

An In-depth Analysis of the Overconfidence Bias and its Impact on Investment Decision-Making: Evidence from Indian Investors

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ABSTRACT

This study investigates the role of overconfidence in shaping investor decision-making, drawing from primary survey data of 152 respondents in Delhi, India. Overconfidence, defined as inflated self-belief in knowledge, skills, or predictive ability, is a critical behavioral bias influencing asset allocation, risk perception, and trading patterns. Using descriptive statistical analysis of questionnaire responses, the study identifies significant evidence of overconfidence among Indian investors. Findings indicate that investors frequently overestimate their ability to outperform markets, misattribute success to personal skill, underestimate risks, and engage in speculative trading. The results corroborate behavioral finance literature, highlighting overconfidence as a key determinant of suboptimal portfolio performance. This research underscores the necessity of investor education, behaviorally informed advisory frameworks, and regulatory safeguards to mitigate systemic risks posed by psychological biases.

Keywords: *Overconfidence bias; behavioral finance; investment decisions; Indian investors; trading behavior*

1. Introduction

Classical finance theories assume investors are rational, optimizing returns under conditions of full information (Markowitz, 1952; Fama, 1970). However, behavioral finance challenges this paradigm, documenting how cognitive biases systematically distort decision-making (Kahneman & Tversky, 1979). Among these, **overconfidence bias**—the tendency to overestimate one's knowledge, accuracy of information, or ability to control outcomes—plays a pivotal role in financial decision-making (Odean, 1998; Barber & Odean, 2001).

Though widely studied in developed economies, research on overconfidence in **emerging markets such as India** is limited. Given India's high retail investor participation and rapid digitalization of trading platforms, exploring behavioral biases in this context provides valuable insights.

This study therefore examines the **existence, extent, and consequences of overconfidence among Indian investors**, using primary survey evidence from Delhi-NCR.

2. Literature Review

- **Professional vs. Student Biases:** Lambert et al. (2012) demonstrated both professionals and students are vulnerable to overconfidence, though in different dimensions.

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- **Decision-making & Information Search:** Gill et al. (2018) linked overconfidence positively with decision-making behaviors, mediated by information-seeking.
- **Attribution & Illusion of Control:** Trehan & Sinha (2018) identified these biases in Indian investors.
- **Overinvestment:** Pikulina et al. (2017) experimentally showed overconfidence leads to excessive investment and risk-taking.
- **Demographic Differences:** Mishra & Metilda (2015) found men are generally more overconfident than women, with experience and education amplifying the bias.
- **Recent Evidence:** Jain et al. (2023) highlight how personality traits and financial literacy shape investment intentions through overconfidence.

Collectively, these studies confirm that **overconfidence distorts portfolio allocation, increases trading frequency, and often reduces long-term performance.**

3. Research Methodology

- **Design:** Descriptive, quantitative
- **Population:** Indian investors (college students + working professionals) in Delhi-NCR
- **Sample Size:** 152 respondents
- **Sampling:** Convenience & snowball
- **Data Collection:** Structured questionnaire (5-point Likert scale)
- **Analysis:** Descriptive & inferential statistics (MS Excel)

Survey Items included: investor self-assessment of market knowledge, risk perception, trading frequency, reliance on intuition, and reactions to portfolio performance.

