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Impact of Cognitive Biases on Individual Stock Returns: The Moderating Role of Financial Literacy

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ABSTRACT

Background: Cognitive biases including overconfidence, loss aversion, and herding behavior can lead to suboptimal investing decisions and worse stock returns, contrary to traditional finance theory.

Objective: To research how cognitive biases affect stock returns and how financial knowledge moderates this effect. The study tries to demonstrate how cognitive biases and financial literacy affect investment outcomes.

Method: 447 Delhi-NCR investors were surveyed using a standardized questionnaire. We examined the direct and indirect effects of cognitive biases (loss aversion, mental accounting, and herding behavior) and financial literacy (risk diversification, investing techniques, and financial products) on stock returns using SPSS and AMOS.

Results: reveal that cognitive biases strongly influence stock returns. Mental accounting, loss aversion, and herding affect investment performance. Higher financial literacy reduced the unfavourable effects of cognitive biases on stock performance. The model has strong fit indices, indicating strong results.

Novelty: This study sheds light on how financial literacy mitigates cognitive biases on stock returns in emerging markets like Delhi-NCR. Combining cognitive biases and financial literacy into one model builds on previous findings.

Key Words: Cognitive Biases, Financial Literacy, Stock Returns, Behavioral Finance, Loss Aversion, Herding Behavior, Mental Accounting, Emerging Markets

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1. INTRODUCTION

Recently, behavioral finance has gained popularity due to its focus on psychological aspects affecting financial decision-making and market results. Traditional finance theories assume investors are rational and make decisions based on information. Numerous research have shown that cognitive biases often drive investors to make suboptimal financial decisions (Kahneman & Tversky, 1979; Barberis & Thaler, 2003). Irrational investing decisions, caused by cognitive biases such overconfidence, loss aversion, and herding, influence stock returns and market efficiency (Khan et al., 2020; Ahmad, 2020). We know a lot about these biases, but we don't know how they effect investing outcomes, especially in emerging countries.

Understanding financial concepts helps investors make good selections. Financial literacy enhances risk management and investment (Lusardi & Mitchell, 2014; Ahmad et al., 2022). The moderating effect of financial literacy on cognitive biases and stock performance is uncertain. Financial literacy may reduce cognitive biases (Wijaya et al., 2023), but empirical research on how financial knowledge influences stock market performance is few.
To fill this gap, this study studies cognitive biases and financial literacy's stock return moderating function. “The study uses Structural Equation Modeling (SEM) and Delhi-NCR investors to evaluate how cognitive biases and financial literacy affect stock returns directly and indirectly. This research should illuminate psychological factors that affect investment decisions and improve financial market efficiency, especially in emerging economies with diverse financial literacy

2. LITERATURE REVIEW TABLE:

Authors	Year	Methodology	Focus	Findings
Khan & Dahiman	2020	Correlation & Regression Analysis	Cognitive biases (herding, disposition, mental accounting) & investment decisions	Herding bias, disposition effect, and mental accounting positively impact investment decisions. Financial literacy moderates' biases.
Ahmad, F.	2020	Regression Analysis	Personality traits, disposition effect, herding, overconfidence, and risk aversion	Extravert investors more likely to show cognitive biases. Risk aversion moderates the relationships between personality traits and biases.
Ahmad & Shah	2022	Regression & SEM Analysis	Overconfidence, risk perception, financial literacy & investment decisions	Risk perception mediates the relationship between overconfidence and investment performance. Financial literacy moderates these relationships.
Mahmood et al.	2024	Hierarchical Regression Analysis	Investor behavior, cognitive biases & financial literacy in PSX	Anchoring, overconfidence, and herding impact investment decisions. Financial literacy moderates these biases.
Quddoos et al.	2020	SEM Analysis	Behavioral biases, financial literacy, and investment performance	Anchoring & overconfidence bias affect investment performance. Financial literacy has no moderating role in improving performance.
Khan et al.	2023	Survey, Regression Analysis	Behavioral biases, financial literacy & investment decisions	Behavioral biases (overconfidence, disposition effect, herding) significantly impact decisions. Financial literacy moderates these biases.
Ranaweera & Kawshala	2022	Survey, Moderation Analysis	Overconfidence, herding, financial literacy & investment decision-making	Overconfidence and herding bias significantly affect decisions. Financial literacy moderates the relationship between these biases.
Wijaya at al.	2023	PLS-SEM	Heuristics, herding & investment decisions in Indonesia	Heuristics and herding behavior significantly affect investment decisions. Financial literacy does not moderate these biases.
Khan et al.	2025	SEM, Stratified Random Sampling	Behavioral biases, financial literacy, and trade returns	Mental accounting, overconfidence, loss aversion, anchoring, and representativeness impact trade returns. Financial literacy and locus of control moderate these relationships.
Adil et al.	2022	Hierarchical Regression Analysis	Behavioral biases, financial literacy & gender	Financial literacy significantly moderates the impact of cognitive biases on investment decisions for both genders.
Rehmat et al.	2023	Structural Equation Modeling	Behavioral biases, financial literacy & investment decisions	Financial literacy significantly moderates the relationship between biases and investment decisions. Risk

