

Assessing the Influence of Behavioral Biases on Financial and Investment Choices Among investors in Golaghat District of Assam.

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Abstract

The study investigates the impact of behavioral biases on investors' behavior and financial decision-making through regression analysis. Results indicate that behavioral biases significantly influence investors' behavior in securities trading, with a regression coefficient of 0.1847 and a standard error of 0.236. The analysis also reveals a substantial effect of behavioral biases on the financial culture of investors, with a regression coefficient of 0.557 and a standard error of 0.065. ANOVA contrast analysis further confirms the significance of these findings, with an F-value of 100.344 for investors' behavior and an F-value of 563.495 for financial culture. The R-squared values of 0.439 and 0.819 respectively suggest a high level of variance explained by behavioral biases in both aspects. However, while investors' behavior in securities trading shows a significant impact of behavioral biases, the regression coefficient for raising the financial culture of investors (0.342) indicates a lower level of significance, with a probability value of 0.082.

These findings underscore the critical role of behavioral biases in shaping investors' behavior and financial decision-making processes. Understanding and addressing these biases are crucial for improving investment outcomes and promoting financial literacy among investors. The study emphasizes the importance of behavioral finance in guiding effective investment strategies and enhancing overall financial well-being.

Keywords: behavioral biases, financial decisions, investment choices, behavioral finance, investors, portfolio management etc.

1. Introduction

Behavioral biases play a significant role in shaping financial and investment decisions among individuals worldwide. As investors navigate complex markets and face uncertainties, their decisions are often influenced by psychological factors that deviate from rational economic models. Golaghat District, situated in the northeastern state of Assam, India, presents a unique context for studying the interplay between behavioral biases and investment choices among its diverse population of investors. Understanding the impact of behavioral biases on financial decisions is crucial for several reasons. Firstly, it sheds light on the deviations from traditional

finance theory assumptions of rationality and efficiency. Secondly, it helps explain phenomena such as market bubbles, herding behavior, and excessive risk-taking observed in real-world financial markets. Moreover, recognizing these biases is essential for policymakers, financial advisors, and investors themselves to develop strategies that mitigate their adverse effects and enhance financial well-being.

The present study seeks to investigate the influence of behavioral biases on financial and investment decisions specifically among investors in Golaghat District. By examining the prevalence and effects of various biases, this research aims to contribute to the growing body of literature in behavioral finance and provide insights relevant to both academic scholarship and practical applications in the financial industry. A review of existing literature reveals numerous studies highlighting the impact of behavioral biases on investment decisions across different contexts. Notable works by Kahneman and Tversky (1979), Thaler (1980), and Barberis and Thaler (2003) have laid the groundwork for understanding the cognitive and emotional factors driving financial behavior. Additionally, empirical research conducted in diverse settings, including India, has demonstrated the significance of behavioral biases in shaping investor behavior and market outcomes (Agarwal et al., 2009; Kumar & Goyal, 2018; Das & Mohanty, 2020). Despite the extensive body of research on behavioral finance, there remains a dearth of studies focusing specifically on Golaghat District and its investors' behavioral tendencies. Given the region's distinct socio-economic characteristics and cultural dynamics, examining the prevalence and impact of behavioral biases in this context offers valuable insights into the complexities of investment decision-making at the grassroots level. Against this backdrop, the current study adopts a mixed-methods approach, combining quantitative surveys and qualitative interviews, to explore the behavioral biases influencing financial and investment choices among Golaghat District investors. By leveraging both quantitative data analysis and qualitative insights, this research aims to provide a comprehensive understanding of the psychological factors shaping investment behavior in the region.

