RESEARCH PROJECT

ON

***"A STUDY ON INVESTOR PSYCHOLOGY AND MARKET ANOMOLIES"***

submitted as partial fulfillment for the degree of

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## DECLARATION:

I, Harsh Kumar, a student of Master of Business Administration (MBA) – Semester 4 at University Institute of Applied Management Sciences, Panjab University, Chandigarh, hereby declare that the research study titled, "Investor psychology and market anomalies" is my original work and has been carried out in partial fulfillment of the requirements for the degree of Master of Business Administration under the guidance of Dr. Nidhi Gautam, Associate Professor, UIAMS, Panjab University.

This study is based on independent research, and all sources of data, information, and references have been duly acknowledged. The research, data collection, analysis, and findings presented in this report are a result of my own efforts, and I confirm that this work has not been submitted, either in part or full, to any other university, institution, or examination body for the award of any degree, diploma, or certification. The study adheres to ethical research practices, ensuring that all data collected from respondents has been used solely for academic purposes while maintaining confidentiality and anonymity. Any assistance or contributions received during the research have been appropriately acknowledged in the report.

I take full responsibility for the authenticity and originality of this research study.

Date: _____

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## FACULTY DECLARATION:

I hereby declare that the student, Harsh Kumar of MBA (IV) has undergone has project under my periodic guidance on "*Investor psychology and market anomalies.*"

Further I hereby declare that the student was periodically in touch with me during his research work and the work done by student is genuine & original.

(Signature of guide)

## ACKNOWLEDGEMENT

First and foremost, I would like to express my sincere gratitude to the Almighty for blessing me with the strength and perseverance to complete this research project successfully.

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## ABSTRACT

The classical theory of finance takes the assumption that markets are efficient and investors behave rationally. Nonetheless, several anomalies and irrationalities found in real financial markets contradict this assumption. This research discusses the relationship between investor psychology and market anomalies with a focus on how cognitive bias and emotions influence investment choice. Using primary data gathered from 125 respondents using a standard questionnaire, this study examines the occurrence of psychological biases like overconfidence, herd behavior, loss aversion, and representativeness in the Indian stock market scenario. It also examines investors' awareness and belief concerning anomalies like the January Effect, Weekend Effect, and Momentum Effect. The research finds that a lot of investors rely on intuition, social media trends, and historical stock performance instead of systematic financial analysis. This explains repeated market anomalies and contradicts the Efficient Market Hypothesis (EMH). The results emphasize the need to incorporate behavioral finance into education and strategy formulation. This work adds to the body of literature explaining how psychological factors shape market inefficiencies and provides advice to investors, advisors, and policymakers about reducing the effects of such biases on financial choices.

**Research Type:** Descriptive Research

**Data Source:** Primary and secondary

**Sample Size:** 125

**Data collection Method:** Digital Platform( questionnaire)

**Tools used:** Google forms

# CHAPTER-1

# INTRODUCTION

## Background of the Study

Investor behavior in financial markets has long fascinated economists and analysts. Orthodox theories like the Efficient Market Hypothesis (EMH) state that markets are rational and all available information is embodied in asset prices. In reality, however, investors are often guided by psychological biases and emotions, which frequently lead to irrational choices and the occurrence of market anomalies. The 2008 global financial crisis and events such as the GameStop short squeeze (2021) have shown the importance of investor sentiment and herd behavior in determining market trends—often separated from fundamental value.

In India, retail participation in financial markets has grown exponentially. As of March 2024, India had more than 140 million Demat accounts, a sharp increase from only 40 million in 2020, reflecting growing retail investor interest, according to SEBI. Furthermore, NSE states that almost 45% of daily turnover in the cash market is now contributed by retail investors. Discount brokers, mobile trading apps, and access to real-time news and social media have all made a big difference to investor behavior.

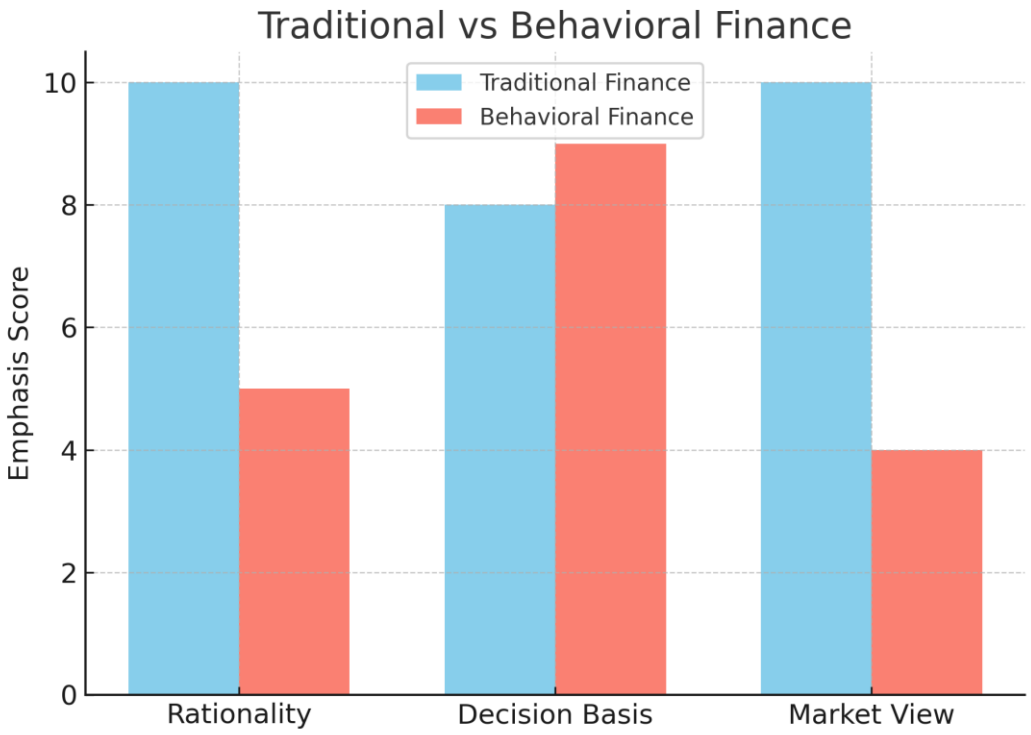
Concurrently, behavioral finance proposes that overconfidence, anchoring, aversion to regret, and herding distort rational choice. These cognitive biases lead to market anomalies like the January Effect, Weekend Effect, and Momentum Effect, which defy the postulates of EMH. The growing role of behavioral factors in financial decision-making poses doubts regarding the long-term sustainability of market efficiency and the predictability of stock returns.

## Evolution of Behavioral Finance

Behavioral Finance appeared in the late 20th century as a reaction to the inconsistencies in classical finance theory. Researchers such as Daniel Kahneman and Amos Tversky brought cognitive psychology into economic theory, later being awarded a Nobel Prize in 2002 for Prospect Theory. This theory opposes the rationality assumption by demonstrating that individuals have different values for gains and losses, which causes inconsistent and usually irrational choice.

Other early researchers such as Richard Thaler, Robert Shiller, and Meir Statman extended the discipline further by discovering biases including overconfidence, anchoring, herd behavior, and mental accounting. These experiments illustrate how actual investors diverge from mathematical utility-maximizing behavior because of psychological constraints and emotional responses.

Behavioral finance now offers explanations for anomalies that EMH cannot explain—like the January Effect, Momentum Effect, and Overreaction Hypothesis.




**Problem Statement**

Even with improvements in financial literacy and availability of information, a significant share of Indian investors still make emotion-based, bias-driven, and peer-influence decisions. Though conventional models believe in rational decision-making, investors tend to exhibit behaviors like:

- Clutching losing stocks (loss aversion),
- Blindly following others (herd behavior),
- Buying and selling stocks based on past price movements (representativeness),
- Overacting to news or social media phenomena.

These irrational actions lead to widespread mispricing of assets, spikes in volatility, and lasting market anomalies. The Indian market, while becoming increasingly sophisticated, is still heavily driven by these behavioral tendencies, particularly retail investor behavior.

This study aims to investigate these psychological trends and ascertain their effect on the effectiveness of Indian capital markets. There also exists a deficiency of empirical Indian evidence linking investor psychology with any particular anomalies, which this research remedies through primary research.

**Indian Stock Market and Behavioral Trends**

The Indian capital market is one of the most lively and fast-growing in the world. With a combined market capitalization exceeding ₹320 lakh crore, the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) cater to millions of investors on a daily basis. SEBI and AMFI have been working in tandem consistently to enhance investor education, but psychological biases are deeply rooted.

This is further evident based on reports presented by AMFI and SEBI:

- More than 45% of equity trading volume is now from retail investors.
- 85% of Indian investors indicate that they use social media and WhatsApp groups to discuss or make investment decisions.
- Behavioral patterns reflect a pattern of chasing returns in bull phases and panic selling in corrections.
- Mobile investment apps have resulted in impulsive, gamified investing habits among young people.

These trends are not random—they are a systemic change in the way investing is done, and it is essential to understand this change for market efficiency, policy, and investor protection.

## Objectives of the Study

- To examine the psychological biases that impact investment choices.
- To research investors' awareness and belief in market irregularities.
- To measure the relationship between investors' behavior and market anomalies.
- To learn demographic trends in psychological investment patterns.
- To offer suggestions to minimize the adverse effect of biases on decision-making.

## Scope of the Study

The research relies on first-hand data gathered from a questionnaire completed by 125 respondents with various demographics, such as varying age brackets, educational backgrounds, income levels, and investment experiences. It is individual investor-centric rather than institutional players and encompasses a variety of asset choices—stocks, mutual funds, ETFs, cryptocurrencies, and real estate.

The research focuses on behavioral dimensions, rather than portfolio performance. It is restricted to the Indian financial market, specifically the equity market, and both veteran and new investors are included.

## Justification for the Questionnaire

To understand actual investor behavior and attitudes, relying solely on secondary data is insufficient. This study employs a structured questionnaire divided into:

- **Demographics**
- **Investor behavior and psychology**
- **Perception and experience of market anomalies**

This format allows a quantitative approach to measure how widespread psychological biases are and how they correlate with anomaly awareness or acceptance.

## Significance of the Study

This study is of great significance for several reasons, particularly in the context of India's rapidly changing financial environment. As stock markets increase in size and participation, the behavior of investors continues to be an uncertain factor—usually ignored in traditional financial models. This research puts spotlights on that same factor: human nature in investing.

1. For Retail Investors

Individual investors are usually the most susceptible to impulsive and emotional decision-making, driven by news, market rumors, and herd behavior. Individual investors can gain self-knowledge by learning how psychological heuristics like loss aversion, regret aversion, and overconfidence impact them and implement more logical strategies. This study can serve as a mirror to help investors look back at their choices and prevent typical pitfalls.

2. For Financial Advisors and Wealth Managers

Knowing client psychology is the foundation of behavioral financial planning. Advisors may give logical recommendations, but clients respond emotionally. With the findings of this research, financial professionals can tailor advisory strategies, communicate better, and enhance client results by anticipating biases while setting goals, assessing risk, and planning investments.

3. For Policymakers and Regulators

SEBI, AMFI, and other financial regulators seek to protect investors and develop market transparency. The present study presents empirical insights into how psychological prejudices generate risks like irrational exuberance, improper allocation of capital, or the formation of bubbles. These findings can be applied to develop more effective investor education programs, design disclosures or nudges in trading systems, and structure policy reactions to behavioural patterns (e.g., speculative booms in penny stocks or meme stocks).

4. For Scholars and Potential Researchers

There is a paucity of behavioral finance literature when it comes to Indian retail investors. This research helps fill that lacuna with original data. It further lays a foundation for more research—to see how these biases vary by region, asset class (such as crypto), and demographics. It also provides opportunities for experimental research on how financial behavior can be altered or enhanced.

5. For the Financial Sector

Mutual fund houses and fintech platforms can leverage the findings of this study to create tools and interfaces that assist investors in preventing rash decisions—e.g., cooling-off periods, AI-driven nudges, or information pop-ups prior to placing high-risk trades. Synchronizing product offerings with psychological tendencies can boost long-term client retention and satisfaction.

**Challenges in Researching Investor Psychology**

Researching investor psychology, although revealing, is necessarily complicated by the subjective and dynamic nature of human behavior. There are a number of major challenges involved in conducting and interpreting research in this area:

1. Response Bias in Self-Reporting

The main data for this research is a questionnaire that is based on self-reported answers. The respondents might give socially accepted answers or underreport their irrational behaviors either knowingly or unconsciously. For example, an investor might not acknowledge that they make investment decisions according to social media trends even if they are doing it.

2. Bias Awareness Gap

Most investors are not conscious of their own biases. Psychological behavior is subconscious, so respondents may not be able to accurately judge their own decision-making processes. This provides a limitation in measuring the actual depth of cognitive errors with survey instruments alone.

3. Sample Representativeness

While 125 responses represent a fair sample, the results may not be entirely representative of the Indian investing community diversity. Differences in urban vs. rural attitudes, regional investment culture, linguistic diversity, and digital vs. offline investors could produce divergent psychological results.

