



A STUDY ON BEHAVIOURAL BIASES IN INVESTMENT DECISION MAKING

¹Ms. Vyshnavi A, ²Mr. Sunil R.Hegde, ³Ansh Rupani, ⁴Juhi Sah,
⁵Pratham Kumar Chaudhary, ⁶Jatin Bothra, ⁷Mithesh NS

¹²Assistant Professor, ³⁴⁵⁶⁷Student

Bachelor of Business Administration, Centre for Management Studies, Jain (Deemed-to-be-University), Bengaluru

Abstract

Investor decision-making is not solely driven by rationality and objective analysis but is significantly influenced by behavioral biases. This study delves into the realm of behavioral finance to explore the prevalence and impact of these biases among retail investors. Through a comprehensive review of literature and empirical analysis, common behavioral biases such as overconfidence, loss aversion, and herd mentality are identified as pervasive forces shaping investor decision-making. Moreover, this research examines the interplay between demographic factors, financial literacy levels, and the manifestation of these biases among retail investors. By shedding light on the behavioral dynamics underlying investment decisions, this study aims to enhance investor awareness and provide insights for developing effective strategies to mitigate the adverse effects of behavioral biases. Ultimately, this research contributes to improving investment outcomes and decision-making processes for retail investors in financial markets.

KEYWORDS- Bias recognition, Investor protection, Investment performance, Market integrity, Financial outcomes, Herd behaviour, Investor psychology.

Introduction

Financial decision-making is frequently impacted by a wide range of emotional and cognitive elements, which are referred to as behavioral biases. These psychological biases have a big influence on investing decisions and results. It is critical for investors, financial professionals, and policymakers to comprehend the dynamics of behavioral biases in investment decision-making since it offers insights into market inefficiencies and areas for reform.

This research paper embarks on a journey to explore the intricate landscape of behavioral biases in investment decision-making. Drawing from a diverse array of cognitive psychology and behavioral finance literature, we delve into the underlying mechanisms driving these biases and their implications for financial markets. Moreover, this study employs primary research methodologies, including the development of a questionnaire,

to gather firsthand insights from investors. By examining real-world behaviors and perceptions, we aim to enrich our understanding of how behavioral biases manifest in investment decisions.

Through empirical analysis and theoretical frameworks, we endeavor to illuminate the various facets of behavioral biases, from overconfidence and loss aversion to herding behavior and mental accounting. By synthesizing insights from primary and secondary sources, this research seeks to provide actionable recommendations for investors and financial practitioners to navigate the complexities of decision-making in dynamic market environments. Ultimately, this endeavor contributes to the broader discourse on behavioral finance and its implications for investment management practice

Objectives of study

- To identify and classify common behavioral biases exhibited by retail investors in their decision-making processes.
- To analyze the role of financial literacy in mitigating or exacerbating behavioral biases among retail investors.
- To investigate the demographic factors (age, gender, education, etc.) that may influence the prevalence and severity of behavioral biases among retail investors.
- To contribute to the existing body of knowledge in behavioral finance by providing insights into the specific behavioral biases prevalent among retail investors and their implications for investment decision-making.
- To explore the extent to which behavioral biases influence the investment decisions of retail investors.

REVIEW OF LITERATURE

- Shefrin, H., & Statman, M. (1995). In their 1995 paper "The Behavioral Perspective on Economic Behavior," Shefrin and Statman pioneer the field of behavioral finance by merging psychology with economic theory. They challenge the assumption of rationality in traditional economic models, emphasizing cognitive biases and heuristics' role in financial decisions. Identifying phenomena like overconfidence and loss aversion, they explore implications for asset pricing and market efficiency. By stressing the significance of psychological factors in economic behavior, they lay the groundwork for a new financial approach, sparking considerable research and debate on psychology's influence on financial markets.
- Tversky, A., and D. Kahneman (1979). In order to provide an alternate descriptive model for risk-averse decision-making, this work presents prospect theory in opposition to expected utility theory. It finds widespread consequences in decisions made among risky prospects that go counter to the tenets of utility theory. Notably, people have a tendency to place a lower value on likely outcomes than on certain ones (this is known as the certainty effect), which causes them to seek out risk in losses and avoid risk in profits. If shared components are eliminated, the isolation effect also results in uneven preferences. Prospect theory produces concave value functions for gains and convex ones for losses by replacing utility with values assigned to gains and losses, and decision weights with probability. Except in cases

of low probability, decision weights are generally less than matching probabilities, which adds to the allure of gambling and insurance.

