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A Study on The Relationship Between Financial Literacy and Behavioural Biases Among Young Investors

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1. Abstract

This study examines the relationship between financial literacy and behavioural biases among young investors, addressing a critical gap in behavioural finance literature that often treats these constructs in isolation. Moving beyond the assumption that access to information alone leads to rational decision-making, the paper argues that financial literacy interacts conditionally with cognitive and emotional biases such as overconfidence, herding, loss aversion, and anchoring. Drawing on prior empirical research and behavioural theory, the study proposes a structured analytical framework to explain how varying levels of financial literacy influence investment behaviour under different market conditions. The findings suggest that while higher financial literacy reduces certain biases, it may simultaneously intensify others—particularly overconfidence—thereby challenging the linear view of investor rationality. The study concludes with practical recommendations for educators, investors, and policymakers aimed at improving financial decision-making and market stability.

Keywords: Financial Literacy, Behavioural Biases, Young Investors, Overconfidence, Herding, Loss Aversion, Behavioural Finance.

2. Introduction

2.1 Background of the Study

The rapid growth of retail participation in financial markets has been accompanied by a noticeable increase in young investors, driven by digital trading platforms, social media influence, and easier access to financial products. While this democratization of finance has expanded participation, it has also raised concerns regarding the quality of financial decision-making. Young investors often enter markets with limited experience, making them particularly vulnerable to behavioural biases that can distort judgment and lead to suboptimal investment outcomes.

Financial literacy has been widely promoted as a solution to these challenges. Defined as the ability to understand and apply financial concepts such as risk, return, diversification, and time value of money, financial literacy is assumed to enhance rational decision-making. However, real-world evidence suggests that even financially literate investors frequently exhibit irrational behaviours, indicating that knowledge alone may not be sufficient to eliminate bias.

2.2 Problem Statement

Existing literature presents mixed evidence regarding the effectiveness of financial literacy in mitigating behavioural biases. Some studies find that higher literacy reduces errors such as excessive trading and poor diversification, while others observe persistent biases—particularly overconfidence and herding—even among educated investors. This inconsistency arises from a static analytical approach that assumes a uniform relationship between literacy and behaviour.

The core problem addressed in this study is the lack of a conditional perspective that explains how financial literacy influences different behavioural biases in varying contexts. Without such a framework, educational initiatives and policy interventions risk being ineffective or misdirected.

2.3 Contribution and Significance of the Study

Financial literacy and behavioural biases play a crucial role in shaping the investment decisions of young investors. With the increasing participation of youth in financial markets, understanding how knowledge interacts with psychological factors has become essential. Traditional finance assumes that higher literacy leads to rational behaviour, but real-world evidence contradicts this assumption. Young investors often display biased decision-making despite having access to financial information. This study recognizes that financial literacy alone may not eliminate irrational behaviour. Instead, it emphasizes the conditional and complex relationship between knowledge and behavioural biases. By addressing this interaction, the study provides meaningful academic and practical insights. It highlights why education-based solutions sometimes fail to improve investment outcomes. The section outlines the major contributions and significance of the study. These contributions are relevant to theory, practice, and policy formulation.

1. **Contribution to Behavioural Finance Theory**
   This study contributes to behavioural finance by challenging the traditional assumption of fully rational investors. It explains that even financially literate individuals are influenced by cognitive and emotional biases. The research positions financial literacy as a moderating factor rather than a corrective tool. This helps in understanding mixed findings in earlier studies. The study integrates psychological behaviour with financial knowledge. This theoretical contribution enhances realism in investor behaviour models.

2. **Understanding Financial Literacy Beyond Knowledge**
   The study emphasizes that financial literacy is not limited to technical understanding of financial concepts. It shows that literacy may improve awareness but not necessarily emotional control. Young investors may misuse knowledge, leading to overconfidence. This insight explains why educated investors sometimes trade excessively. The study highlights the behavioural limits of financial education. This perspective broadens the interpretation of financial literacy.

3. **Relevance to Young Investors**
   Young investors form a growing segment of the financial market. They are highly influenced by technology, social media, and peer opinions. The study focuses on this group due to their higher exposure to behavioural biases. Limited experience makes them more vulnerable to decision errors. Understanding their behaviour is critical for market stability. The study provides insights tailored specifically to this demographic.

4. **Practical Significance for Education and Advisory Services**
   The findings are useful for designing effective financial education programs. They suggest combining financial knowledge with behavioural training. Advisors can use these insights to better understand client behaviour. This helps in developing personalized investment guidance. The study highlights the importance of bias awareness in decision-making. It supports more holistic investor education approaches.