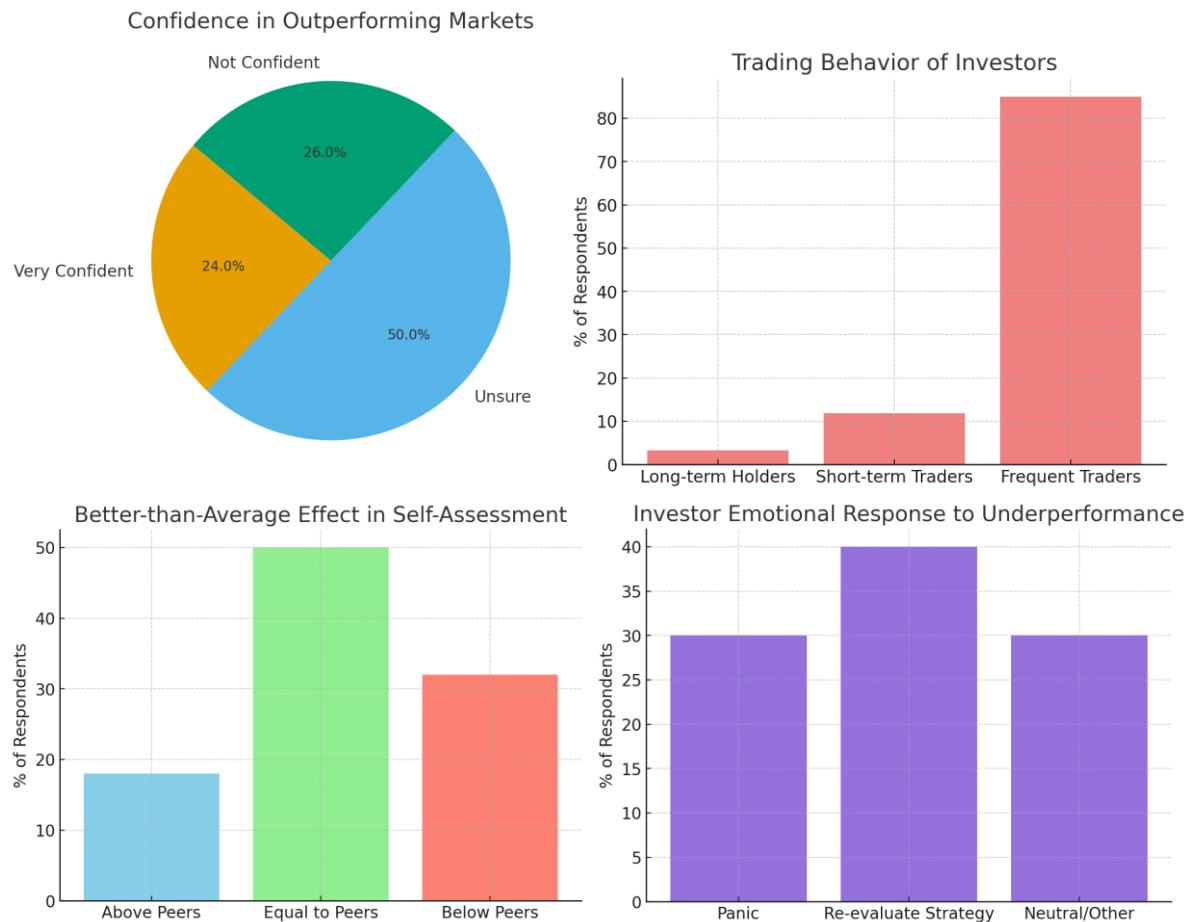
4. Data Analysis and Results

Table 1. Demographic Profile of Respondents

Category	Percentage (%)
Age 18–34	68%
Age 35+	32%
Students	42%
Working professionals	58%
Male	61%
Female	39%

Table 2. Key Findings on Overconfidence

Variable / Indicator	Results (%)
Confidence in outperforming markets	24% very confident; 50% unsure
Better-than-average effect	18% above peers; 50% equal; 32% below average
Optimism bias (next quarter)	24% confident; 26% not confident
Attribution bias	24% believed they had superior knowledge
Trading behavior	3.3% long-term holders; 11.8% short-term; majority frequent traders
Emotional response	30% panic during underperformance; 40% re-evaluate
Loss experience	19% suffered losses due to overestimation
Risk appetite	20% willing to take higher risks



