- 33-42 ()
- 43-52 ()
- 53-62 ()
- 63 and more ()

3-Marital status:

- Married ()
- Single ()

4-Education status:

High school and below() Bachelor () Master () PHD()

5-Job: State officer () Private sector employee () Worker ()
Own business ()

Retired () Farmer() Housewife () Unemployed () Other()

6-Do you have regular income?

Yes, I have regular income () No,I have irregular income () I do not have income ()

7- The average of your monthly income:

1-500 - 700 ()

2- 701 - 1200 ()

3- 1201 - 1700 ()

4- 1701-2000 ()

5- 2000 or more ()

8-The average of monthly income in your family:

1- 500 - 700 ()

2- 701 - 1200 ()

3- 1201 - 1700 ()

4- 1701-2000 ()

5- 2001 – 3000 ()

6- 3001 or more ()

9-Do you save money? Yes () No ()

10-If your answer is “Yes” to above question, how much is your monthly saving?

1-250 or less ()

2- 250 - 500 ()

3- 501 - 750 ()

4- 751 - 1000 ()

5- 1001 and more()

11- How do you evaluate your economic situation?

- Not satisfactory ()
- Not satisfactory, not satisfactory ()
- Satisfactory ()

12-Which of the following investment types do you prefer beside stock? You can have several choices.

- Bank Deposit ()
- Foreign currency ()
- Gold ()
- Bonds ()
- Real estate ()
- Individual pension ()
- Future contracts ()
- Other ()

13-Which asset normally gives the highest return when it is considered that an investment has been made for a long period of time (eg 10 to 20 years)?

Bank deposit () Bonds () Stock() Real estate () Gold () Other()
I do not know()

14-Which of the following phrases describe you most accurately as an investor?

- Finance or banking professional ()
- Individual investor receiving professional help ()
- An individual investor without receiving professional help ()

15-Do you make a portfolio from your investments? (Do you invest in more than one investment tools).

Yes() No()

16-If your answer is “Yes” to the above question, how many kinds of investment assets your portfolio contain?

2 () 3() 4() 5 and more()

17-How often do you follow the profit/loss situation in your investments?

I do not follow () Daily() Weekly() Monthly() Yearly()

18-How often do you follow the developments in the financial markets?

I do not follow() Daily() Weekly() Monthly() Yearly()

19- Which information resource or resources do you use when you want to make investment?

Newspaper () TV() Internet() Investment expert opinion ()
Firms' reports and explanation() My own analyzes() Social environmental advice()
Other()

20- What is your most important expectation when making a new investment decision?

High return () Capital maintenance () Perpetual annuity ()

Reduction of portfolio risk () Other ()

21- What is the most important factor of the basic factors required for high return in investment?

Information () Experience () Risk-Taking () Walk on eggshells (Act cautiously) () Chance()

22-How do you find yourself in your investment decision success than other other investors?

I am better than average () Average level() I am worse than average() No idea()

Second section

1- strongly agree 2- Agree 3- undecided 4- disagree 5- strongly disagree

1- My investment instruments' lost is related to bad luck or other external factors

2 I have this belief that I have known the performance of the financial investment instrument's of past period, before that period

3 I Keep positive performance or positive information about a financial investment instrument in my memory and use it when I want to make a decision about my next investment.

4 If I have a portfolio of two financial instruments, A and B, I would sell a B product that lost 15% instead of A, which earn 15% of those instrument with the same cost, when I needed immediate cash.

5 I prefer low risk / low return investment instruments more than high risk / high return investment instruments

6 Low risk is the most fundamental factor I consider when I choose an investment instrument

7 The investment decisions of people I communicate with are influential in my investment decisions.

8 I think that my information is more valuable than the information of other investors during the finance investments.

9 The stocks of big and well-known companies are good and they always have a high return.

10 The new information about an investment instrument does not affect my investment decision.

11 If a financial tool earns for several periods regularly, it will lose soon, and if it loses several periods regularly, it will soon gain.