		(SEM)		perception is a mediator.
Gulzar, T. I.	2024	Smart PLS 4, SEM	Behavioral biases, emotional stability, and financial literacy	Behavioral biases significantly affect investment decisions. Emotional stability is a crucial moderating factor.
Akhtar & Malik	2023	Moderated Multiple Regression Analysis	Personality traits, investor risk behavior & financial literacy	Personality traits significantly influence risk behavior. Financial literacy moderates these relationships.
Sharma & Sood	2023	Quantitative, Likert Scale, Factor Analysis	Cognitive biases, belief perseverance, financial literacy & investment decisions	Cognitive biases affect risk tolerance and investment decisions. Financial literacy mediates the impact of biases.
Zhang et al.	2022	Mediation & Moderation Analysis (Process Macros)	Cognitive biases, risk perception & decision-making	Anchoring and optimism biases significantly affect decisions. Risk perception mediates the relationship between biases and investment decisions.
Suresh, G.	2024	SEM Analysis	Financial literacy, behavioral biases & investment decisions	Heuristic bias positively impacts behavioral biases in decision-making. Financial literacy has a significant impact on investment decisions.
Hussain et al.	2023	SPSS, Smart PLS	Loss aversion, herding, cognitive dissonance & investment decisions	Loss aversion and herding have a significant impact on investment decisions. Cognitive dissonance has no significant effect.
Sudirman et al.	2024	Multi-Group Analysis (MGA)	Investment literacy, cognitive biases & financial decisions	Investment literacy reduces biases like overconfidence, availability, and herding. Gender moderates the relationship between literacy and overconfidence.
Dahal & Uprety	2025	PLS-SEM	Cognitive biases, financial literacy & investment decisions	Cognitive biases significantly impact investment decisions. Financial literacy and risk perception mediate the relationship between biases and investment decisions.
Paudel & Shakya	2025	Regression Analysis, Hayes' Process Macro	Heuristics bias, financial literacy & investment decisions	Overconfidence and anchoring bias significantly influence investment decisions. Financial literacy partially mediates these relationships.
Aftab et al.	2025	Regression & Moderation Analysis	Behavioral biases, financial literacy & Fintech adoption	Financial literacy positively moderates the relationship between biases and Fintech adoption. Risk aversion and overconfidence hinder adoption.
Satria, R.	2025	Regression Analysis, Hayes' PROCESS Macro	Behavioral biases, demographic factors & investment decisions	Behavioral biases negatively impact investment decisions. Demographics significantly moderate the impact of these biases.
Ashfaq et al.	2024	Quantitative Analysis, Financial	Cognitive biases, financial literacy & student investment	Financial literacy significantly impacts cognitive biases. Most significant biases: overconfidence, loss aversion,

