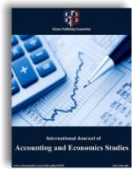
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Research paper



Psychological Factors and Investment Decision Making

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Abstract

Behavioral finance is focused on an investor's mental and emotional factors that influence their investment choices, rather than just on logical thinking alone. This project focuses on finding and studying the psychological aspects that affect investment decisions for people in Andhra Pradesh, mainly from Coastal Andhra and Rayalaseema. A sample of 300 people chosen by convenience sampling and a questionnaire using a structured Likert scale are used in the study to conduct Exploratory Factor Analysis (EFA). Based on the outcomes, the researchers found that Investment Confidence (consisting of Risk Tolerance, Overconfidence and Financial Literacy), Behavioral Biases (Emotional Influence, Herd Behavior and Anchoring Bias), Risk Aversion (Loss Aversion, Regret Aversion) and Social-Cognitive Framing (Mental Accounting and Social Influence) are the strongest psychological aspects affecting how people cope with finances. According to the KMO value of 0.78 and a significant Bartlett's Test result, the data has factorability. Considering these four factors, 70.3% of the different factors making up investment behavior are explained. From the evidence, it seems that choosing investments as an individual investor involves knowledge and biases, emotions, and notions from people in society. They have important consequences for financial education, modifying behavior, and designing financial services.

Keywords: *Behavioral Biases; Exploratory Factor Analysis; Investment Behavior; Psychological Factors.*

1. Introduction

As behavioral finance grows, evidence keeps showing that investors do not always make purely rational decisions in their investing. Objective factors guide investment decisions partly, but personal traits, feelings, mental biases, and demographics play a much bigger role. Looking at these psychological factors is important to form a detailed view of how people in different markets choose what to invest in. Personality traits are a major factor in influencing how investors see and act on risk, rewards, and the selection of investments. (Jain and his colleagues, 2022) investigated how personality traits such as being conscientious and having openness impact intentions to invest, and found that overconfidence bias often leads individuals to make investment decisions. This result is important in the Indian context since many retail investors face cognitive biases because they are not very educated about finances and the market. Besides, how individuals feel about their investments plays a significant part, mainly when markets are turbulent. (Duxbury and his team, 2020) Create a framework that describes how emotions like fear, excitement, and regret interact with people's preferences in buying and selling. The feelings-based approach shows that investors are likely to act irrationally, especially when dealing with big financial decisions. The way we feel can cause us to behave like investors in a crowd, which results in mispriced assets and makes the market less effective. Perceptions of risk vary a lot between investors and are an important factor in their decisions. According to (Farrelly and Reichenstein 1984), although institutional investors can study and analyze data extensively, they may interpret and react to risks depending on their interpretations. This insight agrees with the study by Rana et al. 2011), which pointed out that how someone thinks about risk is greatly influenced by their age, gender, income, and educational attainment. When it comes to their investments, younger people often think about the long-run, which is why they are generally comfortable with bigger risks, and people who are older usually play it safe. By making Environmental, Social, and Governance (ESG) concerns important in investing, there is an increased focus on the idea of value alignment. (Sood et al. 2023) applied a fuzzy AHP (Analytic Hierarchy Process) method to learn Indian investors' preferences for ESG factors. It was revealed in their study that what a person believes about sustainability now plays a bigger role in investment choices for millennials and eco-conscious people. This trend points to how just as important as making a profit is supporting ethical investing. What Bayar et al. 2020) found is that being financially literate has an impact on people's behavior when investing. People with higher financial literacy can tolerate more risk in investments, since they can understand financial data, arrange their portfolios, and handle uncertainties in the markets. People who are not well-informed about finances are more likely to get trapped in cognitive mistakes such as framing effects, anchoring, and mental accounting. Simply put, decisions about investments are mainly influenced by traits and state of mind, thoughts, attitudes toward risk, beliefs, and levels of financial understanding. The processing of these elements together with contextual factors and demographics usually drives people's investment choices, despite simple logic. Combining behavioral insights with financial theory

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helps us see how investors work and also allows financial advisors, policy-makers, and asset managers to make better financial products, tools, and educational guides.