4. Market Sentiment Timing

Investor psychology varies with the cycle of the market. In bull markets, overconfidence will be in command, whereas in bear markets, fear and regret aversion will rule. As data collection takes place over a given time frame, the mood of the market during that time can bias outcomes—a limitation referred to as temporal bias.

.5 Complexity of Bias Interactions

Biases don't act alone. A single investment choice may be affected by several concurrent biases—e.g., overconfidence and representativeness bias. It is difficult to measure these interactions statistically, particularly using a fixed-choice questionnaire.

6. External Factors and Noise

Investor behavior is shaped not only by internal psychologies but also by external stimuli—economic announcements, inflation, political developments, etc. Separating psychological influence from these external noise variables in a real-world, uncontrolled environment is challenging.

# CHAPTER-2

# REVIEW OF LITERATURE

## The Genesis of Behavioral Finance:

Behavioral finance is a relatively recent discipline, starting in the second half of the 20th century, as a critique and reaction to the underlying assumptions of orthodox finance theory, specifically the Efficient Market Hypothesis (EMH). The EMH, to a large extent, developed by Fama (1970), assumes that market prices incorporate all available information, thus removing any systematic scope for returns in excess. In EMH, investor behavior is rational and markets are self-correcting. But the observed facts and phenomena in the real world, e.g., stock market bubbles, crashes, and long-lasting market anomalies, contradicted the hypothesis of investor rationality.

Behavioral finance was an interdisciplinary methodology, integrating theories of economics, sociology, cognitive science, and psychology to account for market anomalies of behavior. Behavioral finance is interested in the psychological factors, such as heuristics, biases, and emotions, in financial decision (Barberis & Thaler, 2003). It seeks to reconcile the idealized investor in standard theories with actual behavior in real markets.

## Investor Irrationality and Limits of EMH

Empirical evidence has demonstrated that investors are irrational. For example, irrational exuberance, which is described by Shiller (2000), leads to overpricing of equities and ultimately unsustainable price bubbles. Similarly, long-run overreaction or underreaction to earnings announcements (De Bondt & Thaler, 1985) shows that information is neither timely nor accurate in being incorporated into market prices and thus refutes the EMH's assumptions.

Behavioral finance rejects the presumption that investors make choices based on reason and self-interest alone. Instead, it paints a more realistic picture where psychological biases, mental accounting, and emotional responses will come to overshadow rational thinking (Kahneman & Tversky, 1979). Therefore, the standard presumption of homogeneous rational agents is replaced by heterogeneous agents that are susceptible to a variety of cognitive distortions.

## Market Anomalies: Violations of Efficiency

Market anomalies refer to empirical regularities or deviations from expected behavior in stock returns that cannot be explained by traditional asset pricing theories like the Capital Asset Pricing Model (CAPM) or EMH. Market anomalies include seasonality effects (e.g., the January effect), momentum and reversal effects, and size or book-to-market ratio-based pricing anomalies.

Fama and French (1993) developed the Three-Factor Model to account for certain of these anomalies, such as size and value effects. However, most anomalies persist even after controlling for them, implying the existence of alternative explanations. Behavioral finance offers cogent psychological explanations for such discrepancies.

**Types of Anomalies**

Calendar Anomalies: One of the oldest anomalies to be noticed is the January effect, where stock prices rise in January to a higher degree than they do in every other month (Rozeff & Kinney, 1976).

Momentum Effect: Stocks that have performed well in the past tend to continue doing well in the near term, violating the random walk hypothesis (Jegadeesh & Titman, 1993).

Reversal Effect: Value stocks perform better in the longer term, something which the EMH should not forecast.

Equity Premium Puzzle: Mehra and Prescott (1985) pointed out that the equity premium puzzle cannot be explained by standard models of risk.

Size and Value Effects: Small firms and firms with a greater book-to-market ratio behave as predicted, suggesting mispricing in the market (Banz, 1981; Fama & French, 1992).

Behavioral finance explains such paradoxes through models like overreaction, underreaction, representativeness, and loss aversion.

**Investment Choice Cognitive Biases**

Overconfidence refers to the inclination of investors to overestimate their skill, predictive ability, and impact on investment returns. Overconfidence generates excessive trading and risk underestimation. Odean (1999) demonstrated that overconfident investors trade more and achieve lower net returns. Overconfidence can also result in speculative bubbles because it increases risk tolerance and herding.

Anchoring Bias

Anchoring refers to the human tendency to give too much importance to a first piece of information (the "anchor") when making a decision. Tversky and Kahneman (1974) demonstrated that investors overestimate the stock price based on its historical price, even when the market conditions have changed. Anchoring can cause investors to neglect to update with new information, resulting in underreaction or overreaction in prices.

Confirmation Bias

This bias is one of interpreting and seeking evidence in a way that affirms preconceptions and rejecting disconfirming information. Confirmation bias investors will look for stories or forecasts that support their investment choices, and this can lead them to misestimate and herd.

Availability Heuristic

This is the bias to overestimate information that is most easily accessible or newest. News reports, for example, may have a strong impact on investors' perceptions of a stock's value independent of its fundamentals.

**Understanding Loss Aversion:**

Loss aversion is a key idea in behavioral finance that was first put forward by Daniel Kahneman and Amos Tversky in their influential Prospect Theory. It refers to the

psychological tendency of individuals to feel the pain of a loss much more profoundly than the joy associated with a similar gain. For instance, the emotional distress from losing ₹1000 is greater than the happiness experienced from winning the same amount. This imbalance has a significant effect on how individuals approach risk and make investment decisions.

Impact on Investor Behavior

This cognitive bias frequently leads investors to avoid accepting a loss, even when it would be sensible to do so. They tend to hold onto poorly performing stocks longer than necessary, clinging to the hope of a recovery. Conversely, they may sell stocks that have increased in value too soon, securing small profits out of fear that these gains will disappear. Consequently, portfolios become overly concentrated in underachieving assets while lacking exposure to potentially high-performing investments.

The Disposition Effect

The disposition effect is closely linked to loss aversion and was popularized by Hersh Shefrin and Meir Statman. It describes the inclination of investors to sell assets that have appreciated while keeping those that have depreciated. This behavior contradicts rational investment principles, which suggest that decisions should be made based on anticipated future returns. Nevertheless, this pattern is evident across various investor types and markets, highlighting how the emotional discomfort associated with acknowledging losses can hinder objective decision-making.

Emotional Triggers and Consequences

Loss aversion stems from a complex interplay of emotions, including fear, anxiety, and regret. These emotions can overshadow rational thought, especially during volatile market conditions. Investors might overlook fundamental analysis, postpone portfolio rebalancing, or double down on poorly performing stocks in an attempt to recover their losses. Such emotional responses often result in inadequate diversification, missed opportunities, and an overall decline in portfolio performance.

Empirical Evidence

A variety of studies around the world have illustrated the tangible effects of loss aversion. In experimental trading settings, loss-averse investors consistently achieve poorer performance compared to those who adhere to more systematic or algorithmic approaches. Research shows that emotionally driven investment choices—especially those reflecting loss-averse behavior—result in increased volatility and lower risk-adjusted returns over time.

Mitigation Strategies

To mitigate the effects of loss aversion, several practical strategies can be implemented:

Establishing predefined exit strategies (such as stop-loss orders) can help facilitate rational decision-making.

Utilizing portfolio rebalancing strategies can promote discipline by encouraging asset allocation based on target percentages instead of emotional responses.

Financial literacy initiatives can enhance investors' awareness of these biases and their potential impacts.

Robo-advisors and AI-driven tools can provide recommendations grounded in data, rather than emotional influences.

Loss aversion is a commonly recognized phenomenon with significant implications for individual investment management and overall market efficiency. Acknowledging and actively taking steps to manage its influence is crucial for success in long-term investing.

**Herd Behavior:**
Herd behavior describes a phenomenon where individuals conform their investment choices to those of a larger collective, often disregarding their personal assessments or insights. In financial terms, this behavior leads to collective actions of buying or selling that aren't necessarily founded on underlying principles. It is driven by the psychological reassurance of not being isolated, even when the shared action may be misguided.

Historical Examples
The financial landscape is filled with notable instances of herd behavior:

- The Tulip Mania of the 1600s had Dutch citizens inflating tulip bulb prices to absurd heights before the market ultimately crashed.
- The Dot-com Bubble in the late 1990s experienced a frenzy surrounding internet stocks, many of which did not have sustainable business plans.
- The GameStop short squeeze in 2021 illustrated how online communities like Reddit's r/WallStreetBets could incite significant herding among individual investors, temporarily driving stock prices far past their true value.

Psychological Drivers
Central to herding are several psychological factors:

- Fear of missing out (FOMO) compels investors to participate in trades simply because others are doing so.
- Peer influence and the need for social affirmation cause individuals to trust group behavior over their judgment.
- Feeling secure in numbers diminishes the perceived risk of error—if the majority is doing it, it seems correct.

In markets, these psychological drivers can overshadow logical reasoning and lead to groupthink, where diverse perspectives vanish and irrational choices flourish.

Market Impact
Herd behavior typically results in:

- Increased volatility: as individuals rush in or out at the same time.
- Bubbles: where asset values soar well beyond their actual worth.

- Crashes: when the herd changes direction, triggering panic selling.

These patterns create pricing inefficiencies, heighten market vulnerability, and can erode investor confidence.

Individual Investor Effects
Retail investors, particularly those who are new, are especially prone to this behavior. With limited experience, they frequently depend on crowd signals to guide their investment choices. The emergence of social media and real-time trading applications has heightened this issue, facilitating rapid transmission of sentiment and swift transactions.

Platforms like Twitter, YouTube, Telegram groups, and Reddit discussions are becoming increasingly influential in shaping investment trends. Although these channels provide broader access to information, they also expedite the spread of misinformation and emotional decision-making.

Mitigation and Control
To combat herd behavior, investors can:

- Conduct independent analysis and formulate a personal investment strategy.
- Utilize checklists and decision logs to maintain consistency with their approach.
- Seek guidance or professional advisory services for impartiality.

On a broader scale, improved disclosures, regulatory measures, and systems that delay execution can help mitigate the instant gratification culture that fuels herding.

Herd behavior is widespread, driven by emotions, and often irrational. However, acknowledging its patterns and taking steps to protect against its effects is crucial for long-term investing.

**Investment in the Stock Market:**
Investing involves the strategic allocation of funds with the objective of generating increased returns over time (Kumari et al., 2023). In the context of India, investors are presented with a wide array of financial instruments tailored to meet diverse investment goals. Traditionally, the equity market has been favoured by those willing to assume higher risks, as it offers the potential for substantial returns. Conversely, debt instruments, including government and corporate bonds, are typically preferred by risk-averse investors due to their stable returns and lower risk profiles. These bonds provide fixed interest payments over a designated period, making them an attractive option for those seeking consistent income.

Recent trends indicate a significant shift in investor behaviour in India. According to the Economic Survey 2024, highlighted by Sharma and Gohel (2024), the number of demat accounts in India surged from 114.5 million in FY23 to 151.4 million in FY24. This growth reflects a broader trend where investors, previously inclined towards safer investments like real estate and fixed deposits, are now increasingly turning to the stock

market in search of higher returns. Khandal (2022) attributes this shift to the current environment of low interest rates and sluggish property appreciation, which have made traditional investments less attractive.

The stock market plays a crucial role in driving economic growth, as noted by Chikwira and Mohammed (2023). Kumari et al. (2023) further emphasize that individual retail participation in the Indian stock market has been on the rise, signifying a growing confidence among retail investors. However, the level of awareness and knowledge about different financial instruments varies. While many investors are familiar with traditional instruments like bonds and equities, there is still limited awareness of newer instruments such as derivatives. Kamalkannan and Arockiam (2021) found that this lack of knowledge, coupled with lower risk tolerance, has hindered the adoption of these more complex financial products.

In a study conducted by Jain and Arora (2023), it was found that while a majority of people in Ahmedabad are aware of stock market investments, their participation in trading is limited due to low risk tolerance and the inherent uncertainties of the market. This highlights a broader challenge within the Indian investment landscape, where investor perceptions and interpretations of market information play a critical role in shaping price trends and driving investment decisions (Sharma, 2019).

Despite the growing interest in stock market investments, the literature reveals that studies focusing specifically on factors influencing stock market development remain limited. Salameh and Ahmad (2020) highlight that while inflation negatively impacts stock market growth, several factors positively contribute to its development, including economic growth, foreign investment, market liquidity, trade openness, and the advancement of the banking sector. This suggests that a multifaceted approach is necessary to understand and foster stock market growth in emerging economies like India.

Equities, representing ownership in companies, have emerged as a popular choice for investors aiming for high returns, though they come with a higher level of risk. The significant participation in Indian equity markets, particularly by retail investors, has been fuelled by improved access through digital platforms. On the other hand, the stability offered by debt instruments continues to attract those who prioritize lower risk and steady returns. Understanding these dynamics is essential for comprehending the evolving landscape of investment in India, where both traditional and modern financial instruments play vital roles in shaping investor behaviour.