		Literacy	decisions	and confirmation bias.
Noch & Rumasukun	2024	Thematic Analysis	Cognitive biases, emotional & socio-cultural influences on investment decisions	Cognitive biases (overconfidence, confirmation bias) and emotional factors (FOMO) influence investment decisions. Socio-cultural influences affect risk perception.
Choudhary et al.	2024	Binary Logistic Regression	Financial literacy, gender, neuroticism & cognitive biases	Financial literacy and neuroticism significantly predict biases like availability and mental accounting. Gender also plays a significant role in biases.
Kumar et al.	2024	PLS-SEM, Probability & Non-Probability Sampling	Risk perception, cognitive biases & investment performance	Risk perception significantly affects heuristics and prospects. Psychological biases mediate the relationship between risk perception and investment performance.
Mohanty et al.	2024	Multiple Regression, Discriminant Analysis	Cognitive biases, financial decision-making during COVID-19	Recency and familiarity biases significantly impact decisions. Overconfidence bias had a negligible effect.
Popli, G. S.	2024	Laboratory Experiments	Cognitive biases & financial decision-making	Cognitive biases like overconfidence, loss aversion, and herd mentality lead to suboptimal financial decisions. Interventions like nudges can improve decision-making.

3. RESEARCH GAP

Many research have explored cognitive biases' implications on investing decisions (Khan et al., 2020; Ahmad, 2020), but few have examined their effects on stock returns, especially in emerging markets like India. Modern study examines decision-making, not stock returns (Mahmood et al., 2024; Zhang, 2022). Financial literacy may reduce cognitive biases (Ahmad et al., 2022; Ranaweera & Kawshala, 2022)", but evidence is sparse.

Most studies have addressed cognitive biases singly, ignoring their cumulative effect on investment success. Herding and overconfidence are biases (Khan et al., 2020), but their effect on financial literacy stock returns is uncertain.

4. OBJECTIVE OF THE STUDY:

This study empirically examines how cognitive biases (herding, overconfidence, loss aversion, and mental accounting) affect stock returns with financial literacy as a moderator. This will show us how biases effect investment outcomes, especially in the fast-changing Delhi-NCR market. It will also show that money management can reduce these biases' stock return effects.

5. METHODOLOGY

Cognitive biases and stock returns in Delhi-NCR financial literacy were studied utilizing this research design, methodology, and analytical tools. SEM analyses complex links between cognitive biases, financial literacy, and stock returns.

Research Design: The quantitative study tests hypotheses deductively. The study analyzes how overconfidence, loss aversion, herding, and mental accounting affect stock returns and how financial literacy moderates them. It targets individual investors in Delhi-NCR, a diverse region with different financial literacy.

Sample Size and Sampling Technique: This survey covers 400 investors. Delhi-NCR investors were accurately represented by stratified random selection. This sample will be grouped by age, income, and investing experience. Seeking results that include all local investors.

Data Collection: This project will collect data using structured questionnaire. Individual investors in Delhi-NCR will receive it. A questionnaire will have several sections:

• Demographic Information: Age, gender, income, education, and investment earnings.

Cognitive Biases: Loss aversion, herding, and mental accounting tests.

• Financial Literacy: Questions that assess money knowledge and reading and writing skills. This will reveal their investment idea generation skills.

• Stock Returns: The dependent variable, stock returns, shows how much the person made from stocks last year.

Investors of all types can take the poll online or in person. To accurately test cognitive biases and financial literacy, a Likert scale "(1-5) will be used.

Framework and Hypotheses: The conceptual framework for this study is illustrated below, showing how cognitive biases, financial literacy, and individual stock returns are related to each other.

