Impact of Behavioural Biasness on Investment Decision Making Process

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ABSTRACT

The realm of investment is not merely a terrain of rational analysis and logical deductions; rather, it's a complex interplay of psychological biases that often steer investor decision-making processes. This abstract delves into the intricate web of behavioral biases that permeate the investment landscape, shedding light on their profound impact on investor behavior and market dynamics. Drawing from a diverse array of behavioral economics literature and empirical studies, this abstract synthesizes the prevalent biases that plague investor decision-making, ranging from overconfidence and confirmation bias to loss aversion and herd mentality. It elucidates how these biases manifest in various stages of the investment process, influencing asset allocation, portfolio diversification, and risk management strategies. Moreover, the implications of behavioral biases on market efficiency and asset pricing, highlighting the divergence between rational expectations and actual market outcomes. By dissecting the underlying mechanisms of these biases and their consequences, it underscores the importance of recognizing and mitigating their effects for both individual investors and financial institutions. It also discusses the potential synergies between traditional finance theories and behavioral economics, proposing integrated approaches that harness the strengths of both disciplines to enhance investor decision-making.At the end this topic gives us a holistic understanding of behavioral biases in the investment domain, emphasizing the need for investor education, regulatory measures, and technological innovations to foster more rational and informed decision-making processes. By unraveling the intricate interplay between psychology and finance, these abstract paves the way for a more nuanced comprehension of investor behavior and its ramifications on market dynamics.

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CHAPTER ONE

INTRODUCTION

People can made decisions which rely upon their perceptions and feeling instead of gathering much information which simplify operative decision making. However, number of investigations showed that human beings make their decision on the basis of their nature, their habits, and their cognitive behavior which are hidden deeply in their mind. Rational investor are risk averse and will desire a low risk in place of high risk on a current level of returns by Markowitz (1952). Behavioral finance is the reading of by what means psychology can effects on decision-making process and incommercial markets.Psychology enhance the judgement of human beings.Phycology can also give us thesignificant evidences about human actions whichvary from traditional economic assumptions by (shefrin 2011).

According to (Kahneman and Tversky, 1979), said that investors behave irrationally in real market, they excessively trade in market, buy stock without bearing in mind the basic value. Their decision is rely upon their past performance and they purchase stock which was purchase by their friends. Rational investors usually shorten their decision making process and are lying to heuristics behavior due to which systematic error can occur and which leads to reasonable choices of investments, but cannot enhance the utility. Singh (2010) said that behavioral finance concept is established on partial arbitrage and organized psychology. However, arbitrage suggests that profit making action from price changes among markets, which involves adverse or optimistic cash flows in an incidence that are mostly not risky. There are different economics and finance concepts which suggest that investor perform rational and focus on easily available information while making decision regarding investment. Behavioral finance studies numerous psychological biases and how it affects investment judgments of individual and organizations especially when analyzing financial books regarding decision making, Reilly and Brown (2011).Some overseas scientist find out that human psychology can effects by investor decision by Berber and Odean (1999), Huberman (2001), Pompian (2008) &Shefrin (2011). There is instinct literature, which associates with logical error like people think when we see the options for investment for which this paper search to discover; supposedly, investors are very confident while making decisions because they rely on experience, this disposition may cause unfair andincorrectresults. This research examines the effects of behavioral biasness on investor decision at Pakistan stock exchange.

Behavioral biases include both cognitive biases (such as availability, mental accounting, representativeness, anchoring, and confirmation bias. On the other hand, emotional bias which includes risk aversion, over confidence, regret aversion, endowment bias.

In the world of uncertainty investor choose sequence of action between differentreplacements. The expected utility theory (EUT) said that investors make a balanced decision by investing all the changes which depend upon their utility and associated risk.

By combining "behavioral" and "psychological"phases in economics and financial decision behavioral finance emerged as a new concept in 1980s. An alternative theory presented by Kahneman and Tversky which explain decision making under uncertain condition. Behavioral biases play vital role to encourage investor whichdiffer from rationality and make irrational decision. Behavioral bias has negative impact on rational

decision making it cause irrationality. Bias is a predisposition error said by sherfin (2000). That is why investor shows irrational behavior in different situation, wrong judgements, and misrepresentation in observation.

Behavioral finance associates, with the perceptions from psychology, economics and finance. This study will support financial advice-givers to recognize various kinds of behavioral biasness and its probable effect on investment decision making process. It also gives benefits to all regulatory authorities in acquiring financial strengths and made such policies through which we can neglect these biasness. It also help rational investor to make investment decision. That is why it is essential to study behavior of investor and also its impact on behavioral biasness and investment decision making process.

In this study we will see the cognitive bias which include (availability, mental accounting, representativeness, anchoring, confirmation bias), and emotional bias (risk aversion, over confidence, regret aversion, endowment bias).

Furthermore, a theory of rational choice has been introduced to attaina wanted outcome on process of decision making. Nature of human being vary by means ofinadequatementalcompetencies. Due to this purpose decision making behavior of human beings cannot shadow the full rational behavior. In 1956 Simon introduce a new idea of rationality. This theory describes that due to absence of knowledge and memory lossirrational decision made by people.

Financial theories are rely upon this statement that investor make rational decision.

Fama (1970) said that price of security reveal the information which isaccessible in market. Traditional theory take responsibility that decision of the investors are rely on the (EUT) expected utility theory. Though (EUT) rely on the rationality concept and said investor make reliable and liberated decision among different accessiblesubstitutes. In 1980 another idea introduced in behavioral finance theory, Behavioral finance depend on two units, Thaler and barberis in 2002 said that it is based on "cognitive psychology" and "limit to arbitrage". Cognitive psychology defines us about thinking of people and perception of people, While limit to arbitrage is opportunity where people are not capable of making profit from market disruptionsdue to irrationality in behavior.Kahneman and taversky in 1979, develop a prospect theory of decision making Theory of prospect said that there are some psychological issues which effects the decision making of investor and they differ from rationality which continued to Simon's in (1956) dispute of restricted rationality. Failure of investment returns are due to these psychological factors which is known as behavioral biasness. Detail study on investment behavior of each investor of different countries has revealed that mostly investor show behavioral biasness.

A. Background:

From past few years people assumed that theory of traditional finance is true as it said that investors make thoughtful decision by thinking rationally, On the basis of different valuations or by using different economic models. Sherfin in (2001) said that financial market and financial decision are affect by psychological factors. Behavioral finance is the technique in financial market which rise in reaction to complications challenged in traditional finance.

Daniel Kahneman is the father of behavioral finance who receive "NobelPrize" in the economics feild. "Daniel Kahneman", "Amos Tversky", and "Richard thaler" are the pioneer researcher of the behavioral finance. There are various studies that test rationality and thusdeveloped behavioral finance. Behavioral biases offer reason for the irregularityin which human make irrational decision which includes improvements and results including losses by (Tversky, A and Kahneman 1973).Availability, mental

accounting,representativeness,anchoring,confirmation bias, risk aversion ,over confidence, regret aversion, endowment bias etc. are some biasness that seemed as unit of behavioral finance and ultimately affect investor decision making. Behavioral biases affect decision making process which influence investor to move from "rationality" and take "irrational" investment decision said by (Niehaus and shrider, 2014). This research cover both empirical and theoretical contributions. The present study focuses on nine different biases which we have taken from conceptual framework to analyze its effect on investment decision making.