5. **Policy and Research Implications**

   The study has important implications for policymakers and regulators. It supports investor protection through behavioural-focused education initiatives. Policymakers can use the findings to reduce irrational retail trading. The study also provides a foundation for future empirical research. Researchers can test the proposed relationships using quantitative methods. Overall, it strengthens policy and academic discussions on investor behaviour.

3. Review of Literature

3.1 Financial Literacy and Investment Decision-Making

Early research in the field of financial literacy consistently indicates a positive relationship between financial knowledge and sound investment decision-making. Studies show that individuals with higher levels of financial literacy are more likely to engage in systematic financial planning, participate actively in capital markets, and construct well-diversified investment portfolios. Such investors demonstrate a stronger understanding of key financial concepts, including compound interest, inflation, risk–return trade-offs, and portfolio diversification, which enables them to evaluate investment options more effectively.

Empirical evidence further suggests that financially literate investors are less prone to basic financial errors, such as underestimating long-term returns or failing to account for inflation while planning savings. Higher literacy has also been linked to greater retirement preparedness, improved savings behaviour, and reduced reliance on informal or speculative investment avenues. As a result, financial literacy has been widely promoted as a critical tool for enhancing individual financial well-being and market efficiency.

However, much of this early literature is grounded in the traditional finance assumption of rational decision-making, where investors are expected to process information objectively and make optimal choices. These studies largely overlook the role of psychological constraints, emotional responses, and cognitive limitations that influence real-world financial behaviour. By assuming that knowledge directly translates into rational action, early research underestimates the impact of behavioural biases such as overconfidence, mental accounting, and herding.

Consequently, while early findings establish the importance of financial literacy in improving investment-related knowledge and access, they fail to fully explain why suboptimal investment decisions persist even among educated investors. This limitation in the literature has paved the way for behavioural finance research, which emphasizes the need to examine how financial literacy interacts with psychological factors in shaping investment decision-making.

3.2 Behavioural Biases in Young Investors

Behavioural finance identifies several biases prevalent among young investors. Overconfidence leads to excessive trading and underestimation of risk. Herding behavior, amplified by social media and peer influence, causes investors to follow market trends without independent analysis. Loss aversion results in holding losing investments too long, while anchoring causes reliance on irrelevant reference points. These biases persist regardless of access to information.

3.3 Linking Financial Literacy and Behavioural Biases

Recent studies suggest that financial literacy does not uniformly reduce behavioural biases. While it may lower susceptibility to herding and framing effects, higher literacy can increase overconfidence as investors overestimate their analytical abilities. This dual effect highlights the need for a conditional approach that recognizes financial literacy as both a mitigating and amplifying factor depending on the bias involved.

4. Objectives of the Study

The primary objectives of this study are to:

- Examine the level of financial literacy among young investors.
- Identify the dominant behavioural biases affecting their investment decisions.
- Analyse the relationship between financial literacy and specific behavioural biases.
- Propose a structured framework explaining the conditional interaction between literacy and behaviour.
- Offer practical recommendations for improving financial decision-making among young investors.

5. Research Methodology

Research Design

The study adopts a descriptive and explanatory research design to systematically examine the relationship between financial literacy and behavioral biases among investors. The descriptive component focuses on documenting existing evidence related to levels of financial literacy and the prevalence of various behavioral biases such as overconfidence, herding, loss aversion, and mental accounting. This helps in understanding the current state of knowledge in the field.

The explanatory component aims to analyse and interpret how financial literacy influences investor behaviour under different conditions. By combining a systematic review of existing literature with conceptual analysis, the study identifies recurring patterns, contradictions, and contextual factors that shape investor decision-making. This design is appropriate as it allows the study to explain variations in findings across different studies rather than merely describing them.

Data Sources

The study is based entirely on secondary data, collected from credible and peer-reviewed sources to ensure reliability and validity. These sources include academic journals, conference papers, working papers, government publications, financial education reports, and prior behavioural finance studies. Reputed databases such as Google Scholar, JSTOR, SSRN, and ResearchGate are used to access relevant literature.

The selected studies provide empirical evidence on financial literacy levels, investor behaviour, and the presence of behavioural biases across different demographic and market contexts. Using secondary data enables a broader analysis across regions and time periods, which would not be feasible through primary data collection within the scope of this study.

Analytical Approach

The study employs a qualitative synthesis of empirical findings to compare and contrast results reported in previous research. Key themes, methodological approaches, and major conclusions are systematically reviewed to identify consistencies and inconsistencies in the relationship between financial literacy and behavioral biases.

