Project Dissertation Report On

IMPACT OF BEHAVIORAL FINANCE ON PORTFOLIO INVESTMENT DECISIONS

Submitted By:

SHIVANI GOYAL
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Under the Guidance of

DR. SONAL THUKRAL
ASSISTANT PROFESSOR

DELHI SCHOOL OF MANAGEMENT

Delhi Technological University
Bawana Road Delhi 110042

CERTIFICATE FROM INSTITUTE

This is to certify that Project Report on "IMPACT OF BEHAVIORAL FINANCE ON PORTFOLIO INVESTMENT DECISIONS" is a bona fide work carried out by "Shivani Goyal" who is a student of MBA 2018-20 Batch. The project is submitted to Delhi School of Management, Delhi Technological University in partial fulfillment of the requirement for the award of degree of Masters of Business Administration.

Signature of Guide

Signature of Head DSM

Place:

Seal of Head

Date:

STUDENT DECLARATION

The project has been undertaken as a partial fulfillment of the requirement of the degree of "DELHI SCHOOL OF MANAGMENT" OF "DELHI TECHNOLOGICAL UNIVERSITY" (DELHI)

This project was executed in 4rd semester of MBA programme under the supervision of Dr. Sonal Thukral.

I declared that this project is my original work and the analysis and findings are for academics purpose only. This project has not been presented in any seminar or submitted elsewhere for the award of degree or diploma.

Counter Signed by:

(Student Signature)

Shivani Goyal

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Shivani Goyal
Delhi School of Management
Delhi Technological University

Abstract

Investor's assessment has been one of the key determinants of market developments. In this unique circumstance, examining the pretended by feelings like dread, insatiability and expectation, in taking care of business venture choices appeared to be significant. Behavioral Finance is an advancing field that reviews how mental components influence dynamic under vulnerability. This study tries to discover the impact of certain recognized financial biases, to be specific, Overconfidence, Representativeness, Herding, Anchoring, Cognitive Dissonance, Regret Aversion, Gamblers' Fallacy, and Mental Accounting, on the dynamic procedure of individual financial specialists in the Indian Stock Market. Essential information for examination was accumulated by appropriating an organized poll among financial specialists who were arranged as (i) young, and (ii) experienced. Results acquired by investigating an example of seventy four respondents, out of which twelve confessed to having endured lost in any event half in light of the emergency, uncovered that the level of presentation to the predispositions isolated the standard of conduct of youthful and experienced speculators.

Gamblers' Fallacy, Anchoring and Representative and Herding inclination apparently affected the young financial specialists essentially more than experienced speculators.

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Chapter One

Introduction

Traditional style speculation hypotheses depend on the supposition that speculators consistently act in a way that expands their arrival. However various exploration show that financial specialists are not generally so levelheaded. Human become bewildered when the vulnerability in regards to venture choice immerses them. Individuals are not generally objective and markets are not generally proficient. Social fund clarifies why individual don't generally settle on the choices they are required to make and why markets don't dependably carry on as they are relied upon to act. Ongoing examination shows that the normal financial specialists settle on choices dependent on feeling, not rationale; most speculator's purchase high on theories and deal low on alarm state of mind. Mental investigations uncover that the torment of losing cash from speculation is extremely multiple times more noteworthy than the delight of gaining cash. Feelings, for example, dread and voracity regularly assume a urgent job in financial specialist's choice; there are likewise different reasons for silly conduct. It is seen that stock value goes here and there every day with no adjustment in major of economies. It is likewise seen that individuals in the securities exchange move in groups and this impact stock cost. Hypothetically advertises are effective yet by and by, they never move proficiently. For instance, a rumored organization reports a super interest in a rising territory over next hardly any years, the stock cost of the organization fires climbing quickly without investigating the possibilities, return or the measure of venture to be made in this undertaking. That is the way the conduct of financial specialist moves the stock cost.

The traditional finance worldview looks to comprehend budgetary markets utilizing models in which financial specialists are discerning. Despite the fact that numerous conventional speculations of shifting complexities and informative force have existed and developed in the course of recent decades, the reasonability of financial specialists is a focal supposition one and all. Thaler in 2005 said, The field of account has advanced in the course of recent decades dependent on the supposition that individuals settle on reasonable choices and that they are fair in their forecasts about what's to come. Financial specialists are thought of as a balanced part that take deliberately weighted monetarily doable choices each and every time. A sane speculator can be characterized as a one that consistently (i) refreshes his convictions in an ideal and suitable way on getting new data; (ii) settles on decisions that are normatively worthy.

In what is probably going to be named as an irregularity by most conventional monetary hypotheses, the establishments of the world economy were shaken by the Financial Crisis of 2008 that began in the USA and worldwide downturn that came about. (Nofsinger 2001)

Bernstein in 1998 said, There is evidence that uncovers that there is

nonsensicalness, irregularity, and inadequacy in the manners in which individuals show up at choices and decisions when confronted with vulnerability. Additionally Nofsinger in 2001 said that, The suppositions of soundness and fairness of individuals have been drubbed by therapists for quite a while.

In 1970s Kahneman and Tversky, two reseachers brought forth another idea, Behavioral Finance. Social fund concentrates how individuals really carry on in a money related setting. In particular, it is the investigation of how brain science influences money related choices, organizations, and the monetary markets. Nofsinger, 2001.

Thus, it isn't that phenomenal that financial experts don't have these blemishes, it is just that they appreciate the hugeness of sentiments in trading, and train their cerebrum not to mix emotions in with decisions by following a two-advance method (i) understand one's own energetic and mental deficiencies by thinking about various recognized inconsistencies or 'predispositions' and choose if he/she has presented these mistakes previously or if there is a tendency to present this in future; and (ii) ensuing to achieving focuses in past development, grasp the senseless direct of others and bit of leeway from their slip-ups. (Parikh, 2011).

1.1. Objectives of the Study

i. To check if the normal individual speculator taking an interest in the Indian Stock Market is rational always.

ii. To know whether the mental effect of social account in settling on venture choices acquires changes the dynamic of the financial investors or not.

iii. To comprehend different “behavioral biases” and its impact on the speculation choices.

The work centers around eight distinguished conduct predispositions, in particular: Overconfidence, Representativeness, Herding, Anchoring, Cognitive Dissonance, Regret Aversion, and Gamblers' Fallacy. Impacts of these eight factors on the dynamic procedure of portfolio financial specialists in Delhi NCR, India has been examined in this investigation. Singular speculators were picked for the examination since they were bound to have restricted information about utilization of social hypotheses in dynamic and henceforth inclined to committing mental errors. The impact has fundamentally been examined regarding whether social elements influence the financial specialists' choice to purchase sell or hold stocks.

The proposition follows an elucidating research structure. Essential information for investigation has been accumulated utilizing a questionnaire1 study. The poll was conveyed to financial specialists exchanging at a financier floor and as an online overview to connect with speculators who like to exchange by means of web based stages. The last example comprised of 74 financial specialists, chose by applying judgment inspecting dependent on two rules (i) age of the respondent, and (ii) long periods of contributing experience. Two sub-tests were of forty one and thirty three speculators were made: (i) encountered financial

specialists – those matured over 30 with at any rate 4 years of contributing experience; and (ii) Young financial specialists – those matured 30 or underneath with under 4 years of experience. The example has been prepared and dissected utilizing IBM SPSS Software and Microsoft Excel. Nine factors were coded into SPSS, 1 of them a dichotomous variable speaking to speculator gathering, and the staying eight, each speaking to an inclination, were made by utilizing scaling procedures like 3-point and 5-point Likert Scales, and math mean. A general investigation of these factors was led which checks if the standard of conduct of youthful financial specialists is not the same as that of the accomplished ones. Further, impact of each inclination on the two gatherings was broke down independently utilizing. Theories were tried utilizing the Chi-square test for Independence.

The rest of the piece of proposal is organized as follows: Chapter Two depicts insights regarding reasons for the appearance of the field of Behavioral Finance. The foundation and advancement of the field, famous conduct speculations, and the eight social predispositions pertinent to this examination are talked about. Existing writing applicable to the general investigation, just as to each predisposition has been surveyed in setting. Part Three gives subtleties on the structure of the exploration and strategies utilized for encouraging the examination; lines it up with hypothetical depictions of investigation techniques utilized after which the real examination and results are introduced in detail. Part Four gives an outline of the outcomes acquired and gives suggestions; followed up by the end in Chapter Five.

1.2. Significance of the study

Behavioral Finance is getting increasingly more consideration for the comprehension of conduct of putting open in the current entrepreneur world. A great deal of contributing oddities can't be clarified by the cutting edge portfolio hypothesis which depends on the foundation presumptions that all speculators are sound and autonomous. Under the advanced portfolio hypothesis. (Markowitz, 1952) CAPM Model and APT Model, financial specialists are thought to be discerning and autonomous and, accordingly, it is extremely hard to get alpha come back from the market, for example effective market theory. (Fama, 1970).

The ramifications of effective market speculation is that no one can reliably beat the market and get a prevalent return over the long haul. Be that as it may, we see a great deal of venture adventures, for example, Mr. Warren Buffett (Warren Buffet and Clark, 2001), Mr. Dwindle Lynch 2000, Sir John Mark Templeton, 2008.