B. Role of Behavioural Finance in Investment Decision:

To make or to take decision is different and difficult activity.it can never be depend on personal assets and difficult models which do not take in to concern the circumstances. If any variable caused problem will be reconciled by the cognitive psychology of the leader. The decision making activity based on conditions or circumstances incorporates not only problems which are confronted by each individual and also extend to the environment. We can describe decision making as a process of selecting a specificsubstitute from number of substitutes. This activity tracks after appropriate assessment of all the substitutes.It should be updated in different fields so that the desired result will be accomplished in modest business environment.This will give a good knowledge of nature of human in global outlook in addition with the growth of well skills and facility to catch best from investments. All investor vary from each other in every aspects due to different features like demographic factor which include socio-economic factor, education, age and race. This is the most difficult challenge ever faced by investor in the space of investments. When the investor design investment portfolio, the investor should see many things like "financial goals", "risk tolerance level", and many other constraints. With these factors they will have to forecast the output mean variance optimization. This is the process which is best matched for institutional investor, but it cause failure for those who are susceptible to behavioral bias.

Current situation shows that, behavioral finance is the essential part of the decision making, because it greatly impact investor's performance. And investor can increase their performance by identifying the biasness and blunders of judgement to which are liable. When we consider the behavioral finance it also help the investors to select a better asset instrumentand they can neglect error in future. The relevant issue of this study is how to reduce or remove psychological biasness in investment decision making process.

C. Emergence of Behavioural Finance:

Making money is the main purpose of investment. In past years, "investment" was rely on "performance", "forecasting", and"market timing". This produce very casual result which mean that investor was dropped with usual features, and slight peace of mind. When come to search reason, we will find a great space between accessible returns and actual returns we received. When we examine we come to know it is instigated by main mistakes in decision making process. That is to say, we can roughly conclude that they make irrational investment decision. By identifying mistakes and neglect them to convert the quality of investment decision and the consequences, they identified the effect of psychology in an investment decision. In past years researcher's identified through psychological process these mistakes occur in behavioral finance. Behavioral finance is very famous in stock market as well as all over the world of investment decision. Many investor thinks that psychology play important role in identifying market behavior. The consequences of these researches were at thealteration with rational, self-interested decision-maker fictional by "traditional finance" and "economics theory".Behavioral finance is all about how human act on investment decision by (linter).Behavioral finance does not define that rational behavior biased or faulty. It strive to comprehend and estimate efficient financial market consequences of psychosomatic decision process. It also well-known that no anyintegrated theory of behavioral finance subsists at this time.

D. Behavioural Finance Principles and its Implications:

In the theory of traditional finance, rational investors are present. In comparison to modern theory recommends that financial decision making of investors are not determined dueto deliberations. The decisions are taken by investors which are alsoimpulsive. But on another hand, decision of human beings are focus on numerous cognitive deceptions. They are combined in the group of two and have been revealed.

➢ *Heuristic decision process:*

This is the method where investor find out the things for themselves by using trial and error method and which focus on the expansion of rules of thumb. It is called rule of thumb because human beings made decisionin very difficult and undefinedsurroundings. The genuineness of the investment decision process is not normal. Investor collected the information which include mental and emotional factors. Sometimes result are good but sometimes result are poorer. It includes some factors like "representativeness", "overconfidence", "anchoring", and "gambler's fallacy", "availability bias.

➢ *Prospect theory:*

The prospect theory is established by Kahneman and Tversky. Another groups of Impressions which effects the decision making process which are combined in prospect theory. In this theory differentconditions of mind are conversed whichaffect an investor decision is making Process. The main concepts which discussed are as follows: loss aversion, regret aversion, mental accounting, and self-control.

E. Research Problem

The connection between behavioral biasness and investor decision has been focus by many researchers from past decades. In this paper we will focus on how behavioral biasness (cognitive and emotional biasness) affect psychology of investor and help him/her in decision making.

F. Research Questions:
- To check the result of "cognitive bias" and "emotional bias" on investment decision making process.
- To recognize the reason of the behavioral biasness and their results on an investor's choice of investment.
- To investigate the effect of these behavioral biasness in investment decision-making process
- To detect the research gaps and hypothetical research in this area.

G. Objective of the Study:
- The aim of this study is to identify the impact of cognitive bias and emotional bias on investment decision process.
- Also, to help the investors to better understand the investment decision making process.
- To help and understand the psychology of investor in investment decision making.
- To fulfill the research gap and hypothetical research in this area.

H. Limitations:

This study emphasize on individuals' behavioral biasness in investment decision-making process. We have very limited knowledge and financial constraint about our topic.

I. SCOPE:

On the basis of our knowledge, firstly we use the systematic literature review method in the study of behavioral finance and with that we also identify a connection of nine different biasness involved in investment decision-making process. This paper will be beneficial for all those researchers who are working in the area of behavioral finance in order to understand the impact of behavioral biasness on investment decision making process.

Key words: behavioral biasness, herding, mental accounting, confirmation bias.

J. Study Structure:

- **Chapter 1:** This chapter gives us a details about the current scenario of the behavioral biasness on investment decision. Further this chapter gives us the detail about the problem statement, objective, and significance of study.
- **Chapter 2:** This chapter gives the detail review about behavioral biasness on investment decision with the perspective of Pakistan scenario as well as international scenario. This study is taken from different websites, journals and articles. This study continues the hypothesis related to study.
- **Chapter 3:** This chapter gives the details about research methodology and research design which is primarily quantitative. Further we will collect data through questionnaire with the sample size of 385 individual. Also this chapter elaborates on the techniques used for data analysis through SPSS software and we get result from this.
- **Chapter 4:** This chapter gives the result from the software we used and discuss in detail the finding of data and provide assessment. Further it confirms the model and test the hypothesis by describing the conclusion of the results obtained.
- **Chapter 5**: This chapter includes the conclusion of the whole study.

CHAPTER TWO

LITERATURE REVIEW

The systematic literature review focus upon national as well as international studies on rational decision-making process and behavioral bias for present study.

A. Pakistani Scenario:

Behavioral finance is all about human behavior which was influenced by emotional and cognitive bias at the time of making decision regarding investment. We cover the relationship of two biasness named as over confidence and confirmation bias in this literature.

Pompian in (2011) said that over confidence is a behavioral bias in which investor hasbaseless beliefs on their cognitive capabilities. (Daniel, Hirshleifer, & Subramanian, 1998) investigate that investor who are overconfidence are miscalculate the indications of personal information although supervising the broadly accessibleevidence. Kumar and Goyal (2016) said that investor who are over confident at the moment of examiningfacts and figures depend on previous experience and become over confident and supervisegenuine fact. In the same way, Barber and Odean in (2000) analyze that investor who are overconfident, trade in large volume and large quantity of trading, returns before hypothesis of transaction charge was usual, while return next to hypothesis of transaction charge was reduced. Over confident investor always misinterpret the data and extravagant their capabilities after close examination of thedataabout investment and give false results about the return of investment. . Confirmation bias is a cognitive fault which traces the investor's understanding about information in the way they approve the prior ideas while neglecting from clarification of data that reject previous views said by (Shefrin, 2007). Bashir et al in (2013) analyze the effect of behavioral biasness on investor financial decision. Hefined that investor was effected by confirmation bias at the time of making decision. Decision making process also affect by some religious factor. Most of the Muslim investor thought that the investment they made is according to Islamic laws or not. (Esso and dibbi in 2004) said that people act according to their religious beliefs while selecting financial, cosmetics, food and medical related product. According to Keister study in (2003), activities related to saving and investment are hypothetically resolute and assumed by religious valuesas religiosity has logical impact on customs, approaches, attitudes and believers. Religious plays a major character in making of decision about the risk attitude said by Keister in (2003) he examines the research claimed that.