2. Review of literature

Investment decisions are affected not only by financial and economic factors but also by several psychological elements. Scholars have been paying more attention to how people assess risks, feel emotions, make decisions and how their personality and culture play a role. It summarizes relevant worldwide and Indian works to give a full picture of what affects investment decisions in psychology. (Jain et al. 2022) studied the relationship between investor personality traits, investor intention, and the roles of overconfidence bias and financial literacy. Their research in India shows that excessive self-assurance and bias in attributing success may make individuals make decisions in finance that are not in their best interests. The authors point out that better financial education can address these cognitive biases. A recent study led by Sood et al. 2023) applied the fuzzy AHP approach to see how Indian investors prioritize ESG factors. Findings indicate that more and more investors are guided by ethical and sustainable beliefs, and this trend is stronger among younger people who pay attention to social matters when investing. The results highlight that value-based investing is becoming more important and tied to why people choose their investments. (Bayar et al. 2020) studied how individual investors' risk tolerance is related to their financial literacy by carrying out a multinomial logistic regression analysis. It showed that more knowledge about financial matters makes individuals less fearful of losing and more likely to take calculated risks. It shows that education is very important in shaping how people feel about investment. One of the first notable studies by Farrelly and Reichenstein 1984) revealed that institutional investors tend to trust their intuition on risks more than any formal analysis. Therefore, the way risks and opportunities are viewed is strongly affected by our psychological filters. According to (Duxbury et al. 2020), emotions like fear, excitement and regret have an impact on people's choices between buying or selling assets in financial markets. A key point is that even those with solid financial knowledge may not be safe from making hasty or unwise decisions when influenced by feelings. In their study, Rana et al. 2011) found out what effect gender, age, and education have on Pakistani people's choices in risky situations. It was shown in the results that younger and more educated people often choose higher-risk investment options. Even though the work is not limited to India, what was discovered can be relevant to similar countries and markets. They (Alkhawaja&Albaity, 2020) examined why people in the UAE save for their retirement. The research found that trust, thinking ahead, and a sense of financial safety were what inspired people to save and invest a lot, suggesting that people who feel secure emotionally are more likely to save and invest over time. There was a study by Rosdiana(2020) where Generation Z and millennials were compared to find out how different factors, like motivation, money knowledge, and the social setting, influence their interest in investing. It was shown in the study that younger investors rely a lot on their peers and easily accessible information from the internet, suggesting that social cognitive factors strongly affect investment choices.

3. Research gap

While numerous studies have explored the impact of individual psychological biases on investment decisions, limited research has examined these factors holistically using empirical techniques like factor analysis to uncover their latent structure. Most existing literature addresses these biases in isolation—such as risk tolerance, overconfidence, or herd behavior—without integrating how these factors cluster together and collectively shape investor behavior. This study bridges that gap by applying exploratory factor analysis (EFA) to identify underlying psychological dimensions that influence retail investors. The extraction of four distinct factors—Investment Confidence, Behavioral Biases, Risk Aversion, and Social-Cognitive Framing—provides a comprehensive framework that better explains the interplay between rational understanding and emotional or social influence in investment decisions. Future research can build on this model to design targeted investor education programs and behavioral interventions.

4. Research objective

- To identify and analyze the underlying psychological factors that influence individual investors' decision-making behavior in financial markets using exploratory factor analysis.

1) Research Hypothesis

H_0): There is no statistically significant underlying factor structure among the psychological traits influencing investment decisions.

2) Research Methodology

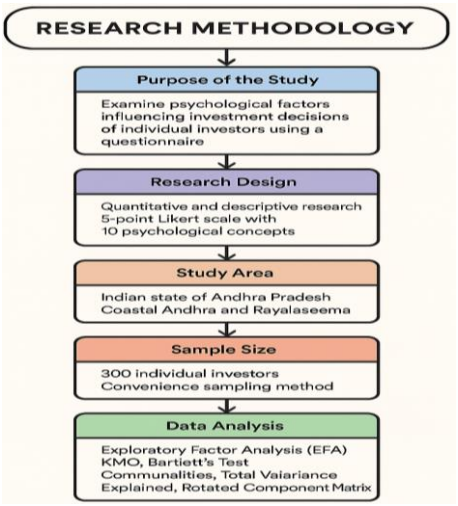


Fig. 1: Research Methodology.

The purpose of this study is to look at the psychological reasons behind how individual investors decide on investments using a questionnaire. Experts try to learn how having a higher risk tolerance, being overly confident, letting emotions decide, lacking financial literacy, and certain biases affect the way people manage their finances. The study uses a survey, applying quantitative and descriptive research. Items on the instrument are rated on a 5-point Likert scale that runs from Strongly Disagree (1) to Strongly Agree (5). They are linked to ten main psychological ideas that influence how people make investment decisions. The study area focuses on the Indian state of Andhra Pradesh, mainly selecting respondents from areas known as Coastal Andhra and Rayalaseema. Analyzing this area gives a better view of how behavior changes across many cultures and economies in India. Sample Size: The analysis follows the responses of 300 individual investors. Because of time and resource limitations, a convenience sampling method was chosen to collect the data. Participation was decided by whether individuals could take part and were willing to do so.
Using Exploratory Factor Analysis (EFA), researchers looked for hidden psychological constructs in the observed items. To check if the sample was right for factor analysis, researchers used KMO and Bartlett's Test. Using Communalities, Total Variance Explained, and the Rotated Component Matrix (Varimax) helps to explain the factor structures.