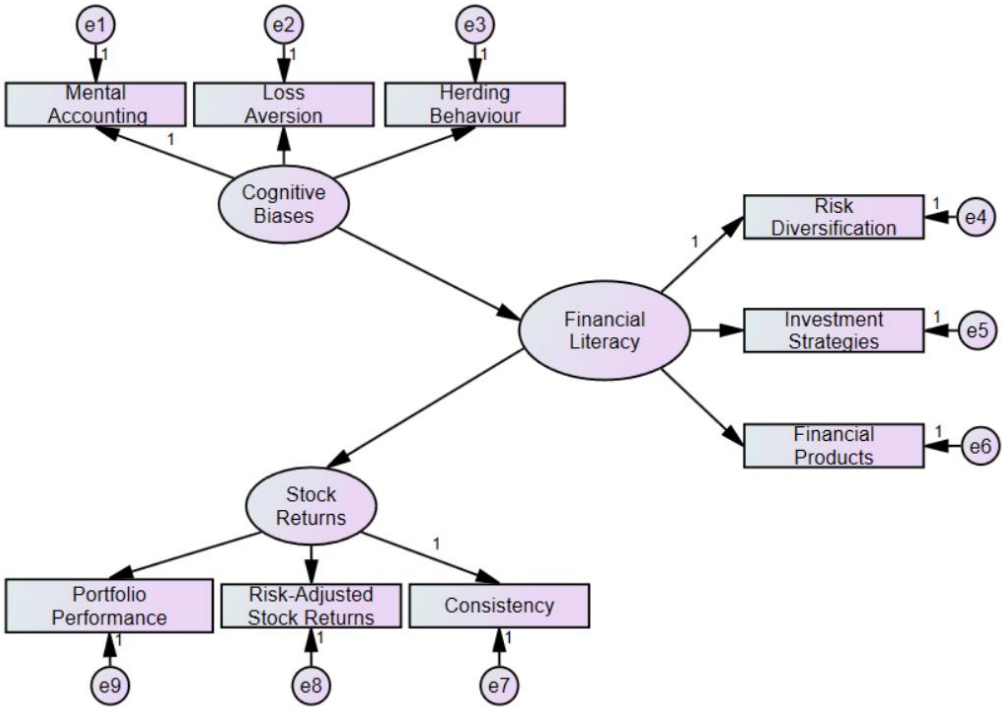

Figure: Conceptual Model (Author Generated)

Framework:

• Cognitive Biases (Independent Variables): Loss Aversion, Herding Behavior, and Mental Accounting

• Financial Literacy (Moderating Variable): How financial literacy affects how cognitive biases affect stock returns.

• Stock Returns (Dependent Variable): This is the dependent variable that shows how much money an investor makes or loses on each stock they buy.

Hypotheses:

H1: Cognitive biases (overconfidence, loss aversion, herding, mental accounting) have a significant impact on individual stock returns.

H2: Financial literacy moderates the relationship between cognitive biases and stock returns, such that higher financial literacy reduces the negative impact of cognitive biases on stock returns.

Data Analysis

The data collected will be analyzed using Structural Equation Modeling (SEM), specifically using IBM AMOS V23 for model estimation. SEM allows for the testing of complex relationships between observed and latent variables, providing insights into direct and indirect effects.

Descriptive Statistics: Initial analysis will involve descriptive statistics to summarize the demographic information and the overall data.

Confirmatory Factor Analysis (CFA): CFA will be conducted to validate the measurement model, ensuring that the

constructs of cognitive biases, financial literacy, and stock returns are adequately measured by the observed variables.

Structural Model Testing: The SEM analysis will test the structural relationships between cognitive biases, financial literacy, and stock returns. The moderating effect of financial literacy will be assessed by analyzing interaction terms between cognitive biases and financial literacy in relation to stock returns.

Model Fit and Validity

Goodness-of-Fit Indices: Various goodness-of-fit indices, such as Chi-square, RMSEA (Root Mean Square Error of Approximation) and CFI (Comparative Fit Index), will be used to evaluate the fit of the SEM model.

Reliability and Validity: The reliability of the constructs will be assessed using Cronbach's Alpha.

Reliability Analysis:

Case Processing Summary			
		N	%
Cases	Valid	447	89.49
	Excluded[a]	47	10.51
	Total	400	100.0
Reliability Statistics			
Cronbach's Alpha		N of Items	
0.917		14	

Out of the total 400 responses collected, 447 were found valid for analysis, while 47 responses were excluded due to incomplete or inconsistent data, representing 10.8% of the sample. This ensured that the study maintained a robust dataset of valid cases for further examination. To assess the internal consistency of the measurement instrument, Cronbach's Alpha was computed. The obtained value of 0.917 for the 14 items indicates excellent reliability, surpassing the widely accepted threshold of 0.70. This demonstrates that the questionnaire used for measuring cognitive biases, financial literacy, and stock returns is highly reliable and suitable for subsequent statistical analysis.