Most risky investment is done by Jews and earns large amount of return on financial assets associate to non-Jews. Thus, the religious have influence on investors' investment decision making. "Prospect theory", said that there are some psychological issues are included in investment decision-making process. Because of these factors, investors differ from rational decision making. When investors look anundefinedcircumstances, they make various decisions and their behavior in front of the situations involving gains is different from their behavior towards situations involving losses. Various factors identified by the researcher of behavioral finance school of thoughts which cause anomalies in investment decision process. Hence it is significant to take out factors that market particularly needs. Investors of china make poor trading decision, and they are effected by "disposition bias", "representative bias" and are more overconfident. Overconfidence is defined as a condition

when an individual think through his skill, knowledge and/or ability to be greater than the actual performance. This is one of the common biases. People are overconfident and invest without bearing in mind the risks associated. This influences the rational decision-making said by"(Odean, 1999; Barber &Odean, 2000; Barber &Odean, 2001; Statman, Thorley, &Vorkink, 2006; Weber & Camerer, 1998; Moore, & Healy, 2008)".It has been seen that investor sell assets when prices are low while more assets are sold when price is high. This effect is called disposition effect. This process is also called as "prospect theory", "loss aversion", "regret avoidance" and "mental accounting" said by (Shefrin, 2000; Shefrin& Statman, 1985).Risk level also plays avigorous role in investor's decision making different person have different ability to accept the risk, like younger person can bear more risk, than the older because one consider himself physically and financially strong to tolerate any losses. Bashir, Uppal, Hanif, Yaseen, and Saraj (2013) analyze that men can tolerate risk than women. It is also observed that risk-opposed individuals invest a lesser amount in stocks (Shum and Faig, 2006). A person who can bear a high-risk tolerance can invest much in risky stocks to earn greaterearnings. Investor who like to get upcoming benefit like "capital gain"frequently like to capitalize in fast moving companies. Growing company usually pay little amount of dividend as company reinvest their receiving in to the growing company. That is why price of these shares increase over time. It is summarized that the current price of a share, the future trends in the price level and its growth rate, all play vital role in shaping the investor's behavior. It has been detected that the investors emphasis on the popular stocks and attention-taking events (Waweru, Munyoki, &Uliana, 2008).

Doya in (2008) describes that we take decision by seeing four main processes. First a person should see the current situation in which he take decision. Secondly, all available option must keep in mind that how much reward or punishment will be given by each choice. In the 3rd stage, the choice is estimated in accordance of personal necessity. In the last and fourth stage the option we choose is re-consider in relation of result. He said all above mentioned steps are useful in analysis of any model where these steps are followed. Those standard financetheories which are rely on thestatement that the person who invest and collect all publically available information will take rational decision. Though, problem has started when person are not sure about the outcomes of decision. The point here is that people normally act illogically. If we takeacase of lottery ticket, we will get a clear point that most of the individuals purchase lottery ticket in the expectation that they will hit aprize. In reality people createintellectualshortcuts when they have to take some decisions, said by "(Shan mug sundaram& Balakrishnan, in 2011; Tversky & Kahneman, in 1974)". Behavioral finance explained diffrent types of anomalies. According to sherfin in (2000), behavioral finance affect human psychology by investor and other financial practitioner. Traditional theory are the grouping of three theories named as"Modern portfolio theory (MPT)", "efficient market hypothesis theory (EMHT)", and "rational hypothesis". All these theories are rely on four basic assumptions which are "investors are rational", "markets are efficient", "investors design their portfolios according to mean variance portfolio theory" and "estimated returns are a function of risk". On the other hand behavioral finance theory describes that investors are usual not rational. Markets are inefficient, investor plan a portfolio according to the behavioral portfolio theory not according to mean variance portfolio theory.

Statman (2014) said that expected return ismonitor by behavioral asset pricing theory in which we cannot measured risk by using beta and expected returns are identified by factors except risk. People avoid such decisions which lead them towards losses. It is explained by regret aversion theory. Experts in behavioral finance theorybelieves that "psychological" and "cognitive bias"for instance overconfidence bias, anchoring bias, representative bias, and information bias, generate financial markets irregularities. (Shefrin, 2001; Kahn man and Tversky, 1979), said that Cognitive error leads the investors to grasp the stocks which are growing and escape the stock which has high. Investment decision making involved some psychological factor according to prospect theory.

Due to these factors investors deviate from rational decision. In some circumstances investor make different decision in his/her different attitudes because their attitude towards loss is different and their attitude towards gain is different. (Kahneman & Tversky, 1992; 1979) said that decision making process based on four elements namely reference dependence, loss aversion, and diminishing sensitivity. Investor's behavior affect by four biases psychological, demographic, social and economic. Other psychological factor include"Overconfidence bias", "disposition effect", "herd behavior", "gambler's fallacy", and "hot hand fallacy".

(Nofsinger, 2016; Chen, Kim, Nofsinger, and Rui, in 2007) identified that investor in growing market are more liable towards cognitive bias. Because investor in china make poor decisions regarding trade that is why they are affected by "disposition effect", "representative bias" and "overconfident bias". They make categories of every investor like "investor with middle aged", "activeinvestors", "and wealthyinvestors", "experienced investors" and those who are from cosmopolitan cities and presented that investor who consider savvier investors are also disposed towards the cognitive bias. Overconfidence is one of the common bias in which individual defines his skill, knowledge and ability which is to be greater than actual performance. Without seeing the risk people become overconfident. This influences the making of rational decision said by (Odean,in 1999; Barber andOdean, in 2000; Barber &Odean, in 2001; Statman, Thorley, andVorkink, in 2006; Weber & Camerer, in 1998; Moore, and Healy, in 2008). Disposition bias tells us that investor sell assets when prices are low while more assets are sold when prices are high. (Shefrin, 2000; Shefrin& Statman, 1985) said that this process include in "prospect theory", "loss aversion", "regret avoidance" and "mental accounting".(Lin, 2011; Banerjee, 1992; Bikhchandi, Hirschleifer, and Welch, 1992) said about herd behavior. He said that this is a type of behavior where people depend on others instead of taking an independent decision. They follow the decision of majority instead of relying on the moments of stock price that ultimately influence investors risk and return characteristics.

Level of income, age, knowledge of market, academic qualification and marital status include in demographic factor. And have greater impact on investment decision. Different studies investigates on demographic factor on investment decision process and conclude different results. (Kaleem, Wajid, & Hussain, 2009) carried out study in rajhistan which concludes that investor investment style can be hit by age, income, language and education. Data from Lithuanian stock market shows that there is an existence of a relationship between decision of investment and personal characteristics of investors like gender, age, personal experience and profession said by kartasova in 2013.The result of this study shows that "overconfidence bias", "anchoring bias", "mental accounting" and "herd behavior" intensely effect decision making process.

In behavioral finance study, decision making process also affect by certain economic factors. Trading shares, income level, savings, risk level attached with financial instruments, growth level, liquidity, dividend and fluctuation in price of an instrument these all factors include in investment decision process. Highly demanded shares attract investor decision making process. Investor which are new in market invest on those shares which are highly traded in stock exchange because they think that these stocks performs well in stock market. These kind of shares have less liquidity. Financial position also play a major role in behavior of investment decision of investors. To predict the company's performance major players hits the past presentation of the companies. In investment decision process taxes on capital gain also plays an important role. Just because investor trade share on daily basis other taxes do not affect investor. Income is also a part of investment decision process. Monthly income of individual is called as income. Investor invest more if they have a higher income. Different choices are available for the person with higher income level. Saving is also an important factor that shapes the behavior. People with more saving will invest more. With extra saving investors invest in risk and long term financial instruments. Risk level attach with an instrument also plays a pivotal role in determining investor's behavior. Every person has different ability to bear the risk. Personality traits,

environment and financial responsibilities also affect the person's ability to bear risk. Men can bear more risk than woman found by Bashir, Uppal, Hanif, Yaseen, and Saraj (2013).