- Hirshleifer, D., & Shleifer, A. (2009) offer a comprehensive review of the field's key findings and developments. They delve into various topics, including investor sentiment, limits to arbitrage, overconfidence, and the disposition effect, explaining their influence on asset prices, trading behavior, and market efficiency. The authors scrutinize how behavioral finance challenges traditional theories like the efficient market hypothesis and the capital asset pricing model. Moreover, they emphasize understanding human psychology in financial decision-making and propose integrating behavioral insights into financial practice.
- Gervais and Odean's 2001 paper, "Learning by Doing in the Stock Market," explores how individual investor experience impacts stock trading performance. Through analysis of a vast dataset, they discover that investors improve their performance over time, learning from trading experiences. Investors exhibit increased activity in previously traded stocks, indicating a learning-by-doing process. Positive returns reinforce trading activity. However, despite learning, investors still underperform benchmarks, suggesting incomplete learning or counteracting biases. The paper underscores the significance of experience and learning in individual investor behavior and performance.
- Barberis and Thaler's 2003 paper, "A Survey of Behavioral Finance," offers a comprehensive overview of the field, detailing key concepts, theories, and empirical findings. They analyze behavioral biases like overconfidence and loss aversion, and heuristics such as herding behavior, impacting financial decision-making. The authors highlight how these factors lead to market anomalies, challenging traditional finance theory assumptions. They also discuss implications for asset pricing models, market dynamics, and financial institution design. Moreover, the paper suggests avenues for future research, emphasizing integrating behavioral insights into financial practice and policy-making.
- Kumar and Goyal's 2015 study scrutinizes behavioral biases in retail individual investors' investment decisions in Karnataka. Utilizing survey data analysis, they uncover prevalent biases such as overconfidence, loss aversion, herding, and anchoring. The study assesses these biases' impact on decisions, risk-taking, diversification, and performance. It sheds light on how biases shape investors' attitudes and strategies in financial markets, discussing implications for investor welfare, market efficiency, and education programs. Overall, it enriches behavioral finance by emphasizing psychological factors in investment outcomes.
- Gervais, S., & Odean, T. (2001) study how overconfidence influences trading frequency in individual investors. They argue that experience increases confidence, prompting more trading without necessarily enhancing returns. Their analysis of investor trading data confirms a connection between overconfidence and trading behavior. This research underscores the significance of psychological biases in financial decision-making, particularly the impact of overconfidence on investor actions in the stock market. It emphasizes the necessity of considering psychological factors in understanding trading patterns effectively.
- Sialm, C., & Starks, L. (2006) study, "Overconfidence and Trading Activity in a Less Liquid Market," explores how overconfidence affects trading behavior in such markets. They investigate whether overconfidence influences trading frequency in less liquid markets, using a specific dataset. Their findings indicate that overconfident investors exhibit increased trading activity, potentially worsening challenges related to limited liquidity. This research enhances comprehension of how behavioral biases impact investment decisions in varied market settings, stressing the significance of psychological factors in analyzing trading behavior.

