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# UNDERSTANDING BEHAVIORAL BIASES IN INVESTMENT DECISION MAKING

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## ABSTRACT :

In the traditional investment theories, it is assumed that investors are rational to maximize their expected utility. Behavioral finance, on the other hand, suggests that cognitive biases and psychological factors have the greatest influence on their financial choices. This paper examines four significant behavioral biases: overconfidence, loss aversion, herding behavior, and mental accounting, and examines how they impact individual investment choices. The study, applying a standardized research of retail investors, looks deeper into the effect of demographic parameters, like the age of individuals and experience concerning investments, as a determining cause of these predispositions. Generally, results establish that less-seasoned investors-investors between the ages-are overconfidence and herd-oriented, and aging investors tend more towards loss aversion. These are patterns that help enlighten how the behavioral biases lead to investment decisions and can therefore provide insights useful in optimizing a decision-making strategy that minimizes financial risks.

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## INTRODUCTION :

The traditional rationality theories in investment decisions have always applied the assumption that the individuals operate rationally by working in ways of maximizing their expected utility. An example is in determining investment decisions where a rational investor operates with all the available information to come up with excellent financial results (Ahmad Zamri, Ibrahim, Haslindar, Tuyon, 2017). However, bounded rationality theory attacks this assumption: people cannot perceive all the information relevant to an issue due to cognitive biases and environmental constraints, according to Kinoshita et al. (2013). In practice, investors fall victims to such a limitation, hence failing to meet the rational level usually expected when making decisions.

While the traditional finance models, such as the efficient market hypothesis, believe that investors act perfectly rationally, the behavioral finance deems psychological factors and biases have tremendous effects on investment decisions (Mitroi & Adrian Stancu, 2014). The pioneers in this field of study are Daniel Kahneman, Amos Tversky, and Richard Thaler, who have studied on these biases and proved they can actually lead to suboptimal financial decision-making (Tversky & Kahneman, 1971; Shefrin & Thaler, 1988). Some biases include overconfidence, herding, anchoring, and mental accounting. All of these result in irrational investors, thereby affecting their outcomes of investment (H. M. Shefrin & Thaler, 1988; Singh, 2016).

This study was conducted with the purpose of understanding how four major behavioral biases affect individual investment decisions by considering the framework of behavioral finance for investor decision-making. It covers theoretical and empirical research in the discipline of the subject matter, in doing so it explores how these biases affect financial decision-making and challenge traditional models of rationality. Therefore, it leads to further advancement of knowledge within the area of behavioral finance concerning the intricacies of investment behavior and restriction to rational financial decision making in a market.

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## OBJECTIVES OF THE STUDY :

- To analyze the implications of central behavioral biases - overconfidence, loss aversion, and herding behavior- on investment decisions, portfolio performance, and risk appreciation.
- To Identify strategies that assist an investor in realizing and mitigating behavioral biases while taking into account external market factors and economic conditions.

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## LITERATURE REVIEW:

In recent times, a field called behavioral finance has been developed to serve as a connecting bridge between actual decision-making and conventional finance theories. Behavioral finance recognizes that more than the theoretical approach of conventional finance, where such decisions are presumed to be rational, these investment decisions are really more driven by social influences, emotional influence, and cognitive biases. This paper follows up a review of basic research on the existence of behavioral biases and its effects on investment decisions.

Behavioral biases are the regular patterns of leaving.

The most common biases affecting the investment decisions are overconfidence, loss aversion, herding, anchoring, and framing effects. This paper explains how these biases have their basis from rationality, where investment decisions are made by psychological factors that are not in the best interest of the investors.

**Overconfident investors** trade more often and diversify less, studies like Barber and Odean's (2001) shows Investors who are overconfident may also misjudge the risks and thus make less than ideal choices

Prospect theory, as set by Kahneman and Tversky (1979), had established the loss aversion theory, which holds that losses are more psychologically important than comparable benefits.

Investors end up holding onto failing assets for a long time or selling winning investments too soon in order to avoid the pain of a **loss**, which affects portfolio performance. 1992 research by Bikhchandani, Hirshleifer, and Welch found that investors often **herd**, which can lead to asset bubbles and market meltdowns.