In the same way individual with high income level invest in the more risky investment as comparison to low income level. (Shum and Faig, 2006) found that risk averse individual less in stocks. A person who can bear a high risk can invest in more risky stocks to earn greater returns. Investor decision can also hit by market price, liquidity and dividend policy of the instrument. Low price, greater liquidity, and higher dividend is preferred by an individual investor. Investor will invest in growing company to acquire future benefit like "capital gain". These companies use money to take a startup of new projects, purchase new units or take over other companies. Investor receive bonuses and enhanced their capital gains.it can be summarize that the current price of the share, the future trends in price level and its growth rate plays significant role in determining investor behavior. (Waweru, Munyoki, &Uliana, 2008) found that attention grabbing events and popular stocks are focused by investor. Investor can behave irrationally due to social factors or influence of family members and colleagues to buy or sell certain financial instrument. Socio economic factor can also hit the investment decision of the investor as well. Hot hand fallacy, gamblerfallacy, herdingbehavior, disposition effect, these all factors are influenced by behavioral factors and these are professional and non-professional behavior said by Hon-Snir,Kudryavtsev, and Cohen (2012). Experienced investor are not affected by behavioral factor.

By using Dhaka stock exchange Islam in 2012 recognized main factors which affect investment decision. Psychological factors have greater effect on investment decision making process showed by these factor analysis.

B. International Scenario:

Mojtaba and Abolfazl (2016) showed the effect of behavioral biasness factors on investors of Iran. Resultsindicated that "herd character", "market prospect", and "overconfidence biasness" and "heuristics biasness" influences investment decision in Iran. Investor face difficulties while making judgements due to lack of financial literacy said by Dhankar (2018). The traditional finance theory is failed to check market anomalies proved by scholars. We can assume that fund managers are logical that is why strictly check out andobserve the traditional finance models when making decision. A person should understand in what way cognitive and emotional bias affect.

Decision making. Oganlusi and obademi in 2019 describe that how over confidence bias and representative bias including herd instinct, regret aversion and cognitive dissonance affect investor decision making. Brahmana, et al (2012) outlined nine biases that influences investment decision such as overconfidence biasness error, representativeness, mental accounting error, anchoring, confirmation biasness error, over confidence, endowment bias, availability bias and Regret aversion. Their findings exposed that behavioral factors such as overconfidence biasness, confirmation bias, and herd intuitive bias significantly alters investor's decision-making process .Michelle (2010) said that social, economic, psychological, and cultural influences can change the investment decision in Nigeria, the study discovered that social factors which are most prevailing factor monitored by psychological and commercial factors. While traditional factor affects the least.Decourt et al in 2007 said that how Brazilian investor affected by cognitive bias, regret aversion, and disposition effect. Rekik and Bluejeaned in (2013) reveal that investor in Tunisia do not act rationally while taking any decision regarding investment. This researchdiscovers that "herding behavior", "representativeness", "anchoring biasness", "regret aversion" and "mental accounting" all effects the investor of Tunisia and the process of their decision making.That is whyoverconfidence biasness is absent in Tunis Market.Infact investor of Tunisia are very under confident to the others reactions and opinions. Study also reveals that age, gender, groups economic factor also affects investor decision making. The study showed people with convinced age limit are not as much

of focus to factor while mature investors who're not much educated regarding the market and have less income are focus to effect upon behavioral biases. Smit and moratis in 2010 said that while new finance has been flourished and still it is very difficult explanation to give that why people behave irrationally while dealing with money. The behavioral attitude is a unique kind of approach which gives explanation to the movement of financial markets which is very efficient to the market premise. (Liu, Jin, Wang, and Yuan, 2015) said that through the enhanced participation of behavioral finance investor focus on behavior of investor and their investment decision making process. (Ko & James Huang, 2007) said that over confidence is one of the principle reason of market anomalies. Through over confidence investor is pretty much sure about their decision and ignore risk linked to investment. In overconfidence condition, the investor take trendy events reputed, which maybe sometimes due to dynamic economic conditions. (Darrat, Zhong, & Cheng, in 2007 said that over confidence leads to higher trading volumes. The inquiry was test to study the effect of historicalperformance and they found that attitude of anchoring bias denotes the random result. Furthermore it was examined that every personcan handle their fightsamongconsequentialcertainty and historical behavior by altering anchoring attitudes with theories rather than behavior. To expand strategies regarding trade which abusethe behavior of investor.

A theoretical research was identified where we study anchoring biasness both from technical and anomalies point of view.(Qingzhong Ma, Hui Wang, 2017) said that empirical evidence explains productivity as wide set of irregularities and describe strategies regarding trade which misuse the anchoring biasness. The research discovered that unproductive knowledge effects the choices of investment decision, mainly the anchoring biasness impactstart in bidding for online auctions. Consequences of this study established the reality of anchoring behavioral biasness in an online auction.

Faulkner in 2002 identified three types of traits and give three types of theories which relate to behavioral finance these are "prospect theory", "regret theory", "mental accounting" or "cognitive dissonance".

C. Regret Theory:

This model was developed by loomes and sudgen in 1982 which describe choice under uncertainty. It gives us the minimax approach which is used in the decision theory for reducing the possible losses although exploiting the possible gain. Regret theory is a kind of model which minimize the function of regret direction which explains the change among the result yield by particular choice and best consequence which we can achieve in state of nature. Regret is a kind of emotion which is affected by associating a given output or state of particular events with the state of predictable outcome said by Bell (1982). For example when we choose from a less famous brand and a most famous brand, customer may focus on the regret of outcome that the less famous brands perform much unwell than famous brand and therefore no chance to select unfamiliar brand. A lot of investors have knowledge about prospect study and investment decision was regret noted by shefrin and statman in (1985). It is a nature of human being to feel the agony of regret at having error neither keeping this kind of errors in to a greater perspective. Regret theory actually help in explaining the truth that investors willsubmit the stocks with selling price which is an decreasing trend and speed up the selling of stocks which has increasing trend.

➢ *Prospect Theory*

"Daniel kahneman" is a professor at Prince University in psychology department which developed a prospect theory, "Amos tversky" in the year 1979 is a pschycollogicallyfaithful substitutes of expected utility theory (EUT). This study allow people to make alternatives in the situation where they describe the choices which have risk involvement. Cognitive psychology techniques was useful in prospect theory which gives various separations of economic decision which made from "neo-classical theory". This study tells us about the

value of decision which involve thedoubt and that is why they gaze at the alternatives in positions of potential gains or potential losses in relative to a particularlocation which is frequently the purchase price.

Faulkner in the year 2002 pronounced some facts about prospect theory agrees a consequentialist approach (this is the approach which give the right and wrong judgement of conduct) to choice, which said that while in making decision. People are likely to be concerned with the probableconsequences of their actions.

Specifically, they identify probable course of action rely on interest and the probability of each of an action possible outcomes. On the basis of prospect theory the coding of results gain & loss represent most important characteristic of decision making that results are observed in relation of gain and loss which is related to some referencepoint. Asignificant consequence of "prospect theory" is the way agents of economics individually surround by a consequences or operation in their concentrationwhich affects the usefulness they assume or receive.