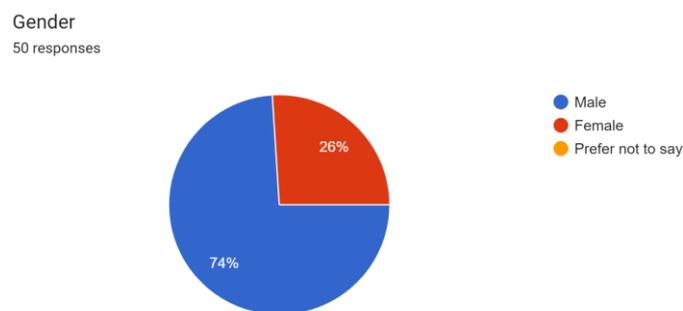
- Barber, B., Greenwood, R., & Jin, L. (2013) "Psychology and the Financial Crisis," delves into the psychological factors behind the 2008 financial crisis. They analyze empirical studies and theories to reveal how cognitive biases like overconfidence and herding impacted decision-making by investors, institutions, and policymakers. By synthesizing research findings, the authors highlight the role of psychological mechanisms in worsening market instability and systemic risk. They also discuss the implications for regulatory reforms and risk management post-crisis, emphasizing the necessity of integrating behavioral economics into financial analysis and policymaking.
- Jain, R., Jain, P. and Jain, C. (2015) paper conducts an in-depth review of behavioral biases affecting individual investors' decision-making, diverging from conventional finance theories. It explores biases like disposition effect, mental accounting, and overconfidence, which often lead to irrational investment choices and subpar long-term returns. Additionally, the paper discusses potential solutions to mitigate these biases' adverse impacts on decision-making processes. It also suggests avenues for future research in behavioral finance to enhance understanding and improve investment decision-making practices.
- S.A. Zahera and R. Bansal (2018) discusses the pivotal role of financial management in the economic system, emphasizing the interchangeability of trading and investing. It underscores investing's long-term nature, aiming for optimal returns. However, stock market complexities arise from diverse participant behaviors. The Efficient Market Hypothesis and Modern Portfolio Theory are mentioned, but market efficiency is questioned due to anomalies like bubbles and crashes. Behavioral finance emerges to explain deviations from rational decision-making in uncertain environments.
- The goal of the Rzeszutek, Szyszka, and Czerwonka (2015) paper is to examine the relationship between personality traits (impulsivity, venturesomeness, and empathy) and the susceptibility to behavioral biases (certainty effect, sunk cost fallacy, and mental accounting) in people with different degrees of experience in market investments. Two hundred students from the Warsaw School of Economics and one hundred retail investors from the Warsaw Stock Exchange participated in the study. The research identified behavioral biases and personality factors and evaluated their influence on decision-making processes using a survey approach and laboratory experiment. The findings show that bias expression is influenced by specific personality factors and that bias susceptibility rises with market investing skill.
- In 2016, A. C. and R. K. In response to conventional economic theories, the discipline of behavioral finance emerged, exploring the cognitive psychology underlying people's financial actions. While rationality, risk aversion, and profit maximization are the cornerstones of economic theory, real-world decision-making is significantly more nuanced and emotive. The impact of behavioral biases on the decisions made by equities investors in the Indian market, namely in Tamil Nadu, is the main emphasis of this study. Examined are six major biases: gambling, mood, emotions, heuristics, frames, and personality. Their interactions are also discussed. Structured questionnaires are used to collect data using a multistage random sampling strategy and descriptive study. These biases have a substantial impact on investing decisions, as shown by statistical research, including structural equation modeling, which highlights the complex interactions between different behavioral elements.
- E. Vijaya (2016) Behavioral finance examines the impact of several behavioral elements on investment decisions and performance by fusing cognitive and behavioral psychology with financial decision-making. This study looks into the presence and correlations between market characteristics and retail equities investors in India who exhibit traits including overconfidence, representativeness, anchoring, mental accounting, disposition effect, herd behavior, loss aversion, and regret aversion. The study validates the influence of these factors on investors' decisions and investment performance through the

application of Structural Equation Modeling (SEM). The findings indicate that market characteristics have a detrimental influence on investment success, while overconfidence, the disposition effect, and herd behavior have a positive effect.