**Factors Affecting Investor Decision-Making:**

Investor decision-making is influenced by a multitude of factors that vary across different demographics, market environments, and individual preferences. A landmark study by Al-Tamimi (2006) on the investment behaviour of UAE investors identified several key factors that significantly influence investment decisions. These include expected corporate earnings, the desire to get rich quickly, stock marketability, past stock performance, government holdings, and the development of organized financial markets. Conversely, factors such as expected losses in local investments, risk minimization, potential losses in international markets, family opinions, and gut feelings about the economy were found to be less influential. Al-Tamimi's findings have inspired numerous subsequent studies, including research conducted by Obamuyi (2013) on Nigerian

investors, which confirmed similar influential factors, emphasizing the universal aspects of investor behaviour across different markets.

Further exploring the global context, Kengatharan (2019) analysed the factors influencing investment decisions in Sri Lanka's stock market and identified significant demographic influences such as age, gender, marital status, educational qualification, and monthly income. The study highlighted that past stock performance, company stability, goodwill, industry reputation, dividend payments, and expected earnings were among the most influential factors. In contrast, factors such as opinions of majority shareholders, ease of borrowing funds, diversification needs, opinions of friends or co-workers, governing body influence, and social status were less significant in influencing investor decisions.

In the Indian context, the study by Mathew and Kumar (2022) revealed that equity investors prioritize returns from securities, followed closely by risk, liquidity, past stock performance, and investment safety. These factors are closely linked to socio-economic characteristics such as income and occupation, with women showing a particular preference for diversification, and risk tolerance decreasing with age. Investors aged 50 and above place greater emphasis on risk factors compared to their younger counterparts, highlighting how age influences investment priorities.

The behaviour of corporate versus individual investors also varies significantly. Dewan, Gayatri, and Dewan (2021) conducted a comparative analysis and found that corporate investors focus on market knowledge, external environment, SEBI regulations, and detailed company information such as profitability, financial stability, and dividend policy. In contrast, individual investors are more influenced by personal factors such as knowledge, saving and consumption patterns, financial goals, influence from friends or relatives, risk perception, and available funds. This distinction underscores the different priorities and approaches taken by corporate and individual investors.

Regional differences also play a role in investment decision-making. Popat and Pandya (2018) examined the differences between rural and urban investors, finding that rural investors rank goodwill as the most influential factor, while urban investors prioritize risk. Rural investors place less importance on interest rates, whereas urban investors are less concerned with safety and profitability. These findings suggest that geographic location and associated socio-economic conditions significantly influence investor priorities.

However, a study by Khandal (2022) revealed a concerning trend where many investors lack knowledge of market trends and recent developments, often relying blindly on advice from friends, relatives, or others when making stock market investment decisions. This lack of informed decision-making has led many to lose their hard-earned money, highlighting the need for increased financial literacy and awareness.

The role of heuristics and corporate governance in investment decisions is also significant. Qureshi et al. (2012) confirmed a strong positive connection between the use of heuristics, financial tools, and investment decision-making. The study also established a positive and significant link between firm-level corporate governance practices (ESG) and investment decisions. These findings were corroborated by Sajid et al. (2015), who also noted a deviation from the efficient market hypothesis, suggesting that behavioural factors often override rational decision-making.

Patra and Raju (2016) identified 22 variables that influence investor attitudes towards equity stocks, with five factors—company business activities, stock valuation, annual reports, price-to-earnings ratio, and overall profitability—emerging as the most significant. Conversely, factors such as revenue/profit patterns, customer reviews, company vision and mission, business risk factors, and debt-to-equity ratio were found to have the least influence.

The impact of demographic factors on investment objectives is further highlighted by Agarwal et al. (2021), who concluded that age significantly influences investment goals, with priorities shifting as individuals age. Marital status was found to have no impact on investment needs, as both single and married individuals shared similar goals for financial independence and security. Additionally, occupation did not affect preferences for financial instruments, indicating that investment choices remain consistent regardless of job changes.

In examining specific factors influencing investor decisions, Jayaraj (2013) identified personal needs, accounting information, a company's past stock performance, and prudence as key considerations. Similarly, Patil and Bagodi (2021) emphasized the significance of stock marketability, expected corporate earnings, financial statement conditions, and recommendations from financial advisors and analysts in investment decisions. Information obtained from the internet was also deemed highly significant, while insider information and rumours were viewed as non-essential, adding excitement but not being critical to decision-making.

Finally, the study by Zanvar and Bhola (2016) found that even high-income, well-educated, salaried, and independent investors tend to be conservative, preferring safer investment options in the market. This finding aligns with the results of Nguyen et al. (2024), who, using the Efficient Market Hypothesis (EMH) and Heuristic Theory, indicated that investors focus heavily on a company's EPS and designated employer representative, favouring companies with strong historical performance and financial stability.

Raut, Das, and Mishra (2018) further highlighted that investors often follow the investment patterns of their peers, a behaviour particularly prevalent in emerging markets like India. This herd mentality reflects the social dynamics that can influence investment decisions, often leading to collective actions that may not always align with individual financial goals.

In summary, a multitude of factors—including demographic characteristics, past performance, market knowledge, and behavioural biases—affect investor decision-making. Understanding these factors is crucial for developing strategies that cater to the diverse needs and preferences of investors, thereby enhancing the effectiveness of investment decisions in various market contexts.

**Impact of Age, Gender, Marital Status, Income, Education and Occupation on Investor's Decision-Making:**

Investor decision-making is a complex process influenced by a variety of demographic factors, including age, sex, income, and occupation. According to Davar and Gill (2009), investors often rely on their past experiences when making future investment decisions.

Their study reveals that demographic characteristics such as age, education, occupation, and income significantly influence the investment decision-making (IDM) process. Generally, wealthier, more educated, and younger investors are more inclined to invest in equity shares and mutual funds, highlighting the impact of socio-economic status on investment preferences.

Age plays a crucial role in shaping investment awareness and decisions. The findings of Charles and Kasilingam (2013) underscore that an investor's age significantly influences their level of investment awareness. Younger investors, particularly those in the 18 to 25-year-old age group, tend to be more overconfident, which can affect their investment decisions. Saxena (2020) notes that this younger cohort is less affected by loss aversion compared to older age groups. Conversely, older investors, especially those aged 60 and above, often make more informed investment decisions, leveraging their experience to navigate the complexities of the market.

Risk tolerance is another critical factor that varies with age and gender. Mishra and Mishra (2016) support the commonly held view that risk tolerance declines with age, and their analysis also shows that men typically exhibit higher risk tolerance than women. However, Ansari (2019) argues that across all age groups, investors tend to prioritize the safety of their capital, making "risk" a central consideration in their investment decisions. This study also reveals that investors, regardless of age, prefer to invest in mutual funds, government securities, and real estate, indicating a broad-based concern for capital preservation.

The impact of gender on investment behaviour is further explored in a study conducted in Spain by Gonzalez-Igual, Corzo Santamaria, and Rua Vieites (2021). Their findings suggest that female investors tend to be more cautious and conservative in their approach to risk compared to their male counterparts. Women also perceive themselves as less influenced by irrational biases stemming from other people's opinions, highlighting a more measured approach to investment.

Income and occupation also significantly influence investor behaviour. The study by Senthil and Gopi (2015) indicates that an individual's annual income plays a crucial role in the decision-making process, with income levels directly impacting the types of investments pursued. Similarly, Pandey and Vishwakarma (2020) reveal that younger investors, seeking to maximize their capital, tend to favour mutual funds and the equity market, while others still prefer safer investment options like bank and post office deposits due to their security.

Education and intra-household dynamics also shape stock market participation. Bai et al. (2022) argue that education, along with household dynamics and religion, plays a significant role in determining whether individuals choose to engage in stock market investments. Despite these influences, a study by Dawar and Wadhwa (2011) found no significant differences in behaviour between male and female investors concerning factors such as self-image, accounting information, neutral information, advocate recommendations, and personal financial needs, suggesting that gender may not always be a determining factor in investment behaviour.

Occupation and demographic factors can moderate the relationship between behavioural biases and financial decision-making. For instance, a study by R.C. (2021) on individual investors at the Colombo Stock Exchange in Sri Lanka found that age moderated the relationship between the disposition effect and financial decision-making, while

occupation influenced the connection between herd mentality bias and financial decisions. Interestingly, education did not serve as a moderating factor in this study, which contrasts with findings from Jaffna, Sri Lanka, where demographic factors like age, marital status, and monthly income significantly influenced investment decisions, while gender and education did not show a significant relationship (Yogendrarajah and P, 2017).

In Rajasthan, a study by Jain and Mandot (2012) found a negative correlation between investors' marital status, gender, age, educational qualifications, and occupation. However, it revealed a positive correlation between investors' city of residence, income level, and level of knowledge, suggesting that location and income may play more pivotal roles than other demographic factors.

Finally, a unique study on the derivative market in Udaipur, India by Nagori, Sayyed, and Singh (2020) concluded that while educational qualification, age, and awareness do not significantly impact investors' perceptions of derivatives, factors such as gender, income level, and occupation do have a considerable influence. Similarly, Sampathkumari (2020) found that the demographic profile of an investor significantly influences their decision to invest in mutual funds, emphasizing the need to consider these factors when advising investors.

In summary, demographic factors such as age, sex, income, and occupation are pivotal in shaping investor behaviour and decision-making. These factors influence not only the types of investments chosen but also the level of risk tolerance and the approach to investment strategies. Understanding these dynamics is essential for tailoring financial advice and products to meet the diverse needs of different investor segments.

**Investment Objectives and Investment Preferences:**

Investment objectives and asset preferences among investors are shaped by a complex interplay of factors, including demographics, financial goals, and risk tolerance. The literature reveals a shifting landscape in household savings, where Vijay and Shastri (2016) observed a growing trend towards physical investments, driven by their ease of access and the attractive returns they offer. This shift highlights a broader preference among households for tangible assets, which are perceived as more secure and reliable compared to financial instruments.

Demographic factors play a crucial role in determining investment objectives. In a study conducted in the Indore district of Madhya Pradesh, Chaurasia (2017) found that objectives such as Quick Return, Tax Benefit, and Liquidity were significantly influenced by the age of investors. The study also revealed that, except for Tax Benefit, all other investment objectives had a significant relationship with the gender of the investors, suggesting that demographic characteristics are integral in shaping investment priorities.

The preference for traditional investment options remains strong among Indian investors. Dhoot and Bhola (2016) conducted a study in Pune involving 770 participants, which found that insurance and bank deposits were the most favoured investment options. High returns, tax benefits, and safety emerged as the key factors influencing their investment choices. Similarly, Gandhi (2015) observed that in Chennai, retail investors continue to prefer traditional investment avenues such as Bank Fixed Deposits, Post Office savings,

and National Saving Certificates. These findings suggest that despite the availability of more sophisticated financial products, Indian investors often prioritize safety and guaranteed returns.

Demographic factors further influence the criteria for selecting investments. Hemalatha (2019) noted that gender, age, occupation, internet usage, computer literacy, and the use of online trading platforms significantly impact the selection of investment options. This indicates that as digital literacy and access to online trading platforms increase, investment patterns may shift towards more diversified portfolios, including financial instruments that were previously underutilized.

A broader study conducted across India by Maheshwari and Mittal (2017) found that demographic factors such as age, occupation, income, and city of residence play a significant role in shaping investment objectives. The study revealed that investors with different educational backgrounds exhibit varying preferences for tax benefits, future security, and maintaining the status quo, while they generally show indifference towards capital growth and regular income. Interestingly, the study also noted that regardless of gender, there is a shared preference among investors for future security from their financial investments, highlighting a common desire for stability and long-term planning.
These findings collectively underscore the diverse range of factors that influence investment objectives and asset preferences among Indian investors. As demographic characteristics, financial goals, and risk tolerance vary, so too do the investment choices individuals make. Understanding these dynamics is crucial for financial advisors and policymakers seeking to cater to the needs of different investor segments, ensuring that investment products are aligned with the specific objectives and preferences of the population.

**Impact of Sustainability:**

The consideration of ESG (Environmental, Social, and Governance) factors by investors has increasingly become a vital aspect of portfolio screening, influencing investment decisions and shaping market trends (Marti et al., 2023). As sustainability issues gain prominence, the integration of ESG factors into investment strategies is not just a trend but a necessity for investors aiming to balance ethical considerations with financial returns.

The literature underscores the growing significance of sustainable investments, particularly among institutional investors. Escrig-Olmedo et al. (2017) argue that expanding the market for sustainable investments hinges on targeting institutional investors and incorporating ESG factors into traditional investment products. This integration would help resolve the current challenge where investors must often choose between "traditional" and "sustainable" investments, by aligning ESG preferences with financial objectives.

Further emphasizing the importance of sustainability, Aich et al. (2021) highlight that sustainability reporting has become a strategic tool linking all stakeholders, from internal employees to external investors. Companies that effectively gather and report high-quality qualitative and quantitative data on sustainability can position themselves ahead of competitors, making them more appealing to both investors and clients. This approach underscores the competitive advantage that sustainability practices can provide in the

marketplace.