5. Data analysis

Table 1: KMO and Bartlett's Test

Test	Value
Kaiser-Meyer-Olkin (KMO)	0.78
Bartlett's Test (Chi-Square)	1325.45
Bartlett's Test (p-value)	0.000

Sources: Primary Data.

Following Kaiser's recommendations, a KMO score of 0.78 means the sample is adequate, while 0.90s are marvelous, 0.80s are meritorious, 0.70s are middling, 0.60s are considered mediocre, and anything under 0.50 is unacceptable. If the value is over 0.6, it shows that the shared relationships among variables are strong enough to form clear and reliable factors. Therefore, you can use your data to perform exploratory factor analysis (EFA).

Table 2: Communalities Table

Variable	Initial	Extraction
Risk Tolerance: I am comfortable investing in high-risk financial instruments for the possibility of high returns.	1.000	0.562
Overconfidence: I believe I can make better investment decisions than most other investors.	1.000	0.618
Emotional Influence: I often let my emotions influence my investment decisions.	1.000	0.479
Financial Literacy: I understand key financial concepts like diversification, inflation, and return on investment.	1.000	0.691
Herd Behavior: I tend to invest in assets that many people around me are investing in.	1.000	0.503
Anchoring Bias: I rely heavily on initial information or past prices when making investment decisions.	1.000	0.538
Loss Aversion: I avoid investments that have a high potential for loss, even if the returns could be high.	1.000	0.587
Regret Aversion: I hesitate to invest because I fear regretting the decision if it turns out badly.	1.000	0.554
Mental Accounting: I treat money differently depending on where it comes from or what it is intended for.	1.000	0.502
Social Influence: I consider the opinions of friends, family, or social media before making investment decisions.	1.000	0.648

Sources: Primary Data

So, all the variance a variable has is accounted for in the analysis at the beginning. Principal Component Analysis (PCA) and the early stages of factor analysis always handle these considerations. The highest communalities are seen for Financial Literacy (0.691) and Social Influence (0.648), which are strongly influenced by the factor model. They are probably essential to understanding how investors behave. Strong evidence of both overconfidence (0.618) and loss aversion (0.587) shows that these biases play a role in the structure of the behavior factors found. Emotional Influence (0.479) is less strongly tied to the concept behind this aspect, so it is less reliable. It is not as informative about the specifics of the model as the other two concepts are. Mental Accounting (0.502) and Herd Behavior (0.503) are at the border of acceptable representation, suggesting a moderate match with the latent factors. It looks like most psychological variables contribute well to the factor analysis, which is why they are included in its results. Financial Literacy, Social Influence, and Overconfidence are explained very well by the model as possible factors impacting retail investors' decisions.

Table 3: Total Variance Explained

Component	Eigen value	% of Variance	Cumulative %
Risk Tolerance: I am comfortable investing in high-risk financial instruments for the possibility of high returns.	2.87	29.6	29.6
Overconfidence: I believe I can make better investment decisions than most other investors.	1.65	17	46.6
Emotional Influence: I often let my emotions influence my investment decisions.	1.22	12.6	59.2
Financial Literacy: I understand key financial concepts like diversification, inflation, and return on investment.	1.08	11.1	70.3
Herd Behavior: I tend to invest in assets that many people around me are investing in.	0.74	7.6	77.9
Anchoring Bias: I rely heavily on initial information or past prices when making investment decisions.	0.61	6.3	84.2
Loss Aversion: I avoid investments that have a high potential for loss, even if the returns could be high.	0.49	5.1	89.3
Regret Aversion: I hesitate to invest because I fear regretting the decision if it turns out badly.	0.42	4.3	93.6
Mental Accounting: I treat money differently depending on where it comes from or what it is intended for.	0.33	3.4	97
Social Influence: I consider the opinions of friends, family, or social media before making investment decisions.	0.29	3	100

Sources: Primary Data.