Mr. Ginzo Korekawa (Ginzo, 1991), Mr. Andre (Kostolany, 1996), Mr. Jim (Slater, 2000), Mr. Jim (Rogers, 2004), Mr. George (Soros and Volcker, 2003) , Mr. Philip (Fisher, 1997), utilizing speculation strategies referenced in the cited books creating enormous degree of alphas… The rundown of these venture adventures is simply too long to even think about naming all. On the off chance that the cutting edge portfolio hypothesis is substantial and the market is productive to take out for all alphas inside the financial exchange, what is the explanation that there are such huge numbers of great speculators in the market?

1.3. Scope of the Study

Behavioral Finance is a combination of finance, psychology and economics. It's study is growing day by day. Its bits of knowledge are of developing significance to money related counsels in serving customers. There are numerous colleges in India and abroad that offer different projects in the field. Furthermore, each offers a promising profession with rewarding choices.

It is a particular sub discipline inside the field of financial aspects, at the crossing point of customary financial matters and the more extensive sociologies. Markets much of the time show practices that can't be satisfactorily clarified by customary monetary hypothesis, and conduct money endeavors to decipher these varieties by applying sociological and mental variables to their examination.

1.4. Limitations of the Study

The principle shortcoming of the examination is inferable from the way that it plans to consider financial specialist standards of conduct utilizing polls. Settling on money related choices can be requesting for different reasons that could drive numerous into settling on unreasonable choices at one point or the other. In any case, while noting a survey, similar people are probably going to be loose and in a superior attitude, subsequently deciding to offer responses, which may put them across in various light, particularly in setting of inquiries which were introducing speculative circumstances. To beat this issue to a degree, numerous inquiries endeavored to commit the members concede errors they have made previously.

A subsequent confinement emerges out of the way that India is a tremendous nation, and this investigation can't be viewed as an assessment of the normal Indian financial specialist. The example gathered is for the most part from a state called Delhi and NCR, which accounts for a minor 1.38% of the Indian populace. The area was picked essentially in light of the fact that it was the specialist's home state in this way making information assortment advantageous. It is not yet clear whether speculators in different pieces of the nation would display a comparable conduct as would be discovered by this examination.

Chapter 2

2. Literature Review

2.1. Behavioral Finance

Behavioral Finance is a part of account that reviews how the conduct of specialists in the money related market are impacted by mental variables and the subsequent effect on choices made while purchasing or selling the market, in this manner influencing the costs. The science means to clarify the reasons why it's sensible to accept that business sectors are wasteful. A portion of the key meanings of conduct account are talked about underneath.

The science manages hypotheses and tests concentrated on what happens when financial specialists settle on choices dependent on hunches or feelings.

In this way, Behavioral account can be characterized as a field of fund that proposes clarification of securities exchange peculiarities utilizing distinguished mental predispositions, as opposed to excusing them as Chance outcomes reliable with the market effectiveness theory. (Fama, 1998). It is accepted that singular speculators and market results are affected by data structure, and different qualities of market members (Banerjee, 2011).

Schindler (2007) records three fundamental foundations for research in Behavioral account. (I) Limits to exchange which contends that it tends to be hard for discerning merchants to fix the disengagements brought about by less normal dealers (Barberis and Thaler, 2003). So exchange open doors exist which permits financial specialist madness to be considerable and have seemingly perpetual effect on costs.

To clarify speculator unreasonableness and their dynamic procedure, conduct money draws on the test proof of the intellectual brain science and the inclinations that emerge when individuals structure convictions, inclinations and the manner by which they decide, given their convictions and inclinations (Barberis and Thaler, 2003) in this manner carrying us to the subsequent foundation (ii) Psychology – research around there has demonstrated that people display certain predispositions deliberately while defining their convictions and inclinations consequently influencing their choices. (iii) Sociology – which underlines the way that an extensively immense number of money related choices are an aftereffect of social communication as opposed to being made in disconnection. This repudiates the understood supposition that people arrive at choices without outer impacts.

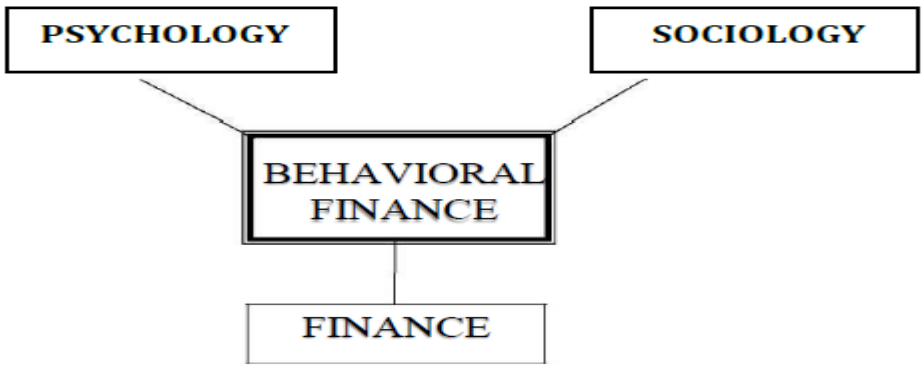

Figure 1. **Evolution of Behavioral Finance,** *Source:* ***Schindler (2007)***

2.2. Behavioral Biases

(Chen, 2007), Studied that speculators might be slanted toward different sorts of social inclinations, which lead them to make psychological mistakes. Individuals may make unsurprising, non-ideal decisions when confronted with troublesome and questionable choices on account of heuristic disentanglement. Social inclinations, uniquely, are characterized similarly as efficient mistakes seem to be, in judgment.

Pompian, 2006 study shows results that exploration recognize a considerable rundown of explicit predispositions, applying more than fifty of these to singular speculator conduct in ongoing examinations. At the point when one considers the subordinate and the unfamiliar inclinations anticipating application in close to home money, the rundown of methodical speculator mistakes appears to be exceptionally long in fact. Exploration that is progressively splendid looks to sort the predispositions as indicated by an important structure. A few creators allude to inclinations as heuristics (general guidelines), while others call them convictions, decisions, or inclinations; still different researchers arrange predispositions along psychological or enthusiastic lines. While such an inclination scientific classification is useful—a fundamental hypothesis concerning why individuals work under predisposition has not been created. Rather than a general hypothesis of venture conduct, social money research depends on an expansive assortment of proof highlighting the inadequacy of human dynamic in different monetary dynamic conditions.

2.2.1. Overconfidence Bias

Pyschologists have confirmed that Overconfidence makes individuals overestimate their insight, disparage chances, and misrepresent their capacity to control occasions. The idea of Overconfidence gets from an enormous collection of intellectual mental analyses and studies where subjects overestimate both their own prescient capacities and the accuracy of the data they have been given. Individuals are inadequately adjusted in evaluating probabilities—occasions they believe are sure to happen are regularly far under 100 percent sure to happen. To

put it plainly, individuals think they are more brilliant and have preferable data over they really do (Pompian, 2006).

Shefrin in 2000 shows presumptuousness relates to how well individuals comprehend their own capacities and the restrictions of their insight. People who are presumptuous about their capacities will in general think they are better than they really are. The equivalent applies to information. People who are arrogant about their degree of information will in general think they know more than they really do.

Stylist and Odean in 2001, partitioned individuals in bunches on premise of sex and, in view of the past mental exploration certainty that men are more pompous than ladies, tried the hypothesis that arrogant financial specialists exchange unreasonably. They archive that men exchange 45% more than ladies, and find that men's net returns were cut by 2.5% every year while it was 1.72% for ladies, in information accumulated from 1991 through 1997.

Fagerström (2008) directed an examination to explore carelessness and over hopefulness in the market and factors that influence individuals in dynamic with regards to contributing and breaking down. The logical strategy for the exploration is a quantitative back-testing exercise technique dependent on noteworthy information taken from IBES, Institutional Brokers' Estimate System. The information taken is a rundown of accord expected development of benefits for the organizations at S&P500 for the up and coming a year, contrasted and the acknowledged result for the period February 1986 to April 2008. The outcomes demonstrated that examiners of the S&P 500 were overstated by the issues of arrogance and the over idealistic predispositions. It likewise affirms hypothesis of Anchoring and Herding.

2.2.2. Representation Bias

Gilovich (1983) characterize representativeness as an appraisal of the level of correspondence between an example and a populace, a case and a class, a demonstration and an entertainer or, all the more for the most part, between a result and a model.

Representativeness is worried about deciding contingent probabilities. Utilizing the heuristic the likelihood that an article or occasion A has a place with a class or procedure B is resolved. Representativeness is supposed to be generally utilized, while making decisions under vulnerability, when individuals are approached to pass judgment on the likelihood that A has a place with B. (Tversky and Kahneman, 1983). In the event that A and B are portrayed in similar terms, Representativeness can be diminished to 'Likeness' (Tversky and Kahneman, 1981: in O'Hagan et al, 2006).

Representativeness is judgment dependent on overreliance generalizations. The financial specialists' ongoing achievement; will in general proceed into the future moreover. The inclination of choices of the financial specialists to make dependent on encounters is known as generalization. (Shefrin, 2000). Ritter (1991) noticed another fascinating outcome of judgment by Representativeness predisposition where he properties since a long time ago run underperformance of IPOs to the speculators' momentary direction. This has numerous ramifications to speculation dynamic. While making speculations, people will in general quality great attributes of an organization straightforwardly to great trait of its stock. These organizations end up being poor speculations as a rule. (Lakonishok et al, 1994).