In a broader context, the adoption of ESG practices has seen varying levels of impact across different markets. For instance, in South Korea, there has been a noticeable shift towards sustainable management practices driven by ESG adoption. Park and Jang (2021) observe that new investors may be reluctant to invest in companies with poor ESG performance, while existing investors might leverage stewardship codes to hold companies accountable during shareholders' meetings if they fail to meet ESG standards.
The influence of sustainability on investment decisions is further explored by Lingnau, Fuchs, and Beham (2022), who demonstrate that sustainability, alongside traditional factors like return, risk, and liquidity, significantly affects the willingness to invest (WTI). Their study suggests that while efforts to enhance sustainability are not always rewarded, a clear deficiency in sustainability practices is notably penalized, indicating the risks associated with neglecting ESG factors.

In the United States, investors have shown a strong preference for portfolios that align with development goals, even to the extent of accepting lower returns if their investments support Sustainable Development Goals (SDGs) or are managed by sustainable banks (Harasheh, Bouteska, and Manita, 2023). This trend highlights the growing importance of aligning financial investments with broader social and environmental objectives.
Moreover, the impact of governance within the ESG framework is particularly noteworthy. Parikh et al. (2023) emphasize the critical role of good governance practices in enhancing shareholder wealth. Their study reveals that strong governance positively influences stock returns, whereas environmental factors tend to have a negative impact, and social factors do not significantly affect equity returns. This finding suggests that among the ESG components, governance plays a more decisive role in driving financial performance.

Lastly, the analysis by Traaseth and Framstad (2016) provides insight into the financial implications of ethical investing. Their study indicates that companies with higher ESG scores slightly outperform those with lower scores, particularly in the U.S. market, with statistically significant results. While there is weak evidence that negative screening—excluding companies with poor ESG scores—might reduce returns for ethical investors, the overall conclusion is that ethical investing does not necessarily lead to a loss in returns, thereby supporting the viability of sustainable investment strategies.

These insights collectively underscore the growing influence of ESG factors on investment decisions and the importance of sustainability in shaping the future of financial markets. As the demand for responsible investing continues to rise, understanding the nuances of how ESG considerations impact investor behaviour and financial performance will be crucial for both investors and companies. The literature review highlights the intricate interplay of various factors influencing investment behaviour, from demographic characteristics such as age, gender, and education to broader economic and psychological factors. As markets continue to evolve, particularly with the growing emphasis on sustainability, these insights become increasingly relevant for understanding and predicting investment trends. The integration of ESG factors into traditional investment strategies represents a significant shift in the investment landscape, offering new opportunities and challenges for both individual and institutional investors. The increasing importance of sustainability reporting and responsible investing underscores the need for a more holistic approach to investment decision-making, one

that balances financial returns with social and environmental considerations.

In conclusion, the investment landscape is continuously shaped by a combination of rational and irrational factors, demographic influences, and evolving market conditions. Understanding these dynamics is crucial for developing effective investment strategies that align with both financial goals and broader societal values. As the field of investment behaviour continues to advance, further research is needed to explore the complex interactions between these various factors and to refine the theoretical frameworks that guide investment decision-making.

# CHAPTER- 3
# RESEARCH METHODOLOGY

## Introduction

The effectiveness and legitimacy of any research significantly depend on the robustness and relevance of its methodological framework. In the field of behavioral finance—where understanding financial decision-making requires insight into human behavior, perceptions, and emotions—the research methodology must encompass both measurable patterns and the psychological subtleties that shape investment behavior. This chapter provides a comprehensive explanation of the research design, sampling techniques, data collection methods, analytical tools, and ethical standards adhered to in order to ensure the study's academic rigor.

## Research Design

This research utilizes a descriptive and cross-sectional design. The descriptive aspect allows the researcher to examine existing patterns, behaviors, and psychological reactions among investors without altering any variables. Since the study aims to explore behavioral tendencies such as loss aversion, herd mentality, and overconfidence—and their connections with demographic and economic characteristics—this approach is considered most appropriate.

A cross-sectional study gathers data at a single moment in time, which enables the assessment of a snapshot of the population's financial behavior, specifically how it aligns or diverges from established behavioral finance theories. This non-experimental design is ideal for describing and analyzing phenomena as they occur naturally.

## Research Objectives

This study is guided by the following goals:

- To investigate the impact of behavioral biases—such as overconfidence, herd behavior, and loss aversion—on investment choices.

- To evaluate investor familiarity and comprehension of market anomalies (e.g., momentum effect, January effect, overreaction hypothesis).

- To analyze the correlation between demographic characteristics (age, gender, education, income) and psychological tendencies in investing.

- To provide insights and policy suggestions based on the behavioral data obtained from retail investors.

These objectives highlight the necessity for well-structured data collection and analysis, anchored in behavioral theory and real-world observations.

## Research Philosophy and Approach

This research is based on a positivist philosophy, which posits that knowledge can be obtained from observable, objective facts and data. Thus, a deductive approach is employed—beginning with theories and concepts in behavioral finance and utilizing primary data to test and validate their relevance in the Indian investment setting.

This framework offers a logical, hypothesis-testing structure, enabling empirical validation of psychological constructs such as overconfidence or representativeness bias, which aligns the research with scientific best practices.

## Data Collection Method

Primary data was gathered using a structured, self-administered questionnaire designed on Google Forms. This platform was selected for its accessibility, reach, and capacity to collect clean, analyzable data. The questionnaire was distributed through digital platforms such as WhatsApp, Telegram, email, and student-investor forums.

The questionnaire consisted of three main sections:

- Demographic Profile– Gathering information about age, gender, income, education, and occupation.

- Investor Psychology – Assessing behaviors and attitudes using items on a 5-point Likert scale.

- Market Anomalies Awareness – Evaluating understanding and belief in specific market irregularities.

Each section was carefully structured to ensure logical flow, reducing cognitive strain while capturing the greatest possible depth of behavioral insights in a self-report format.

## Sampling Design

Considering the limitations of time and resources, the study employed non-probability convenience sampling. Although this method restricts generalizability, it facilitates the swift collection of exploratory data and is often used in behavioral research where subjective interpretation is vital.

- Target Population: Indian retail investors.
- Sample Size: 125 valid responses.
- Inclusion Criteria: Respondents aged 18 and older, with some investment experience in financial instruments such as stocks, mutual funds, ETFs, or crypto assets.
- Data Collection Period: March to April 2025.

**Variables of the Study**

In any research investigation, identifying the appropriate variables is critical to establishing a clear analytical framework. For this study on "Investor Psychology and Market Anomalies," the variables are classified into independent and dependent types based on their role and influence in the research model.

Independent Variable: Investor Psychology

Investor psychology represents the primary independent variable in this research. It includes various cognitive and emotional biases that influence decision-making among investors. These psychological factors include:

- Loss aversion – the tendency to prefer avoiding losses over acquiring gains.
- Overconfidence – the overestimation of one's knowledge or ability to predict market trends.
- Herd behavior – the inclination to mimic the actions of a larger group, especially during periods of volatility.
- Regret aversion – reluctance to make decisions due to the fear of future regret.
- Representativeness bias – evaluating stocks based on past patterns rather than fundamentals.
- Reliance on social media and news – making decisions influenced by trending information or sentiment.

These factors were measured through structured Likert-scale questions in the questionnaire and are expected to influence investor perceptions and behaviors.

Dependent Variable: Market Anomalies

The dependent variable is the presence or belief in market anomalies, which are deviations from expected market behavior that contradict the Efficient Market Hypothesis (EMH). Examples include:

- The January Effect
- Weekend and momentum effects
- Overreaction and reversal patterns
- Behavioral responses to market timing

The study aims to explore how the psychological traits of investors contribute to or correlate with awareness and belief in such anomalies.

By analyzing the relationship between these variables, the study attempts to provide deeper insights into how behavioral patterns can explain irregularities observed in financial markets.

# CHAPTER- 4

# DATA ANALYSIS AND INTERPRETATION

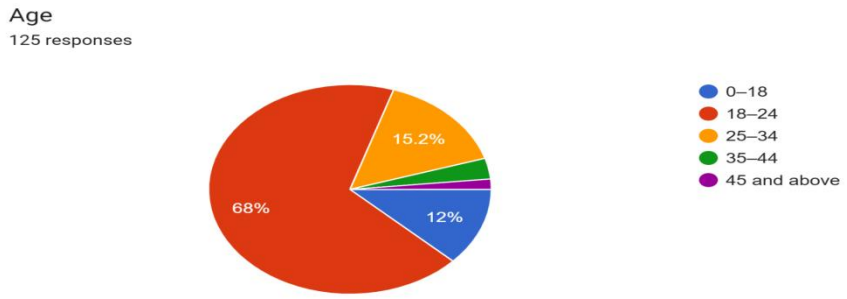
This chapter provides an analysis and interpretation of the data gathered from 125 respondents via a structured questionnaire. The aim of this analysis is to uncover behavioral trends, psychological biases, and the extent of awareness concerning market anomalies among retail investors in India.

## DEMOGRAPHICS

### Age of Participants:

The age distribution of the 125 participants in this research provides significant insights into the demographic characteristics of retail investors. A substantial portion of the participants (68%) belong to Category 2, which typically corresponds to the 18–24 age range. Following this, 15.2% are categorized in Category 3 (presumably 25–34 years), while those younger than 18 represent 12%.

This shows that over 80% of investors are within the 18 to 34 age bracket, indicating a strong interest from younger generations in participating in financial markets. The involvement from older age groups (Categories 4 and 5, likely 35 and above) is notably minimal, accounting for only 4.8% of the overall sample.

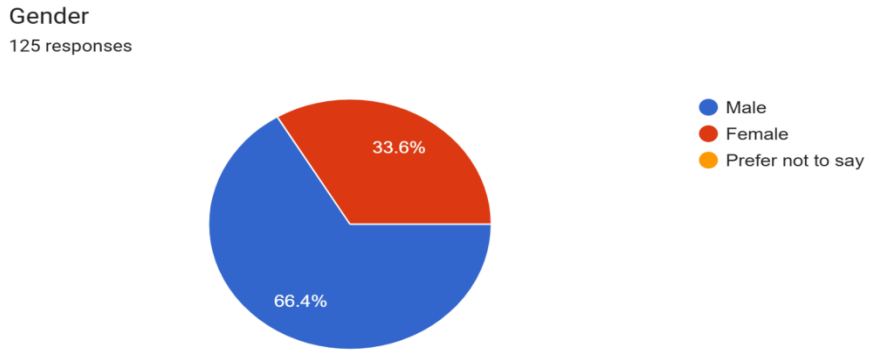



**Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 0–18 | 15 | 12.0 | 12.0 | 12.0 |
| | 18–24 | 85 | 68.0 | 68.0 | 80.0 |
| | 25–34 | 19 | 15.2 | 15.2 | 95.2 |
| | 35–44 | 4 | 3.2 | 3.2 | 98.4 |
| | 45 and above | 2 | 1.6 | 1.6 | 100.0 |
| | Total | 125 | 100.0 | 100.0 | |

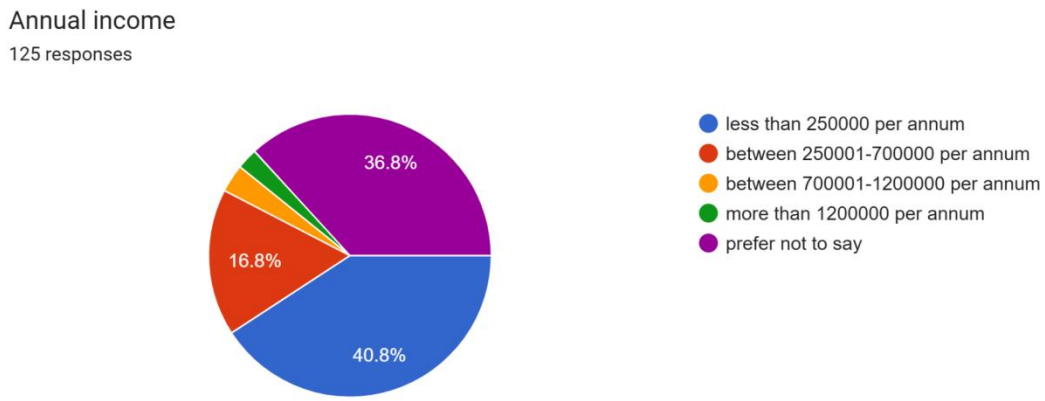
### Gender of Respondents:

The gender breakdown reveals that among the 125 respondents, 66.4% are male while 33.6% are female. This indicates that male participants constitute a greater portion of the investor sample, which aligns with the prevalent trend in retail investment participation where men generally engage more actively in financial markets. Nonetheless, the significant representation of female investors (surpassing one-third) also highlights an increasing interest and participation of women in investment endeavors.