D. Mental Accounting:

Thaler gives the concept of economics in 1980, he said that individual can distribute their existing and upcoming asset in to discrete and non-transferable portions. The study significances that individual allocate various levels of usefulness to each group of asset, which affect their decision or additional behavior.it is an application in "mental accounting" of the life cycle of behavioral hypothesis that people structure their assets which belongs to their existing wealth or upcoming income and has consequence of its behavior as the accounts are mostly non-fungible borderingtendency to put away. Investors are capable to canter the losers as they are unwilling to identify losses. Investors incorporate the auction of losers so that the pain of regret is restricted to one time period. Also, investors be likely to influence the sale of winners over time to extend the favorable experience and at the end investor's often have an irrational partiality for all those stocks which pay great dividend because they don't have any issue in using the income of dividend but are not liable to sell a few shares and swim into the capital.Shefrin& Statman in the year 1994 discuss that investors think rationally in terms of taking a "safe" part of their range which issheltered from downside risk and all those parts which involves risk are designed for a chance of getting rich.

E. Cognitive Dissonance:

"Cognitive dissonance" is a kind of "psychological conflict" that every individual bear when they are exist with proofs and false beliefs and false assumption like cognitive dissonance which is categorized as a type of regret. With the regression study of "cognitive dissonance"Ferstinger in the year 1957 states that there is tendency of individual to take necessary actions which decrease the "cognitive dissonance" which is considered to be fully rational. Investor sometimes neglect the present information or it can recover the one sided arguments to keep it beliefs and assumptions valid. Goetz Mann &Peles in the year 1993 discussed that there are some researches of "cognitive dissonance "which highlight the method that inflow of money is very fast in mutual funds and performance automatically decrease when money go out from mutual funds. Those investor who lost their funds are not willing to face that they perform extremely bad in market. According to smit and moraitis in 2010 individual act irrationally when dealing with money. The behavioral theory is another type of behavioral approach which gives us the detailed information of financial market. In traditional finance security price is reflected by given information said by (fama 1970), In addition behavioral finance explains because investor behave irrationally and due to inefficient financial market stock or security price change said by "Cabral de Avila, Lucimar Antonio de Oliveira, Alanna Santos de Melo Silva Avila, Jessica RayseMalaquias, in 2016); (Kabasinskas& Macys, in 2010).As the participation of investor rises, behavioral finance theory focused on the behavior of the investor and it also increased decision making process said by (Liu, Jin, Wang, & Yuan, in the year 2015). A primary building block in behavioral finance is over confidence. (Ko & James Huang, 2007), stated that overconfidence biasness is a kind of consequences of psychology which is one of the

fundamental reason of anomalies. (Prosad, Kapoor, Sengupta, &Roychoudhary, 2018) said that investor are very confident about their skills and investment decision process and avoid risk due to over confidence. When investor dealing with securities he is overconfident about his planning's and metal propensity in that case investor shows over confidence bias said by "Huang, Tan, &Zhong,in the year 2014". In overconfidence biasness investor take things for granted. The effect of behavioral biasness on investment process are conclude from the trading volume of financial market. Higher trading volume can lead to behavior of over confidence stated by "Darrat, Zhong", &"Cheng", in the year 2007; "Phan", "Rieger", &"Wang", in the year 2018; "Mushinada"&"Veluri", in the year 2018; "Khan, Tan, Chong, & Ong, in the year, 2017. Results of this research indicates that designed retail products are broadly interlinked to the investors behavioral biasness mainly overconfidence biasness was investigated by "Abreu & Mendes", in the year.2018.

The study was examined on the basis of historical behavior and it was find out that attitudeanchoring biasness on conviction shows the unpredictable outcome. When investigated furthermore we found the conflict among the consequentialwhich can be resolved by individual by adjusting anchoring biasness attitudes with the true beliefs instead of false behavior. The study has been conducted on anchoring bias which examine the effects of anchoring biasness on return of stocksevaluations by collecting data from surveys which involve university's students and those who has knowledge regarding financial markets. It can be also seen that the valuation of university's student inclined by first stock value and if it is the situation of professional valuation which was not mathematically and financially significant and also these professionals are unaware about the historical returns which rely on its expectation investigated by "Kaustia", "Alho", and"Puttonen", in the year, 2008. To discover plans regarding trade which abuse investor's behavioral anchoring biasness, this research was inspected where "anchoring bias" was studied from both the angles which is technical and anomalies point. When we see experimentaldata which indicate that "anchoring biasness" describe the productivity as a wide group of variances and explain policies regarding trade that abuse the anchoring biasness investigated by "Qingzhong Ma", "Hui Wang", in the year, 2017. Final assessment declares that there is direct relationship between behavioral biasness and anchoring biasness which says that higher the anchor higher the subsequent and lower the anchor lower the subsequent. In contrast to undefined data, wrong information brings a delicate anchoring biasness said by (Qu et al., in the year, 2008). The research discovered that uncommunicative information influence the selection of investment decision making process, mostly the anchoring biasness found in order for online sale. This study gives us the results which confirmed that the presence of anchoring behavioral biasness in an online sale.

For better understanding of disposition effect in investment decision making process. Theresult of disposition effects is anessentialtool of online-trading stock that has examined by the investors in their study. Study also shows that disposition has negative financial impact. E-trading situation which is internet based recently emerged as"effect of disposition" is not exaggerated by the future possibility gain and loss investigated by "H.-J. Lee et al., in the year 200". Experimental result of this research showed that of disposition effectis present in Taiwanese market, additionally it is specified that permits with altered on price of market show various disposition behavior investigated by "changin 2008". To see the effect of disposition on Chinese stock market, the study use account data of some brokerage firm from china and found that Chinese are poor in decision making. They just focus on gains not losses. "Gongmeng Chen, Kenneth A. Kim,in 2007"said that they sell those stocks whose price are increased in the market but not those stocks whose price are decreased in the market which shows persistent disposition behavior. According to socio-economic and demographic factor, we collect practical evidence which found that investor who are wealthier and professional shows a lesser effects of disposition investigated by "dhar andzhu in 2006". Kaustia in 2004 investigated that how disposition effect impact on initial public offerings while effect of disposition was found to be very consistent because of current buying price originated by researchers in initial public offer. As we studied the above IPO'S another research investigated the after mark effected of disposition in Malaysian market. This study showed that many

investors planned to change a victorious IPO in contrast to misplacing IPO that effect in constant effect of disposition said by "Chong, 2009". Roger in 2009 studied that effect of disposition is also studied in equity premium. Survival of effect of disposition by investor tend to tolerate high risk premium for stock investment.

Effect of disposition is also examined in Korean stock index and provide strong evidence of effect of disposition in the investment performance. Study also find that investor are more disposed towards "disposition effect" than oversees investor. There is a negative and inverse relationship between investment's performance and effect of disposition. Disposition biasness is stronger in long term than in short term. With the help of this research additional research has been investigated to study the disposition effects on Taiwan stock market. Research showed that individual investor has positive and significant association with the "disposition effect". Effects of disposition has been investigated in Taiwan mutual fund investors. Disposition effects changes in market states. "Disposition effect" was not unvarying in Taiwan mutual fund investor. Result of this study recommended that investor exchange their mutual fund more in contrast to bull market. Consequently in this studyphenomenon of effects of disposition presents for Taiwan mutual fund also said by "J.S.Lee", "yen Chan", in 2013.