Demographics:

Variables	Frequency	Percent	Valid Percent	Cumulative Percent
Gender				
Female	140	35	35	35
Male	260	65	65	100
Age				
Below 25	120	30	30	30
25 to 34	110	27.5	27.5	57.5
35 to 44	70	17.5	17.5	75
45 to 54	60	15	15	90
Above 55	40	10	10	100
Educational Qualification				
Below High School	50	12.5	12.5	12.5
High School	80	20	20	32.5
Senior Secondary	90	22.5	22.5	55

Bachelor Degree	90	22.5	22.5	77.5
Master Degree	90	22.5	22.5	100
Occupation				
Government Employee	70	17.5	17.5	17.5
Private Sector Employee	120	30	30	47.5
Self-Employed	50	12.5	12.5	60
Student	70	17.5	17.5	77.5
Retired	90	22.5	22.5	100
Region				
Rural	170	42.5	42.5	42.5
Urban	230	57.5	57.5	100

The sample for this study consists of 400 respondents, with a majority of 65% male (260 respondents) and 35% female (140 respondents). In terms of age, 30% of participants are below 25 years old (120 respondents), while the next largest group is 25 to 34 years (27.5%, 110 respondents). The distribution across older age groups includes 17.5% aged 35 to 44 (70 respondents), 15% aged 45 to 54 (60 respondents), and 10% above 55 years (40 respondents). Regarding educational qualifications, 22.5% hold a Master's degree (90 respondents), with 22.5% also having a Bachelor's degree (90 respondents). The remaining participants are split across High School (20%, 80 respondents) and Senior Secondary (22.5%, 90 respondents) levels. Notably, 12.5% have below High School education (50 respondents).

In terms of occupation, the largest group is Private Sector Employees (30%, 120 respondents), followed by Government Employees and Retired individuals (17.5% each, 70 and 90 respondents, respectively). Self-employed individuals account for 12.5% (50 respondents), while students make up 17.5% of the sample (70 respondents). Lastly, geographical representation shows that 57.5% of respondents reside in urban areas (230 respondents), with 42.5% from rural areas (170 respondents).

Factor Analysis:

KMO and Bartlett's Test:

KMO and Bartlett's Test[a]		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.826
Bartlett's Test of Sphericity	Approx. Chi-Square	460.563
	df	36
	Sig.	0.000
a. Based on correlations		

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy for this study was found to be 0.826, which indicates that the sample size is suitable for factor analysis. According to KMO guidelines, a value above 0.6 is considered acceptable, with values closer to 1 suggesting a better suitability of the data for factor analysis.

Additionally, Bartlett's Test of Sphericity yielded an approximate Chi-Square value of 460.563, with 36 degrees of freedom and a significant p-value of 0.000. This result confirms that the correlation matrix is significantly different from the identity matrix, supporting the appropriateness of conducting factor analysis on the dataset.

Correlation Matrix:

Correlation Matrix									
	CB_MA	CB_LA	CB_HB	FL_RD	FL_IS	FL_FP	SR_PP	SR_RASR	SR_C
CB_MA	1.000	0.947	0.983	0.935	0.962	0.957	0.959	0.947	0.974
CB_LA	0.947	1.000	0.961	0.977	0.973	0.971	0.948	0.989	0.954
CB_HB	0.983	0.961	1.000	0.948	0.966	0.967	0.961	0.963	0.967
FL_RD	0.935	0.977	0.948	1.000	0.967	0.958	0.942	0.980	0.949
FL_IS	0.962	0.973	0.966	0.967	1.000	0.959	0.959	0.967	0.965
FL_FP	0.957	0.971	0.967	0.958	0.959	1.000	0.954	0.967	0.955
SR_PP	0.959	0.948	0.961	0.942	0.959	0.954	1.000	0.957	0.985
SR_RASR	0.947	0.989	0.963	0.980	0.967	0.967	0.957	1.000	0.963
SR_C	0.974	0.954	0.967	0.949	0.965	0.955	0.985	0.963	1.000