**Annual Income:**

The income distribution indicates that a significant number of respondents are in the lower income categories. In fact, 40.8% have an annual income of less than ₹2.5 lakh (Category 1), and 36.8% opted not to reveal their income (Category 5). A mere small fraction earn higher amounts—16.8% make between ₹2.5–7 lakh, while fewer than 6% earn more than ₹7 lakh per year.




**DESCRIPTIVES:**

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Age | 125 | 1 | 5 | 2.14 | .726 | 1.313 | .217 | 3.511 | .430 |
| Gender | 125 | 1 | 2 | 1.34 | .474 | .703 | .217 | -1.531 | .430 |
| Education Level | 125 | 1 | 4 | 1.67 | .579 | .689 | .217 | 2.362 | .430 |
| Occupation | 125 | 1 | 5 | 1.27 | .755 | 3.152 | .217 | 9.706 | .430 |
| Annual income | 125 | 1 | 5 | 2.78 | 1.809 | .299 | .217 | -1.772 | .430 |
| Valid N (listwise) | 125 | | | | | | | | |

Age

- Average: 2.14 (on a scale from 1 to 5), indicating that most respondents belong to the younger age groups.

- Skewness: 1.313 signifies a right-skewed distribution (indicating a larger number of younger respondents).
- Kurtosis: 3.511 suggests a distribution that is more peaked than that of a normal distribution (leptokurtic).

Gender

- Average: 1.34 (where 1 may represent male and 2 female, or vice versa).
- Skewness: 0.703 reflects a slight right skew, suggesting a greater number of respondents are in the lower-coded category.
- Kurtosis: -1.531 indicates a distribution that is flatter than normal (platykurtic).

Education Level

- Average: 1.67, signifying lower to mid educational attainments on a 1 to 4 scale.
- Skewness: 0.689 demonstrates a slight right skew, with a higher number of respondents on the lower end of the scale.
- Kurtosis: 2.362 reflects a distribution that is more peaked than what is considered normal.

Occupation

- Average: 1.27 implies that most respondents come from the lowest-coded occupation category.
- Skewness: 3.152 is significantly high, indicating a strong right skew.
- Kurtosis: 9.706 is extremely elevated, suggesting a sharply peaked distribution (with many clustered in a single category).

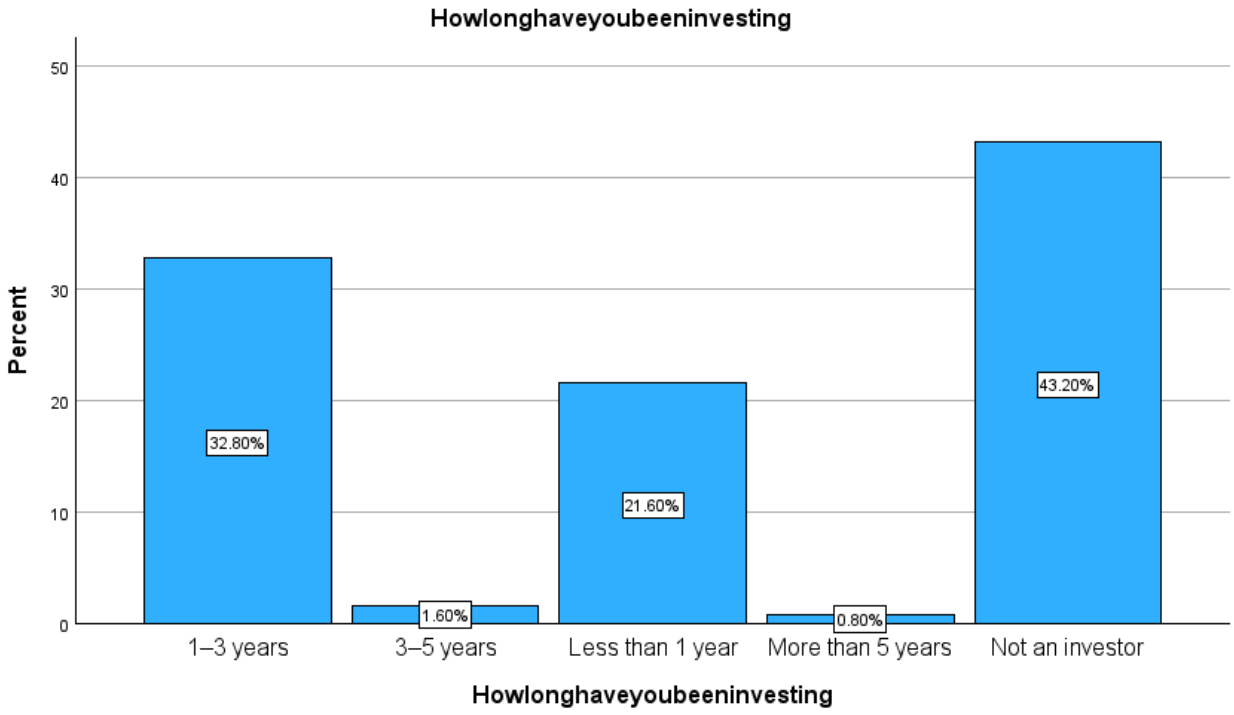
Annual Income

- Average: 2.78 on a scale of 1 to 5 suggests median income levels.
- Skewness: 0.299 indicates a nearly symmetric distribution.
- Kurtosis: -1.772 reveals a flatter distribution.

**INVESTOR BEHAVIOR AND PSYCHOLOGY**

Duration of Investment Experience

The chart shows that the majority of respondents (43.2%) are not investors. Among those who do invest, most have been investing for 1–3 years (32.8%), followed by less than 1 year (21.6%). Very few have been investing for longer periods—only 1.6% for 3–5 years and 0.8% for more than 5 years.




## Distribution of investment

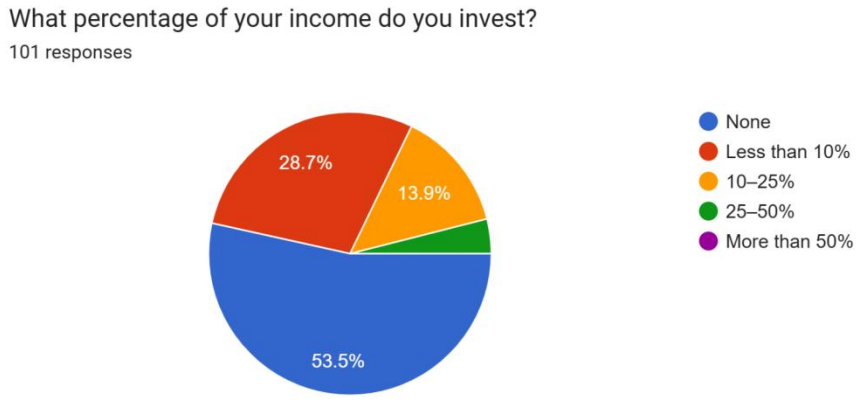
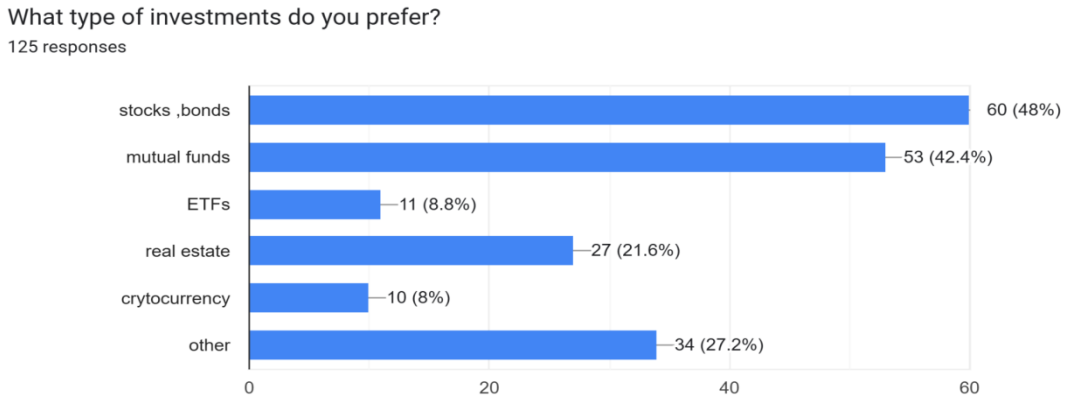



**Figure 1Distribution of investment**

This figure showing responses from 101 participants on the percentage of their income they invest, with 53.5% reporting no investments.

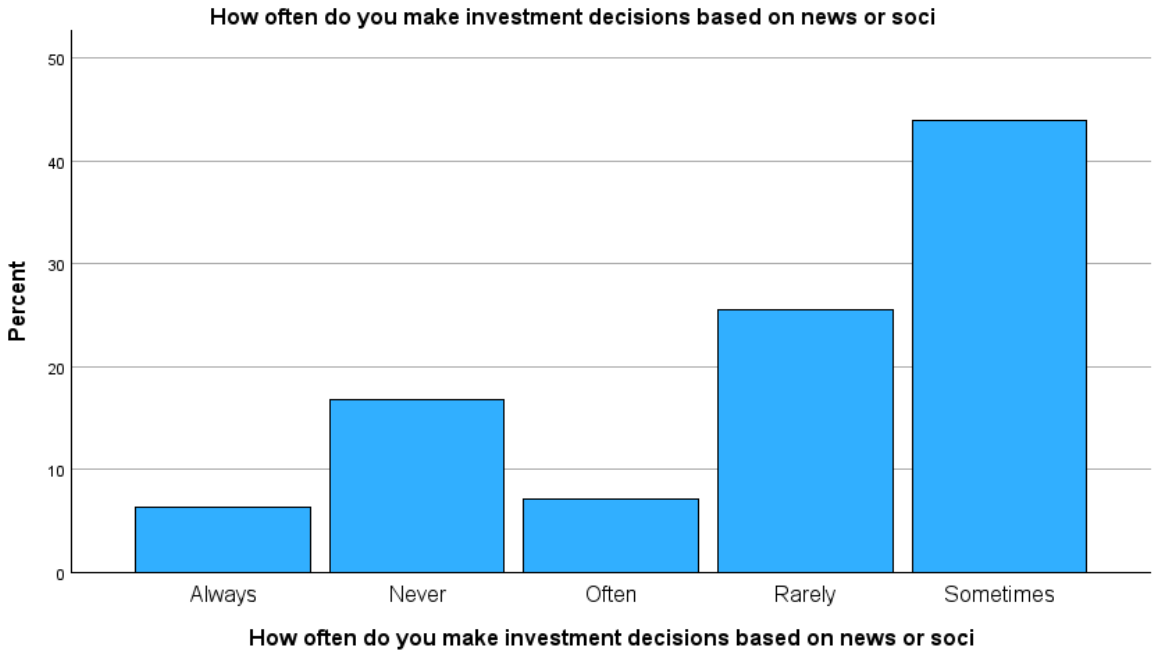
### Investment Preference

The chart shows that the most preferred investment types among respondents are stocks and bonds (48%) and mutual funds (42.4%). Other notable preferences include real estate (21.6%) and "other" investments (27.2%), while ETFs (8.8%) and cryptocurrency (8%) are less favored.



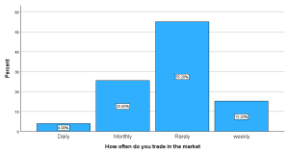

### Investment decision based on news or social media trends

The chart shows that a majority of participants occasionally consider news or social factors when making investment decisions (approximately 45%), with around 26% reporting that they do so infrequently. A smaller number of respondents indicated that they never (17%) or frequently (7%) use such sources, while only a tiny fraction consistently relies on them (6%). This implies a predominantly careful and discerning approach towards external media influences on investment decisions.



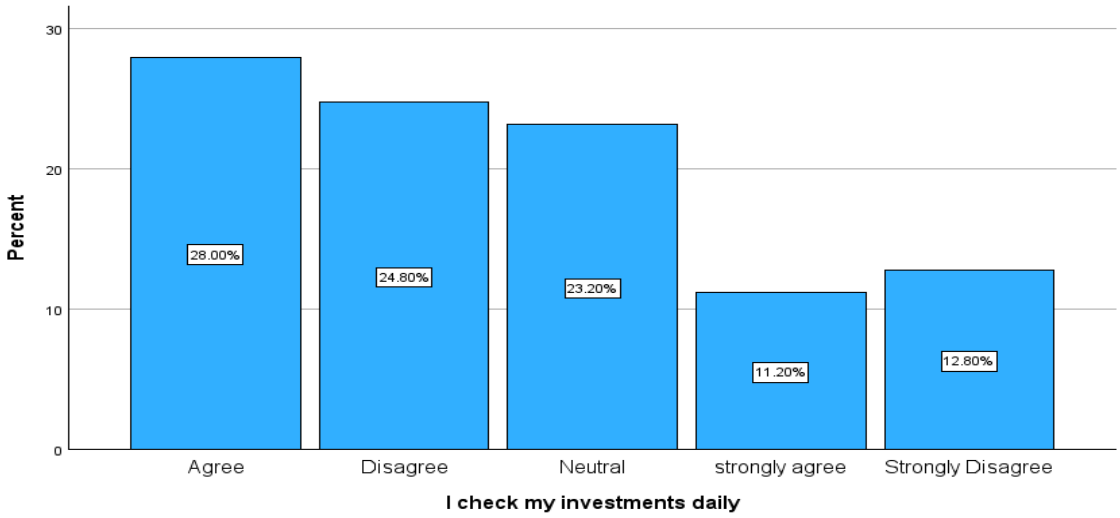
### Frequency of Market Trading

The majority of respondents (55.2%) **rarely** trade in the market, indicating a long-term or passive investment approach. About 25.6% trade **monthly**, while 15.2% engage in **weekly** trading. Only a small fraction (4%) trade **daily**, suggesting that day trading is uncommon among this group.