12 When I am undecided between two financial investment instruments, I choose the one that I have more information about.

13 The preferences of other investors in the market are important to me and I follow them in my investment decisions.

14 I invest in the stocks of the companies where I reside.

15 I am completely self-reliant in making right decisions about my financial investments.

16 In investing subject, not losing value is more important than its gain/return.

17 The sadness I feel in my investments when I lose is more effective than the joy I feel when I win.

18 In investment decisions, I trust my experiences more than new information.

19 I do not change my investment instruments, even if there are instruments with more profit or Return.

20 I will not change my mind about the investment instruments that I believe it will win, even if it begins to lose.

21 The winning investment instrument in the past, that is losing in present, will win again in Future.

22 If I lose by my investment instrument, I sell that tool as soon as possible.

23 When I realize that the market is going down, I completely deduct/sell the investment instruments.

24 I am willing to take more risk when I get easy gains in investments.

25 I think that the economic growth that will take place in the local and international markets in the coming period will be positive.

26 I have a strong expectation that my financial investments will gain in the next period.

27 A remarkable performance of a investment instrument will have an effect on my decision process when I want to invest again in the same type of investment instrument.

28 If my investment decisions are successful, I relate this result to my competences and abilities.



	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
My investment instruments' lost is related to bad luck or other external factors.					
I have this belief that I have known the performance of the financial investment instrument's of past period, before that period.					
I Keep positive performance or positive information about a financial investment instrument in my memory and use it when I want to make a decision about my next investment					
If I have a portfolio of two financial instruments, A and B, I would sell a B product that lost 15% instead of A, which earn 15% of those instrument with the same cost, when I needed immediate cash.					
I prefer low risk / low return investment instruments more than high risk / high return investment instruments.					
Low risk is the most fundamental factor I consider when I choose an investment instrument					
The investment decisions of people I communicate with are influential in my investment decisions.					
I think that my information is more valuable than the information of other investors during the finance investments.					
The stocks of big and well-known companies are good and they always have a high return.					
The new information about an investment instrument does not affect my investment decision.					
If a financial tool earns for several periods regularly, it will lose soon, and if it loses several periods regularly, it will soon gain.					
When I am undecided between two financial investment instruments, I choose the one that I					
The preferences of other investors in the market are important to me and I follow them in my investment decisions.					
I invest in the stocks of the companies where I reside.					
I am completely self-reliant in making right decisions about my financial investments.					
In investing subject, not losing value is more important than its gain/return.					
The sadness I feel in my investments when I lose is more effective than the joy I feel when I win.					
In investment decisions, I trust my experiences more than new information.					
I do not change my investment instruments, even if there are instruments with more profit or Return.					
I will not change my mind about the investment instruments that I believe it will win, even if it begins to lose					
The winning investment instrument in the past, that is losing in present, will win again in Future.					
If I lose by my investment instrument, I sell that tool as soon as possible.					
When I realize that the market is going down, I completely deduct/sell the investment instruments.					
I am willing to take more risk when I get easy gains in investments.					
I think that the economic growth that will take place in the local and international markets in the coming period will be positive.					
I have a strong expectation that my financial investments will gain in the next period.					
A remarkable performance of a investment instrument will have an effect on my decision process when I want to invest again in the same type of investment instrument.					
If my investment decisions are successful, I relate this result to my competences and abilities.					

TEZ FOTOKOPİSİ İZİN FORMU

E NST İT Ü

Fen Bilimleri Enstitüsü Sosyal Bilimler
Enstitüsü

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YAZARIN

Soyadı : Abo Ayash
Adı : Sammar Ibrahim AbedAlraoof
Bölümü : Business Administration

T E ZİN ADI: (İngilizce)

T E ZİN TÜRÜ : Yüksek Lisans

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Doktora

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- 1- Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.
- 2- Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
- 3- Tezimden bir bir (1) yıl süreyle fotokopi alınamaz.

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