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Impact of Behavioural Factors on Real Estate Investment Decisions – An Analysis

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Abstract:

Behavior finance challenges the conventional wisdom that capitalists are rational and that markets are efficient. Rather, it presumes that decision-making is significantly influenced by behavioural factors. Capitalists make decisions that deviate from logic due to common prejudices such as social influences, herding tendencies, mental accounting, and verification tendency, which affect their financial outcomes. Through a thorough analysis of the body of available evidence, this study attempts to develop a theoretical framework for identifying the precise ways in which these behavioural factors affect investor behavior and market dynamics. Additionally, the study emphasizes the ways via which these predispositions demonstrate their significance to real estate investing decisions. The investigator employed quantitative methodologies where the data was collected from 506 real estate investors on various behavioural aspects which influence the real estate investment decision. SEM model is applied to draw the conclusions.

Keywords: *Investor Sentiment, Behavioural factors, SEM Application, Decision-making, Measurement model.*

INTRODUCTION:

Real estate investment has grown quickly in both quantity and complexity due to its high value and value-added space. Real estate, as an investment property, is susceptible to speculation due to its inherent qualities, but excessive speculation will unavoidably endanger the financial system. However, the investing behavior of micro-subjects is rarely examined in the current literature on financial risk and real estate investment.

In the real estate market future property prices cannot be forecast using the information currently available. The model and paradigm of traditional financial theory, however, were limited to a wholly rational analytical framework that ignored the real decision-making behavior of investors,

and it was discovered in the ensuing decades that the model was incompatible with the actual investment behavior of investors in the financial/ real estate market. There are numerous instances that occur in the real estate investment decisions which the conventional finance theory may not explain.

Various behavioural finance theories such as Prospect Theory – Kahneman & Tversky (1979), Herding Behaviour Theory – Banerjee (1992), Anchoring Theory – Tversky & Kahneman (1974), Mental Accounting – Thaler (1985), Status Quo Bias – Samuelson & Zeckhauser (1988), Overconfidence Bias – Barber & Odean (2001), Regret Aversion – Loomes & Sugden (1982) have been developed to study the role of behavioural factors in investment decision making.

One of the most effective tools for analysing the behavioural elements influencing investment decisions is structural equation modelling (SEM). SEM is a powerful statistical technique that allows researchers to examine complex relationships between a wide range of factors, including direct and indirect effects. Unlike traditional regression techniques, SEM can model latent variables, which represent unobservable psychological traits such as investor mood, risk perception, and cognitive biases. Researchers can better understand how behavioral factors influence investing decisions and identify the key behavioural concepts influencing investor behavior by employing SEM.

REVIEW OF LITERATURE:

1(1 Aditi Nema, 2 Dr. Mamta Manshani 2025)

The study of behavioral biases and how they impact spending decisions shows that psychological factors have a substantial impact on real estate investment habits. This study looked at several prevalent biases and their effects on market characteristics and decision-making, such as reduction hostility, herding behavior, overconfidence, and verification bias. The data suggests that recognizing these biases can improve decision-making for both individual capitalists and economic experts. Entrepreneurs may easily create strategies to mitigate these biases' effects once they comprehend how they operate, which can enhance investment functionality and lower risk.

2 (Mr Lakavath Raju Aug 2024).

The study emphasizes how behavioral biases such as hindsight, regret aversion, and representativeness have a big influence on investment choices. Investors' decision-making and interpretation of historical performance may be impacted by these biases. Bias of Self-attribution and Overall Optimal Bias exhibit inconsistent results, whereas other biases like Cognitive Dissonance, Herd Instinct, and Loss Aversion show weaker or non-significant connections. All things considered, the results highlight the intricacy of behavioral factors influencing investment choices and imply that knowledge of these biases can yield insightful information about investor behavior.

3 (YatmokoBaroto (June 2024).

The financial literacy has a major impact on several aspects of people's financial behaviour and

investing decisions. In addition to being positively correlated with wiser and better investment selections, financial literacy can also lessen biases in the process of making investment decisions. Additionally, better financial management, risk dispositions, investment preferences, and knowledge of investment scams are all associated with financial literacy. Thus, raising public financial literacy can have a significant positive impact on people's ability to manage their money more effectively, choose investments more sensibly, and take on fewer needless financial risks.