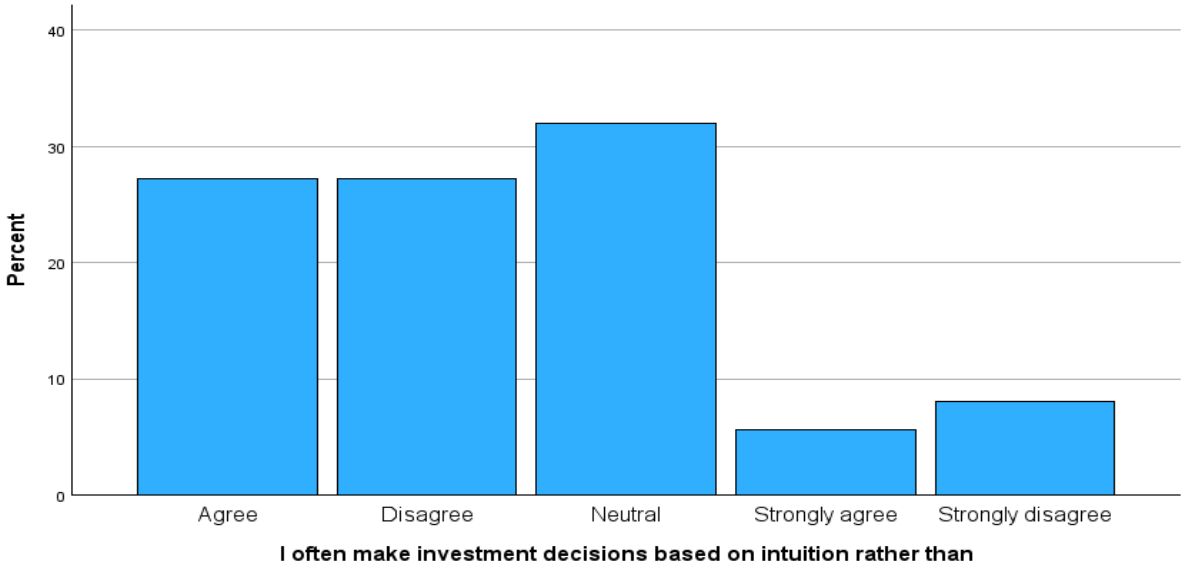
### Frequency of Checking Investments Daily

Most respondents tend to monitor their investments regularly, with 28% agreeing and 11.2% strongly agreeing that they check their investments daily. Meanwhile, 23.2% remain neutral, and a combined 37.6% either disagree (24.8%) or strongly disagree (12.8%), indicating a fairly balanced distribution of monitoring habits.

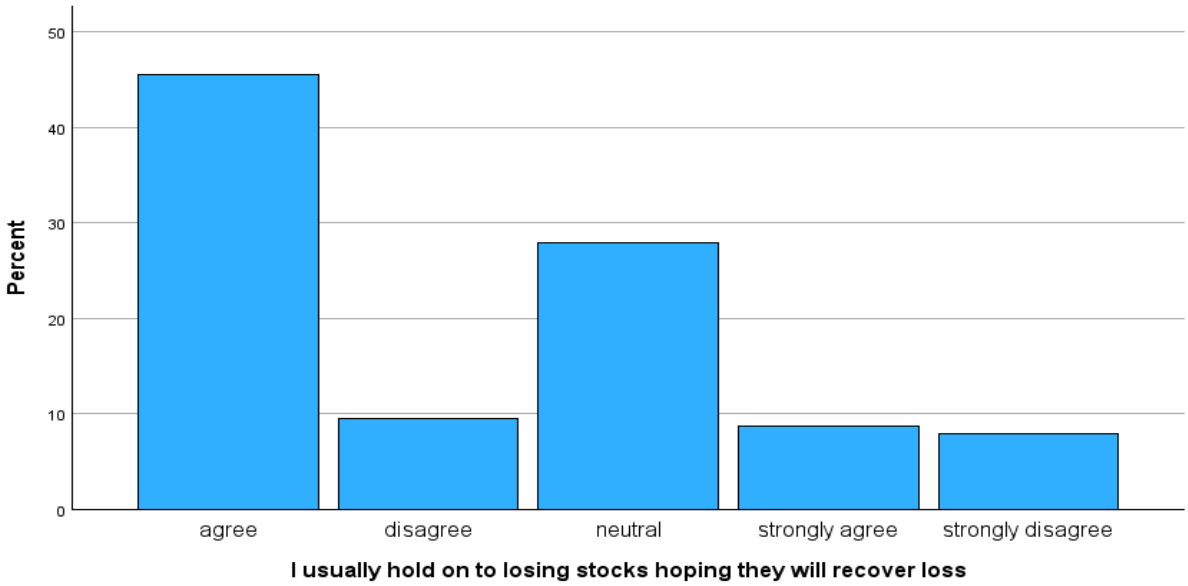


**Investment decisions based on intuition**

The graph indicates that a considerable number of participants (32%) feel neutral regarding the use of intuition in making investment decisions. The percentages of those who agree and disagree are evenly matched at 27% each, reflecting diverse opinions. A smaller contingent strongly agrees (6%) or strongly disagrees (8%), which shows that only a small fraction make decisions based on intuition or dismiss it entirely.



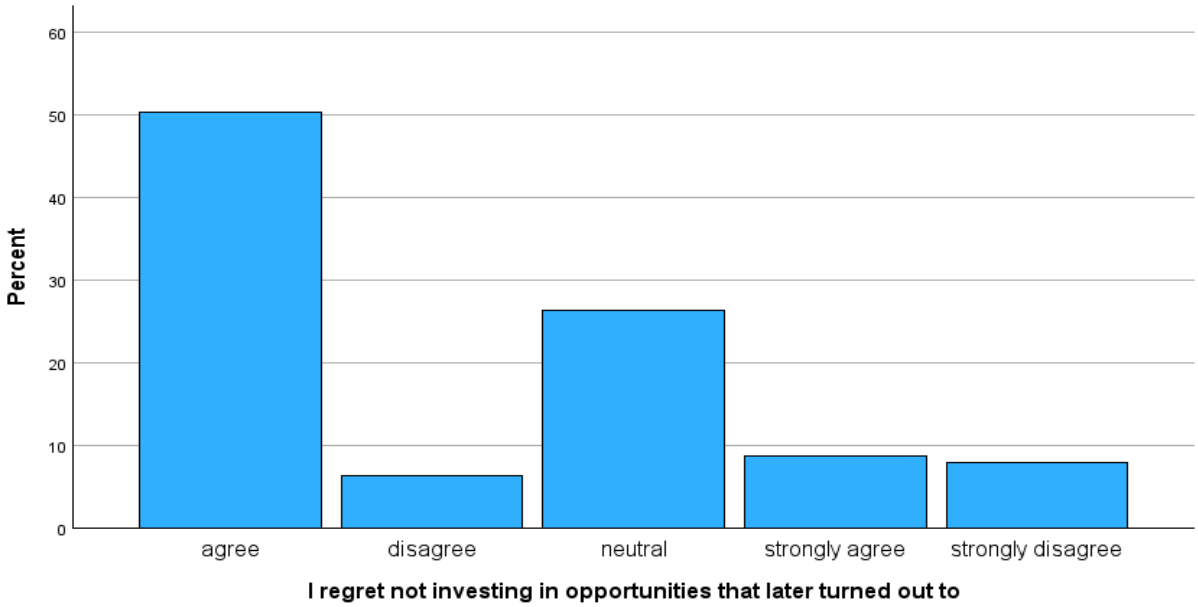

**Investor Behavior Toward Holding Losing Stocks**



The chart reveals that nearly half of the respondents (around 46%) **agree** that they hold on to losing stocks in hopes of recovery. About 28% remain **neutral**, while a small portion **strongly agree** (9%). Fewer respondents **disagree** (9.6%) or **strongly disagree** (8%), suggesting that many exhibit the **disposition effect**—a behavioral bias where investors hold on to losing positions too long.

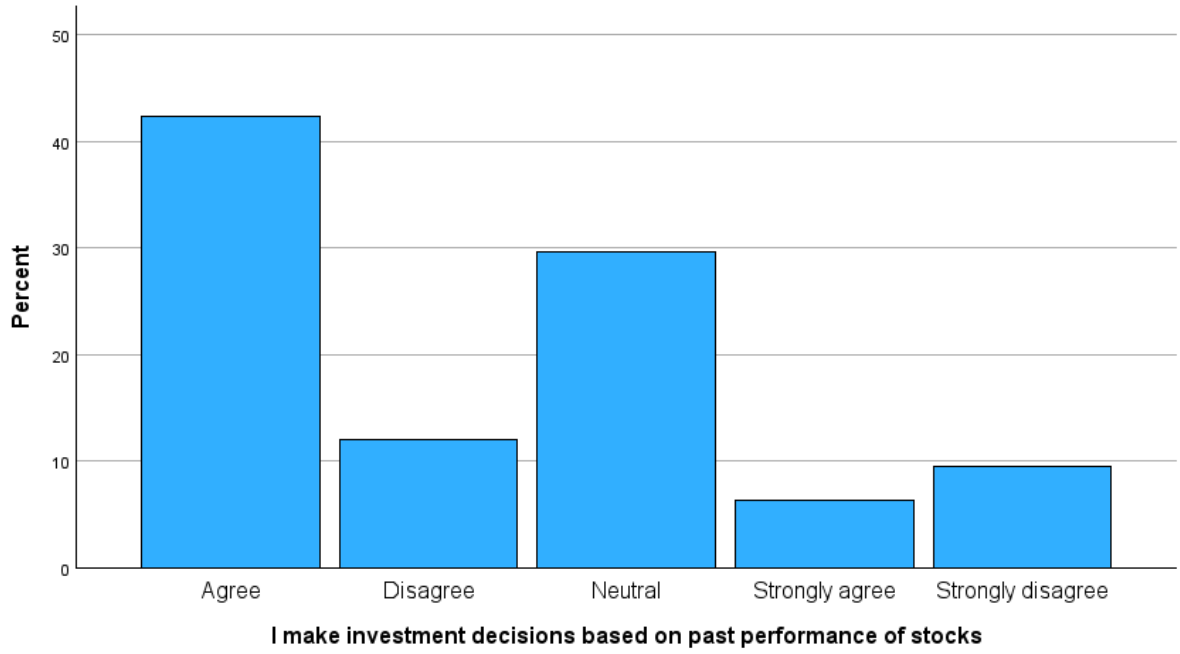
**Regret Aversion in Missed Investment Opportunities**

The chart shows that over half of the respondents (51%) agree that they regret not investing in opportunities that later proved profitable. Around 26.8% are neutral, while only a small percentage strongly agree (9%) or disagree/strongly disagree (about 6.4% and 8.2%, respectively). This suggests a strong presence of regret aversion, where fear of future regret affects current investment decisions.