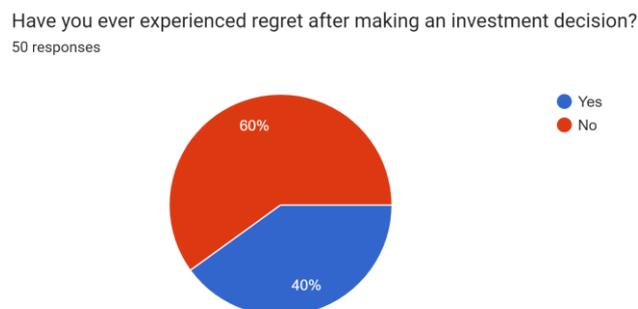
- The study by Suresh G. (2021) looks into how behavioral biases and investors' financial literacy interact and affect investing choices. The study investigates heuristic bias, framing effect, cognitive illusions, and herd mentality through Likert scaling approach and Structural Equation Modeling (SEM) analysis of questionnaire data. The findings demonstrate that heuristic bias and behavioral biases are positively correlated, whereas the framing effect, cognitive illusions, and herd mentality are negatively correlated. Interestingly, while making decisions, investors frequently rely more on heuristic biases than on other forms of irrationality. In general, a person's level of financial literacy has a big impact on their stock market investing choices.

Data Analysis

The following data was conducted with a sample size of 50 people constituting from the age group of 18-24.

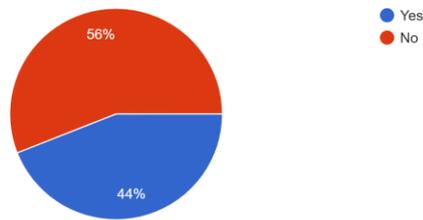


Gender Distribution: The majority of participants were male, constituting 74% of the sample, while females comprised 26%. This suggests a gender imbalance in the sample, which may influence the generalizability of findings.



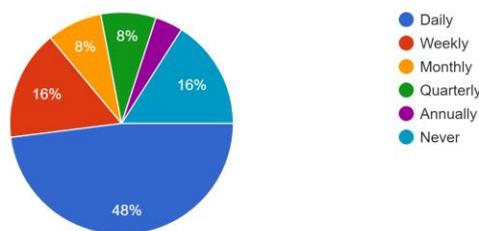
Regret After Investment: Approximately 40% of respondents reported experiencing regret after making investment decisions, highlighting the emotional and psychological impact of investment outcomes on individuals.

Do you consider yourself to be overly confident about your investment decisions?
50 responses



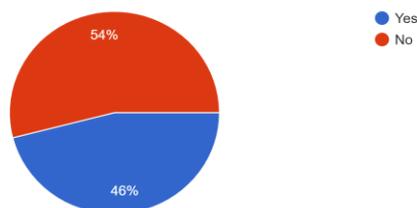
Overconfidence About Investment Decisions: A significant portion (44%) of participants admitted to being overly confident about their investment decisions, suggesting a tendency towards heightened risk-taking behavior and potential misallocation of resources. This also indicates potential biases that could affect their investment strategies.

How often do you check your investment portfolio?
50 responses



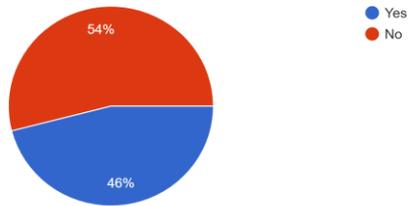
Frequency of Portfolio Checking: Nearly half of the participants (48%) checked their investment portfolios daily, indicating a high level of engagement with their investments. However, a considerable portion (16%) reported never checking their portfolios, which may suggest a lack of active portfolio management.

Have you ever followed the investment decisions of friends or family without conducting your own research?
50 responses



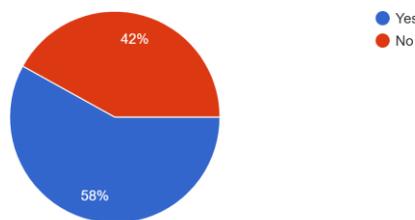
Following Advice Without Conducting Research: A substantial proportion (46%) of respondents acknowledged following advice from friends and family without conducting their own research, indicating a reliance on external sources for decision-making.