2.2.3. Herding Bias

Grouping in monetary markets can be characterized as shared impersonation prompting a union of activity. (Hirshleifer and Teoh, 2003). The most widely recognized mix-up done by examiners is that they don't take choices themselves, they start to lead the pack from others and trust them and tail them aimlessly. That is the reason, in budgetary markets, when the best an ideal opportunity to purchase or sell is within reach, even the individual who figures he should make a move encounters a solid mental weight holding back him to do as such. The primary purpose behind this is pressure from or impact by peers. The Reliance Power IPO, 2008 is a case of an occurrence where numerous speculators bought in without having full data on the issue. Financial specialists apply to Herd conduct since they are worried of what others think about their venture choices. (Scharfstein and Stein, 1990).

Private examiners will when all is said in done be affected by recommendations of notable specialists. Welch (2000) in his assessment found agents could be indicating Herding conduct too. It was not asserted due to nonattendance of littler scope level data. At whatever point and master changed his recommendations, it had a positive association with the accompanying two analyst's updates. The change was viewed as seriously influenced by the all-encompassing business sector accord, and to progressing information revives.

(Welch, 2000).

2.2.4. Anchoring Bias

Anchoring is a mental heuristic which can be said to happen when financial specialists give superfluous significance to measurably arbitrary and mentally decided 'stays' which drives them to speculation choices that are not basically 'discerning'. At the point when required to evaluate a decent purchase cost for an offer and speculator is probably going to begin by utilizing an underlying worth – called the "Anchor" – absent a lot of examination, state for example the 52-week low of the stock. At that point they change this stay up or down to mirror their examination or new data, yet contemplates have indicated that this modification is inadequate and closes delivering results that are one-sided. Financial specialists displaying this inclination are probably going to be affected by these grapples while responding to key inquiries like 'Is this a decent an ideal opportunity to purchase or sell the stock?' or 'is the stock reasonably evaluated?' The idea of Anchoring would thus be able to be clarified by the propensity of speculators to "Anchor" their musings to a sensibly immaterial reference point while settling on a venture choice (Pompian, 2006).

Andersen (2010) shows the contribution of Anchoring in dynamic of market members by utilizing a current exchanging calculation. The calculation was applied to genuine market information of the Dow Jones Industrial normal and CAC40 stock file to search for exchange prospects. The model returned out-of-test benefit even while considering exchange costs on the CAC40 and in this manner give proof that Anchoring had a task to carry out in the week by week value fixing of the Dow and CAC40.

2.2.5. Cognitive Dissonance Bias

At the point when a financial specialist faces a circumstance where he needs to pick between two other options, almost certainly, some contention will trail a choice has been reached. The negative parts of the elective he picked are probably going to be noticeably obvious while the positives of the disposed of elective will add to the contention. This winds up testing the financial specialist's trust in the choice he has quite recently made.

As per Pompian (2006), there are two distinguished parts of Cognitive Dissonance that is identified with dynamic. (i) Selective discernment: where financial specialists just register data, which attests their convictions along these lines making an inadequate perspective on the genuine picture. (ii) Selective dynamic: Investors are probably going to fortify duties recently made despite the fact that it may be obvious that it is an inappropriate activity. This happens due to promise to the first choice driving the financial specialist to justify activities, which would permit him to adhere to it, despite the fact that these activities are imperfect.

2.2.6. Regret Aversion Bias

Regret Aversion is a mental blunder that emerges out of over the top

spotlight on sentiments of disappointment at having settled on a choice, which ended up being poor, predominantly in light of the fact that the results of the option are noticeably better for the financial specialist to see. The underlying driver of this sort of blunder is the propensity that people hate to concede their slip-ups. Due to experiencing this inclination, financial specialists may abstain from taking definitive activities for the dread that whatever choices they make take will be problematic in Hindsight. One potential drawback is this could lead financial specialists into clutching a losing position for a really long time, on account of reluctance to concede and redress botches in a convenient way. Another drawback is that it can prevent speculators from making a section into the market when there has been a downtrend, which is giving indications of completion, and signs that it is a decent an ideal opportunity to purchase. The Fear of Regret happens regularly when people tarry while deciding. Different brain science exploratory investigations recommend that lament impacts dynamic under vulnerability. Individuals who are disappointment loath will in general stay away from trouble emerging out of two sorts of missteps (i) Errors of commission – which happen because of confused activity, where the financial specialist considers this choice and regrets the way that he made it, accordingly scrutinizing his convictions (ii) Errors of oversight – which happen because of botching a chance which existed (Pompian, 2006).

2.2.7. Gamblers' Fallacy Bias

Kahneman and Tversky (1971) portrays the core of Gamblers' deception as a confusion of the reasonableness of the laws of possibility. One significant effect on the money related market is that speculators experiencing this inclination are probably going to be one-sided towards anticipating inversions in stock costs. Gamblers' Fallacy emerges when speculators improperly foresee that pattern will turn around and are brought into antagonist thinking. Gamblers' Fallacy is said to happen when a financial specialist works under the recognition that mistakes in irregular occasions are self-rectifying. For example, if a reasonable coin is hurled multiple times and it land on heads each time, a speculator who feels that the following flip will bring about tails can be supposed to be experiencing this inclination.

2.2.8. Mental Accounting Bias

The term Mental Accounting was first introuced by Richard Thaler and defined by Thaler (1999) as the set of intellectual skills required to keep track of financial activities.

Mental Accounting is the arrangement of intellectual tasks utilized by people and family units to sort out, assess, and monitor money related exercises. This outcome in an inclination for individuals to isolate their cash into discrete records dependent on an assortment of emotional reasons. People will in general allocate various capacities to every advantage gathering, which has a frequently unreasonable and contrary impact on their utilization choices and different practices. Mental Accounting alludes to the codes individuals use while assessing a speculation choice.

2.2.9. Hindsight Bias

Shiller (2000) depicts Hindsight bias as the propensity to imagine that one would have realized real occasions were preceding they occurred, had one be available at that point or had motivation to focus.

Monti and Legrenzi (2009) explored the connections between speculation dynamic and Hindsight predisposition. They state that financial examinations consider the specialist's premonition viewpoint just, without considering the Hindsight predisposition potential impacts in the dynamic procedure. They gathered information from 25 Master and PhD understudies going to courses in Finance and Economics at Bocconi University and from 35 money related directors from a main Italian bank by flowing two arrangements of surveys. The study found strong evidence for the consequences that Hindsight bias can have on the investor's portfolio decisions: the portfolio allocation perception and therefore, the risk exposure.

Behavioral Bias	Explanation
Overconfidence Bias	Overconfidence bias is a tendency to hold a false and misleading assessment of our skills, intellect, or talent. In short, it's an egotistical belief that we're better than we actually are.
Representation Bias	Representative Bias is when we arrive at a conclusion based on the facts that suggest (represent) it without delving deeper into it. For ex : You invested in a company because you feel its a good company with an ethical outlook.
Herding Bias	In behavioral finance, herd mentality bias refers to investors' tendency to follow and copy what other investors are doing. They are largely influenced by emotion and instinct, rather than by their own independent analysis
Anchoring Bias	Anchoring is a bias described by behavioral finance in which individuals fixate on a target number or value—usually, the first one they get, such as an expected price or economic forecast
Cognitive Dissonance Bias	Cognitive dissonance is a behavioral bias that may induce irrational behavioral. In finance, it can lead people to buy and sell impulsively.
Regret Aversion Bias	This bias seeks to avoid the emotional pain of regret associated with poor decision making.
Gambler's Fallacy	The Gambler's Fallacy occurs when an individual erroneously believes that a certain random event is less likely or more likely, given a previous event or a series of events.
Mental Accounting Bias	Mental accounting, also known as "two-pocket" theory, is a behavioral bias that occurs when people put their money into separate categories, separating them into different mental accounts, based on, say, the source of the money, or the intent of the account

Table 1.1. **– A summary of all Behavioral Biases**

Chapter Three

3.0. Analysis

3.1. An overview

The various psychological biases in behavioral finance are mentioned in the above Table 1.1. Every bias has its own implication and logic for decision making. Following part in the study will discuss all those biases and its impact on investing decisions.

3.2. Questionnaire Survey

Questionnaire Survey is the most widely used and the most convenient method to analyze. Also the data is of remote locations so it is best to use questionnaire. As per Taylor (2006), questionnaires are a sensible option when information is needed from a large number of people and is a powerful method to capture their opinions and attitude.

Taylor (2006) emphasized three main pointers to be kept in mind while designing the questionnaire survey. Thus for this study all three points are carefully used:

(i) Confidentiality of the respondents is essential and not compromised.

(ii) Concise questionnaire and in lieu with the research

(iii) Interest of respondents' is to be formed and retained.

The questionnaire consists of 26 questions.

These 16 questions were developed dependent on the Likert Scale, which is a symmetric one-dimensional scale where all the things measure something very similar, anyway in various degrees of endorsement or dissatisfaction. Likert Scales are contained by Likert things and dependent on the include of these things exist in various point scales. Three-point Likert Scales have been utilized in the survey and the three-level Likert thing takes the structure (I) Always/Yes (Positive) (ii) Sometimes/Maybe (Neutral) (iii) No/Never (Negative). These things are measured by being doled out scores relying upon the investigation strategy utilized (Taylor et al, 2006). This examination utilizes the 'Weighted Scoring Method', portrayed later, in which loads of three, two and one are appointed to the positive, nonpartisan and negative reactions separately to figure scores.