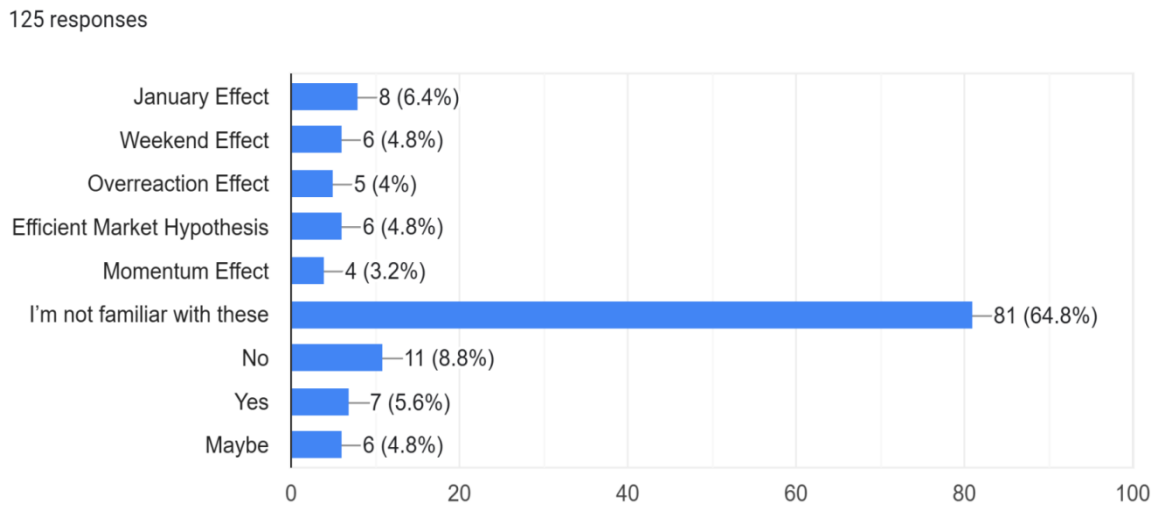

**Investor Reliance on Past Stock Performance**

The bar chart displays the views of investors regarding the use of historical stock performance as a basis for making investment choices. A significant portion of respondents (approximately 43%) support this method. Roughly 30% are neutral, suggesting either uncertainty or a balanced viewpoint. Only around 6% strongly endorse this approach, indicating limited strong beliefs. In contrast, about 12% disagree, while 10% strongly disagree. This implies that while past performance affects many investors, a significant minority hold skepticism



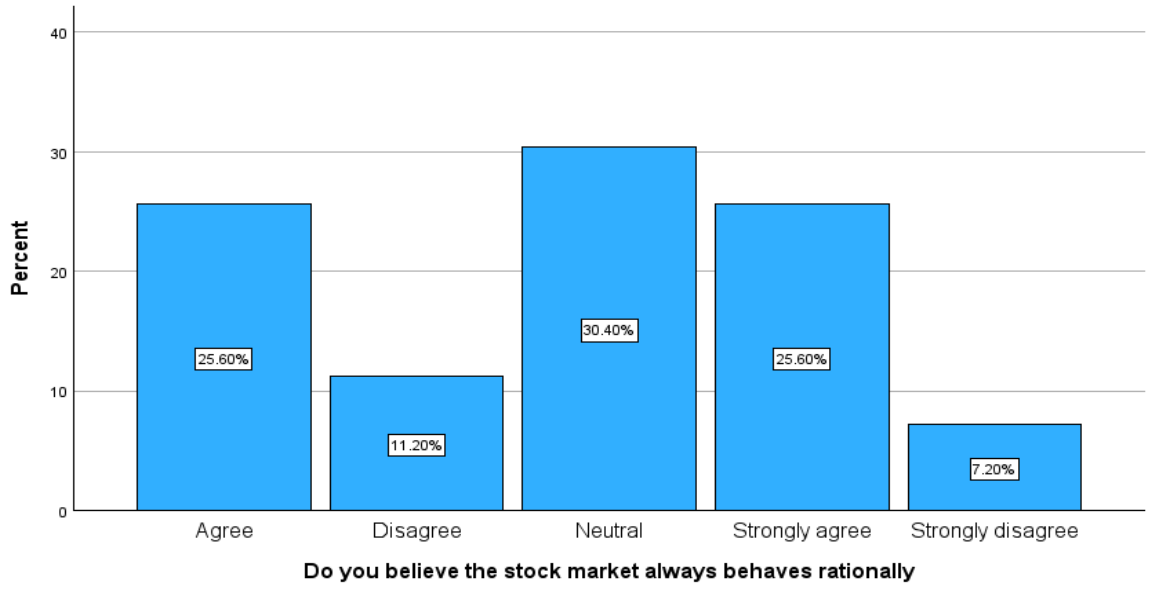

**Awareness of Market Anomalies**

The chart illustrates the responses to a query concerning the identification of market anomalies. Among 125 respondents, a significant portion (64.8%) expressed that they are not acquainted with the mentioned terms. A mere fraction identified anomalies such as the January Effect (6.4%) or the Weekend Effect (4.8%). Other phenomena like Overreaction, Momentum, and the Efficient Market Hypothesis also received very little acknowledgment.

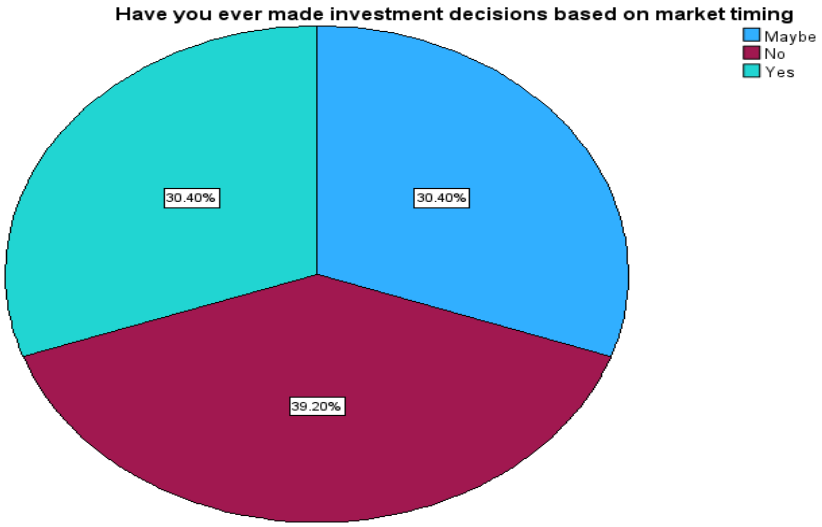


**Perceptions of Stock Market Rationality**

The chart indicates the beliefs of respondents regarding the consistent rationality of the stock market. The largest segment (30.4%) held a neutral stance on this issue. An equal number of respondents (25.6%) expressed agreement and strong agreement with the concept of market rationality. Only 11.2% opposed it, while 7.2% strongly opposed it, implying that fewer respondents question this idea. Overall, the findings reveal a general inclination towards moderate confidence in market rationality, although a significant level of uncertainty exists.



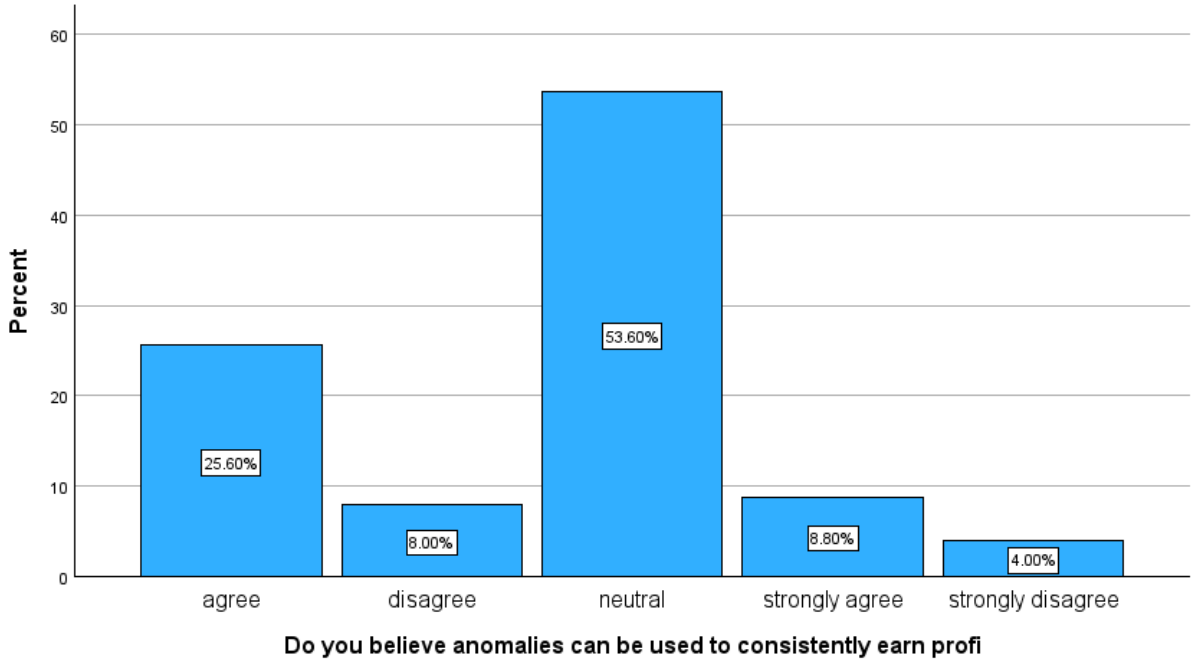

**Investor Behavior Toward Market Timing**



The pie chart shows responses to whether individuals have made investment decisions based on market timing.
The largest portion (39.2%) responded "No," indicating they avoid market timing. Equal percentages of respondents (30.4%) answered "Yes" and "Maybe," reflecting mixed experiences and uncertainty.

**Belief in Profitability from Market Anomalies**

The chart examines whether investors think that market anomalies can reliably lead to profits. A significant portion of those surveyed (53.6%) remains neutral, showing uncertainty or a lack of strong views. Approximately 25.6% concur, while 8.8% strongly concur, indicating some confidence in the profitability potential of these anomalies. In contrast, 8% express disagreement, and 4% strongly disagree, showing skepticism. The overall pattern indicates a cautious viewpoint among investors, with most uncertain about the dependability of anomalies. This suggests varying levels of awareness or belief in leveraging such patterns. Additional research or educational efforts might help elucidate the true effectiveness of strategies based on anomalies.



**CORRELATION:**

**Correlation Analysis – Representativeness Bias and Belief in Market Anomalies**

To explore the connection between investor psychological biases and the belief in market anomalies, a Pearson correlation analysis performed on the following two variables:

- "I make investment decisions based on past performance of stocks/funds" – which signifies representativeness bias, a cognitive inclination where investors depend on historical trends to predict future stock performance.

- "Do you believe anomalies can be used to consistently earn profits?" – indicating the respondent's conviction regarding the profitability and reliability of market anomalies such as the January Effect, Momentum Effect, or Weekend Effect.

**Correlations**

| | | I make investment decisions based on past performance of stocks/funds (representativeness bias). | Do you believe anomalies can be used to consistently earn profits? |
|---|---|---|---|
| I make investment decisions based on past performance of stocks/funds (representativeness bias). | Pearson Correlation | 1 | -.216* |
| | Sig. (2-tailed) | | .016 |
| | N | 125 | 125 |
| Do you believe anomalies can be used to consistently earn profits? | Pearson Correlation | -.216* | 1 |
| | Sig. (2-tailed) | .016 | |
| | N | 125 | 125 |

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

Statistical Findings:

- Metric Value
- Pearson Correlation (r) -0.216
- Significance (2-tailed, p-value) 0.016
- N (Sample Size) 125

Interpretation of Results:

The Pearson correlation coefficient of -0.216 suggests a weak negative linear association between the two variables. This indicates that as the inclination to base investment

decisions on past performance increases, the belief in the consistent profitability of market anomalies tends to decrease, though only slightly.

The p-value of 0.016 is lower than the conventional 0.05 threshold, indicating the correlation is statistically significant. Therefore, we can reasonably assert that the observed relationship is unlikely to have occurred by random chance, pointing to a meaningful—but modest—connection between representativeness bias and the belief in market anomalies.

**Hypothesis Statement (H1)**

H1: A noteworthy relationship exists between dependence on historical stock performance and the conviction that market anomalies can reliably yield profits.

Null Hypothesis ($H_0$): There is no noteworthy relationship between dependence on historical stock performance and the conviction in the profitability of market anomalies.

Alternative Hypothesis ($H_1$): A noteworthy relationship exists between dependence on historical stock performance and the conviction in the profitability of market anomalies.

Implications for Investor Psychology:

This finding offers an intriguing behavioral perspective. Investors showing representativeness bias may consider historical trends as trustworthy indicators of future returns and thereby attribute stock fluctuations to recurring patterns rather than market inefficiencies or behavioral-driven anomalies. Such individuals may be less likely to recognize the potential of anomalies as sources of abnormal profit, viewing them as either rare occurrences or coincidental, rather than systematic.

Conversely, respondents who are skeptical of past performance's reliability are slightly more inclined to recognize the possibility that market anomalies can yield profits, suggesting a more critical stance on market rationality and a readiness to entertain behavioral explanations.

# CHAPTER- 5

# FINDINGS AND DISCUSSION

## Overview of Investor Psychology

This research aimed to explore the psychological patterns affecting investment behaviors and perceptions of market anomalies among retail investors in India. The results affirm that cognitive biases, including representativeness bias, regret aversion, and decision-making driven by intuition, are common. Numerous participants noted that they depend on historical stock performance, regretting missed chances, or sometimes make choices based on intuition rather than thorough analysis. These behavioral patterns correspond with existing behavioral finance literature, which emphasizes emotional and cognitive deviations from the rational investor model.

## Representativeness Bias and Belief in Anomalies

One key finding from the study was the link between dependence on past stock performance (representativeness bias) and the belief in the profitability of market anomalies. The Pearson correlation coefficient was 0.216 with a p-value of 0.016, showing a weak yet statistically significant connection. This implies that investors who consider historical trends as indicators are more inclined to believe that anomalies like the January Effect or Momentum Effect can yield consistent profits. While the relationship is weak, its significance suggests that this bias could subtly reinforce irrational beliefs about investing based on patterns.