Do you tend to sell winning investments too early and hold on to losing investments for too long?
50 responses



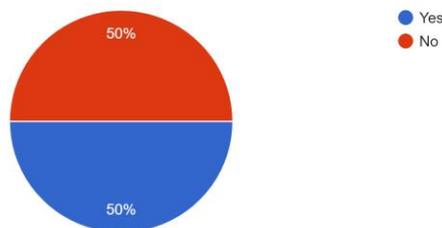
Tendency to Sell Winning Investments Early: Almost half of the participants (46%) admitted to selling winning investments too early, potentially missing out on further gains due to impulsive decision-making.

Have you ever avoided selling an investment at a loss because you were hoping it would rebound?
50 responses



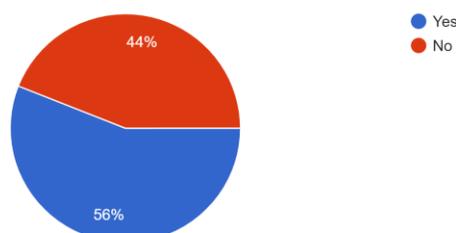
Avoiding Selling Investments at a Loss: The majority (58%) of respondents admitted to avoiding selling investments at a loss, indicating a reluctance to accept losses and potentially leading to holding onto underperforming assets.

Do you tend to anchor your investment decisions to past prices or performance?
50 responses



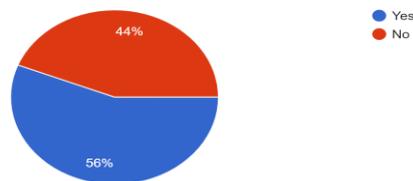
Anchoring Investment Decisions to Past Performance: The data showed an even split (50-50) regarding anchoring investment decisions to past prices or performances, suggesting that some investors may be influenced by historical data when making investment decisions.

Do you seek out information that confirms your existing investment beliefs while ignoring contradictory information?
50 responses



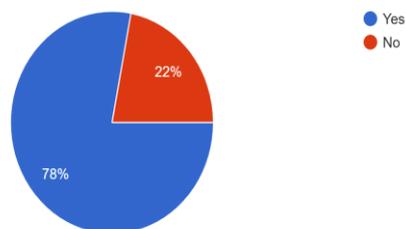
Confirmation Bias in Seeking Information: Over half of the participants (56%) admitted to seeking information that confirms their existing investment beliefs, potentially leading to a biased decision-making process.

Have you ever invested in a company or asset solely based on a recommendation from a financial expert or influencer?
50 responses



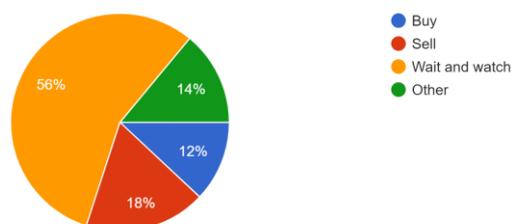
Following Recommendations from Financial Influencers: A considerable proportion (56%) of respondents reported investing based on recommendations from financial influencers, indicating the influence of external sources on investment decisions.

Do you feel more comfortable investing in familiar industries or companies?
50 responses



Comfort with Investing in Familiar Industries or Companies: The vast majority (78%) of participants expressed a preference for investing in familiar industries or companies, suggesting a tendency towards conservative investment strategies.

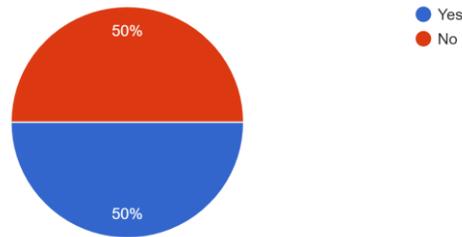
How do you respond to news headlines about the stock market?
50 responses



Response to News Headlines about the Stock Market: The majority (56%) of participants adopted a "wait and watch" approach to news headlines about the stock market, highlighting a cautious response to external market information.

Have you ever felt pressured to make an investment decision due to fear of missing out (FOMO)?