2. Overview of Behavioral Finance

Behavioral finance represents a paradigm shift in the field of finance, offering insights into the psychological factors that influence financial decision-making. Unlike traditional finance theory, which assumes that market participants are rational and make decisions solely based on maximizing utility, behavioral finance acknowledges the presence of cognitive biases and emotional influences that lead to deviations from rationality (Barberis & Thaler, 2003). At its core, behavioral finance integrates principles from psychology, sociology, and cognitive science to explain why individuals often make suboptimal financial decisions. One of the foundational concepts in behavioral finance is prospect theory, developed by Kahneman and Tversky (1979), which posits that individuals' decision-making under uncertainty is shaped by subjective evaluations of potential gains and losses, rather than objective probabilities. A key insight of behavioral finance is the recognition of various cognitive biases that affect investor behavior. Loss aversion, for instance, refers to the tendency of individuals to prefer avoiding losses over acquiring equivalent gains, leading to risk-averse behavior (Kahneman & Tversky, 1979). Overconfidence bias, on the other hand, leads individuals to overestimate their knowledge and abilities, resulting in excessive trading and suboptimal portfolio management (Odean, 1999).

Another prominent phenomenon in behavioral finance is herding behavior, wherein individuals mimic the actions of others without conducting independent analysis, often leading to market bubbles and crashes (Banerjee, 1992). Anchoring bias, availability bias, and confirmation bias are among the other cognitive biases documented in behavioral finance literature, each influencing investor decisions in distinct ways (Tversky & Kahneman, 1974; Kahneman, Slovic, & Tversky, 1982; Nickerson, 1998). Despite its critiques and challenges, behavioral

finance has gained widespread acceptance and recognition for its ability to explain observed market phenomena and improve our understanding of investor behavior. By incorporating insights from behavioral economics, financial practitioners and policymakers can develop more robust investment strategies, enhance market efficiency, and promote financial literacy among investors (Shiller, 2003; Thaler, 2015).

3. Importance of Studying Behavioral Biases in Investment Decisions

Understanding behavioral biases in investment decisions is of paramount importance for several reasons. Firstly, it provides insights into the deviations from traditional finance theory assumptions of rationality and efficiency (Barberis & Thaler, 2003). By recognizing the psychological factors that influence investor behavior, researchers and practitioners can develop more accurate models of market dynamics and investment outcomes. Secondly, studying behavioral biases helps explain phenomena such as market bubbles, herding behavior, and excessive risk-taking observed in real-world financial markets (Banerjee, 1992). By identifying the underlying cognitive and emotional drivers of these behaviors, policymakers and regulators can implement measures to mitigate systemic risks and enhance market stability. Understanding behavioral biases is essential for individual investors to make informed decisions and achieve their financial goals. By recognizing their own cognitive limitations and biases, investors can adopt strategies to mitigate the adverse effects of behavioral biases on their investment portfolios (Odean, 1999). This may include seeking professional financial advice, diversifying their investments, and adhering to disciplined investment principles. Furthermore, studying behavioral biases has implications for financial advisors and asset managers in designing investment products and client strategies. By incorporating insights from behavioral finance, advisors can tailor their recommendations to clients' specific risk preferences, time horizons, and behavioral tendencies (Thaler, 2015). This personalized approach enhances client satisfaction and fosters long-term relationships based on trust and transparency.

4. Problem Statement

Behavioral finance biases significantly influence investors' decision-making processes in financial markets, often leading to suboptimal outcomes and inefficient asset allocation strategies (Thaler, 1999). Investors tend to segregate their trades into different mental accounts, treating them as isolated islands, which can hinder effective portfolio management and liquidity management (Barberis & Thaler, 2003). This practice, considered one of the most common mistakes in the stock market, reflects how investors allocate funds based on personal obligations and perceived needs within each mental account (Thaler, 1999). Investors commonly evaluate their trades based on the final destinations of the funds, maintaining separate mental accounts to manage various financial obligations (Barberis & Thaler, 2003). However, this approach often results in liquidity constraints, as investors perceive the need to hold cash reserves across all isolated accounts to support liquidity requirements (Thaler, 1999). Understanding investors' behavior and the psychological factors influencing their decisions to buy or sell securities is paramount in addressing the challenges posed by behavioral biases (Barberis & Thaler, 2003).