3.3. Sample Profile

One of the essential points of the examination was to concentrate on genuine financial specialists, as they were bound to have constrained information about the use of conduct hypotheses in dynamic and henceforth simple to mental blunders. The example profile was made dependent on two judgment measures: age of the respondent and long stretches of venture involvement with the securities exchange. After an examination of the example, the accompanying gatherings were seen as ideal:

(i) Experienced: Investors aged 30 or over 30, with at least 4 years of investing experience

(ii) Young: Investors aged less than 30, with under 4 years of investing experience

The substantial number of reactions gathered by the poll overview was 79. At the point when the judgment measures were applied, the example was cut down to 74 fundamentally attributable to hardly any unpracticed respondents aging over 30. Altogether, there were 33 young financial investors and 41 experienced. So as to keep the example profile even between the two gatherings, 3 fragmented perceptions, where answers to multiple inquiries were missing, were sifted and removed from the accomplished financial specialist sub-test to arrive at the last example profile of 74 which is given beneath in Table.

Experience	Age<30	Age >30	Total
Up to 4 Years	33	-	33
4 Years and Above	-	41	41
Total	**33**	**41**	**74**

Table 3.1. **Profile of Sample Respondents**

To sum up ,the sample in the study has a total of 74 responses:
(i) 33 are Young Investors (aged below 30 with experience less than 4 years)

(ii) 41 are Experienced Investors (aged 30 or more with experience of 4 years and above)

3.4. Data Collection

The investigation incorporates just essential information which was accumulated utilizing the survey which was conveyed online to contact more extensive crowd. In the wake of considering numerous alternatives a free review site, 'google forms' was picked. The survey was made accessible online at **https://forms.gle/WM3Wq9DVohcjeX3S6**. This online review was appropriated among individual contacts and to contacts of the franchisee head. Members were urged to convey the overview to their contacts too. At last, 79 responses were acquired out of which 74 were chosen in the wake of separating and disposal.

3.5. List of Hypotheses

1. There is no relationship between investor experience and losses suffered.

2. Young investors are not likely to be more overconfident than experienced investors

3. Both investor types are equally likely to predict future price of a stock though past performance. (Representation Bias)

4. Both investor types depend on similar factors while making judgments/analyses (Herding Bias)

5. Both investor types are equally likely to fix target price at the starting of trading day (Anchoring Bias)

6. Both investor types are equally likely to exhibit Regret Aversion bias

7. Both investor types are equally likely to be subject to the Gamblers' Fallacy Bias

8. Both investor types are equally likely to save money to trade (Mental Accounting Bias)

9. Both investor types are equally likely to justify the mistakes committed while making investment decisions (Cognitive Dissonance Bias)

3.6. Analysis and Hypothesis Testing: Methods Used

3.6.1. Chi-Square Test for Independence

Chi-square test is a non-parametric statistical test analyzing methods often used in experimental work where the data consists of frequencies, counts or percentages. It can be used to determine whether two or more classifications of the samples are independent or not. Chi-square test can be applied only to discrete data. However, continuous data can also be tested by classifying it to different discrete categories or by labeling using nominally scaled variables (Maxwell, 1971). Two key concepts in the context of the Chi-square test are:

(i) Qualitative Variables: Variables can be quantitative or subjective. Subjective factors show classification as opposed to estimation. A regularly utilized subjective variable in social exploration is the 'dichotomous variable', which is parallel. Chi-square test is relevant just when we have subjective factors ordered into classes.

(ii)Contingency table: In an example, when the members are gathered in at least two distinct ways, the outcomes might be organized in rectangular tables called 'Possibility Tables'. The sections in the table may relate to frequencies, or its change into extents or rates.

The most widely recognized utilization of the test is to evaluate the likelihood of affiliation or freedom of realities. The test, as the name proposes, depends on the Chi-square dispersion. The Chi-square worth is determined so as to look at the watched and expected frequencies utilizing the recipe:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

O = *the frequencies observed*

E = *the frequencies expected*

$\sum$ = *the 'sum of'*

Where Oi = observed frequencies, Ei = expected frequencies, and i = 1...N where N is the number of cells in the contingency table (Zibran, 2007).
The significance of the calculated value of chi-square is assessed by referring to the standard Chi-square table which contains critical square values on different degrees of freedom and levels of probability. The hypotheses are stated as:
H0: The two variables are independent in the whole the population (Independence)
H1: There is some relationship between the variables (Relationship)
If the value of square is less that the value corresponding to confidence interval, the Null hypothesis (H0) cannot be rejected. In the IBM SPSS software which has been used, three Chi-square tests are performed, namely (i) Pearson Chi-Square, (ii) Likelihood Ratio Test, and (iii) Linear-by-linear association.

3.6.2. Relationship between Age of Respondents and loss suffered

Statistics

Age of the Respondent

N	Valid	74
	Missing	3
Mean		32.9459
Minimum		25.00
Maximum		53.00

Table 3.2. **Age of Respondents**

Age of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25.00	1	1.3	1.4	1.4
	26.00	8	10.4	10.8	12.2
	27.00	6	7.8	8.1	20.3
	28.00	11	14.3	14.9	35.1
	29.00	7	9.1	9.5	44.6
	30.00	4	5.2	5.4	50.0
	31.00	2	2.6	2.7	52.7
	32.00	4	5.2	5.4	58.1
	34.00	2	2.6	2.7	60.8
	35.00	7	9.1	9.5	70.3
	36.00	7	9.1	9.5	79.7
	37.00	1	1.3	1.4	81.1
	38.00	2	2.6	2.7	83.8
	40.00	1	1.3	1.4	85.1
	41.00	1	1.3	1.4	86.5
	42.00	5	6.5	6.8	93.2
	45.00	1	1.3	1.4	94.6
	51.00	1	1.3	1.4	95.9
	52.00	2	2.6	2.7	98.6
	53.00	1	1.3	1.4	100.0
	Total	74	96.1	100.0	
Missing	System	3	3.9		
Total		77	100.0		

Table 3.3. **Descriptions of Age of Respondents**

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Loss Suffered by Investors	74	96.1%	3	3.9%	77	100.0%

Table 3.4. **Case Processing Summary of Age of Respondents**

Age of the Respondent * Loss Suffered by Investors Crosstabulation

			Loss Suffered by Investors			
			Less than 10%	Between 30% - 50%	More than 50%	Total
Age of the Respondent	Less than 30	Count	23	3	7	33
		% within Age of the Respondent	69.7%	9.1%	21.2%	100.0%
	30 or More than 30	Count	19	17	5	41
		% within Age of the Respondent	46.3%	41.5%	12.2%	100.0%
Total		Count	42	20	12	74
		% within Age of the Respondent	56.8%	27.0%	16.2%	100.0%

Table 3.5. **Loss Suffered by Investors**

The impact on the normal individual speculators' portfolio was probably going to be noteworthy, in view of bits of knowledge from individual loss suffered, and loss suffered by companions and associates the same. The respondents were approached to uncover loss suffered in 2017 – 2020. Table shows that 20 respondents (27.0%) endured a 30-50% loss. The quantity of individuals that suffered a loss > 50% was 12 (16.2%). Table shows that the quantity of speculators that suffered a loss was marginally higher. It must be checked if the loss suffered about had a relationship with the respondents.

The Chi-square test for independence was performed to check the hypothesis:
H0: There is no relationship between investor experience and losses suffered.

H1: There is some relationship between investor experience and losses suffered.

Investing Experience during 2017-2020 * Loss suffered by Investors Crosstabulation

			Loss Suffered by Investors			
			Less than 10%	Between 30% - 50%	More than 50%	Total
Investing Experience during 2017-2020	Less than 4	Count	25	3	7	35
		% within Investing Experience during 2017-2020	71.4%	8.6%	20.0%	100.0%
	Equal or more than 4	Count	17	17	5	39
		% within Investing Experience during 2017-2020	43.6%	43.6%	12.8%	100.0%
Total		Count	42	20	12	74
		% within Investing Experience during 2017-2020	56.8%	27.0%	16.2%	100.0%

Table 3.6. **Cross tabulation; Loss Suffered by Investors**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.474[a]	2	.003
Likelihood Ratio	12.469	2	.002
Linear-by-Linear Association	1.374	1	.241
N of Valid Cases	74		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.68.

Table 3.7. Chi-Square Test – Loss suffered by investors

The p-value of the Chi-Square test is 11.474. Thus the null hypothesis will be rejected at the 95% confidence interval. It can be now said that a relationship existed between the experience of investors and the losses they suffered. Since it was obvious that the participants in the survey had suffered losses, it made an interesting premise to check if they were susceptible to behavioral biases while making financial decisions.

3.7. Bias Specific Analysis and Hypothesis Testing

3.7.1. Overconfidence Bias:

Overconfidence Bias is a propensity to hold a bogus and deluding appraisal of our abilities, mind, or ability. So, it's a vain conviction that we're better than we really are. The risk of a carelessness predisposition is that it commits one inclined to making errors in contributing. Overconfidence will in general make us not exactly fittingly wary in our speculation choices. A significant number of these mix-ups originate from a fantasy of information as well as a deception of control.

The inclination was checked by posing a backhanded inquiry in the poll that If they hear sees from a renowned investigator that contentions with their supposition about a stock, would they change their assessment. It was a 5 scale likert question. Investigation was accomplished for Young and Experienced Investor to discover how overconfident they are.