As stated by Tversky and Kahneman (1974), investors frequently use information not related to the investor's choice, such as the price at which an asset was bought when market conditions changes. Tversky and Kahneman (1981)

observe that on average people tend to gamble more if the potential loss is **framed** as a potential gain that will affect their investment decisions.

Shiller (2000) argues that behavioral biases lead to stock price volatility and the market bubble. This is so because investors sometimes overreact to the news and other economic events and often misprice the assets. Shefrin and Statman (1985) argue that investors who act on behavioral bias often do not realize optimal returns due to the suboptimal risk-reward evaluations.

As proposed by Shefrin and Statman's Behavioral Portfolio Theory in 2000, investors create their portfolios based not only on profit maximization but also on psychiatric requirements and inclinations. Instead of purely focusing on logically sound financial goals, BPT instructs investors to create portfolios to fulfill their emotional objectives, for example, reducing the perception of risk or preventing regret.

Barberis, Shleifer, and Vishny (1998) proved that news often causes investors to overreact while also showing a tendency to under-react to news, hence leading to market inefficiencies.

Benartzi and Thaler (1995) hypothesized that investors are often engaging in mental accounting activity, which is defined as classifying investments into separate accounts instead of

This can be considered against their entire portfolio, which results in suboptimal investment choices. Lichtenstein, Slovic, and Fischhoff (1978) have concluded that investors often made poor decisions due to some sort of over- confidence and anchoring bias, especially in unstable and complex markets.

Therefore, considering a focus on actionable ways for mitigating behavioral biases in real investment practices, this research forms a starting point for future study regarding the effects of behavioral biases on investment decision- making processes.

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## RESEARCH METHODOLOGY :

This methodology explains just how much of an impact behavioural bias has in investment selection. The methods of data sourcing would be both primary sources based on surveys as well as those that are secondary comprised of reports and case studies via published literature. This research paper, through perusing the above data, would identify leading sources of bias hampering investment options and investor activities.

### Data Collection Tools

Questionnaire: Google Forms questionnaire was administrated to a sample of 50 participants targeted to measure levels of **over-confidence, herding, and losses aversion**, in investment making decisions. Likert scale based questionnaire was specifically used to attain the responses about the level of agreement or disagreements with the corresponding statements.

Secondary data was used in gathering knowledge from different available articles and journal papers on topics of psychology, economics, and finance, particularly on how cognitive biases affect people's investment. Journal articles with research studies supplied the theoretical insight and provided data contextualization being primary data itself.

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## DATA ANALYSIS & INTERPRETATION :

This section presents an analysis of the data collected given in the figure 1.1 on investment behaviors, demographic characteristics, and the impact of behavioral biases on decision-making. The findings provide insights into how age, income, education, and investment experience influence financial decisions and susceptibility to cognitive biases. This section presents an analysis of the data collected on investment behaviors, demographic

characteristics, and the impact of behavioral biases on decision-making. The study shows how age, income, education, and experience with investment affect financial decision-making and exposure to cognitive errors.

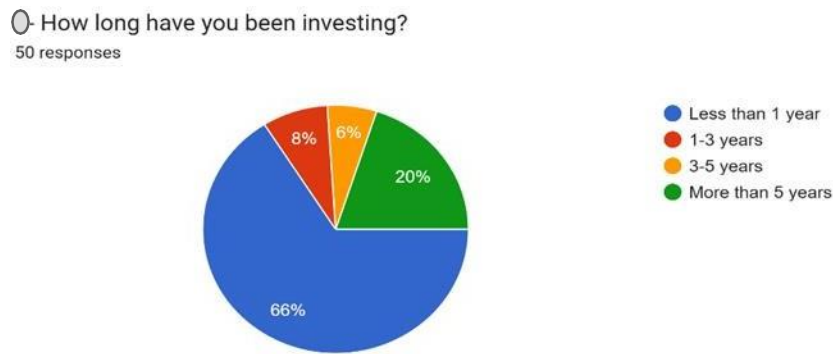


FIGURE 1.1

Demographic Distribution and Investment Experience (Table 1.1)

AGE GROUP	INCOME LEVEL	EDUCATION	INVESTMENT EXPERIENCE
Below 25 (Majority)	Mostly Below ₹5 lakh, some up to ₹20 lakh	High School, Bachelor's, Master's	Mostly <1 year, some 1-3 years
25-35	₹5-20 lakh	Master's, Doctorate	1-5+ years
36-50	₹10-20 lakh and Above ₹20 lakh	Master's, Doctorate	More than 5 years
Above 50	Above ₹20 lakh	Master's, Doctorate	More than 5 years

**Observation:** The majority of the respondents are young investors, below 25 years of age, with limited investment experience of less than 1 year. Higher age groups have more experience and diversified investment strategies.

**Behavioral Biases and Investment Decisions**

Psychological biases in investor behavior usually have behavioral consequences on investor choice such as making impulsive financial decisions. Respondents will answer some questions based on how they react to a potential loss, risk, and uncertainty in the financial market.

The following pie chart (fig 1.2) brings out how respondents reacted towards a potential loss:

When facing a potential loss, are you more likely to:  
50 responses

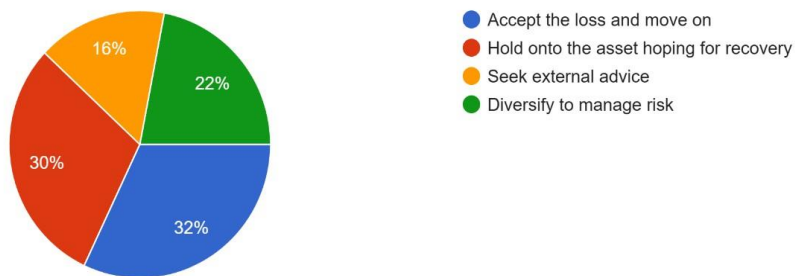


Figure 1.2

**Loss aversion:** The tendency to prefer avoiding losses over acquiring equivalent gains, an aversion that makes people hold on to the losing investments and refuse to accept a loss.

Loss of possible gains and pre-loss indecision-avoidance of forfeited wealth of course, near enough to half of the respondents declared themselves incapable of closing bad investments--rather they'll be held onto, perhaps for something better. Still, another did not reach any conclusion and was

thereby very risk averse coming to terms with loss. And, again all this was quite a form of the loss aversion bias, which is wherein loss hurts vastly more than what any gain may bring somebody much glee.

#### What is the impact?

- To sell at loss hurts as reading failure, it hurts to hurt.
- The fear of regret grows irrationally, as any investor refuses to lose hope that all market signboards tell their story against his or her direction.
- It will shoot fear; eventually, people become paralyzed so much that their financial result eventually turns worse at the long haul.
- The fear of losing many events results in bad decision-making on the part of investors since they tend to hold rather than switch their resources for better opportunities.

### 2. Herd Behavior: The tendency to do what most people are doing assuming others know better and making the same mistake that they are rather than independent analysis.

Seeking Advice and More Following the Majority

About 30 percent of the respondents admitted to following external advice in making financial decisions. This is a result of herd behavior, a psychological tendency where individuals tend to imitate the actions of others. It is based on the belief that collective decisions are correct.

#### Why does this happen?

- Uncertainty: In the face of complex financial choices, people rely on experts or peers for reassurance.
- Ambiguity: If something is not clearly defined, the majority becomes the cue that defines what should be done.
- Social proof: When many people do something—for instance, holding on to an asset or taking financial advice from some guru, people assume it must work.
- While there are certainly some times when others' advice is worthwhile, following the crowd blindly often leads one into bad decisions because the group probably made their decision based on emotion rather than reason.

### 3. Overconfidence Bias: A tendency of exaggerating one's own knowledge, skills, and/or abilities by overestimating the actual chances of success in an attempt to predict future outcomes and overlook all possible pitfalls.

Taking too much risk & ignoring warning signs

A few investors—some of whom are high-income or experienced—may suffer from overconfidence bias; that is, believing they are better decision-makers.

#### This bias results in:

- Risk underestimation: They think that they can predict the market with a very high degree of accuracy.
- They tend to neglect the expert's warning and assign losses to circumstances beyond their control.
- Overtrading: Overconfident traders trade more. They feel they can time the market, and it is very costly with lower return.
- Overconfidence provides an inflated sense of control, and investors take risks they don't deserve and fail to consider the downsides that may come about.

#### Decisions Based on Patterns

Decisions are often determined by recognizable patterns, which emerge from past experience, external forces, and psychological proclivities. People prefer to rely on familiar cues, habits, and data trends, as these will make complex decisions easier, hence less uncertain and cognitive-load-laden. Patterns emerge in the case of investment behaviors, like following market trends, seeking validation from peers, or trusting financial reports. These patterns allow a certain degree of predictability that can increase people's confidence when making decisions. However, if not analyzed more critically, the same patterns might lead to a bias or even herd behavior. Understanding these patterns is very essential in strategic and informed decision-making.

Which factors influence your investment decisions the most? (Rank in order of importance: 1 = Most Important, 5 = Least Important)

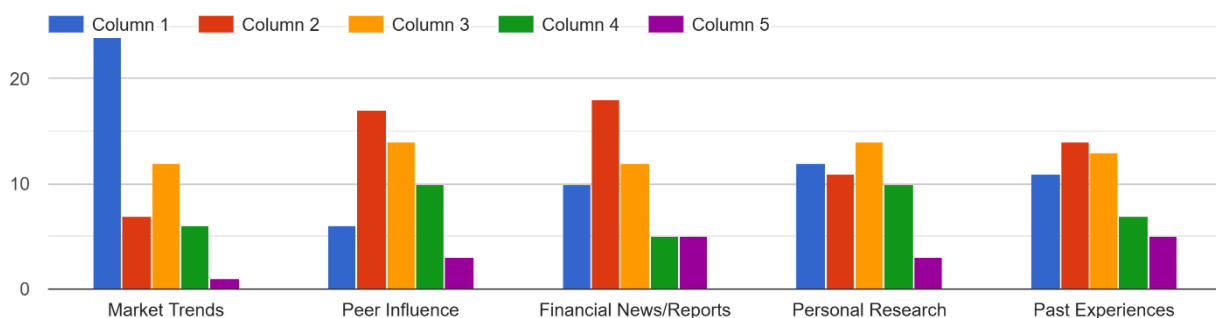


Figure1.3

The following is a bar graph in (fig 1.3), ranking from 1 as most important to 5 as least important, what drives investment decisions. All the patterns that can be drawn from these data clearly indicate various preferences that determine investor behavior:

❖ **Market Trends Dominate Decision Making**

The highest number of respondents ranked Market Trends as the most important variable (Column 1) and showed great reliance on trends in the outside market. In other words, it is an investment pattern based on data rather than real-time information to form decisions.

❖ **Intense Peer Pressure:**

Peer Influence is dominant in Columns 2 and 3, which shows although it is probably not the highest influence variable, proof of social masses and aggregate behavior make up a high enough influence in the decision. This pattern is in itself a humanity instinct pertaining to seeking conformity, especially in the face of uncertainty.

❖ **Financial News/Reports Dependence:**

Like peer influence, Financial News/Reports topped Columns 2 and 3. It reflects the trend that investors tend to consult more often with experts that use state-of-the-art financial analyses and filtered insights, strengthening the position of authoritative sources of information.

❖ **Balanced Approach Supported by Personal Research:**

There is a more diversified pattern in rankings for Personal Research spread across Columns 1 to 4. This shows that some investors hold very high regard for their own analysis, while others combine it with external factors, which suggests a hybrid model of decision-making.

❖ **Past Experiences as a Moderating Factor:**

Past Experiences are steady in the rankings of columns 2 and 3: even though it is not a deciding variable it does play a steady predictable role in shaping the choices. The psychological aspect involved in the known consequences when decision-makers have novel choices is caught here.

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## CONCLUSION :

Behavioral biases are crucial in deciding an investment; they lead to illogical decisions without any financial decision that can be based on logic. Some of the biases lead investors to overestimate risks, or overreact to changes in the market, while following a trend without proper evaluation, as is the case with behavioral biases such as overconfidence, loss aversion, herd behavior, and anchoring bias. These emotion-driven and cognitive shortcuts open up the intricate psychology at work while taking decisions related to money. Only high self-awareness, together with disciplined investment practices, can be an antidote to these unconscious biases. Better investment decisions then would be driven by data-driven analysis, clear-cut financial goals, and diverse opinions from people in your life. All things considered, managing and understanding behavioral biases will form the key to consistency in the right decisions toward long-term investment success and sound financial welfare.

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