The research problem at hand focuses on examining the impact of behavioral biases on investors' financial and investment decisions. Specifically, the study aims to address the following research questions: (1) Does behavioral biases contribute to the development of investors' strategies for financial and investment decision-making? (2) How does behavioral biases influence investors' behavior in making decisions to buy or sell securities? (3) To what extent does behavioral biases affect investors' financial literacy and their ability to make informed and optimal financial decisions?

5. The objectives of the study are outlined as follows:

- To elucidate the role of behavioral biases in facilitating the development of strategies for financial and investment decision-making among investors.
- To assess the influence of behavioral biases on investors' behavior, particularly in their decisions to buy or sell securities.
- To evaluate the impact of behavioral biases on enhancing investors' financial literacy and facilitating the adoption of optimal and affordable financial decisions.

6. Significance of the study

Behavioral biases exert a significant influence on the financial and investment decisions made by investors, attracting considerable attention from researchers, academics, and practitioners within financial markets. As financial and investment decisions are inherently individualistic and reflective of investors' psychological and cognitive processes, it is imperative to acknowledge the underlying elements driving these decisions. Understanding the behavioral nuances of investors aids in accurately comprehending and predicting future movements within financial markets, thereby enabling the attainment of above-average returns or mitigating risks associated with financial and investment decisions (Barberis & Thaler, 2003; Thaler, 1999).

7. Hypothesis of the study

Based on the study's research questions, the following hypotheses can be formulated:

- Hypothesis 1: There is a significant contribution of behavioral biases in assisting investors to develop strategies for making financial and investment decisions.
- Hypothesis 2: Behavioral biases significantly influence the behavior of investors, leading them to make decisions to buy or sell securities.
- Hypothesis 3: Behavioral biases have a measurable effect on raising the financial literacy of investors and facilitating the adoption of the most appropriate and affordable financial decisions.

These hypotheses will be tested and analyzed to determine the extent to which behavioral biases influences investors' decision-making processes and financial outcomes.

8. Literature Review

Behavioral biases significantly influence investment decisions, leading to deviations from rationality and impacting market outcomes. Key behavioral biases include loss aversion, overconfidence, and herd mentality, which have been extensively studied in the context of financial decision-making (Barberis & Thaler, 2003; Kahneman & Tversky, 1979; Banerjee, 1992). Loss aversion, as proposed by Kahneman and Tversky (1979), refers to individuals' tendency to prefer avoiding losses over acquiring equivalent gains. This bias often leads to risk-averse behavior, where investors are more sensitive to potential losses than gains. Overconfidence, on the other hand, involves individuals' overestimation of their knowledge and abilities in predicting future market movements, leading to excessive trading and suboptimal portfolio management (Odean, 1999). Herd mentality, as described by Banerjee (1992), refers to the tendency of individuals to mimic the actions of others without conducting independent analysis. This phenomenon often results in market bubbles and crashes, as investors follow the crowd rather than making rational decisions based on fundamentals. Previous research on behavioral biases in investment decisions has highlighted their significant impact on market dynamics and investor outcomes. Studies by Odean (1999), Barber and Odean (2001), and Hirshleifer (2001) have demonstrated the prevalence of behavioral biases among investors and their implications for trading behavior and portfolio performance.

In the Indian context, studies relevant to behavioral finance and investor behavior have gained prominence in recent years. Agarwal et al. (2009) examined market-based measures of monetary policy expectations in India, highlighting the role of behavioral factors in shaping investors' reactions to policy changes. Kumar and Goyal (2018) conducted a study on behavioral biases among individual investors in the Indian stock market, shedding light on the influence of psychological factors on investment decision-making. Additionally, Das and

Mohanty (2020) investigated individual behavioral biases and investment decision-making in India, providing empirical evidence on the impact of cognitive and emotional factors on investor behavior. These studies underscore the importance of considering behavioral biases in understanding market dynamics and designing effective investment strategies tailored to investors' behavioral tendencies.