Where available, quantitative results such as correlation coefficients, regression coefficients, and statistical significance levels are interpreted to assess the strength, direction, and nature of relationships between variables. However, instead of re-estimating models, the study focuses on understanding how results differ across contexts such as market conditions, investor profiles, and types of biases. This integrated analytical approach supports a nuanced interpretation of existing evidence and aligns with the study's objective of developing a conditional perspective.

6. Summary of Key Findings

- Financial literacy among young investors varies significantly, influenced by education, income, and access to financial information.
- Behavioural biases such as overconfidence, herding, and loss aversion are widespread among young investors.
- Higher financial literacy reduces susceptibility to basic decision errors but does not eliminate emotional and cognitive biases.
- Overconfidence tends to increase with higher financial literacy, particularly in self-directed trading environments.
- The relationship between literacy and behavior is conditional rather than linear.

7. Proposed Framework: Financial Literacy–Behavioral Bias Interaction

7.1 The Conditional Interaction Framework

The proposed framework suggests that financial literacy influences investor behavior differently across two broad contexts: stable market conditions and volatile market conditions.

Dimension	Stable Market Conditions	Volatile Market Conditions
Role of Financial Literacy	Enhances rational analysis	May amplify overconfidence
Dominant Biases	Mild overconfidence	Herding, panic selling
Decision Quality	Relatively improved	Deteriorates under stress

7.2 Interpretation of the Framework

In stable markets, financial literacy supports informed decision-making and risk assessment. However, during periods of volatility, emotional responses dominate, and even literate investors may succumb to herding or loss aversion. This explains why financial education alone cannot guarantee rational behaviour under stress.

8. Limitations of the Study

- Reliance on secondary data limits direct measurement of investor behaviour.
- Behavioural biases are difficult to quantify precisely due to psychological subjectivity.
- Findings may not be generalizable across different cultural or regulatory environments.

9. Conclusion and Recommendations

9.1 Conclusion

The study concludes that financial literacy plays a complex, conditional, and non-linear role in shaping the investment behaviour of young investors. While higher levels of financial literacy significantly improve financial awareness, analytical skills, and understanding of investment instruments, they do not fully eliminate behavioural biases. In several cases, increased knowledge may even reinforce certain cognitive distortions, such as overconfidence, where investors overestimate their ability to predict market movements.

The findings suggest that information and education alone are insufficient to ensure rational investment decisions. Emotional and social biases—such as herding behavior, fear of missing out (FOMO), and loss aversion—continue to influence decision-making, particularly during periods of market volatility or uncertainty. This highlights that investor behavior is shaped not only by knowledge but also by psychological factors, market conditions, and social influences.

Furthermore, the study reveals that the impact of financial literacy varies across different types of behavioral biases. While literacy may reduce errors related to misinformation or poor diversification, it has limited effectiveness in addressing emotion-driven and socially reinforced biases. This conditional effect explains the inconsistent findings reported in existing literature and supports the need for a more nuanced analytical framework.

Overall, the study emphasizes that a purely knowledge-based approach to financial education is inadequate. Without integrating behavioural insights, financial literacy programs may fail to achieve their intended outcomes, particularly among young investors who are increasingly exposed to digital trading platforms and social media-driven investment trends.

9.2 Recommendations

For Educators: Financial literacy programs should move beyond traditional, theory-based instruction and integrate behavioural finance concepts into their curriculum. Educators should focus on developing self-awareness among learners regarding common cognitive and emotional biases, such as overconfidence, loss aversion, and herding behavior. Teaching methods should include case studies, simulations, role plays, and real-market scenarios to help students understand how emotions influence financial decisions. Emphasizing emotional control, reflective thinking, and bias recognition will enable learners to apply financial knowledge more effectively in real-life investment situations.

For Young Investors: Young investors are advised to adopt disciplined and structured investment strategies to minimize the influence of behavioural biases. Practices such as portfolio diversification, long-term financial planning, and setting predefined risk limits can help reduce impulsive decision-making. Investors should avoid frequent trading driven by market noise or social media influence and instead rely on goal-based investing and systematic investment plans (SIPs). Regular self-evaluation and adherence to a well-defined investment strategy can assist young investors in maintaining consistency and rationality during market fluctuations.

For Policymakers: Regulatory bodies and policymakers should actively support and promote comprehensive investor education initiatives that address both technical financial knowledge and behavioural risks. Special attention should be given to the challenges posed by digital trading platforms, algorithm-driven recommendations, and social media investment content, which often amplify behavioural biases. Policymakers can encourage transparency, mandate clear risk disclosures, and collaborate with educational institutions and financial intermediaries to deliver targeted awareness programs. Such measures can enhance investor protection and contribute to a more informed and resilient investment ecosystem.

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