All four factors have eigenvalues that are larger than 1, which is the standard (from Kaiser's criterion) for deciding which factors are important in exploratory factor analysis. The combination of latent variables accounts for most of the differences between the original 10 variables, which is an indication of a strong factor structure and well-reduced dimensions. Of these six factors, because their eigenvalues are less than 1, they usually do not add much extra variance and are dropped in the final model. Factor 1 (29.6%) is the factor that most

clearly represents a strong trait in the group of respondents. Such constructs could be financial confidence, knowledge, or different behaviors. Factor 2 (17.0%) – Refers to another side, which might pick up biases like being overconfident or influenced by feelings. Factor 3 (12.6%) could indicate people are avoiding risks, such as by not taking losses or regrets seriously. This 4th factor (11.1%) may indicate a person facing influences from others through social or cognitive bias (for example, behaving like the crowd or letting others' voices shape their judgment). The next 5 factors account for less than 10% each and might be repetitive or noise.

Table 4: Rotated Component Matrix (Varimax Rotation)

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Risk Tolerance: I am comfortable investing in high-risk financial instruments for the possibility of high returns.	0.73			
Overconfidence: I believe I can make better investment decisions than most other investors.	0.71			
Emotional Influence: I often let my emotions influence my investment decisions.		0.65		
Financial Literacy: I understand key financial concepts like diversification, inflation, and return on investment.	0.62			
Herd Behavior: I tend to invest in assets that many people around me are investing in.		0.58		
Anchoring Bias: I rely heavily on initial information or past prices when making investment decisions.		0.69		
Loss Aversion: I avoid investments that have a high potential for loss, even if the returns could be high.			0.75	
Regret Aversion: I hesitate to invest because I fear regretting the decision if it turns out badly.			0.69	
Mental Accounting: I treat money differently depending on where it comes from or what it is intended for.				0.71
Social Influence: I consider the opinions of friends, family, or social media before making investment decisions.				0.73

Sources: Primary Data.

A four-factor structure is found when the Varimax-rotated component matrix is examined, and these factors group the 10 psychological variables in a meaningful way. The association with Risk Tolerance, Overconfidence, and Financial Literacy (0.73, 0.71, and 0.62, respectively) shows that Factor 1 reflects an investor's confidence and ability to decide on financial issues. Such features reflect that people take an active, knowledgeable approach to investing and feel confident about making choices. High loadings in factor 2 come from Emotional Influence (0.65), Herd Behavior (0.58), and Anchoring Bias (0.69), all of which are about cognitive and emotional biases. If an investor heavily embraces this factor, they might base their decisions on memories, social events, and habits without doing an objective review. According to Factor 3, high scores on Loss Aversion (0.75) and Regret Aversion (0.69) stand for the central trait of seeking to avoid risk and feeling hesitant. Because of their anxiousness, these people usually focus on safety rather than on chances for success. The last factor, Factor 4, covers Mental Accounting (0.71) and Social Influence (0.73), demonstrating how our thoughts and society affect our financial choices. The mental way investors arrange their finances and what others in their networks think shapes their decisions here. By introducing the four factors, this solution points out that investing involves many aspects like thinking logically, having biases, experiencing emotions, and being influenced by others.

6. Discoveries

- Because the KMO value is 0.78 and the results from Bartlett's Test are significant (Chi-square = 1325.45, $p < 0.001$), it is suitable to use EFA. It shows that the sample is representative and well-chosen.
- The table with communalities shows that the model contains a reasonable number of psychological qualities. Financial Literacy (0.691), Social Influence (0.648), and Overconfidence (0.618) had the most explanatory power, and Emotional Influence (0.479) was less important but also represented.
- The results from the table demonstrated that the first four factors (with eigenvalues greater than 1) explained 70.3% of the total variance, so the model is reliable and can efficiently reduce the data.
- The Varimax method grouped items into four meaningful psychological clusters: Confidence & Competence (including Risk Tolerance, Overconfidence and Financial Literacy), Behavioral Bias (comprising Emotional Influence, Herd Behavior and Anchoring Bias), Risk Aversion (with items such as Loss and Regret Aversion) and Social & Cognitive Framing (Mental Accounting and Social Influence).

7. Suggestions

- Awareness programs should be created using insights from the four main psychological dimensions. Helping people get better at managing their finances and evaluating risks supports Factor 1 (Confidence & Competence).
- Advisors should add behavioural finance to their practices to help their clients manage cognitive and emotional biases such as anchoring and following the crowd (Factor 2).
- Regulators and financial services could introduce digital tools to reduce the risks and regrets of people who tend to avoid risks (Factor 3).
- Use trusted financial information and learning from people around you to make better money decisions (Factor 4).