Herding bias also affect investment decision process, how does it impact? Different approaches were used to assess a risk and return association in commercial market along with theparticipation of "herd behavior". "Bekiros", "Jlassi", "Lucey", "Naoui", &"Uddin", in the year 2017, identified that there is areverseresponseestablish in Asian financial market as a result of herd phenomenon. Results of the researchproposed that the collectedoutline of herding brightened the firm's business cycle investigated by "Mueller" and"Brettel", in the year 2012. On the other hand some evidences was collected when we come to know about the herd behavior at times when market was highly unstable, dispersion of return decrease due to intraday instability said by "Rompotis", in the year 2018. Of all these studies one of the study is identified how investor affect through herd behavior.

The consequences of this research implicit the reality of herd behavior in investor investment decision making. This study also shows that herd behavior is different in male and female investigated by "Lin" in the year 2011.

A research take part in the understanding the effect of herd behavior in investment decision taken in extremelyinstable environment. Hall in 2016 suggest that herding behavior exist in property fund managers as well. Research identified the effectof herd behavior on divergence. A role of herdbehavior of manager of mutual fund determined, and examined that herd behavior which inclined by paper gain and loss ratio. Herding behavior of mutual fund manager also harms performance of investment. Disposition bias also effects herd bias as well. During the financial crisis herd effect was also found in US and Latin American markets. Some papers showed that herd behavior was also found in housing loans, credit cards, and different kinds of loans. (Tran, Nguyen, & Lin, in the year 2017), said that big banks are more herd than smaller regional banks. Volatility of the stock market reduce due to herding behavior. "Ben Mabrouk", in 2018, identified that herd behavior is inversely proportional to both markets and herd behavior is increase due to inaccessibility of knowledge in both markets.Primarily, investors are subjective by various behavioral biasness factors. Consequently, various investors make investment decisions in different way. The current investigation made a determination to overwhelm the spaces found in literature review and thusexamine the effect of behavior biasness on investor's decision making process.

F. Conceptual Framework
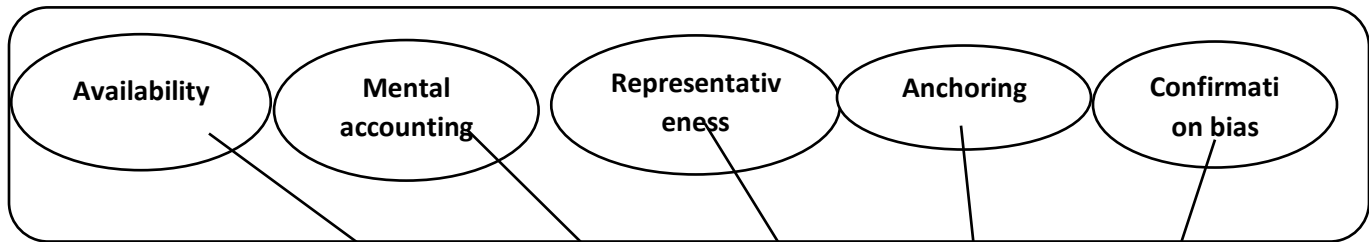
COGNITIVE BIAS
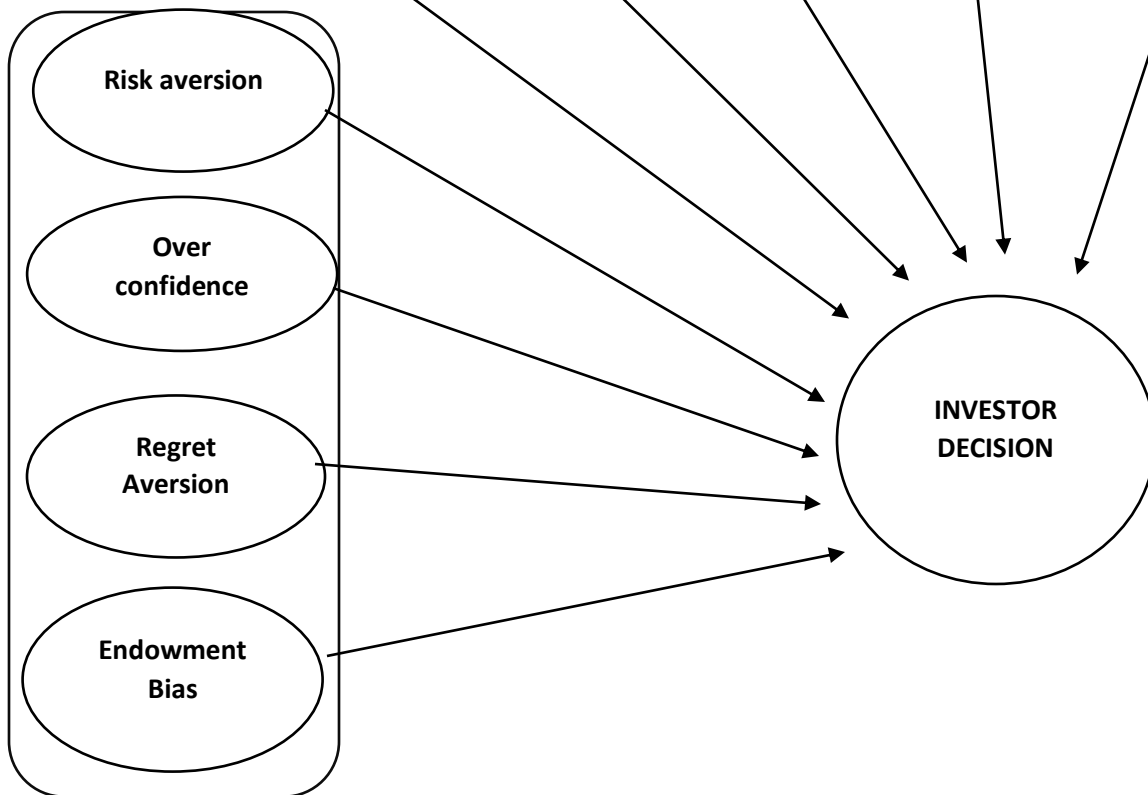
G. Cognitive Bias

➢ *Availability:*

In availability bias investor depend upon information which is simply available instead of we find other substitutes and methods. Availability bias is investor give huge value to naturally available data.

➢ *Mental accounting:*

"Mental accounting" is a type of "cognitive bias" which individual use and household to establish and keep way of financial activities. Discovered by economist "Richard H. Thaler", it deals with individuals which

organize funds differently and consequently, are disposed to irrational decision-making process in spending and investment behavior.

➢ *Representativeness:*

Representativeness is kind of heuristic which is defined as when investor purchase new stock and avoid those stock which performs bad in the past. This behavior biasness shows the investor's overreaction.

➢ *Anchoring:*

"Anchoring" is a kind of humanpropensitywhich depend upon single piece of information when Making or taking decisions. "Anchoring"mentions people's tendency to make estimation about the probabilities of indefinite events. "Anchoring"arise when a value of scale is set by existing observations.

➢ *Confirmation bias:*

Confirmation bias is a kind of cognitive bias which is used for understand, courtesy, or recall information in the way that strengths personal opinions of person. People use confirmation bias when they gather selective dataor when they elaborate in aninclined way. Confirmation biasnessendorse overconfidence biasness inprivate opinions and can sustain or toughen beliefs in the face of conflicting data.

H. Emotional Bias:

➢ *Risk Aversion:*

"Risk aversion" is an investor wish to neglectuncertainties. Risk averse has negative impact on trading activity on the investor and their portfolio size.it directly affect individualcapital by making poor decision. On the basis of past studies investors are "rational", "risk averse" and try to maximize capital under complex conditions.

➢ *Overconfidence:*

Mostly investor seek that they are better than other and this will lead them to overconfidence bias. Investor becomes overconfidence when they get someinformation by concerning particular area. Heuristics use in decision making process which can save time, charge and exertion but it mayerror reasoningand those results which I want will not be achieved.

➢ *Regret Aversion:*

Regret averse is a type of emotional bias in which investor do not want to takecritical decision because investor has some kinds of anxiety in mind that whatsoever course they select will prove less optimum. Fundamentally, regret aversion is used to neglect emotional stress of regret connected with cheap decision making process.

➢ *Endowment biasness:*

The "endowment bias"denotes to an "emotional biasness" which causes investors to create value to own an object, frequently irrational, than its value of market. "Endowment effect" will be seen undoubtedly with those stuffs which have sensitive and figurative consequence of the individual. Research showed that "ownership" and "loss averse" are the two importantpsychosomatic reason which cause the endowment biasness.

I. Hypothesis Of The Study:

H1: There is a substantial connection among behavioral biasness and investment decision making.

H2: "overconfidence" is substantialimpact on investment decision making process.

H3: "Anchoring" is meaningfully impact by investment decision making process.

H4: "Disposition effects" is positively influence by investment decision making process.

H5: "Risk aversion" has adverse and insignificant effect on investment decision making process.

CHAPTER THREE

METHODOLOGY

The aim of this research is to analyze the effect of behavioral biasness on investment decisions process. The "methodology "chapter clearly define the research design and research techniques used for this research. It also gives the detail study about population, size, sampling technique, data collection methods, and data analysis methods.

A. Research Design:

To identify the effect of behavioral biasness on investment decision making process, we collect data from 211 questionnaire from surveys. And also, we collect data from different journals and articles and from different websites. No secondary is used in this research. We take behavioral factor as dependent variable and other variable asindependent variable. Research design is basically a kind of structure of research according to Kombo and Tromp in (2006).This is the descriptive research which is concerned about what, where and how the research process occur said by cooper and schindler in 2003.The main focus of this study is quantitative, because there are lot of benefit of quantitative study number 1 is that results will be increased if criteria of selection is properly developed, number 2 is, it is easy to check, and number 3 is data will be efficient,acute,and reliable. The aim of this research is to check the hypothesis which is right or wrong.

B. Population:

The particular selected population also havenoticeable features on which researchers concentrated to take a broad view of the result of research explained by Mugenda and mugenda in 2003.from this definition we can make assumption that the target population is homogenous. Therefore on the basis of this research the target population is all individual investor.

C. Size

➢ Sampling Technique:

The sampling technique explains the "sampling unit", "sampling frame", "sampling procedures", and the "sample size" for the study said by "Cooper & Schindler", in the year 2003 explained that sampling frame is a technique in which we can list down the populations from which we can select the sample. Sample size is controlled by four constraints said by fox and bayat in 2007, he list these four parameters number 1 is the certainty level of the gathered information which represented to the total population, number 2 is the need of accuracy which we need for the sample estimation, number 3 is which type of analysis we use as we use many stasticall techniques and number 4 is the size of the overall population from which we have drawn the samples. The study focus on 211 respondents.

D. Data Collection

Collection of data is the technique through which we can collect information accurately about different types of methods in a proper format which gives us accurate answer of our research question. We can test hypothesis and identify the results.Mellenburgh in 2008 said that questionnaire are useful for the collection of information, which is not noticeable because theyinvestigate about "feelings", "motivations", "attitudes", as

well as individual experience. Individuals are not influenced in any means by researcher said by Franker in 2006. Franker also said that questionnaire has benefit of being less expensive and take less time as data instrument collection.We collect information by filling out the questionnaire from different students, by using different website and different journals. In this study we use random sampling technique. The questionnaire process was used for the collection of primary data. The sample used for analysis was two hundred and eleven questionnaire. (211).

➢ *Data analysis:*
The main focus of this investigation is to make conclusion from the data we have gathered. Several questions regarding investor decision are calculated through SPSS and generate a new score. Descriptive statistics isdescribe the information available in literature. Initial analysis is done by using some test to look out that whether behavior biasness occur in Pakistan or not. Correlation analysis is used to check the relationship between behavioral biasness with other variables. Investor type will take as moderating variable. Quantitative data is used and was presented in tables and explanations. Further we use the multiple regression analysis which gives us the overview of the results on impact of behavioral biasness on investment decision making process.

Below is the regression equation

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6 + \beta 7X7 + \beta 8X8 + \beta 9X9 + \varepsilon$$

Dependent variable is represented by Y and X shows independent variable. Score will be derived from Likert scale for each behavioral factor.
X1 Represents Availability
X2 Represents Mental Accounting
X3 Represents Representativeness
X4 Represents Anchoring
X5 Represents Confirmation Bias
X6 Represents Risk Aversion
X7 Represents over Confidence
X8 Represents Regret Aversion
X9 Represents Endowment Bias
Regression analysis was calculated on SPSS software. The "β coefficients" from the equation above signify the strength and track the connection among the independent and dependent variables.

E. Data Validity And Reliability
Pilot study was done to check the authentication of questionnaire. This method is useful in pre-testing the questionnaire which is used in the study. This was done to confirm the implication of the materials to study, advance study shows that how to manage the instruments, and test the rationality and consistency of the instruments, therefore check if there were any uncertainty in the tools. The reliability analysis was measured to find the degree to which the calculating items would give similar results after a number of trials. A test process was used to evaluate the degree which gives the same results after repeated trials. The selection of pilot study was done using purposive sampling.

CHAPTER FOUR

RESULTS

Basically, there are two types of techniques which are useful in the data analysis i.e. "descriptive statistics" and "inferential statistics". We analyze the demographic factors of respondents by using descriptive statistics techniques.To investigate the connection among behavioral biasness and investment decision making process the regression and correlation analysis were used.

A. Validity And Reliability

For confirming the authenticity of the questionnaire pilot study was used in which two hundred and eleven (211) respondent's data were examinedand to look atthe consistency of data we get Cronbach's alpha. The reliability analysis gives us the value of Cronbach's alpha which must be higher or equal to 0.6 to conclude the consistency of questionnaire.

Table 1: Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.635	.623	9

B. Respondent's Profile

Table 2: Respondents Profile

Demographic Factors	Frequency	Percentage
GENDER		
Male	121	57.3
Female	90	42.7
AGE GROUP		
25-45	209	99.1
45-65	2	0.9
EDUCATION GROUP		
below matriculation	11	5.2
matriculation	4	1.9
bachelor	50	23.7
post graduate	146	69.2
PROFESSION GROUP		
student/housewife	108	51.2
businessman	16	7.6
salaried person	86	40.8
retired	1	0.5
MONTHLY INCOME		
below 25000	42	19.9

25001-60000	148	70.1
60001-100000	12	5.7
above 100000	9	4.3

Table 3: Correlation Results

	Risk Averse	Investor decision	Mental accounting	Availability	Representativeness	Anchoring	Overconfidence bias	Regret aversion
Risk averse Pearson correlation	1	0.110	-0.082	0.235	0.182	0.150	0.054	-0.138
Sig.(2 tailed)		0.110	0.238	0.001	0.008	0.030	0.435	0.046
N		211	211	211	209	211	211	211
Investor decision Pearson correlation	0.110	1	-0.204	-0.007	0.038	0.055	-0.047	-0.059
Sig.(2 tailed)	0.110		0.003	0.918	0.587	0.426	0.502	0.390
N	211	211	211	211	209	211	211	211
Mental accounting Pearson correlation	-0.082	-0.204	1	-0.240	0.173	0.023	0.013	0.451
Sig.(2 tailed)	0.238	0.003		0.000	0.012	0.740	0.853	0.000
N	211	211	211	211	209	211	211	211
Availability Pearson correlation	0.253	-0.007	-0.240	1	-0.261	-0.135	-0.096	-0.131
Sig.(2 tailed)	0.001	0.918	0.000		0.000	0.050	0.163	0.057
N	211	211	211	211	209	211	211	211
Representativeness Pearson correlation	0.182	0.038	0.173	-0.261	1	0.464	0.309	0.065
Sig.(2 tailed)	0.008	0.587	0.012	0.000		0.000	0.000	0.351
N	209	209	209	209	209	209	209	209

Anchoring Pearson correlation	0.150	0.055	0.023	-0.135	0.464	1	0.300	0.040
Sig.(2 tailed)	0.030	0.426	0.740	0.050	0.000		0.000	0.566
N	211	211	211	211	211	211	211	211
Overconfidence bias Pearson correlation	0.054	-0.047	0.013	-0.096	0.309	0.300	1	-0.084
Sig.(2 tailed)	0.435	0.502	0.853	0.163	0.000	0.000		0.223
N	211	211	211	211	211	211	211	211
Regret aversion Pearson correlation	-0.138	-0.059	0.451	-0.131	0.065	0.040	-0.084	1
Sig.(2 tailed)	0.046	0.390	0.000	0.057	0.351	0.566	0.223	
N	211	211	211	211	209	211	211	211

** Correlation is Significant at the 0.01 level (2 tailed)
*Correlation is Significant at the 0.05 level (2 tailed)

C. Correlation Analysis

The connection among all the variables is strong. There is significantbond among the overconfidence biasness and investment decision making process which is -0.047. It is also notable that at 1% level of inevitability which represents that if investor's overconfidence decrease it will also decrease the decision of investor. There is connection between mental accounting and investor decision which shows that –0.204 which is complex at 1% level of inevitability which express that there is negativeconnectionamong these variables as the regret aversion of the investor's decreaseit reduce the decision making of the investment. The linkingamong availability and investment decision is -0.007 at 1% level of certainty which express that there is negativelinkamongthese variables as investor in front of prices it decrease its investor decision. The connection between over-confidence and investment decision is -0.047it is notable that at 1% level of certainty which express that there is negativeassociation among these variables which representsthat if over confidence decreaseit decrease investor decision. The correlationamong Anchoring and investment decision is 0.055 it isnotablethat at 1% level of certainty which express that there is positive affiliationamong these variables which shows that anchoring increase investor decision. The liaisonamong representativeness and investment decision making process is 0.038 which is notable that at 1% level of certainty which express that there is positive correlationamong these variables which shows that representativeness increase investor decision making. The correlation between availability and investment is -0.007 which is notable that at 1% level of certainty which express that there is adverseconnection between these variables which describes that availability decrease investor decision.

➢ *Regression Analysis:*

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594ᵃ	.353	.292	1.44201

Predictors: (Constant), Regret aversion, Anchoring, Availability, Availability, Availability, Representativeness, Risk averse, Risk averse, Overconfidence bias, Mental Accounting, Representativeness, Risk averse, Anchoring, Representativeness, Mental accounting, Representativeness, Anchoring, Risk averse

➢ *Regression Results*

This analysis represents the result of linear regression with the investor decision as independent variable and other factors were taken as independent variables i.e. Regret aversion, Anchoring, Availability, Representativeness, Risk averse, Overconfidence bias, Mental accounting. The summary of this model shows the R-square shows 0.353 dissimilarities in the investor decision process which is clarified by the model while adjusted R-square is 0.292 which is somehow close to R-square. The value of R- square is high which is 35.3% on that percentage probability level is low. This can be occur due to some other factors which are not considered in this model.

➢ *Overall Individual Significance*

Table 5: Overall Significance

F	Sig.
5.756	0.000b

a. Dependent Variable: Investor decision
b. Predictors: (constant) Regret aversion, Availability, Availability, Availability, Representativeness, Risk averse, Risk averse, Overconfidence bias, Mental accounting, Representativeness, Risk averse, Anchoring, Representativeness, Mental accounting, Representativeness, Anchoring, Risk averse.

Table 6: Individual Significance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.734	.924		1.877	.062
	Risk averse	.076	.093	.058	.819	.414
	Risk averse	-.304	.077	-.260	-3.922	.000
	Risk averse	.112	.087	.103	1.282	.201
	Risk averse	-.016	.082	-.014	-.199	.843
	Mental accounting	-.199	.081	-.190	-2.451	.015
	Mental Accounting	.110	.086	.087	1.273	.205
1	Availability	.052	.073	.053	.705	.482
	Availability	.245	.098	.174	2.491	.014
	Availability	.003	.084	.003	.040	.968
	Representativeness	.177	.094	.145	1.881	.061
	Representativeness	.413	.083	.361	4.992	.000
	Representativeness	.041	.084	.033	.492	.623
	Representativeness	-.094	.092	-.069	-1.019	.309

	Anchoring	-.013	.074	-.013	-.173	.863
	Anchoring	.047	.087	.040	.541	.589
	Anchoring	-.078	.079	-.078	-.992	.322
	Overconfidence bias	-.026	.083	-.021	-.315	.753
	Regret aversion	.060	.080	.057	.750	.454

a. Dependent Variable: Investor decision

CHAPTER FIVE

CONCLUSION

When we deal with the diverse options of investment there is one fundamental question that people always facewhich is what will be the best plan of action while investing in the financial market? On the basis of assumption of the reality it is proved that investor will choose financial instruments which maximize the gain and minimize the loss "Ahmed Zamri", "Ibrahim, Haslindar", "tyuon", in 2017".People are reflected as partial rational and partial irrational in investor decision. After various researches in behavioral biasness it is recognized that many researches showed that individuals behave rationally in the process of decision making only when they have relevant information accessible. When data is not accessible to them in such cases, experimental evidence showed constant sequence of irrationality which looked like the way investors reach at decisions and selections when tested with risk and indecision.The current study also reveal some truth about market psychology which showed that investors can purchase or shift stocks and sometimes they do not purchase or sell at all.Hence, the most problematicexperimenthandled by investors in investment decision field. From all of the above variables risk averse, representativeness and anchoring has a positive and significant correlation with the decision of the investor while others have no any significant relationship with investor decision. According to the consequences of finding this study will help in identifying the effect of behavioral biasness on investment decision making process, which reduce biasness and make rational decision. Furthermore this research will help regulatory authority of market in order to improve such type of rules to escape these behavioral biasness.

Traditional financial theory suggest that investor make rational decision with all the information available in the market. In the era of behavioral finance there are various things which needs to enhance but due to some limitation we cannot increase our study. The result can be change if we take the results of overall financial markets. Many investor invest greatvolume of money in stock market in order to receive huge amount of profit in very less period of time.In today's world people are dependent upon money that is why financial decisions are very complex decisions people ever made in their lifetime, and bad financial decisions mayruinhuman and social life. So, we should dohard work in order to decrease biasness. There are many different pathways which helps investor to take rational financial decision through education and provide training to investors. Investor which are not educated can invest in market by taking the advice of other individual investors rather than doing their own research.Research culture must be encouraged and many investors might be trained by means of technical analysis so that they can increase their studies in this field and can make rational decisions as a replacement for of irrational decisions.

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