8.1. Research Gap Analysis

A gap analysis based on the literature review reveals several avenues for further research in the field of behavioral finance, particularly concerning investment decisions and market dynamics in India. While existing studies have extensively explored key behavioral biases such as loss aversion, overconfidence, and herd mentality, there is a need for more in-depth investigations into the mechanisms through which these biases manifest in Indian investors' decision-making processes. Additionally, while studies by Agarwal et al. (2009), Kumar and Goyal (2018), and Das and Mohanty (2020) have provided valuable insights into behavioral biases among Indian investors, there remains a gap in understanding the long-term effects of these biases on portfolio performance and market efficiency. Furthermore, there is limited research focusing on the effectiveness of behavioral interventions and regulatory measures in mitigating the adverse effects of biases on investor outcomes in the Indian context. Therefore, future research endeavors could explore these areas to enhance our understanding of behavioral finance dynamics and inform the development of more effective strategies for promoting investor welfare and market stability in India.

9. Research Methodology:

The researchers employed a descriptive analytical approach to investigate the impact of behavioral biases on the decision-making of financial and investment choices among investors. This approach was chosen due to its suitability for understanding the nature of the study and achieving its objectives.

9.1. Sampling Size and Data Collection Design

A tone-administered questionnaire and interview schedule were utilized to collect primary data for this study. The questionnaire was distributed to 180 investors in Golaghat District of Assam, with 60 samples selected from each of the three subdivisions: Golaghat, Bokakhat, and Dhansiri. Non-probability convenient sampling technique was employed due to the diverse backgrounds and occupations of the investor population in Golaghat District. The response rate was 78.88%, with 142 respondents providing usable data. Data management involved tone-administered checks using a structured and close-ended questionnaire comprising 15 Likert-scale questions. The information gathered from primary sources utilized a non-probability convenience sampling method. A five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) was employed to assess participants' perspectives and gauge agreement levels on various aspects related to the research variables outlined in the questionnaire.

10. Descriptive Statistics and Exploratory Analysis

The study community encompasses 142 investors from Golaghat district of Assam. A questionnaire was disseminated among a sample of 180 individuals within the study community, of which 142 responses were collected, resulting in a response rate of 78.88%. The table below illustrates the number and characteristics of the study sample:

Table 1: Descriptive Statistics

Qualification	Frequency	Percentage
Below Graduate	41	28.87
Graduate	61	42.96
Postgraduate	24	16.9
PhD	2	1.41
Others	14	9.86
Gender	Frequency	Percentage
Male	113	79.58

Female	29	20.42
Others	0	0
Profession	Frequency	Percentage
Job	56	39.44
Business	23	16.2
Unemployed	18	12.68
Student	38	26.76
Wage Labor	7	4.93
Experience as an Investor	Frequency	Percentage
Less than 1 year	26	18.3
1 to 5 years	92	64.79
5 to 10 years	21	14.79
More than 10 years	3	2.11

Source: Prepared by the researcher

The study sample comprises 142 participants, with qualifications distributed as follows: Below Graduate (28.87%), Graduate (42.96%), Postgraduate (16.9%), PhD (1.41%), and Others (9.86%). Gender representation shows 79.58% male and 20.42% female participants. In terms of profession, 39.44% are employed, 16.2% are engaged in business, 12.68% are unemployed, 26.76% are students, and 4.93% are wage laborers. Regarding experience as investors, 18.3% have less than 1 year, 64.79% have 1 to 5 years, 14.79% have 5 to 10 years, and 2.11% have more than 10 years of experience.

11. Testing the Hypotheses and Addressing the Research Questions

To analyze the resolution paragraphs, calculations, standard deviations, and relative weights were computed. Additionally, a one-sample T-test was conducted to examine the resolution paragraphs and test hypotheses, as outlined below.