4 (Gerald Plassmann, Stanford University 2024).

Behavioral finance has revolutionized the understanding of investor behavior and market anomalies by highlighting the pervasive influence of cognitive biases and emotions on financial decision-making. By departing from the traditional assumption of rationality and incorporating insights from psychology, behavioral finance has provided a richer and more nuanced framework for analysing financial markets.

5 (Ayub Ahamed KS March 2024):

The field of behavioral finance emerged because of difficulties facing the traditional finance discipline. Behavioral finance's central theme is that investing decisions are not always influenced by rationality. Behavioral finance considered various behavioral biases according to people's social and emotional awareness and tolerance. The current study aims to ascertain how behavioral biases affect people's social and emotional recognition and tolerance when making investing decisions. The current study aims to determine how behavioral biases impact people's investment choices. Current research mainly looks at four behavioral biases—overconfidence, anchoring, disposition effect, and herding—to determine the influence. The study found that disposition and anchoring significantly affect the investment.

6 (Akshita Singh¹✉, Shailendra Kumar¹, Utkarsh Goel¹ & Amar Johri 2023)

Investing in real estate has increased significantly in recent years. It has been judged to be highly diversified in the portfolios of investors. Additionally, because people feel that having a roof over their heads is critical, the real estate market has been emotionally significant for them. Investors' decision-making process for real estate is like that of other assets, which has led to the study of behavior and associated biases. Behavioral finance holds that people do not always base their decisions on logic and facts. Their prejudice towards aspects results from their frequent irrational decisions based on their expertise or opinions. Research on how behavioral biases impact real estate perspectives is still lacking, even though these biases are significant when making judgments.

7 (Dr. Rohit Kishore, University of Western Sydney, Australia 2022)

Analysing the property market, which is segregated, lacks access to high-quality data, is less informed, inefficient, and greatly influenced by human factors, requires behavioral-based research. This is because the human factor in the stock market—which is more efficient than the real estate

market, more logical, and has access to high-quality data—is being increasingly examined. Future property analysts will therefore have the difficulty of precisely evaluating the human elements at play in the various phases of property decision-making prior to developing trading and investing strategies that draw on both traditional and behavioral framework knowledge. The foundation for developing such a thorough methodology is laid by the study and discussion of behavioral research problems in this paper.

8 (Dr. Saima Tabassum Feb 2021).

This study found a relationship between behavioral traits and the investments made by investors on the Pakistan Stock Exchange. The moderating influence of financial literacy on behavioral traits and investing decision-making was also investigated in this study. A structured 5-point Likert scale and multiple-choice questions were used to poll 98 investors who trade on the Pakistan Stock Exchange to achieve this goal.

9 (Paul Gallimore 2021)

Information is essential while making real estate investment decisions. Investors might use their sense of emotion in addition to concrete data on market action. Investor sentiment-based decisions in the financial markets are typically characterized as irrational. This conclusion could not always be true in the real estate market, and it might not make sense for investors to take investor sentiment into account. In any event, using sentiment data will only make sense if the methods for understanding and analysing it offer accurate predictions of the behavior of other investors.

10 (Atinuke Bogunjoko 2021)

Was used to identify significant cognitive and psychological biases impacting investing decisions in a study on the Nigerian real estate stock market. The findings demonstrated that overconfidence, anchoring bias, and risk aversion all significantly influenced investors' decision-making. This study highlighted the importance of incorporating behavioral insights into real estate investment models to account for deviations from rationality.

11 (Accounting and Finance, Durham University, John Snow College 2019)

Examples of behavioral finance that can more accurately explain unusual events in the real estate market and examine the investing behavior of real estate investors in a manner consistent with the situation of the real estate 311 market today include the overconfidence theory and the herd effect. the actions taken by real estate investors. The elements show how the herding effect and overconfidence lead to characteristics such as emotional support, blindness, uniformity, and collective irrationality in real estate investors' investments, which significantly raises market uncertainty. Another interesting direction for future research is to analyse and assess investor mood and collective irrationality using the overconfidence theory and the herding effect theory.