Age of the Respondent * Overconfidence bias Crosstabulation

			Overconfidence bias					
			Overconfident	Moderately Overconfident	Confident	Slightly Diffident	Diffident	Total
Age of the Respondent	Young Investor	Count	19	8	2	2	2	33
		% within Age of the Respondent	57.6%	24.2%	6.1%	6.1%	6.1%	100.0%
		% of Total	25.7%	10.8%	2.7%	2.7%	2.7%	44.6%
	Experienced Investor	Count	7	9	6	10	9	41
		% within Age of the Respondent	17.1%	22.0%	14.6%	24.4%	22.0%	100.0%
		% of Total	9.5%	12.2%	8.1%	13.5%	12.2%	55.4%
Total		Count	26	17	8	12	11	74
		% within Age of the Respondent	35.1%	23.0%	10.8%	16.2%	14.9%	100.0%
		% of Total	35.1%	23.0%	10.8%	16.2%	14.9%	100.0%

Table 3.8. Crosstabulation – Overconfidence Bias

Chi-square Tests

The following hypotheses were tested:

H0: Young investors are not likely to be more overconfident than experienced investors

H1: Young investors are likely to be more or less overconfident than experienced investors.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.716[a]	4	.002
Likelihood Ratio	17.680	4	.001
Linear-by-Linear Association	14.805	1	.000
N of Valid Cases	74		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.57.

Table 3.9. **Chi – Square Test – Overconfidence Bias**

Chi-square test results.

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi-Square = 17.68

P-Value = 0.001

Conclusion: Since the p – value (0.001) is less than the level of significance (0.05), the null hypothesis is rejected. Hence it is concluded that young investors are likely to be more or less overconfident than experienced investors.

3.7.2. Representative Bias

Representativeness can get down to business when financial specialists either look to purchase what they believe is a 'hot' stock or attempt to name stocks which may have performed inadequately in the ongoing past as 'awful' and keep away from them. On occasion, Representativeness can make financial specialists judge dependent on past records of achievement, prompt and removed. This is fundamentally in light of the fact that these originations are among the most effortless to remember in a little time span with no prompt investigation. An endeavor was made to check whether financial specialists were inclined to being one-sided due to Representativeness.

At the point when a speculator feels that he can anticipate the future estimation of an offer dependent on its past presentation alone, he can be supposed to be liable to predisposition. Results from the possibility table demonstrated that 22.8% of the review members, when posed inquiry whether they accepted that future estimation of a stock can be anticipated by dissecting past execution, opined that it is consistently conceivable and 65% were of the feeling that it is conceivable now and then. Results from weighted scoring indicated that both youthful and experienced financial specialists were similarly prone to be influenced by the inclination, as their mean qualities were over the middle reference score. To start with, the weighted scoring strategy was utilized to check if persuading results on the predisposition could be gotten.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Contingency Table: Representativeness Bias	74	96.1%	3	3.9%	77	100.0%

Table 3.10. **Case Processing Summary – Representative Bias**

Age of the Respondent * Contingency Table: Representativeness Bias Crosstabulation

			Contingency Table: Representativeness Bias				
			Sometimes	Neutral	Usually	Always	Total
Age of the Respondent	Young Investor	Count	8	7	9	9	33
		% within Age of the Respondent	24.2%	21.2%	27.3%	27.3%	100.0%
		% of Total	10.8%	9.5%	12.2%	12.2%	44.6%
	Experienced Investor	Count	8	4	8	21	41
		% within Age of the Respondent	19.5%	9.8%	19.5%	51.2%	100.0%
		% of Total	10.8%	5.4%	10.8%	28.4%	55.4%
Total		Count	16	11	17	30	74
		% within Age of the Respondent	21.6%	14.9%	23.0%	40.5%	100.0%
		% of Total	21.6%	14.9%	23.0%	40.5%	100.0%

Table 3.11. **Crosstabulation – Representative Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.869[a]	3	.182
Likelihood Ratio	4.958	3	.175
Linear-by-Linear Association	2.615	1	.106
N of Valid Cases	74		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.91.

Table 3.12. **Chi – Square Tests – Representative Bias**

Chi-square test results

The age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Representativeness bias was a nominal variable with 4 response options (1 = Sometimes, 2 = Neutral, 3 = usually and 4 = Always).

Chi-square Tests

The following hypotheses were tested:

H0: Young investors are equally likely to predict future price of a stock though past performance than Experienced investors**.**

H1: Young investors are likely to predict future price of a stock though past performance more often than Experienced investors.

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi –Square = 4.958

P – Value = 0.182

Conclusion: The p – value is 0.182 which is greater than the level of significance of 0.05, thus we **retain the null hypothesis.** Hence it is concluded that Young investors are equally likely to predict future price of a stock though past performance than Experienced investors.

Thus from this hypothesis we can prove that both investors are equally likely to be affected by the Representation Bias

3.7.3. Herding Bias

A financial specialist would display Herding conduct when he depends more on data approved by a group, instead of on his own judgment, attributable to famous discernment that the group can't not be right and furthermore due to being careful about likely disparagement which he may confront if the group is in reality right. In the event that financial specialists are vigorously affected by different speculators, examiners and so forth., the capacity to think of their own investigations and decisions get hampered. For most part, Herding may work fine however the upside is restricted since, when everybody is thinking the same, it is very hard to make unusual benefits. Then again, when a drawback occurs, it intensifies the mental predispositions and can prompt irregular misfortunes, particularly to private speculators who are probably going to clutch losing stocks, out of vulnerability because of absence of own perspectives, thus conceivably winding up looking for data from numerous sources.

Financial specialists were inquired as to whether they trust their own judgment more than that of others and the outcomes are appeared in Table given underneath. Some fascinating realities were watched:

Just 41.9% of the financial investors confided in their own judgment more than data/investigations from other recorded sources

39.4% of youthful speculators confided in their own decisions, while just 43.9% of the accomplished financial specialists gave high significance to their decisions.

Experienced speculators appeared to offer more significance to thoughts of either companions/representatives. 31.7% of them opined that they tuned in to companions or suggestions from representatives.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Herding Bias	74	96.1%	3	3.9%	77	100.0%

Table 3.13. Case Processing Summary – Herding Bias

Age of the Respondent * Herding Bias Crosstabulation

			Herding Bias			
			Self	Brokers/Friends	Media/Expert Opinions	Total
Age of the Respondent	Young Investor	Count	13	10	10	33
		% within Age of the Respondent	39.4%	30.3%	30.3%	100.0%
		% of Total	17.6%	13.5%	13.5%	44.6%
	Experienced Investor	Count	18	13	10	41
		% within Age of the Respondent	43.9%	31.7%	24.4%	100.0%
		% of Total	24.3%	17.6%	13.5%	55.4%
Total		Count	31	23	20	74
		% within Age of the Respondent	41.9%	31.1%	27.0%	100.0%
		% of Total	41.9%	31.1%	27.0%	100.0%

Table 3.14. **Crosstabulation – Herding Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.337[a]	2	.845
Likelihood Ratio	.336	2	.845
Linear-by-Linear Association	.294	1	.588
N of Valid Cases	74		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.92.

Table 3.15. **Chi – Square Tests – Herding Bias**

Chi-Square Tests

The following hypotheses were tested to check for independence of the variables:

H0: Both investor types depend on similar factors while making judgments/analyses

H1: Young and experienced investors behave differently while making judgments/analyses

Chi-Square test Results

Age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Herding bias was also a nominal variable with 3 response options (1 = Self, 2 = brokers/friends and 3 = Media/Expert opinions).

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi-Square = 0.336

P-Value = 0.845

Conclusion: The p – value is 0.845 which is greater than the level of significance (0.05), the **null hypothesis is retained. Hence it is concluded that both investor types depend on similar factors while making judgments/analyses.**

Thus it can be concluded that both investor types are affected by Herding Bias.

3.7.4. Anchoring Bias

At the point when speculators will in general mark consistently insignificant value levels as significant and stick on to them while settling on venture choices, they are supposed to show the Anchoring Bias. At the point when speculators will in general fix a cost for an offer before purchasing or selling it dependent on certain data previously, they may really be timing it seriously, in this way getting it costly or selling it too soon. It can likewise happen that financial specialists get fixed to a value point, which may not be reached, along these lines passing up on wise venture chances.

When asked whether they will in general fix an objective cost for purchasing or selling a stock before the beginning of an exchanging day, 39.2% said consistently and 6.8% said that they do it here and there. From this, it could be believed that as a rule all things considered, financial specialists were probably going to have a value go as a top priority, regardless of whether they were not fixing it already.. This inquiry was posed to check if the financial specialists are fixed on costs at which they enter the market, and on the off chance that they have a leave technique in the event that things turn out badly during the day.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Anchoring bias	74	96.1%	3	3.9%	77	100.0%

Table 3.16. **Case Processing Summary – Anchoring Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.294[a]	4	.081
Likelihood Ratio	9.479	4	.050
Linear-by-Linear Association	.013	1	.909
N of Valid Cases	74		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.34.

Table 3.17. **Chi – Square Tests – Anchoring Bias**

Age of the Respondent * Anchoring bias Crosstabulation

			Anchoring bias					Total
			Never	Rarely	Sometimes	Usually	Always	
Age of the Respondent	Young Investor	Count	0	4	2	18	9	33
		% within Age of the Respondent	0.0%	12.1%	6.1%	54.5%	27.3%	100.0%
		% of Total	0.0%	5.4%	2.7%	24.3%	12.2%	44.6%
	Experienced Investor	Count	3	4	3	11	20	41
		% within Age of the Respondent	7.3%	9.8%	7.3%	26.8%	48.8%	100.0%
		% of Total	4.1%	5.4%	4.1%	14.9%	27.0%	55.4%
Total		Count	3	8	5	29	29	74
		% within Age of the Respondent	4.1%	10.8%	6.8%	39.2%	39.2%	100.0%
		% of Total	4.1%	10.8%	6.8%	39.2%	39.2%	100.0%

Table 3.18. **Crosstabulation – Anchoring Bias**

Chi-Square Tests

The following hypotheses were tested based on results from the weighted scoring:

H0: Both investor types are equally likely to fix a target price at the starting of trading day

H1: Experienced investors are more likely to fix a target price at the starting of trading day as compared to young investors.