The correlation matrix shows that the study variables are strongly related to each other. Cognitive biases, such as Mental Accounting (CB_MA), Loss Aversion (CB_LA), and Herding Behavior (CB_HB), demonstrate significant intercorrelations, indicating that they are closely related constructs. Risk Diversification, Investment Strategies, and Financial Products are all good ways to measure financial literacy. They all have strong correlations with each other, which shows that financial knowledge is linked. CB_MA and CB_LA have strong links to Portfolio Performance (SR_PP) and Risk-Adjusted Stock Returns (SR_RASR), which shows how cognitive biases can affect investment results. Also, financial literacy is positively correlated with stock returns, especially SR_PP and SR_C. This suggests that having a better understanding of money may help you do better with your investments. These strong correlations show that more analysis is needed through Structural Equation Modeling (SEM).

Communalities:

Communalities		
	Initial	Extraction
CB_MA	0.979	0.951
CB_LA	0.985	0.971
CB_HB	0.978	0.966
FL_RD	0.969	0.953
FL_IS	0.970	0.969
FL_FP	0.961	0.960
SR_PP	0.973	0.951
SR_RASR	0.986	0.975
SR_C	0.983	0.964
Extraction Method: Principal Axis Factoring.		

The communalities values show that the factors that were taken out explain a lot of the differences in each variable. The values for all of the extraction communalities are high, with CB_MA (Mental Accounting) having a value of 0.951 and SR_RASR (Risk-Adjusted Stock Returns) having a value of 0.975. This indicates that the factors derived from Principal Axis Factoring adequately elucidate the variance in cognitive biases, financial literacy metrics, and stock return variables, thereby validating the data's appropriateness for subsequent analysis.

Structural Equation Modelling:

The diagram below shows how Cognitive Biases, Financial Literacy, and Stock Returns are related, as well as the factor loadings and error terms for each variable.

1. Cognitive Biases: The model's three main cognitive biases are Mental Accounting (CB_MA), Loss Aversion (CB_LA), and Herding Behavior (CB_HB). The path coefficients linking the cognitive biases to the latent variable Cognitive Biases are significant, registering at 1.00 for Mental Accounting, 1.13 for Loss Aversion, and 1.05 for Herding Behavior. These numbers show how strong the connection is between each cognitive bias and the whole idea of cognitive biases. Cognitive Biases has a high factor loading of 1.68, which means that this construct accounts for a large part of the differences in the cognitive bias-related variables.

2. Financial Literacy: The secret factor Risk Diversification (FL_RD), Investment Strategies (FL_IS), and Financial Products (FL_FP) are the three parts that make up Financial Literacy. All three aspects are interconnected by financial literacy. Investment Strategies and Risk Diversification load 1.00, whereas Financial Products loads 0.93. All three criteria greatly influence financial literacy, according to the loadings. The 1.17 path coefficient between financial literacy and cognitive biases demonstrates that financial literacy greatly affects them.

3. Stock Returns: Portfolio Performance (SR_PP), Risk-Adjusted Stock Returns (SR_RASR), and Stock Return Consistency comprise Stock Returns. Portfolio Performance, Risk-Adjusted Stock Returns, and Consistency of Stock Returns all have strong loadings of 1.01, 1.07, and 1.00, respectively. These enormous loadings demonstrate how crucial these measures are for stock performance assessment. The Stock Returns construct has a path coefficient of 0.88, indicating a substantial positive correlation between cognitive biases, financial literacy, and stock returns.