RESEARCH GAP:

Few studies have been conducted in the Indian real estate market to evaluate the level of awareness and problems that buyers encounter when they are buying a property, as well as to look into the connections between market forces and residential property buyers' purchasing behavior. From the review of the literature. Several studies have been carried out in other countries to ascertain the influence of various factors, especially behavioral characteristics, on real estate purchasing decisions. Particularly when it comes to figuring out how both behavioral and rational factors affect residential property buyers' decisions, there are not enough behavioral research studies on the Indian real estate market. According to earlier behavioral finance studies, the primary biases influencing investors' decision-making include mental accounting, personality, heuristics, herd mentality, and overconfidence.

OBJECTIVES:

The main objective of this study is to test how far the behavioural factors impact the investment decision in real estate.

Research Hypotheses.

Based on the available framework, the following broad hypotheses have been framed for this study:

H₀: There is no significant impact of behavioural factors on Real estate investment decisions

H₁: There is a significant impact of behavioural factors on Real estate investment decisions

Further, the following sub-hypotheses have been developed:

- a. **H₀**: Overconfidence bias does not affect investment decisions.
- b. **H₀**: Anchoring bias does not influence investment decisions.
- c. **H₀**: Mental accounting does not influence investment decisions.
- d. **H₀**: Confirmation bias does not influence investment decisions.
- e. **H₀**: Past performance heuristic does not affect investment decisions.
- f. **H₀**: Loss aversion does not influence investment decisions.
- g. **H₀**: Regret aversion does not influence investment decisions.
- h. **H₀**: Herding behavior does not affect investment decisions.
- i. **H₀**: Fear-based decision-making does not influence investment decisions.
- j. **H₀**: Emotional attachment to property does not influence investment decisions.
- k. **H₀**: Peer influence does not affect investment decisions.
- l. **H₀**: Market trends and speculation do not affect investment decisions.
- m. **H₀**: Social proof does not affect investment decisions.
- n. **H₀**: Family influence does not affect investment decisions.

RESEARCH METHODOLOGY:

The study adopts a survey method. The required information is collected from primary and secondary sources. The primary data is collected from Hyderabad investors in different areas. Investing in real estate is one of the most significant financial decisions that individuals and organizations make, and it is influenced by both behavioural and rational factors.

a) Research Design: The study has adopted an exploratory and descriptive approach

b) Sources of data: The data have been collected from primary and secondary sources. The secondary data have been collected from Journals, reports, e-resources etc.

c) Data Instrument: The data have been collected by administering a questionnaire which is on a five-point scale. Weights were assigned to the options as 1) Strongly disagree 2) Disagree 3) Neutral 4) Agree 5) Strongly agree respectively. The questionnaire taking clues from available literature and preparing questions using scaling techniques.

d) Sample design: The data have been collected from Hyderabad city of Telangana State, A sample of 506 respondents is a sufficient sample based on sampling at 5% margin of error as per Krejci and Morgan Table of Sampling. The data collected was on a purposive sampling.

e) Tools: The statistical tools such as factor analysis, SEM model, have been used depending on the data during the study.

SCOPE AND PERIOD OF STUDY:

The present study is confined to the behavioural factors and their impact on real estate investment. The primary data is collected in 3 months from October to December 2024.

Measurement Model Analysis:

To evaluate the sample data, the partial least square (PLS) approach was used. PLS is useful for increasing the prediction power of a structural model, according to Hair Jr. et al. (2014) and Henseler et al. (2009). Furthermore, earlier research in behavioral studies suggested that a structural model with a PLS approach explains superior outcomes (Hair et al., 2012; Ting et al., 2016).