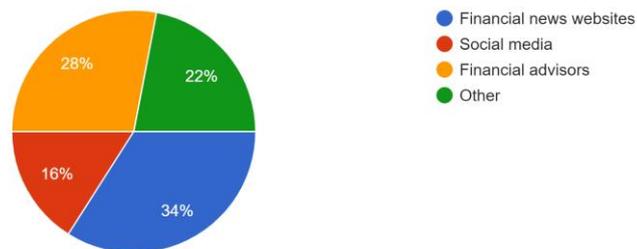
50 responses



Investing Due to Fear of Missing Out (FOMO): The data revealed an equal split (50-50) regarding investing due to fear of missing out, suggesting that FOMO may significantly impact investment decisions for a substantial portion of participants, influencing their behavior in financial markets.

What sources do you typically use for investment information?

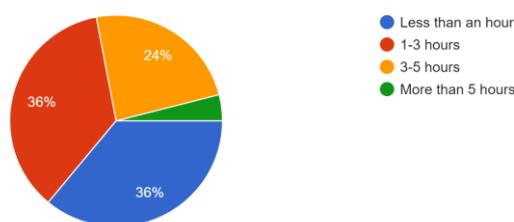
50 responses



Sources Used for Investments: Financial websites were the most commonly used source for investment information (34%), followed by financial advisors (28%), social media (16%), and other sources (22%).

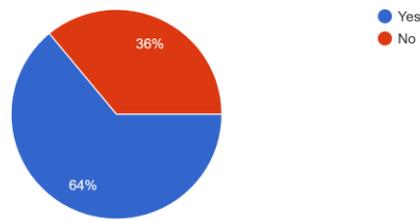
How much time do you spend researching potential investments before making a decision?

50 responses



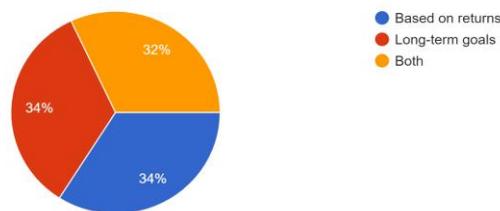
Time Spent Researching Potential Investments: A significant portion of participants (36%) spent less than an hour researching potential investments, suggesting a potential lack of thorough due diligence in investment decision-making.

Have you ever sought professional financial advice before making an investment decision?
50 responses



Seeking Professional Financial Advice: The majority (64%) of respondents sought professional financial advice before making investment decisions, indicating a recognition of the importance of expert guidance in financial matters.

How do you assess the success of your investment decisions?
50 responses



Assessment of Investment Success: Participants varied in their assessment of investment success, with equal proportions prioritizing returns or long-term goals (34% each), while 32% considered both factors equally important in evaluating their investment performance.

Research Methodology

The research methodology for this study employs a mixed-methods approach to understand behavioral biases in decision-making among retail investors. Convenience sampling will select a sample of at least 50 retail investors. A structured online questionnaire, developed from past research and validated scales, will collect data on behavioral biases, demographics, and investment performance.

Research Gap

In the context of behavioral biases influencing decision-making among retail investors, a notable research gap emerges in the examination of interventions aimed at mitigating these biases. While existing literature extensively identifies and outlines the prevalence of behavioral biases in investor decision-making processes, there remains limited investigation into the effectiveness of interventions designed to counteract these biases. Key interventions may include investor education initiatives, behavioral nudges, or the development of technological tools. Exploring the efficacy of such interventions in addressing behavioral biases could provide invaluable insights into strategies for enhancing investor decision-making processes and outcomes.

FINDINGS

- **Behavioral Biases in Decision-Making:**

Overconfidence and Loss Aversion: A significant portion of investors displayed overconfidence in their decisions (46%) and exhibited a reluctance to sell losing investments (58%).

Implication: These biases can lead to suboptimal investment strategies, such as excessive risk-taking or holding onto underperforming assets for too long. Investors should be aware of these biases and strive for a balanced and rational approach to decision-making.

- **External Influences on Decisions:**

Reliance on Expert Recommendations and FOMO: A majority of investors (56%) followed investment recommendations from experts, and half (50%) made decisions based on the Fear of Missing Out (FOMO).