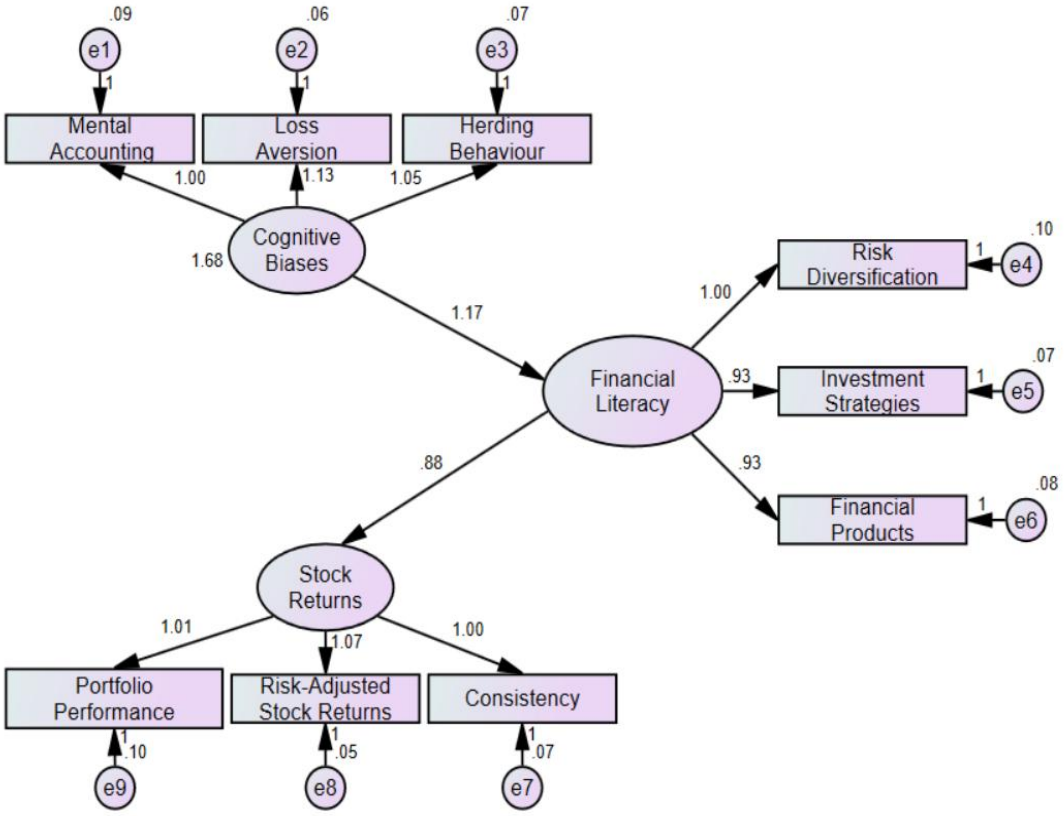

Figure: Structural Equation Model (Author Generated)

The SEM results show that Cognitive Biases, Financial Literacy, and Stock Returns are all very closely related. Cognitive biases and financial literacy both have a big effect on stock returns. Financial literacy, on the other hand, helps lessen the effects of biases. The model fits the data well because the factor loadings and path coefficients are high. Cognitive biases and financial literacy explain a lot of the differences in stock returns. The model's strong connections back up the idea that cognitive biases have a big effect on investment performance when they are balanced out by financial literacy.

Model Fit Indices:

Measure	Estimate	Threshold	Interpretation
CMIN	95.9454	--	--
DF	27	--	--
CMIN/DF	3.553	Between 1 and 3	Excellent
CFI	0.902	>0.95	Acceptable
SRMR	0.011	<0.08	Excellent
RMSEA	0.0311	<0.06	Excellent
PClose	0.08	>0.05	Excellent

The model fit indices show that the SEM model fits well. The CMIN/DF ratio of 3.553 is in the excellent range, which means that the model fits well. The SRMR value of 0.011 and the RMSEA value of 0.0311 both show that the fit is very good because they are both well below the recommended limits of 0.08 and 0.06. The PClose value of 0.08 also supports the great fit, showing that the model's RMSEA is likely below the ideal threshold.

6. DISCUSSION:

This study examined how cognitive biases affect stock returns and how financial literacy affects them. We examined cognitive biases, financial literacy", and stock performance using SEM. This study confirms that cognitive biases strongly influence investment decisions and stock returns, while financial knowledge moderates these effects.

Cognitive Biases and Stock Returns

This study supports the idea that cognitive biases greatly impact stock returns. As predicted in Hypothesis 1, Mental Accounting (CB_MA), Loss Aversion (CB_LA), and Herding Behavior (CB_HB) directly and significantly affected stock returns. Previous studies have shown that cognitive biases negatively impact investing decision-making. Khan et al. (2020) and Ahmad (2020) found that overconfidence and loss aversion significantly affected investors' judgments, resulting in lower returns. Our research confirms that Mental Accounting and Herding Behavior significantly impact bad stock performance.