Table - 1

Construct reliability and validity

Constructs	Items	Cronbach alpha	CR	AVE
Overconfidence bias	4	0.755	0.836	0.584
Anchoring bias	4	0.729	0.811	0.589
Mental Accounting	4	0.726	0.746	0.536
Confirmation bias	4	0.711	0.884	0.542
Past performance Heuristic	4	0.746	0.846	0.551
Loss Aversion	4	0.728	0.815	0.562

Regret Aversion	4	0.707	0.829	0.579
Herding Behavior	4	0.789	0.825	0.521
Fear-Based Decision Making	4	0.715	0.756	0.526
Emotional attachment in property	4	0.719	0.853	0.536
Peer influence	4	0.776	0.825	0.548
Market Trends	4	0.734	0.816	0.589
Social proof	4	0.798	0.821	0.556
Family influence	4	0.739	0.815	0.547
Capital Appreciation	4	0.778	0.829	0.546
Profitability	3	0.746	0.814	0.549

Source: Primary data

The investigation of convergent validity and construct reliability is shown in Table - 1. Overconfidence bias = 0.755, anchoring bias = 0.729, mental accounting = 0.726, confirmation bias = 0.711, past performance heuristic = 0.746, loss aversion = 0.728, regret aversion = 0.707, herding behavior = 0.789, fear-based decision making = 0.715, emotional attachment in property = 0.719, peer influence = 0.776, market trends = 0.734, social proof = 0.798, family influence = 0.739, capital appreciation = 0.778, and profitability = 0.746, each of these Cronbach-alpha values.

The corresponding composite reliability (CR) values are as follows: overconfidence bias = 0.836, anchoring bias = 0.811, mental accounting = 0.746, confirmation bias = 0.884, past performance heuristic = 0.846, loss aversion = 0.815, regret aversion = 0.829, herding behavior = 0.825, fear-based decision making = 0.756, emotional attachment in property = 0.853, peer influence = 0.825, market trends = 0.816, social proof = 0.821, family influence = 0.815, capital appreciation = 0.829, and profitability = 0.814.

All things considered, the model's internal consistency for our variables was adequate. Furthermore, as suggested by Hair et al. (2014), Table 2 further illustrated that our study variables exhibit a suitable level of construct variation and meet the minimum criterion of 0.50 for average variance extracted (AVE).

Utilizing the heterotriat and monotriat (HTMT) correlation matrix, the constructs' discriminant validity was evaluated. According to Henseler et al. (2016), the HTMT correlation matrix is shown in Table 4.6, where all correlation values are less than 0.85. As a result, the measurement model evaluation shows that the constructs have sufficient levels of discriminant and convergent validity to conduct structural model analysis.

Table - 2

HTMT criteria

	Investment Decisions
Behavioural factors	0.680

Structural Model Analysis:

Testing direct links between constructs is the goal of structural model analysis without mediation. Without the use of a mediator, one can assess the direct relationship between independent and dependent variables and determining their magnitude, direction, and importance. Without the use of mediators, structural model analysis (without mediation) concentrates on the direct correlations between independent and dependent variables.

Key Points:

- Examines direct effects, such as $X \rightarrow Y$.
- Assesses path coefficients, which measure the direction and intensity of links.
- Evaluates the importance of associations (p-values).
- Examines R2 to determine the amount of variance that may be explained.