1. Analysis of the First Hypothesis: *There is a significant contribution of behavioral biases in assisting investors to develop strategies for making financial and investment decisions.*

The calculation of averages, standard deviations, relative weights, and the One Sample T test was conducted following the method outlined in Table 1. This table presents the viewpoints expressed by members of the study community in the initial hypothesis paragraphs concerning behavioral biases and their impact on financial culture and decision-making.

Table 2: Analysis of the First Hypothesis: *There is a significant contribution of behavioral biases in assisting investors to develop strategies for making financial and investment decisions.*

Paragraph	Average (Arithmetic)	SD	Value t	Value sig.	Relative Arithmetic Average	Order
Behavioral biases help mitigate the risk associated with financial decisions.	4.10	0.563	21.4	0.00	80.59	3
Behavioral biases aid in developing clear strategies for organizing and regulating financial matters with investors.	4.05	0.452	26.07	0.00	79.56	6
Behavioral biases influence how investors allocate and save their funds.	3.88	0.632	16.31	0.00	78.09	7
Behavioral biases impact how investors handle unexpected losses and savings.	4.08	0.902	12.81	0.00	80.41	4
Behavioral biases are influenced by various behavioral and psychological factors that shape financial decision-making.	4.05	0.878	13.62	0.00	80.08	5
Behavioral biases assist investors in overcoming cognitive errors that distort rational thinking and affect financial decisions.	4.09	0.812	14.81	0.00	83.66	2

Behavioral biases play a crucial role in helping investors evaluate the level of risk associated with financial decisions.	4.12	0.888	15.36	0.00	84.45	1
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Source: prepared by the researcher

The analysis of the data provides numerical evidence supporting the influence of behavioral biases on financial decision-making:

- The average ratings for the paragraphs ranged from 3.88 to 4.12, indicating a strong agreement among participants regarding the role of behavioral biases in financial decisions.
- Standard deviations varied from 0.452 to 0.902, suggesting varying degrees of dispersion in participants' opinions across different aspects of behavioral biases.
- The t-values ranged from 12.81 to 26.07, indicating the strength of the relationship between behavioral biases and financial decision-making. These values are statistically significant with p-values of 0.00, reaffirming the robustness of the findings.
- Relative arithmetic averages ranged from 78.09 to 84.45, reflecting the overall agreement among participants on the importance of behavioral biases in financial culture and decision-making.

Based on the analysis conducted, we conclude that the responses from the study sample overwhelmingly indicate a strong agreement with all paragraphs of the first hypothesis. This collective affirmation leads to the acceptance of the first hypothesis: "There is a significant contribution of behavioral biases in assisting investors to develop strategies for making financial and investment decisions."

2. Analysis of the second Hypothesis: *Behavioral biases significantly influence the behavior of investors, leading them to make decisions to buy or sell securities.*

Table 3: Analysis of the second Hypothesis: *Behavioral biases significantly influence the behavior of investors, leading them to make decisions to buy or sell securities.*

Paragraph	Average Arithmetic	SD	Relative Arithmetic Average	Value t	Value Sig.	Sig. Order
Behavioral biases significantly impact financial and investment decisions driven by investor behavior.	4.16	0.670	81.14	18.72	0	6
Understanding investors' behavior aids in accurately predicting future movements in financial markets.	4.17	0.566	81.29	22.37	0	5
Psychological factors influence investors' decision-making regarding buying or selling securities.	4.29	0.743	83.79	18.96	0	1
Behavioral biases influence investors' psychological decision-making regarding various investment opportunities with differing risks.	4.23	0.608	82.46	21.94	0	3
There exists a crucial role for behavioral biases in the financial decision-making process within behavioral finance.	4.28	0.650	83.49	21.45	0	2
Behavioral biases stand as significant influences that affect investors' behavior, prompting the buying and selling of shares.	4.23	0.608	82.46	21.94	0	3
Investors' decisions are swayed by behavioral factors rooted in their emotions and thoughts, crucially impacting security prices and trends.	3.92	1.018	76.29	9.47	0	7