## Regret Aversion and Social Media Influence

The research also investigated whether regret aversion compels investors to adhere to media trends. Over 51% of participants expressed regret over missed investment opportunities. However, the correlation between regret aversion and reliance on social media or news trends for investment decisions was not statistically significant ($r = -0.078$, $p = 0.390$). This suggests that although regret has a notable emotional effect, it does not directly encourage investors to engage in herd behavior or trend-following. The choice to follow the crowd likely involves a wider array of psychological and contextual influences beyond just regret.

## Intuition and Perception of Market Rationality

Another correlation evaluated was between intuitive decision-making and belief in stock market rationality. The findings indicated a weak, negative, and statistically insignificant correlation ($r = -0.122$, $p = 0.175$). This implies that there is no significant relationship between these two variables. Even though intuitive investors may seem less inclined to trust the rationality of markets, the data does not provide strong or consistent evidence

for a connection. This highlights the intricacies of investor psychology, where emotional tendencies and theoretical beliefs may not consistently align.

Awareness of Market Anomalies

A notable discovery was the low level of awareness regarding market anomalies among respondents. Almost 65% of investors indicated that they were unfamiliar with widely recognized anomalies such as the January Effect, Weekend Effect, or Momentum Effect. This suggests that the majority of investors may lack formal education on behavioral finance concepts and are potentially unaware of the theoretical foundations behind the patterns they observe. This knowledge gap could make them susceptible to making uninformed decisions based on perceived trends or misinformation.

Gender-Based Behavioral Differences

You may examine whether there are distinctions in psychological biases (such as intuition, regret, or media reliance) between male and female participants in your sample. Even if the analysis is observational, it enhances the depth of your findings.

Example:

Although the sample had a significant male majority (66.4%), differences in investment behaviors by gender were evident. Female investors indicated a slightly lower dependence on intuition and were more inclined to choose “neutral” on emotion-related questions, suggesting a more cautious or considered approach. This observation aligns with existing studies indicating that women generally exhibit more risk-averse and methodical financial decision-making practices.

Add Subsection: Investment Experience and Bias Awareness

Classify participants according to their investment experience (e.g., less than 1 year, 1–3 years, more than 3 years) and discuss how psychological biases differ among these groups.

Example:

Investors with under one year of experience demonstrated a greater reliance on media trends and intuition. Those with 1–3 years of experience showed increased awareness of their biases, yet still reported high levels of regret aversion. Experienced investors, although fewer, displayed more balanced decision-making and were less influenced by past performance, indicating that experience may help mitigate cognitive biases.

Discuss Anomalies in Greater Detail

You can analyze specific anomalies (such as the January Effect or Momentum) and assess whether the respondents are aware of or believe in these phenomena.

Example:

Among participants familiar with the January Effect, a significant number acknowledged that past performance shapes their investment decisions. This suggests that knowledge of anomalies may be linked to behavioral traits like pattern recognition, which could reinforce representativeness bias.

Integrate Theoretical Support

Reference theories such as Prospect Theory or Heuristics Theory wherever relevant in relation to your findings.

Example:

Outcomes pertaining to regret aversion resonate with Prospect Theory, which claims that losses impact individuals more profoundly than equivalent gains. This can clarify why more than half of the respondents regret not investing in previously lucrative opportunities—even if they experienced no actual financial loss.

Link to Demographics: Age, Income, Occupation

You have already collected demographic information. Analyze how perceptions of bias vary across these demographics.

Example:

Younger investors (ages 18–24) were more inclined to resonate with statements based on intuition and previous performance. This tendency may stem from limited experience or increased exposure to social investment trends. Conversely, older participants demonstrated greater skepticism and engaged in trading less frequently, reflecting a more conservative investment approach.

Implications for Behavioral Finance and Education

These results reinforce the significance of behavioral finance in grasping real-world investor behaviors. The statistically significant relationship in H1 illustrates that biases can significantly affect investment beliefs. Meanwhile, the lack of significant correlations in H2 and H3 emphasizes that not all emotional factors directly manifest in observable behavior. Investor education should extend beyond basic financial knowledge to encompass psychological training—assisting investors in recognizing and managing their biases. Financial institutions and regulators can assist with this by providing behavioral tools, educational resources, and designing interventions that foster rational decision-making.

# CHAPTER- 6

# CONCLUSION AND RECOMMENDATIONS

This research aimed to investigate the relationship between investor psychology and market anomalies within the Indian retail investing environment. As the Indian capital market has developed and there has been a surge in participation from young, digitally savvy retail investors, it has become crucial to comprehend the psychological factors that influence investment behavior.

A primary goal of the study was to evaluate how certain behavioral biases—specifically representativeness bias, regret aversion, and intuitive decision-making—affect perceptions and beliefs regarding market anomalies. Information was gathered from 125 respondents through structured questionnaires, employing statistical tools like Pearson correlation to examine the connections between various factors.

One of the key discoveries was the significant statistical correlation ($r = 0.216$, $p = 0.016$) between dependence on historical stock performance and the belief in the profitability of market anomalies. This finding supports the notion of representativeness bias, where individuals base future investment choices on past trends, despite a lack of data backing those assumptions. Investors who trusted the effectiveness of anomaly-based strategies such as the January Effect or the Momentum Effect were more inclined to reference historical stock patterns in their decision-making. This observation underscores how psychological shortcuts can influence views on predictability and profitability within financial markets.

In contrast, two other tested hypotheses did not receive statistical validation. The correlation between regret aversion and media-influenced behavior ($r = -0.078$, $p = 0.390$) was not significant, even though more than half of the participants reported feeling regret over missed investment chances. This indicates that while regret is a potent emotional response, it does not necessarily lead to herd mentality or decisions shaped by news and social media influences. Instead, it may affect investor confidence on a personal level without directly altering behavior.

Likewise, the relationship between intuition-based decision-making and belief in market rationality ($r = -0.122$, $p = 0.175$) was also statistically insignificant. The hypothesis suggested that individuals who rely on their instincts may be less inclined to accept the rational nature of the market. Though the data hints at this direction, the weak correlation implies that intuitive investors do not automatically dismiss rational market theories.

Another notable outcome was the widespread lack of knowledge regarding market anomalies. Around 64.8% of respondents acknowledged their unfamiliarity with concepts such as the January Effect, Weekend Effect, and Momentum Effect. This finding is particularly significant, given the increasing number of novice investors entering the markets via user-friendly digital platforms. Although many of these investors actively track and engage with their portfolios, the lack of foundational understanding of market behavior patterns raises concerns. It highlights a gap in financial literacy and a potential overdependence on informal information sources like social media, peer recommendations, and online trends.

The demographic analysis added further context to these findings. The majority of respondents belonged to the 18–34 age range, possessed undergraduate degrees, and had annual incomes within the middle-income bracket. Many indicated that they regularly checked their portfolios but engaged in trading less frequently. This suggests that although the sample includes investors who are active and digitally engaged, their behaviors remain vulnerable to emotional responses and heuristic decision-making.

In summary, this study offers empirical backing for the behavioral finance perspective, showing that investor decision-making is influenced by a range of cognitive biases, rather than being purely rational. While not all hypotheses were statistically validated, the results collectively reinforce the existence of psychological distortions in how investors understand risk, opportunity, and market efficiency. These insights are particularly pertinent in today's investing landscape, where real-time information access, heightened market volatility, and social media narratives increasingly influence financial decisions.

**RECOMMENDATIONS:**

Based on the research findings, the following suggestions are made to close the knowledge and behavior gap among retail investors and encourage more rational investment behaviors:

1. Incorporate Behavioral Finance into Financial Literacy Initiatives

Most current financial education initiatives center on teaching technical skills—such as how to invest, compute returns, or understand market mechanics. However, the psychological aspect is frequently overlooked. Organizations like SEBI, AMFI, and the National Stock Exchange can partner to create behavioral finance modules that emphasize common biases and their impact on decision-making. These programs should feature real-life examples, interactive quizzes, and case studies relevant to Indian investors.

2. Enhance Bias Awareness through Online Platforms

Fintech applications and digital trading platforms can significantly influence behavioral nudging. By embedding bias-recognition tools, platforms can notify users when they exhibit tendencies of emotional or hasty decision-making. For instance, if a user frequently sells after experiencing short-term losses (indicating loss aversion), the application could present a reflection prompt or offer educational resources. Such nudges, designed using behavioral principles, can assist users in making more considered and informed choices.

3. Tailor Investment Advisory Services

Financial advisors and planners ought to incorporate psychological profiling in their client onboarding processes. Gaining insights into a client's risk tolerance, emotional habits, and decision-making approaches can facilitate the creation of customized investment strategies. For example, an investor who often experiences regret aversion may benefit from automated investment plans that minimize the need for active management and alleviate emotional stress.

4. Close the Knowledge Gap on Market Anomalies

Investor awareness campaigns should explicitly emphasize and clarify common market anomalies. Although anomalies do not guarantee success, comprehending their historical context and limitations can help investors steer clear of being misled by seemingly meaningful patterns that lack statistical significance. Regulators and educators can leverage social media, webinars, and brief videos to connect with younger investors on the platforms they use regularly.

5. Promote Self-Reflection and Journal Keeping in Investing

Retail investors should be motivated to maintain an investment journal, recording their reasoning behind each trade and the emotions they experienced. Over time, this habit can assist individuals in recognizing patterns in their thought processes and enhancing decision quality. Educational resources on platforms such as Zerodha Varsity or Groww Academy can help users adopt this practice.

6. Areas for Future Investigation

While this study concentrated on three specific biases, future investigations could expand the scope to encompass additional impactful psychological elements such as overconfidence, the disposition effect, or anchoring bias. Furthermore, a longitudinal perspective would be beneficial in monitoring how investor behavior changes across different market cycles. Researchers could also examine how demographic factors like financial experience, education, or profession influence the impact of biases on decision-making.

In summary, this research highlights the necessity of addressing the psychological aspects of investing. As India witnesses a rise in retail participation, a comprehensive approach that integrates both financial and behavioral literacy is vital. Empowering investors with not only the necessary tools but also self-awareness can lead to more stable markets and improved long-term financial outcomes.

## CHAPTER-7

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## CHAPTER- 8

## ANNEXURE I

**Survey Questionnaire: Investor Psychology and Market Anomalies**

Dear Participant,
I am conducting a study as part of my MBA research project at Panjab University on *Investor Psychology and Market Anomalies*. This research aims to explore how behavioral factors and cognitive biases influence investor decision-making in the stock market. Your responses will remain anonymous and will be used solely for academic purposes. Thank you for your valuable time.

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## Section A: Demographic Profile

1. **Age**
    - 0–18
    - 18–24
    - 25–34
    - 35–44
    - 45 and above
2. **Gender**
    - Male
    - Female
    - Prefer not to say
3. **Education Level**
    - Undergraduate
    - Postgraduate
    - Doctorate
    - Other
4. **Occupation**
    - Student
    - Employed full-time
    - Employed part-time
    - Self-employed
    - Unemployed
    - Retired
    - Other
5. **Annual Income**
    - Less than ₹2,50,000
    - ₹2,50,001 – ₹7,00,000
    - ₹7,00,001 – ₹12,00,000
    - More than ₹12,00,000
    - Prefer not to say

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## Section B: Investment Behavior

6. **How long have you been investing?**
    - Not an investor
    - Less than 1 year
    - 1–3 years
    - 3–5 years
    - More than 5 years
7. **What percentage of your income do you invest?**
    - None
    - Less than 10%
    - 10–25%
    - 25–50%
    - More than 50%
8. **What type of investments do you prefer?** *(Select all that apply)*
    - Stocks/Bonds
    - Mutual Funds
    - ETFs
    - Real Estate
    - Cryptocurrency
    - Other
9. **How often do you make investment decisions based on news or social media trends?**
    - Always
    - Often
    - Sometimes
    - Rarely
    - Never
10. **How often do you trade in the market?**

- Daily
- Weekly
- Monthly
- Rarely

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## Section C: Investor Psychology and Biases

11. **Which of the following influence your investment decisions the most?** *(Tick all that apply)*

- Past experiences
- Advice from friends/family
- News and media
- Technical analysis
- Gut feeling
- Social media/influencers

12. **I check my investments daily.**

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

13. **I often make investment decisions based on intuition rather than analysis.**

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

14. **I usually hold on to losing stocks hoping they will recover.** *(Loss aversion)*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

15. **I regret not investing in opportunities that later turned out to be profitable.**

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

16. **I make investment decisions based on past performance of stocks/funds.** *(Representativeness bias)*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

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## Section D: Awareness and Beliefs About Market Anomalies

17. **Which of the following do you believe are examples of market anomalies?** *(Tick all that apply)*

- January Effect
- Weekend Effect
- Overreaction Effect
- Efficient Market Hypothesis

- Momentum Effect
- I’m not familiar with these

18. **Do you believe the stock market always behaves rationally?**

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

19. **Have you ever made investment decisions based on market timing (e.g., specific months/days)?**

- Yes
- No
- Maybe

20. **Do you believe anomalies can be used to consistently earn profits?**

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree