Impact of Behavioral Biases and Investment Pattern of Young Investors - A Pan India Study

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ABSTRACT

This study examines the impact of behavioral biases on the investment decision-making of young investors in India. Using a sample of 400 respondents, the research explores the role of overconfidence, herd behavior, loss aversion, and risk tolerance as key predictors of investment patterns. A multiple regression analysis reveals that these biases collectively explain 33.3% of the variance in investment decisions, with risk tolerance contributing significantly alongside psychological factors. The findings indicate that young investors' decisions are strongly influenced by cognitive and emotional factors, moderated by demographic variables such as age, gender, education, and income. The study underscores the need for targeted financial education and advisory services to address the effects of biases and guide investors toward more rational decision-making. The insights provide a basis for future research and practical interventions aimed at enhancing investment behavior among young investors in emerging markets.

Keywords: Behavioral Biases, Investment Decision-Making, Overconfidence Bias, Herd Behavior, Loss Aversion, Risk Tolerance, Young Investors

Introduction

Investing has always been a cornerstone of financial growth and wealth creation, yet the dynamics of investment decisions have evolved significantly in recent years. Among young investors in India, the rise of digital platforms, increasing financial literacy, and the accessibility of diverse investment options have redefined traditional investment patterns. Despite these advancements, behavioral biases systematic deviations from rational decision-making continue to play a pivotal role in shaping investment choices.

Behavioral biases, such as overconfidence, herd behavior, loss aversion, and anchoring, influence how individuals perceive risk, make decisions, and allocate resources. These biases are particularly pronounced among young investors, who often face unique challenges such as limited experience, peer influence, and susceptibility to market trends. Understanding these biases is crucial, as they can significantly impact the financial outcomes and long-term wealth-building potential of this demographic.

This research paper aims to explore the interplay between behavioral biases and the investment patterns of young investors across India. By adopting a pan-India approach, the study seeks to capture regional variations, socio-economic influences, and demographic factors that shape investment behavior. It further investigates how technology, financial education, and market access mitigate or amplify these biases, offering a comprehensive perspective on the behavioral tendencies of India's youth.

The findings of this study hold relevance for financial advisors, policymakers, and educators, as they provide actionable insights to design strategies that promote informed and rational investment decisions. In an era of increasing financial inclusion and market participation, understanding the behavioral nuances of young investors is essential to fostering a robust and resilient investment ecosystem in India.

Review of literature

Saini, Anjum, and Saini (2011) analysed investor's behaviour, buyers' opinion and notion referring to diverse factors like form of mutual fund scheme, its objective, the function of economic advisors/brokers, sources of statistics, deficiencies in the provision of services, investors" opinion referring to factors that appeal to them to spend money on mutual and challenges earlier than the Indian mutual fund enterprise and so on. The observe discovered that traders seek for liquidity, simplicity in offer files, on-line buying and selling, normal updates thru SMS, and stringent follow-up of provisions laid with the aid of AMFI (Saini et al., 2011).

Ranjani and Chopra (2011) concluded that the respondents showed widespread focus in subjects regarding funding and private monetary planning. Contrary to famous notion, the sample population confirmed attention approximately economic making plans and willingness to take funding decisions referring to non-public finance. However, in retirement planning, the majority of the respondents felt that they had now not competently deliberate for their retirement (Ranjani & Chopra, 2011).

A survey of 201 individual investors was conducted to study the information sourcing by investors, their perception of various investment strategy dimensions, and the factors motivating investment decisions and reported that psychological and sociological factors dominated economic factors in investment decisions (Shanmugham, 2000).

Avinash (2014) analysed the investment behaviour by examining various investment avenues. Data analyses revealed that Most of the respondents have selected bank deposit as their first option for investment followed by real estate. Below 30 years respondents invest more in real estate whereas above 60 years preferred LIC policies. Full-time salaried people are more aware of different investment avenues (Avinash, 2014).

Patel and Patel (2012) examined the behavioural pattern of investments and various investment alternatives among salaried people working in the private sector. Data analyses state that majorities of Male respondents are intended to invest more. The maximum investment in the range between 1 lakh to 2 lakhs (Patel & Patel, 2012).

Kirubakaran (2013) analysed the behaviour of an investor. This study brings out the relationship between risk of investment and protection of investment. Nearly 59 percent of respondents stick to the protection of investment rather than risk for good returns. Respondents have protecting investment as the main priority (Kirubakaran, 2013).

Objectives

➢ To analyze the relationship between behavioral biases and the choice of investment instruments among young investors in India.

Research Hypotheses

H2: Behavioral biases have a significant relationship with the preference for specific investment instruments among young investors in India.

Research Methodology

This study employs a descriptive and analytical research design to explore the impact of behavioral biases on the investment patterns of young investors in India. The target population includes active investors aged 20-35 years, with a minimum sample size of 400 respondents determined using Cochran's formula for a 95% confidence level. A stratified random sampling method will ensure representation across regions, gender, and education levels. Data will be collected through a structured questionnaire comprising demographic details, behavioral bias indicators (measured on a 5-point Likert scale), and investment patterns. Analysis will involve descriptive statistics to summarize data and inferential tools such as multiple linear regressions to identify relationships and impacts.

Analysis and Interpretation

Table 1: Demographic Profile of the Respondents

Stratification Variables	Category	Frequency	Percentage
Gender	Men	260	65
	Women	140	35
Age Groups	18-27	124	31
	27- 35	276	69
Region	North	99	24.75
	East	112	28
	West	78	19.5
	South	111	27.75
Education Level	Illiterate	46	11.5
	SSLC/HSC	73	18.25
	Graduates	197	49.25
	Professionals	84	21
Income Level	0 – 2,50,000	69	17.25
	2,50,001 – 5,00,000	129	32.25
	5,00,001 – 7,50,000	119	29.75
	Above 7,50,001	83	20.75

The demographic profile reveals that the majority of respondents are men (65%) aged 27–35 years (69%), with a significant proportion being graduates (49.25%) or professionals (21%). Regionally, East (28%) and South India (27.75%) are better represented compared to North (24.75%) and West (19.5%). Income levels are diverse, with most respondents earning between ₹2,50,001–₹5,00,000 (32.25%) or ₹5,00,001–₹7,50,000 (29.75%). The data highlights a predominantly male, well-educated sample, with reasonable geographic and income diversity, providing a strong foundation for analyzing investment patterns among young investors in India.

Multilinear regression is a statistical method to evaluate the relationship between a dependent variable and two or more than two independent variables under study. Regression permits you to estimate in what way a dependent variable may change with the change in independent variable(s).

However, in order to have a reliable multiple regression analysis results, it is necessary to check that autocorrelation and multicollinearity does not exist between the independent variables. Therefore, the tests for auto correlation and multicollinearity have been performed. The results of which are given below:

Durbin-Watson Test for Auto Correlation

Auto Correlation	DW Statistic	p
-0.0264	2.05	0.542

Durbin-Watson Test has been conducted to test the autocorrelation and the acceptable values of DW test are between 1.5 to 2.5. It is observed that the DW statistic is 2.05 which is below 2.5, hence autocorrelation does not exist.

The data has also been checked for multicollinearity. Multicollinearity means that the correlation between the independent variables is high and high correlations within the variables of interest are not acceptable. VIF is used to check this assumption of multicollinearity. If the values are >10, it is stated that multicollinearity exists within the independent variables.

Collinearity Statistics

	VIF	Tolerance
MeanLA	1.34	0.746
MeanHB	1.34	0.749
MeanOCB	1.04	0.966
RT	1.02	0.981

In the above table it is observed that the VIF values are below 2.00, therefore it is stated that multicollinearity does not exist within the independent variables.

Multi linear Regression analysis has been used to predict the Investment Decision-making (Dependent variable) of the young investors by using the explanatory (independent) variables like Over Confidence Bias, Herd Behaviour, Loss Aversion and Risk Tolerance. A forward stepwise selection method has been used in which one predictor variable is added by the model at a time until all the selected predictors are added and the model is tested.

Model Summary						
Model	R	R2	F	df1	df2	p
1	0.350	0.122	63.2	1	399	< .001
2	0.489	0.240	71.2	2	397	< .001
3	0.560	0.314	68.8	3	395	< .001
4	0.588	0.333	44.9	5	398	< .001

Predictors: Constant, OCB
Predictors: Constant, OCB, HB
Predictors: Constant, OCB, HB, LA
Predictors: Constant, OCB, HB, LA, RT
Dependent Variable: Investment Decision-making

The regression analysis reveals that as more predictors are added, the model's ability to explain investment decision-making improves. In Model 1, with just Overconfidence Bias (OCB), the model explains 12.2% of the variance. Adding Herd Behavior (HB) in Model 2 increases this to 24%. The inclusion of Loss Aversion (LA) in Model 3 further increases the explanatory power to 31.4%. Finally, Risk Tolerance (RT) added in Model 4 raises the R^2 to 33.3%, making it the most effective

model. All models are statistically significant (p < 0.001), confirming that behavioral biases, including risk tolerance, significantly influence investment decision-making.

Omnibus ANOVA Test

	Sum of Squares	Df	Mean Square	F	P
MeanLA	4.04	1	4.036	12.18	< .001
MeanHB	15.79	1	15.786	47.62	< .001
MeanOCB	15.83	1	15.833	47.77	< .001
RT	4.30	2	2.148	6.48	0.002
Residuals	148.83	399	0.331		

The above table of Analysis of Variance exhibits the F ratio which tests whether the overall regression model is a good fit for this analysis. According to the above ANOVA table the independent variables Loss Aversion (F = 12.18, p = < 0.001), Herd Behavior (F = 47.62, p = < 0.001), Overconfidence Bias (F = 47.77, p = < 0.001) and Risk Tolerance (F = 6.48, p = 0.002) are statistically significant and predict the variability of the dependent variable Investment behavior. However, according to the sum of squares, variable Financial Literacy is the most influential.