Source: Prepared by the researcher

The examination of the second hypothesis underscores the substantial impact of behavioral biases on investor behavior. The analysis indicates that behavioral biases, with an average rating of 4.16 and a standard deviation of 0.670, significantly influence financial and

investment decisions, as evidenced by the high t-value of 18.72 ($p < 0.001$). Investors' behavior, with an average rating of 4.17 and a standard deviation of 0.566, also demonstrates a noteworthy association with market predictions, as indicated by the robust t-value of 22.37 ($p < 0.001$). Moreover, psychological factors, with an average rating of 4.29 and a standard deviation of 0.743, play a crucial role in guiding decisions related to securities trading, supported by the substantial t-value of 18.96 ($p < 0.001$). These findings underscore the pervasive influence of behavioral biases on investor behavior and highlight the importance of recognizing and mitigating these biases in financial decision-making processes to optimize investment outcomes and ensure market efficiency.

3. Analysis of the third Hypothesis: Behavioral biases have a measurable effect on raising the financial literacy of investors and facilitating the adoption of the most appropriate and affordable financial decisions.

Table 4: Analysis of the third Hypothesis: Behavioral biases have a measurable effect on raising the financial literacy of investors and facilitating the adoption of the most appropriate and affordable financial decisions.

Paragraph	Mean	SD	Relative Arithmetic Average	Value t	Value Sig.	Sig. Order
Behavioral biases affect the raising of investors' financial culture by seeking similar information that aids in making rational decisions.	3.83	1.170	74.52	7.36	0	7
Behavioral biases assist investors in making the most appropriate financial decisions regarding their investments.	4.03	0.914	78.49	11.98	0	5
Behavioral biases encompass cultural and psychological factors that significantly influence investor decisions.	4.36	0.675	85.11	22.07	0	1
Investors typically rely on behavioral biases to assess the expected returns and risks of investments for sound decision-making.	4.04	1.034	78.64	10.67	0	3
Behavioral biases contribute to enhancing investors' experience and knowledge in the decision-making process regarding available investments and trade-offs.	4.17	0.834	81.29	15.11	0	2
Behavioral biases influence investors' behavior and their awareness of the information they possess in portfolio management.	3.98	0.798	77.46	12.97	0	6
Behavioral biases are rooted in the cognitive factors and emotions of investors and impact their investment behavior culture.	4.04	0.768	78.64	14.39	0	3

Source: Prepared by the researcher

The analysis of the third hypothesis reveals compelling insights into the impact of behavioral biases on investors' financial literacy and decision-making processes. The average arithmetic scores range from 3.83 to 4.36, indicating a generally positive perception among respondents. Standard deviation values, ranging from 0.675 to 1.170, suggest some variability in responses. However, relative arithmetic averages, ranging from 74.52 to 85.11, demonstrate strong overall endorsement of the influence of behavioral biases on financial culture. With t-values ranging from 7.36 to 22.07, all associations are highly statistically significant ($p < 0.001$). The Sig. Order confirms the strong statistical significance of the findings across all statements. In conclusion, understanding and addressing behavioral biases are crucial for promoting financial literacy and facilitating sound financial decision-making among investors.

4. Regression Analysis of Study Variables

In assessing the influence of behavioral biases (independent variable) on investors' decision-making regarding securities transactions and their financial literacy (dependent variables), the following conclusions emerged:

Behavioral biases exhibit a statistically significant impact, with a significance level (α) of 0.05, on investors' decisions to buy or sell securities. Behavioral biases also demonstrate a statistically significant influence, with a significance level (α) of 0.05, on enhancing the financial literacy of investors and guiding their financial and investment decisions. To test these hypotheses, a simple linear regression analysis was conducted. The results of the regression model indicate a significant relationship between the level of investor behavior and financial literacy, the dependent variables, and behavioral biases, the independent variable, as illustrated in the table.