Chi-Square test results

Age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Anchoring bias was also a nominal variable with 4 response options (1 = Never, 2 = rarely, 3 = Sometimes, 4 = usually and 5 = Always).

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi –Square = 9.479

P – Value = 0.081

Conclusion: The p – value of 0.081 is more than the level of significance (0.05), the **null hypothesis is retained.** Thus it is concluded that both investor types are equally likely to fix a target price at the starting of trading day.

Hence it is concluded that both investor types are equally likely to exhibit Herding behavior**.**

3.7.5. Cognitive Dissonance Bias

As human beings, investors are all likely to be blessed with different levels of self-esteem and ego. It is natural that an investor would always want to make the right decisions. Cognitive Dissonance is a bias, which is said to have occurred, when investors' beliefs are changed to be consistent with their past decisions. It so happens that sometimes people try to reduce the discomfort of having to live with the burden of a wrong decision by forgetting their past mistakes, thus improving the success rate of their past investment decisions. For these reasons, if investors try to justify mistakes made while making decisions, they can be thought of as being exposed to the bias. Investors can also experience discomfort when they acquire new information that conflicts with preexisting understandings, which is another symptom of the bias. Out of this condition, investors may tend to avoid information that conflicts with their past investment decisions, which were made. Investors are said to be subject to Cognitive Dissonance bias if they exhibit the tendency to avoid new and conflicting information. (Pompian, 2006).

When asked if their minds try to justify mistakes committed while making investment decisions, 58.1% of the respondents admitted that it happens while more interestingly, 33.8% of the investors admitted that it happens sometimes/maybe.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Cognitive Dissonance Bias	74	96.1%	3	3.9%	77	100.0%

Table 3.19. **Case Processing Summary - Cognitive Dissonance Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.767[a]	2	.021
Likelihood Ratio	10.020	2	.007
Linear-by-Linear Association	7.363	1	.007
N of Valid Cases	74		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 2.68.

Table 3.20. **Chi – Square Tests – Cognitive Dissonance Bias**

Chi-Square tests

The tests were performed to see if the different mean scores for the investor types presented any statistically significant information. The following hypotheses were tested:

H0: Both investor types are equally likely to justify the mistakes committed while making investment decisions

H1: Young investors are more likely to justify the mistakes committed while making investment decisions as compared to experienced investors.

Age of the Respondent * Cognitive Dissonance Bias Crosstabulation

			Cognitive Dissonance Bias			
			Definitely	Maybe	Never	Total
Age of the Respondent	Young Investor	Count	24	9	0	33
		% within Age of the Respondent	72.7%	27.3%	0.0%	100.0%
		% of Total	32.4%	12.2%	0.0%	44.6%
	Experienced Investor	Count	19	16	6	41
		% within Age of the Respondent	46.3%	39.0%	14.6%	100.0%
		% of Total	25.7%	21.6%	8.1%	55.4%
Total		Count	43	25	6	74
		% within Age of the Respondent	58.1%	33.8%	8.1%	100.0%
		% of Total	58.1%	33.8%	8.1%	100.0%

Table 3.21. **Crosstabulation – Cognitive Dissonance Bias**

Chi-Square Test Resuts

Age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Cognitive Dissonance Bias was also a nominal variable with 3 response options (1 = definitely, 2 = maybe and 3 = never).

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi –Square = 10.020

P – Value = 0.021

Conclusion: Since the p – value (0.021) is less than the level of significance (0.05), the **null hypothesis is rejected.** Thus it can be concluded that, Young investors are more likely to justify the mistakes committed while making investment decisions as compared to experienced investors.

Hence it is concluded that Young investors are more likely to exhibit the Cognitive Dissonance bias, as compared to experienced investors.

3.7.6. Loss Aversion (Regret Aversion) Bias:

Individuals displaying Regret Aversion abstain from taking unequivocal activities since they dread that, looking back, whatever course they select will demonstrate not exactly ideal. Fundamentally, this predisposition looks to thwart the agony of disappointment related with poor dynamic. It is an intellectual wonder that regularly emerges in merchants, making them clutch losing positions for a really long time so as to abstain from conceding blunders and acknowledging misfortunes.

Regret Aversion likewise makes individuals unduly anxious about taking situations after a series of misfortunes, as they feel instinctually headed to monitor, to withdraw, and to lick their injuries. This may make them delay most at minutes that really merit forceful conduct.

This can likewise influence an individual's reaction to winning positions. For instance, dealers may be reluctantly to sell an in-the-cash position in spite of negative signs, deciding to stick on to it since they dread that the stock may keep on taking off significantly higher once they sell it.

Individuals who are disappointment opposed attempt to stay away from trouble emerging from two kinds of missteps, (i) errors of commission and (ii) errors of omission. The previous happens when we take confused activities, while the last emerges from misinformed inaction, that is, openings neglected or predestined.

The other risk originates from grouping conduct where merchants just attempt to follow the group, since following the mass agreement diffuses obligation and henceforth the potential for future regret.

When asked question, 'If you suffer a loss, how easy would it be to avoid the same investment?' - 23% of the investors replied that it was very difficult to do it.

Chi-Square tests

The tests were performed to see if the different mean scores for the investor types presented any statistically significant information. The following hypotheses were tested:

H0: Both investor types are equally likely to exhibit Regret Aversion Bias.

H1: Young investors are more likely to exhibit the Regret Aversion Bias.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Regret Aversion Bias	74	96.1%	3	3.9%	77	100.0%

Table 3.22. **Case Processing Summary – Regret Aversion Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.565[a]	6	.735
Likelihood Ratio	3.654	6	.723
Linear-by-Linear Association	2.322	1	.128
N of Valid Cases	74		

a. 8 cells (57.1%) have expected count less than 5. The minimum expected count is 1.34.

Table 3.23. **Chi – Square Tests – Regret Aversion Bias**

Age of the Respondent * Regret Aversion Bias Crosstabulation

			Regret Aversion Bias							
			Very Easy	Somewhat Easy	Easy	Average	Somewhat Difficult	Difficult	Very Difficult	Total
Age of the Respondent	Young Investor	Count	2	5	2	3	9	7	5	33
		% within Age of the Respondent	6.1%	15.2%	6.1%	9.1%	27.3%	21.2%	15.2%	100.0%
		% of Total	2.7%	6.8%	2.7%	4.1%	12.2%	9.5%	6.8%	44.6%
	Experienced Investor	Count	6	10	1	3	11	6	4	41
		% within Age of the Respondent	14.6%	24.4%	2.4%	7.3%	26.8%	14.6%	9.8%	100.0%
		% of Total	8.1%	13.5%	1.4%	4.1%	14.9%	8.1%	5.4%	55.4%
Total		Count	8	15	3	6	20	13	9	74
		% within Age of the Respondent	10.8%	20.3%	4.1%	8.1%	27.0%	17.6%	12.2%	100.0%
		% of Total	10.8%	20.3%	4.1%	8.1%	27.0%	17.6%	12.2%	100.0%

Table 3.24. **Crosstabulation – Regret Aversion Bias**

Chi-Square Test Results

Age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Regret Aversion Bias was also a nominal variable with 7 response options (1 =very easy, 2 = somewhat easy and 3 = easy, 4 = average, 5 = somewhat difficult, 6 = difficult and 7 = very difficult).

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi –Square = 3.654

P – Value = 0.735

Conclusion: Since the p – value (0.735) is more than the level of significance (0.05), **the null hypothesis is retained. Hence it is concluded that both investor types are equally likely to exhibit Regret Aversion Bias.**

3.7.7. Gambler's Fallacy Bias

Gamblers' Fallacy Bias emerges when financial specialists improperly anticipate a securities exchange result like a pattern inversion and so on. This may lead them to foresee the finish of a progression of good (or poor) advertise returns. A speculator who experiences the Gamblers' Fallacy inclination is probably going to be one-sided towards anticipating an inversion in the direction of a stock.

Inclination in a flip-a-coin wager

A broadly cited model identified with Gamblers' Fallacy hypothesis is the expectation of the result of a reasonable coin hurl. Respondents were approached to envision a circumstance where a fair coin was flipped multiple times and landed heads each time. When requested to share their musings on the result of the fourth flip just 14.9% (11 financial specialists) said that they are unbiased, as found in table beneath.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age of the Respondent * Gambler's fallacy bias	74	96.1%	3	3.9%	77	100.0%

Table 3.25. **Case Processing Summary – Gambler's Fallacy Bias**

Age of the Respondent * Gambler's fallacy bias Crosstabulation

			Gambler's fallacy bias			
			Haids	Tails	No Preference	Total
Age of the Respondent	Young Investor	Count	2	31	0	33
		% within Age of the Respondent	6.1%	93.9%	0.0%	100.0%
		% of Total	2.7%	41.9%	0.0%	44.6%
	Experienced Investor	Count	4	26	11	41
		% within Age of the Respondent	9.8%	63.4%	26.8%	100.0%
		% of Total	5.4%	35.1%	14.9%	55.4%
Total		Count	6	57	11	74
		% within Age of the Respondent	8.1%	77.0%	14.9%	100.0%
		% of Total	8.1%	77.0%	14.9%	100.0%

Table 3.26. **Crosstabulation – Gambler's Fallacy Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.373[a]	2	.003
Likelihood Ratio	15.501	2	.000
Linear-by-Linear Association	4.287	1	.038
N of Valid Cases	74		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.68.