Table - 3

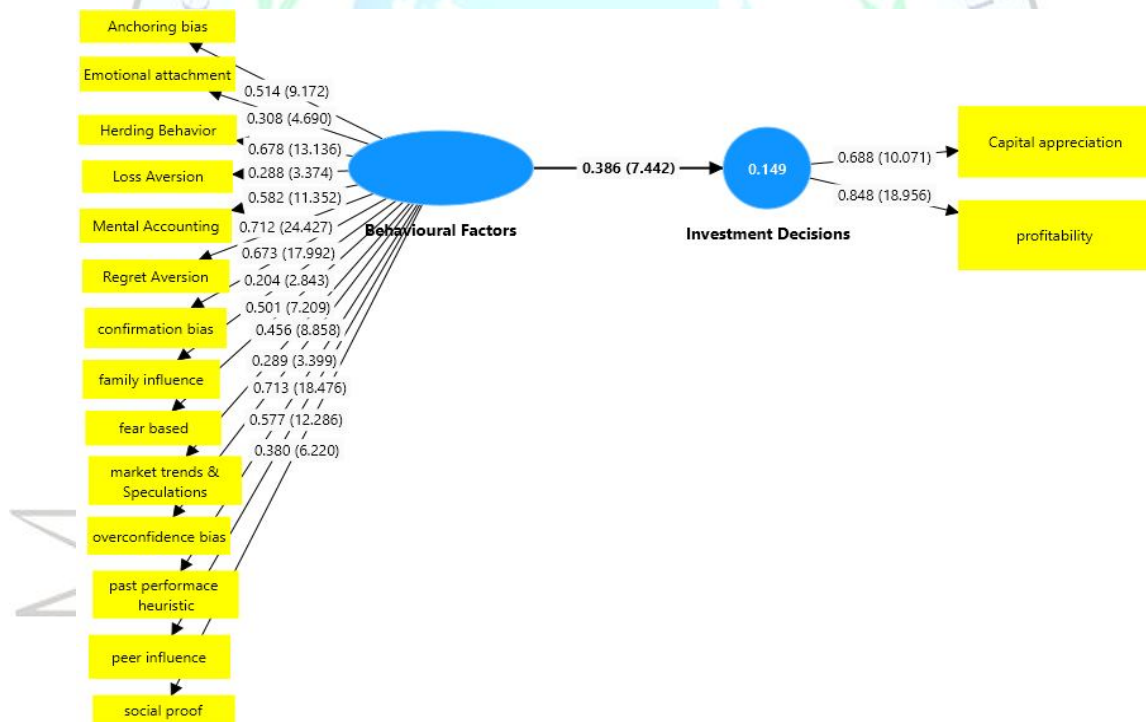
Path Coefficients

Hypothesis	Regression Path	Standard deviation	T statistics	P values	Remarks
H1	Anchoring bias -> Investment Decisions	0.056	9.172	0.000	Supported
H2	Emotional attachment -> Investment Decisions	0.066	4.69	0.000	Supported
H3	Herding Behavior -> Investment Decisions	0.052	13.136	0.000	Supported
H4	Loss Aversion -> Investment Decisions	0.085	3.374	0.001	Supported
H5	Mental Accounting -> Investment Decisions	0.051	11.352	0.000	Supported
H6	Regret Aversion -> Investment Decisions	0.029	24.427	0.000	Supported
H7	Confirmation bias -> Investment Decisions	0.037	17.992	0.000	Supported
H8	Family influence -> Investment Decisions	0.072	2.843	0.004	Supported

	Decisions				
H9	Fear based -> Investment Decisions	0.07	7.209	0.000	Supported
H10	Market trends & Speculations -> Investment Decisions	0.051	8.858	0.000	Supported
H11	Overconfidence bias -> Investment Decisions	0.085	3.399	0.001	Supported
H12	Past performance heuristic -> Investment Decisions	0.039	18.476	0.000	Supported
H13	Peer influence -> Investment Decisions	0.047	12.286	0.000	Supported
H14	Social proof -> Investment Decisions	0.061	6.22	0.000	Supported
Overall model	Behavioral factors -> Investment Decisions	0.052	7.442	0.000	Supported

Source: Primary data

Every association relates to a hypothesis and is examined using the bootstrapping method, as indicated in the figure.



The study shows that a variety of behavioral biases have a substantial impact on investing choices, and all the hypothesized associations are statistically supported. A highly significant t-statistic of 9.172 (p = 0.000) and a regression path coefficient of 0.056 demonstrate anchoring bias (H1), which suggests that investors frequently use initial reference points while making financial decisions. As demonstrated by a coefficient of 0.066 and a t-statistic of 4.69 (p = 0.000), emotional

attachment (H2) also plays a significant effect in investment decisions, indicating that emotional ties to assets influence logical decision-making.

With a regression coefficient of 0.052 and the highest t-statistic among the biases at 13.136 ($p = 0.000$), herding behavior (H3) demonstrates a considerable influence on investing decisions, emphasizing investors' propensity to follow the herd. The idea that fear of losses frequently outweighs the desire for benefits is supported by loss aversion (H4), which has a coefficient of 0.085 and a t-statistic of 3.374 ($p = 0.001$). With a coefficient of 0.051 and a t-statistic of 11.352, mental accounting (H5), which is significant at $p = 0.000$, implies that investors handle money differently based on its source or planned purpose.