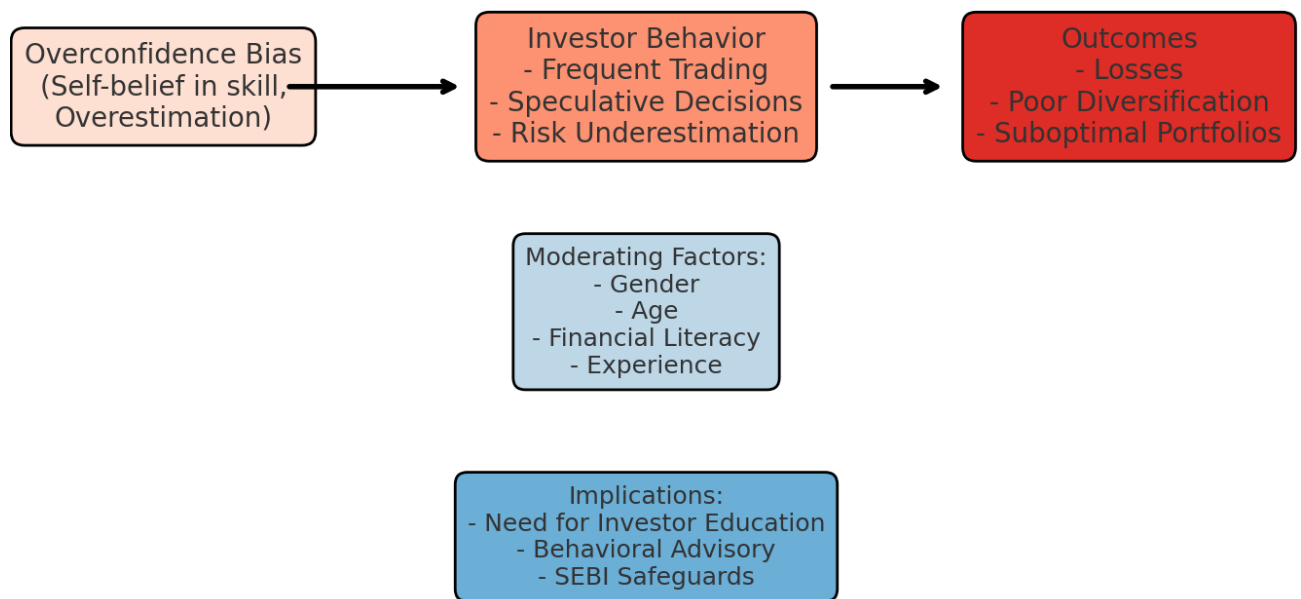
5. Discussion

The results strongly align with **behavioral finance theory**:

- Investors frequently display **overestimation of ability**, **illusion of control**, and **attribution bias**.
- Consistent with Barber & Odean (2001), frequent trading driven by overconfidence correlates with **underperformance due to costs and poor diversification**.
- Younger investors exhibit stronger optimism and risk appetite, suggesting **demographic sensitivity**.

Practical Implications:

- Financial advisors should integrate **behavioral nudges** to reduce risk-taking.
- Regulators (e.g., SEBI) must focus on **investor awareness programs** targeting overconfidence-driven speculative trading.



6. Conclusion

This study establishes the **prevalence and consequences of overconfidence bias in Indian investors**. By overestimating their predictive abilities, investors engage in excessive trading, underestimate risks, and attribute success disproportionately to personal skill. These behaviors, though psychologically rewarding, often produce **suboptimal portfolio outcomes**.

Recognizing overconfidence is essential. Investors should cultivate **disciplined decision-making strategies**, while policymakers and advisory frameworks should incorporate **behavioral safeguards** to protect retail investors. In the long term, addressing overconfidence can enhance **market stability, investor protection, and sustainable wealth creation**.

7. Limitations and Future Research

- Study restricted to Delhi-NCR; larger pan-India studies required.
- Reliance on self-reports introduces potential **response bias**.
- Future studies could:
 - Compare investor subgroups (age, gender, income).
 - Use **experimental trading simulations** to track overconfidence.
 - Examine biases in **digital platforms** (Zerodha, Groww) where **gamification may amplify overconfidence**.

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