Table 3.27. **Chi – Square Tests – Gambler's Fallacy Bias**

Chi-Square Tests

H0: Both investor types are equally likely to be subject to the Gamblers' Fallacy bias

H1: Young investors are more likely to exhibit the Gamblers' Fallacy bias, as compared to experienced investors

Chi-Square test Results

Age of the respondent was a nominal variable (1 = Young investors and 2 = Experienced investors). Gambler's Fallacy Bias was also a nominal variable with 3 response options (1 =Heads, 2 = Tails and 3 = No preference).

Level of Significance: 0.05 (i.e. 5%)

Observation:
Chi –Square = 15.501

P – Value = 0.003

Conclusion: Since the p – value (0.003) is less than the level of significance (0.05), **the null hypothesis is rejected. Hence it is concluded that young investors are more likely to exhibit the Gamblers' Fallacy bias, as compared to experienced investors.**

3.7.8. Mental Accounting Bias

Sometimes investors tend to separate their money to separate accounts owing to various reasons. When people mentally separate money into different accounts, they usually tend to spend it in a different manner. For instance, if they set money aside for the sake of trading, it could be possible that its money they do not need for any other purpose and are willing to risk in the stock markets. This can lead to the Mental Accounting bias. Investors were asked if they set aside a share of their

Income for investing in the share market and their responses are shown in Table. 20.3% of the investors amounting to 15 individuals opined that they do it sometimes, while 52.7% (39) said yes and that they always do it. These investors were likely to be to treat this money as 'trading' money and make untimely investments into their favorite stocks, if they did.

Age of the Respondent * Mental Accounting Bias Crosstabulation

			Mental Accounting Bias			
			Yes	No	Sometimes	Total
Age of the Respondent	Young Investor	Count	24	6	3	33
		% within Age of the Respondent	72.7%	18.2%	9.1%	100.0%
		% of Total	32.4%	8.1%	4.1%	44.6%
	Experienced Investor	Count	15	14	12	41
		% within Age of the Respondent	36.6%	34.1%	29.3%	100.0%
		% of Total	20.3%	18.9%	16.2%	55.4%
Total		Count	39	20	15	74
		% within Age of the Respondent	52.7%	27.0%	20.3%	100.0%
		% of Total	52.7%	27.0%	20.3%	100.0%

Table 3.28. **Crosstabulation – Mental Accounting Bias**

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.928[a]	2	.007
Likelihood Ratio	10.303	2	.006
Linear-by-Linear Association	9.160	1	.002
N of Valid Cases	74		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.69.

Table 3.29. **Chi – Square Tests – Mental Accounting Bias**

Chi-Square Tests

The following hypotheses were tested:

H0: Both investor types are equally likely to save money to trade

H1: Young investors are more likely to save money to trade, as compared to experienced investors

Chi-Square Test Results

Age of respondents is a nominal variable with 1 = Young Investor and 2 = Experienced investor.

Mental Accounting Bias was also a nominal variable with 3 response options (1 =yes, 2 = no and 3 = sometimes).

Level of Significance: 0.05 (i.e. 5%)

Observation:

Chi-Square = 10.303

P-Value = 0.007

Conclusion: Since the p – value (0.007) is less than the level of significance (0.05), the **null hypothesis is rejected.** Thus is can be concluded that Young investors are more likely to save money to trade, as compared to experienced investors.

Hence it is concluded that young investors are more likely to exhibit the Mental Accounting bias, as compared to experienced investors.

Chapter Four

4.0. Findings and Recommendations

4.1. Summary

The research was done to analyse the effects of eight behavioral biases on the investing decisions of various investors. The various biases were Overconfidence, Representativeness, Herding, Anchoring, Cognitive Dissonance, Regret Aversion, Gamblers' Fallacy, and Mental Accounting. Effects of these eight factors on the decision making process of a sample of 74 investors from Delhi NCR, India were studied. Out of this sample, two sub-samples of 41 and 33 investors each were created: (i) experienced investors – those aged above 30 with at least 4 years of investing experience; and (ii) Young investors – those aged 30 or below with less than 4 years of experience. The sample and sub-samples have been processed and analyzed using IBM SPSS Software and Microsoft Excel. 10 variables were coded into SPSS, 1 of them a dichotomous variable representing investor group, and the remaining 9, each representing a bias, were created by using scaling techniques like 3-point and 5-point Likert Scales, and arithmetic mean. An overall analysis of the sample was conducted which checks if the behavioral pattern of younger investors is different from that of the experienced ones. Further, effect of each bias on the two groups was analyzed and hypotheses were tested using the Chi-square test for Independence.

4.2. Findings

1. Likelihood Ratio is 12.469 with degree of freedom of 2; 2 – sided significance – 0.003; Level of significance – 0.05. P-value > Level of Significance. Therefore, Null Hypothesis is rejected. Hence, there is a significant relationship between investors experience and risk taken by them.

2. **Overconfidence:** I took the hypothesis to test if the young investors were more or less likely to be overconfident than the experienced one's. Using Chi-Square test, results were obtained that we can reject the null hypothesis as the p-value was 0.002 which is less than the level of significance of 0.05.

3. **Representative Bias:** The chi-square p-value obtained was 0.182 which is more than the LOS of 0.05. Thus, the null hypothesis is retained and it is proved that young investors are not likely to be affected more by the Representative Bias than experienced ones.

4. **Herding Bias:** The statistical chi-square test result was p-value to be 0.845 which is greater than that of the LOS of 0.05. Hence, we retain the null hypothesis. Thus it can be suggested that both the investors equally likely get affected by herding bias and depend on judgments of analysts/brokers to make decisions.

5. **Anchoring Bias:** The Chi-square p-value was 0.081 which is more than that of the LOS of 0.05. Thus, null hypothesis is retained and it can be concluded that both sets of investors are equally affected by Anchoring Bias.

6. **Cognitive Dissonance Bias:** The p-value of chi-square test obtained was 0.021 which is less than the LOS of 0.05. Thus, the null hypothesis is rejected and it can be concluded that young investors are more likely to be affected by cognitive Dissonance Bias more than the experienced ones.

7. **Loss Aversion (Regret Aversion) Bias:** The Chi-Square p-value was 0.735 which is higher than that of the LOS (0.05). Thus, null hypothesis is retained and it can be concluded that both the investor sets are equally likely to exhibit Loss Aversion Bias.

8. **Gambler's Fallacy Bias:** Level of Significance: 0.05 (i.e. 5%); Chi –Square (2) = 15.501; P – Value = 0.003. Since the p – value (0.003) is less than the level of significance (0.05), the null hypothesis is rejected. Hence it is concluded that young investors are more likely to exhibit the Gamblers' Fallacy bias, as compared to experienced investors.

9. **Mental Accounting Bias:** The Chi-Square test p-value is 0.007 which is less than the Level of Significance of 0.05. Thus the null hypothesis is rejected and it can be concluded that the young investors are more likely to be affected by Mental Accounting Bias than the Experienced Investors.

Null Hypothesis	Result
There is no relationship between investor experience and losses suffered	**Not Rejected**
Young investor types depend on similar factors while making judgments/analysis (Herding Bias)	**Not Rejected**
Both investor types are equally likely to fix target price at the starting of trading day (Anchoring Bias)	**Not Rejected**
Both investor types are equally likely to exhibit Regret Aversion Bias	**Not Rejected**
Both investor types are equally likely to exhibit Gambler's Fallacy Bias	**Rejected**
Both investor types are equally likely to safe money to trade (Mental Accounting Bias)	**Rejected**
Both investor types are equally likely to predict future price of a stock though past performance. (Representation Bias)	**Not Rejected**
Both investor types are equally likely to justify the mistakes committed while making investment decisions (Cognitive Dissonance Bias)	**Rejected**
Both investor types are equally likely to exhibit Overconfidence Bias	**Rejected**

Table 4.1. **Results of Null Hypothesis**

4.3. Recommendations

4.3.1. Recommendations for Investors

We can see in the Table below, approximately 34% investors did not have knowledge of Behavioral Finance concept and thus it can be said that they were prone to the eight anomalies discussed earlier in the report.

Age of the Respondent * Awareness of Behavioural Finance Crosstabulation

			Awareness of Behavioural Finance					Total
			Poor	Basie	Average	Good	Excellent	
Age of the Respondent	Young Investor	Count	12	19	1	1	0	33
		% within Age of the Respondent	36.4%	57.6%	3.0%	3.0%	0.0%	100.0%
		% of Total	16.2%	25.7%	1.4%	1.4%	0.0%	44.6%
	Experienced Investor	Count	13	1	1	19	7	41
		% within Age of the Respondent	31.7%	2.4%	2.4%	46.3%	17.1%	100.0%
		% of Total	17.6%	1.4%	1.4%	25.7%	9.5%	55.4%
Total		Count	25	20	2	20	7	74
		% within Age of the Respondent	33.8%	27.0%	2.7%	27.0%	9.5%	100.0%
		% of Total	33.8%	27.0%	2.7%	27.0%	9.5%	100.0%

Table.4.2. **Crosstabulation – awareness of behavioural finance**

The main recommendation for investors is to make constant attempts to increase their awareness on behavioral finance by educating themselves on the field. Studying about the biases, and reflecting on their decisions are likely to help achieve better self-understanding of two extent and manner to which they gets influenced by emotions while making financial decisions under uncertainty. Even after satisfactory awareness is achieved it is highly recommended that they maintain a chart of the behavioral biases they are likely to be vulnerable to. This should be reviewed periodically in order to recollect and refresh their memory thus giving themselves a better chance to make improved financial decisions in the stock market. Most essentially, what remains unanswered is whether greater awareness of investors about behavioral biases is likely to increase the market efficiency. Awareness about behavioral biases and its application in the course of making investment decision would be increasing the rationality of investment decisions thus making way for higher market efficiency.