Table (5) Analysis of the gradual decrease in the variable corresponding to investor behavior and the financial acumen of investors.

Variable	Regression Coefficients	Standard Error	Standard Regression Coefficients	Value t	Probability Value	Significance Level at (0.05)	Beta Itself
Investors' Behavior in Securities Trading	0.1847	0.236	8.26	0	Significant	High	
Behavioral Biases	0.557	0.065	0.665	10.028	0	Significant	High
ANOVA Contrast Analysis	F-Value: 100.344	R-Squared: 0.439	Probability Value: 0.000	-	-	-	
Raising the Financial Culture of Investors and Making Appropriate Financial Decisions	0.342	0.193	1.83	0.082	Not Significant	Low	
Behavioral Biases	1.056	0.055	0.91	23.749	0	Significant	High
ANOVA Contrast Analysis	F-Value: 563.495	R-Squared: 0.819	Probability Value: 0.000	-	-	-	

Source: Prepared by the researcher

The regression analysis provides valuable insights into the impact of behavioral biases on investors' behavior and financial decision-making. Investors' Behavior in Securities Trading: The regression coefficient of 0.1847 indicates that investors' behavior in securities trading is positively influenced by 0.1847 units for each unit increase in the independent variable. The high t-value of 8.26 and probability value of 0 suggest that this relationship is statistically significant, indicating a high level of confidence. Thus, behavioral biases significantly affect investors' behavior in securities trading. Raising the Financial Culture of Investors and Making Appropriate Financial Decisions: The regression coefficient of 0.342 suggests a positive but relatively weaker impact of 0.342 units on raising the financial culture of investors for each unit increase in the independent variable. However, with a probability value of 0.082 exceeding the significance level of 0.05, this relationship is considered not statistically significant. Hence, other factors besides behavioral biases may contribute to investors' financial culture and decision-making.

Overall, the ANOVA contrast analysis reveals significant findings. The F-values of 100.344 and 563.495, along with the R-squared values of 0.439 and 0.819, respectively, indicate that the regression models explain a significant portion of the variability in the dependent variables. The probability values of 0.000 confirm the statistical significance of the models. The Behavioral biases play a crucial role in influencing investors' behavior and financial culture.

They significantly impact investors' decisions in securities trading and contribute significantly to raising their financial literacy and facilitating appropriate financial decisions. However, other factors beyond behavioral biases may also influence investors' financial behavior, warranting further investigation and analysis.

12. Conclusion

Based on the analysis of regression coefficients and ANOVA contrast analysis, it is evident that behavioral biases play a significant role in shaping investors' behavior and financial decision-making processes. The results indicate that behavioral biases have a substantial impact on both investors' behavior in securities trading and their financial culture, as well as their ability to make appropriate financial decisions. The regression coefficients for behavioral biases in both variables—"Investors' Behavior in Securities Trading" and "Raising the Financial Culture of Investors and Making Appropriate Financial Decisions"—are notably high, indicating a strong influence on investors' decision-making processes. The coefficients of 0.557 and 1.056, respectively, along with their corresponding high t-values and significant probability values ($p < 0.05$), underscore the significance of behavioral biases in guiding investors' actions and enhancing their financial literacy. Furthermore, the ANOVA contrast analysis highlights the overall significance of behavioral biases in explaining variations in investors' behavior and financial culture. The high F-values of 100.344 and 563.495 for the respective variables reaffirm the robust impact of behavioral biases on investors' financial decision-making processes.

So, the researcher concluded, the findings support the hypothesis that behavioral biases significantly influence investors' behavior and financial culture, contributing to their ability to make informed and appropriate financial decisions. These results align with previous research highlighting the importance of understanding behavioral biases in financial markets (Kahneman & Tversky, 1979; Thaler, 1980). By recognizing and addressing these biases, investors and financial professionals can mitigate potential risks and enhance financial outcomes.

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