The greatest t-statistic (24.427, $p = 0.000$) is shown by regret aversion (H6), confirming that investors steer clear of choices that can cause them to regret them later. With a coefficient of 0.037 and a t-statistic of 17.992, confirmation bias (H7) is likewise quite significant, suggesting that investors look for data that supports their preconceived notions. Despite having a lower t-statistic (2.843, $p = 0.004$), family influence (H8) is still significant and demonstrates how family perspectives influence investing decisions. The regression path coefficient of 0.07 and t-statistic of 7.209 ($p = 0.000$) for fear-based decisions (H9) confirm that fear has a considerable influence on investment behavior. With a coefficient of 0.051 and a t-statistic of 8.858, market trends and speculations (H10) are also significant, highlighting the fact that investment activities are influenced by external market conditions.

With a value of 0.085 and a t-statistic of 3.399 ($p = 0.001$), overconfidence bias (H11) shows that investors frequently overestimate their level of expertise and decision-making skills. With a t-statistic of 18.476 ($p = 0.000$) and a coefficient of 0.039, it is evident that the previous performance heuristic (H12) has a significant impact on investment behavior, emphasizing that past performance influences future decisions. With a coefficient of 0.047 and a t-statistic of 12.286 ($p = 0.000$), peer influence (H13) demonstrates how much social circles affect investing choices. The influence of social validation on financial decisions is further supported by social proof (H14), which has a coefficient of 0.061 and a t-statistic of 6.22 ($p = 0.000$).

The total model, which looks at how behavioral characteristics collectively affect investment decisions, has a t-statistic of 7.442 ($p = 0.000$) and a regression coefficient of 0.052. The importance of behavioral biases in influencing investor behavior is highlighted by this thorough investigation, which also highlights the need for awareness and mitigation techniques to improve logical investing decision-making.

The assumption that investors are not necessarily logical actors but are instead heavily impacted by cognitive and emotional proclivities is reinforced by these studies, which together highlight the widespread influence of psychological and social biases on investing decision-making.

The greatest effects are seen in herding behavior and regret aversion, indicating that fear of making poor choices and the propensity to follow the herd are important factors in influencing investing decisions. Furthermore, investors frequently make poor selections because of biases like confirmation bias and the previous performance heuristic, which show that they mostly rely on their preconceived notions and prior experiences. The need of external validation in financial decision-making is further highlighted by the influence of social factors, such as peer pressure, family attitudes, and social proof. These biases can occasionally result in beneficial judgments, but they can also cause systemic errors, which is why behavioral training and financial education are necessary to lessen their negative impacts.

The significance of the entire model (t-statistic = 7.442, p = 0.000) supports the idea that behavioral factors influence investment decisions collectively. The R-squared value of 0.149 suggests that these behavioral biases account for about 14.9% of the variance in investment decisions. Although this implies that other elements also influence investment decisions, the comparatively low R-squared value emphasizes how strongly behavioural inclinations influence investor decision. This research emphasizes how crucial it is to integrate behavioral finance insights into investment strategies since investors can become more disciplined by identifying these biases, which will lessen their impulsive responses to market swings and promote long-term financial stability. By using these insights, financial advisors and legislators can create treatments that lessen the negative impacts of behavioral biases and encourage more logical investing choices. Examples of these interventions include investor awareness campaigns, cognitive training, and decision-support technologies.

CONCLUSIONS OF THE STUDY:

The findings suggests that investors' perceived rationality and the underlying cognitive and emotional biases that influence decision-making diverge significantly. The creation of decision-support technologies and specialized investing techniques that can lessen the effects of these biases are also necessary to close these disparities, in addition to improved financial literacy and access to trustworthy market data. Investors and financial advisors can collaborate to increase market efficiency, lower investment risk, and achieve more sustainable, long-term financial success by developing a more thorough understanding of behavioral factors and encouraging a disciplined, data-driven investment approach. To help market players and regulators better manage the intricate dynamics of real estate investment, this comprehensive viewpoint offers a strong basis for future study and policy-making.

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