4.3.2. Recommendations for Economics/Finance Schools

Behavioral Finance ought to be given more significance in the Academic Curriculum, in the event that it has not as of now been given its due. The schools work admirably in furnishing understudies with information on technical studies and different procedures, which certainly fills in as an establishment to an incredible profession. On the off chance that they are furnished with magnificent information in Behavioral fund, the mental part of the field would have just helped them accomplish better self-comprehension, and consequently dynamic in

pressure circumstance probably won't be as trying to them as it would be something else. Realizing what to do is significant, however realizing when to do what can anyone do, inestimable.

4.3.3. Recommendations for Academics

Behavioral Finance, as a field, unites finance and science. From an examination viewpoint, social account presents a ton of new chances and difficulties for the most part since it is a generally youthful field. In addition, it offers various open doors for innovative reasoning and exploratory investigations, since there is a chance to concentrate on the human psyche and its ways. The field is firmly identified with social financial matters, which centers around understanding the justification behind monetary choices, by exploring on different recognized intellectual or passionate predispositions, which individuals might be experiencing. In this examination, strategies like Weighted Scoring were utilized, since the thought was to assemble an expansive outline around eight inclinations, filling in as a stage for progressively explicit exploratory exploration concentrating on a couple of predispositions. Every one of these predispositions can be examined utilizing various factors to add measurements to the investigation, and methods like Factor Analysis can be utilized to check for inconstancy among them, as they are probably going to display a serious extent of connection. The poll study technique, which was the device utilized to accumulate information, was one of the fundamental confinements of this investigation, but the main viable alternative to arrive at genuine speculators. Any investigation attempted toward this path in view of the intended interest group as understudies of financial matters and account, will furnish boundless chances to concoct inventive exploratory premises on the lines of attempting to out-think counterparts.

Chapter Five

5.0. Conclusion

Outrageous developments in worldwide records and stock costs due to dread and expectation has, as it should, made life intense for a balanced speculator. Market feelings have been seen to influence uncontrollably from positive to negative and back, in the most brief time periods like weeks, days and hours. In this specific situation, understanding nonsensical financial specialist conduct merits more significance that it has ever had. Conduct money - a moderately new field that came into pertinence during the 1980s – examines the impact of brain research on budgetary dynamic. It concentrates how financial specialists decipher new data and follow up on it to settle on choices under vulnerability. The science doesn't attempt to name conventional money related speculations as out of date, yet looks to enhance the hypotheses by unwinding on its presumptions on judiciousness and contemplating the reason that human conduct can be seen better if the impacts of subjective and mental inclinations could be concentrated in setting where choices are made.

Are individuals (showcase members) sound? Or then again would they say they are probably going to be driven by episodes of feelings like dread and ravenousness, which could prompt awful choices? The goal of this proposition was to check if the normal individual financial specialist taking an interest in the Indian Stock Market is objective consistently. The attention is on eight recognized social predispositions, to be specific: Overconfidence, Representativeness, Herding, Anchoring, Cognitive Dissonance, Regret Aversion, Gamblers' Fallacy and Mental Accounting. Impacts of these elements on the dynamic procedure of portfolio financial specialists in Delhi NCR, India were broke down in this investigation. By circulating an organized survey, reactions were acquired from singular financial specialists and the last example comprised of 74 respondents out of with 41 were experienced investors – those matured over 30 and having in any event 4 years of contributing experience; and youthful speculators – those matured 30 or beneath, with under 4 years of contributing encounters. Factors speaking to each predisposition were deliberately developed from the reactions dependent on the Likert Scale, and strategies like Chi-square Tests were utilized to break down the information.

The examination discovered that, out of eight predispositions financial specialists were influenced by some of them. Tests had indicated that all the speculators were influenced by the different inclinations while settling on venture choices yet it couldn't be set up that one financial specialist bunch had endured more misfortunes affected by these predispositions. Results from investigation recommended that, despite the fact that financial specialists were similarly inclined to submitting wrong choices inferable from being one-sided, how much every one of the inclinations were influencing them were distinctive in a noteworthy way to a degree that more youthful and experienced speculators could be isolated as two extraordinary gatherings of individuals displaying an alternate standard of conduct.

Age of the Respondent * Loss Suffered by Investors Crosstabulation

			Loss Suffered by Investors			
			Less than 10%	Between 30% - 50%	More than 50%	Total
Age of the Respondent	Young Investor	Count	23	3	7	33
		% of Total	31.1%	4.1%	9.5%	44.6%
	Experienced Investor	Count	19	17	5	41
		% of Total	25.7%	23.0%	6.8%	55.4%
Total		Count	42	20	12	74
		% of Total	56.8%	27.0%	16.2%	100.0%

Table 5.1. **Crosstabulation – Loss Suffered by Investors**

When asked to reveal financial losses suffered in the 2017 – 2019 timeframe, 12 out of the 74 investors admitted to having faced a loss more than 50%, whereas, 20 respondents faced loss between 30 – 50%. In this context, the study argues that being subject to these behavioral biases had played a significant role in the losses suffered during the crisis by both the young and experienced investors.

Results from the study are more indicative in nature, than confirmative. However, the findings do open up various research opportunities where the number of biases studied could be reduced and the attempts can be made to produce confirmative results under detailed experimental settings. Two recommendations are:

(i) Subjects should be randomly split into two groups. One group should be given a knowledge session about a certain bias. Then both groups should be presented with a scenario, which tries to induce the subjects into committing the bias.

(ii) Subjects should be provided with a scenario where they are likely to be influenced by a certain bias. Then they should be given a knowledge session on the bias. A similar scenario should be presented to the same group a day later, to see if the new awareness has any impact on their decision-making.

Methods like Game Theory and Probabilistic Logic can be used as inspiration while setting up the premises for a detailed and more advanced study. The nature of the field promises that a researcher would be presented with many opportunities to be innovative and creative.

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Appendix – Structured Questionnaire

Impact of Behavioral Finance on Portfolio Investment Decisions

This questionnaire is for my Major Research as part of my final year MBA curriculum. This information will not be used to serve any other purpose and will be kept confidential.

Thanks

Shivani Goyal

1. Email address : _____
2. What is your Age? : _____
3. For how many years have you been investing/trading shares on BSE/NSE? : __
4. What price range of shares do you prefer to invest in?
   - Low cap
   - Large cap
   - Mid cap
   - Combination of low and large cap
   - Other:
5. How much loss did your portfolio incurred in the period 2017 – 2019?
   - >50%
   - 30 – 50%
   - < 10%
   - No losses
6. Whose judgment analysis do you trust most while making investments?
   - Self
   - Broker/Friends
   - Media/Expert opinions
7. Do you consider the past performance of a stock before investing in it?

   Sometimes

   1

   2

   3

   4

   Always
8. Does you fix a target price at the starting of the trading day?

   Never

   1

   2

   3

   4

   5

   Always
9. Do you believe it is possible to find future value of a share through detailed analysis of past performance?
   - Yes
   - No
   - I don't know
10. How easy do you think it was to predict the collapse of SENSEX in the wake of the Global

Financial Crisis?

Very Easy

1

2

3

4

5

6

7

Very Difficult

11. Does the investor profile affect investment decisions?

- Yes
- No
- I don't know

12. Do you feel you can, on average, predict future share prices better than others?

- Always
- Sometimes
- Never

13. What levels of risk do you undertake?

Low Risk

1

2

3

4

5

High Risk

14. Would you go ahead and invest in a stock if your valuation of a stock is different from that made by a well-known expert on some financial news channel or paper?

- Definitely
- Maybe
- Never

15. Are young investors likely to be more overconfident than experienced investors?

- Yes
- No

16. How often have your investment decisions proved to be right?

- >80%
- 50 – 80%
- <50%

17. Does your mind try to justify mistakes committed while making investment decisions?

- Yes
- Sometimes
- No

18. If you hear views from a famous analyst that conflicts with your opinion about a stock, would you change your opinion immediately?

Never

1

2

3

4

5

Always

19. Is there any relationship between investor experience and losses suffered?

- Yes
- No
- I don't know

20. Suppose an unbiased coin is flipped three times, and each time it lands on 'Heads'. What do you feel would be the outcome of the next flip?

- Heads
- Tails
- No preference

21. Do you save a part of your income for investing in the share market?

- Yes
- Sometimes
- No

22. If you win a lottery of Rs 1 Crore (Rs 10 million) which type of shares would you consider investing in?

- Large Cap
- Mid Cap
- Low Cap

23. In 2006-07, if someone had told you that a financial crisis is about to happen in a years' time would you be convinced?

No Convinced

1

2

3

4

5

Highly

24. How would you rate your knowledge on a relatively new field which studies financial decision making, called 'Behavioral Finance'?

Poor

1

2

3

4

5

Excellent

25. Do you believe in randomness or do you find a pattern in stock market movements?

- There is a pattern
- There is no pattern

26. Do you believe in technical analysis?

- Yes
- No

Suggestions if any: _____