Model Coefficient

Predictor	Estimate	SE	T	P	Std. Estimate
Intercept[a]	0.438	0.184	2.157	0.029	
MeanOCB	0.354	0.051	6.911	< .001	0.357
MeanHB	0.262	0.038	6.901	< .001	0.275
MeanLA	0.160	0.045	3.489	< .001	0.180
RT:					
Moderate Risk-Low Risk	0.208	0.057	3.600	< .001	0.297
High Risk – Low Risk	0.093	0.102	0.911	0.363	0.133

The regression analysis shows that several predictors significantly influence the dependent variable. The intercept (0.438, p = 0.029) represents the baseline value when all predictors are at their reference levels. Among the predictors, MeanOCB (Overconfidence Bias) has the largest effect, with an estimate of 0.354 (p < .001, standardized estimate = 0.357), followed by MeanHB (Herd Behavior) with an estimate of 0.262 (p < .001, standardized estimate = 0.275), and MeanLA (Loss Aversion) with an estimate of 0.160 (p < .001, standardized estimate = 0.180). All three predictors are statistically significant and show moderate positive effects. For the risk tier contrasts, Moderate Risk compared to Low Risk significantly predicts the outcome (estimate = 0.208, p < .001, standardized estimate = 0.297), indicating a moderate positive effect. However, the contrast between High Risk and Low Risk is not statistically significant (estimate = 0.093, p = 0.363, standardized estimate = 0.133), suggesting a weak and inconclusive effect. Overall, organizational and behavioral predictors are strong determinants of the outcome, while risk tier effects are less consistent.

Suggestion
- Consider balancing the sample distribution across gender and regional groups to reduce biases and ensure better generalizability of findings.
- Include other biases like mental accounting or anchoring to further enrich the analysis of behavioral factors influencing investment decisions.

- Conduct a longitudinal study to observe how behavioral biases and investment decisions evolve over time, especially with changing market conditions.
- Perform a detailed segmentation based on income or education level to explore whether the impact of biases varies across investor groups.
- Develop actionable insights for financial advisors or policymakers to address and mitigate the adverse effects of biases on young investors.

Conclusion

The study highlights the significant impact of behavioral biases on the investment decision-making of young investors in India. Overconfidence, herd behavior, loss aversion, and risk tolerance were found to be critical predictors, collectively explaining 33.3% of the variance in investment decisions. The findings underscore the importance of understanding psychological factors in shaping investment patterns, alongside demographic characteristics such as age, gender, education, and income. These insights suggest the need for financial education and personalized investment strategies to help young investors make informed decisions while minimizing the influence of cognitive biases. The study provides a robust foundation for future research to explore additional behavioral variables and develop targeted interventions to enhance investment outcomes.

References

1. Beugelsdijk, S., & Noorderhaven, N. (2005). Personality characteristics of self-employed; an empirical study. Small Business Economics, 24(2), 159–167.
2. Kirubakaran, J. P. S. (2013). An Investigative Study on the Attitudes of Investors – A Special Reference to Indian Stock Exchanges. The International Journal's Research Journal of Economics & Business Studies.
3. Kim, G. (2008). Entrepreneurship and self-employment: The state-of-the-art and directions for future research. New England Journal of Entrepreneurship, 11(1), 5.
4. Levine, R., & Rubinstein, Y. (2018). Selection into entrepreneurship and self-employment. National Bureau of Economic Research.
5. Patel, C. Y. P., & Patel, C. C. Y. (2012). A study of investment perspective of salaried people (private sector). Asia Pacific Journal of Marketing & Management Review, 1(2), 126-146.
6. Ranjani, K. S., & Chopra, A. (2011). An empirical study of financial awareness of working women in India. Res. J. Soc. Sci. Manage, 1(6), 268-280.
7. Shanmugham, R. (2000). Factors influencing investment decisions. Indian Capital Markets–Trends and Dimensions (ed.), Tata McGraw-Hill Publishing Company Limited, New Delhi.
8. Saini, S., Anjum, B., & Saini, R. (2011). Investors' awareness and perception about mutual funds. International Journal of multidisciplinary research, 1(1), 14-29.
9. Van Stel, A., Wennekers, S., & Scholman, G. (2014). Solo self-employed versus employer entrepreneurs: Determinants and macro-economic effects in OECD countries. Eurasian Business Review, 4(1), 107–136.
10. Bibiyana, D. J., Srinivasan, K., & Kannamudaiyar, S. (2024). Influence Of Agricultural Sector On Economic Growth Of Bimstec Countries. Library Progress International, 44(3), 15371-15375.