Implication: Depending heavily on external advice and succumbing to FOMO may lead to impulsive decisions and disregard for personal financial goals. Investors should critically evaluate external recommendations and prioritize long-term objectives over short-term trends.

- **Response to Market Fluctuations:**

Wait-and-Watch Approach vs. Reactive Selling: While most investors adopted a wait-and-watch stance during market fluctuations (60%), a notable minority chose to sell investments (18%) in response.

Implication: The prevalence of a wait-and-watch approach suggests a cautious attitude among investors. However, reactionary selling may indicate emotional decision-making or a lack of confidence in investment strategies. Educating investors on the importance of disciplined, long-term investing could mitigate impulsive reactions to market movements.

- **Information Sources:**

Primary Sources of Information: Financial websites (34%), financial advisors (28%), and social media (16%) were identified as primary sources of investment information.

Implication: Investors heavily rely on digital platforms and professional advice for investment guidance. Ensuring the credibility and reliability of information sources is crucial for making well-informed decisions.

- **Evaluation of Investment Success:**

Diverse Criteria for Assessment: Participants assessed investment success based on returns (34%), long-term goals (34%), or a combination of both (32%).

Implication: The varied criteria highlight the importance of aligning investment strategies with individual goals. Investors should focus on their long-term financial objectives and periodically review their portfolio performance against these goals.

SUGGESTIONS

- **Behavioral Biases Awareness Campaign:**

Develop and implement an extensive awareness campaign aimed at retail investors to increase their understanding of common behavioral biases influencing investment decisions. Utilize various communication channels such as social media platforms, webinars, workshops, and informational sessions to reach a wide audience. Provide practical examples and case studies to illustrate how biases can impact investment outcomes and offer tips on how investors can recognize and mitigate these biases in their decision-making process.

- **Investor Education Programs:**

Establish investor education programs focused on equipping investors with the knowledge and skills necessary for making informed investment decisions. Develop educational materials such as online courses, guides, and workshops covering topics such as fundamental investment principles, risk management strategies, and techniques for evaluating investment opportunities. Ensure these resources are accessible and user-friendly, catering to investors of all levels of expertise.

- **Behavioral Bias Mitigation Strategies:**

Conduct research to identify effective strategies for mitigating behavioral biases in investment decision-making. Explore interventions such as decision aids, personalized feedback mechanisms, and cognitive-behavioral techniques designed to help investors recognize and counteract biases. Evaluate the effectiveness of these strategies in real-world settings and provide practical recommendations for implementing them in investment contexts.

- **Impact of Behavioral Biases on Investment Performance:**

Investigate the impact of behavioral biases on investment performance and portfolio management practices. Analyze historical data, empirical studies, and case examples to understand how biases such as overconfidence, loss aversion, and herding behavior influence investor behavior and affect investment outcomes over time. Assess the implications of these biases for portfolio construction, risk management, and long-term financial planning.

- **Policy Implications and Regulatory Measures:**

Examine the policy implications of behavioral biases in financial markets and propose regulatory measures to address them. Evaluate existing regulatory frameworks and identify gaps or shortcomings related to investor protection and market integrity. Recommend reforms aimed at enhancing transparency, fairness, and investor welfare, including measures to promote disclosure, improve investor education, and strengthen enforcement mechanisms.

Conclusion

In summary, this research delves deep into the intricate world of behavioral biases that influence the investment decisions of retail investors. Through a thorough examination of survey responses and existing literature, we've uncovered a plethora of biases such as overconfidence and herding behavior, which significantly mold investor behavior and shape their financial outcomes. These findings highlight the critical importance of educating investors to not only recognize but also effectively mitigate these biases. Moreover, they emphasize the necessity for implementing tailored interventions and regulatory measures to safeguard investors' interests and maintain the integrity of financial markets. By addressing these biases head-on, investors can cultivate more

rational decision-making processes, leading to enhanced financial well-being in the long term. Looking ahead, it is imperative to continue fostering research efforts and fostering collaboration to deepen our understanding of behavioral finance and empower investors to navigate financial markets with confidence.

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