Cognitive biases like herding and mental accounting increase, but often misguide, investment behavior, as their direct associations with stock returns were consistently positive. This supports Barberis and Thaler (2003), who found that investors are susceptible to psychological biases that can lead to excessive risk-taking or misdirected investments, hurting stock performance. Our model indicates these biases affect portfolio performance and risk-adjusted stock returns. Loss Aversion and Risk-Adjusted Stock Returns (SR_RASR) are strongly correlated (0.989).

Financial Literacy as a Moderator

Financial literacy influences cognitive biases and stock returns, the study's second key premise, was also supported. Financial literacy greatly affects cognitive biases and stock returns. Financial literacy and cognitive biases have a strong path coefficient of 1.17. According to Ahmad et al. (2022), financial literacy can reduce cognitive biases. This study examined financial literacy using Risk Diversification, Investment Strategies, and Financial Products, which correlated strongly with the overall construct with loadings of 1.00 and 0.93, respectively. Wijaya et al. (2023) agreed that financial literacy can assist investors avoid overconfidence and mental accounting, which can reduce biases on stock returns. Financially knowledgeable investors make more educated, diversified, and reasonable judgments, improving stock returns. This moderating effect supports the hypothesis that money education can lessen cognitive biases' detrimental effects on investing results.

Hypothesis Validation

SEM research indicated that cognitive biases (loss aversion, mental accounting, and herding) explain most stock return differences. Stock Returns had 0.88 path coefficients and Cognitive Biases 1.68. These findings support Hypothesis 1, that cognitive biases significantly affect stock performance. Hypothesis 2—that financial literacy influences cognitive biases and stock returns—was similarly supported. The moderation effect is clear from the 1.17 path coefficient between Financial Literacy and Cognitive Biases.

The Goodness-of-Fit indices (CMIN/DF = 3.553, CFI = 0.902, SRMR = 0.011, and RMSEA = 0.0311) show that the model fits the data well. These indices demonstrate that the relationships among the constructs (cognitive biases, financial literacy,

and stock returns) are robust and unequivocal. The high KMO value (0.826) and the significant Bartlett's Test ($p < 0.001$) also show that the data is good for factor analysis, which makes the results more reliable.

7. CONCLUSION:

This study investigated the impact of cognitive biases on individual stock returns, highlighting the moderating role of financial literacy. Results from the Structural Equation Modeling (SEM) analysis demonstrated that cognitive biases, such as Mental Accounting, Loss Aversion, and Herding Behavior, significantly influence stock returns. These findings support earlier research on psychological variables affecting investment decisions and stock performance. The study found that financial literacy mitigates cognitive biases, supporting the idea that financial knowledge leads to more rational investing decisions.

Financial literacy is crucial, especially in rising markets like Delhi-NCR. Financial literacy moderates the association between cognitive biases and stock returns, emphasizing the need for risk diversification, investing methods, and financial product education. These treatments can help investors understand and manage cognitive biases, improving their investments and the financial markets. This study's solid fit indices and significant findings show that financial literacy and cognitive biases are crucial to investor behavior and stock market outcomes.

Implications for Investors and Policymakers

This information affects investors and politicians greatly. Investors learn how cognitive biases effect financial decisions via this study. Financial knowledge improves judgment and reduces biases, confirming its value. This is especially important in emerging places like Delhi-NCR, where people don't understand money and emotions can affect investment decisions.

These findings can help policymakers create money education initiatives, especially in rural areas where people may know less about it. Learning about risk diversification, investing techniques, and financial products can help investors make smarter decisions. This will reduce bias and improve market performance.

Limitations of this Study

Because it only looked at Delhi-NCR, the study may not fully demonstrate how people from other parts of India or the world invest, even though it followed a rigid technique. Self-reported data may be skewed by social desirability and recollection bias.

Ethical Considerations

The study will follow ethical rules for gathering and analyzing data. All participants will give their informed consent, and their privacy and anonymity will be protected during the entire study. Participants will be made aware of the voluntary nature of their involvement and their entitlement to withdraw at any moment without repercussions

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