8. Conclusion

It was demonstrated that coastal Andhra and Rayalaseema populations' investment choices are shaped by four essential psychological dimensions. With exploratory factor analysis, the study confirmed that these personality traits are complex, accounting for more than 70% of the different responses. It is shown that, along with knowledge and risk tolerance, influences on investor decisions also include emotional, social, and cognitive biases. They can be used as a basis for better investor teaching, organizing investors by their actions, and enacting policies that help people make smart and well-balanced choices about finance.

References

[1] Alkaraan, F., Floyd, D., Rahman, M., &Nuery, N. (2023). A new era of strategic investment decision-making practices in UK companies: Towards sustainable supply chains and circular economy. Theoretical Economics Letters, 13(3), 666-682. https://doi.org/10.4236/tel.2023.133040.

[2] Alkhawaja, S.O., &Albaity, M. (2020). Retirement saving behavior: Evidence from UAE. Journal of Islamic Marketing, 13(2), 265-286. https://doi.org/10.1108/JIMA-03-2020-0072.

[3] Aman, J., Abbas, J., Shi, G., Ul Ain, N.U., & Gu, L. (2022). Community wellbeing underChina-Pakistan economic corridor: Role of social, economic, cultural, and educational factors in improving residents' quality of life. Frontiers in Psychology, 12, article number 816592. https://doi.org/10.3389/fpsyg.2021.816592.

[4] Baid, V., & Jayaraman, V. (2022). Amplifying and promoting the "S" in ESG investing: The case for social responsibility in supply chain financing. Managerial Finance, 48(8), 1279-1297. https://doi.org/10.1108/MF-12-2021-0588.

[5] Bayar, Y., Sezgin, H.F., Öztürk, Ö.F., & Şaşmaz, M.Ü. (2020). Financial literacy and financial risk tolerance of individual investors: Multinomial logistic regression approach. Sage Open, 10(3). https://doi.org/10.1177/2158244020945717.

[6] Bordalo, P., Gennaioli, N., & Shleifer, A. (2022). Overreaction and diagnostic expectations in macroeconomics. Journal of Economic Perspectives, 36(3), 223-244. https://doi.org/10.1257/jep.36.3.223.

[7] Campbell, D.,Brodeur, A., Dreber, A., Johannesson,M.,Kopecky, J., Lusher, L., &Tsoy, N. (2024).Therobustness reproducibility of the American economic review. I4R Discussion Paper Series, 2024, article number 124.

[8] Dang, L., &Zhao, J. (2020). Culturalriskand management strategy for Chinese enterprises' overseas investment. China Economic Review, 61, article number 101433. https://doi.org/10.1016/j.chieco.2020.101433.

[9] Dunayev, I., Kuchma, M., Byelova, L., Jatkiewicz, P., Bilichenko, O., &Poberezhets, H. (2024). Wartime destruction: Regional assessment of damage to Ukraine's infrastructure. International Journal of Environmental Studies, 81(1), 8-17. https://doi.org/10.1080/00207233.2024.2314862.

[10] Duxbury, D.,Gärling,T., Gamble, A.,& Klass, V. (2020). Howemotions influence behaviorin financialmarkets:A conceptual analysis and emotion-based account of buy-sell preferences. European Journal of Finance, 26(14), 1417-1438. https://doi.org/10.1080/1351847X.2020.1742758.

[11] Farrelly,G.E.andW.R.Reichenstein.(1984).Riskperceptionsof institutional investors. Journal of Portfolio Management, 10(4), 5-12.https://doi.org/10.3905/jpm.1984.408966.

[12] Herus,O.(2024).Peculiaritiesofinvestmentsupportforindustriesinthecurrentenvironment.Economics, Entrepreneurship, Management, 11(1), 57-66. https://doi.org/10.56318/eem2024.01.057.

[13] Jain, R., Sharma, D., Behl, A., & Tiwari, A.K. (2022). Investor personality as a predictor of investment intention – mediating role of overconfidence bias and financial literacy. International Journal of Emerging Markets, 18(12), 5680-5706. https://doi.org/10.1108/IJOEM-12-2021-1885.

[14] Pysarenko, N., Hromozdova, L., Butkevych, O., Dovhenko, Ya., Derbenova, Ya., & Artemenko, A. (2023). Study of the influence ofpsychological factors on the efficiency of communication strategies in the marketing of innovations. Current Issues in Modern Science, 8(14), 136-149. https://doi.org/10.52058/2786-6300-2023-8(14)-136-149.

[15] Rosdiana, R. (2020). Analysis of investment interests, motivation, social environment, financial literacy (comparative study of Generation Z and Millennial Generation). International Journal of Business, Economics and Law, 22(1), 111-121.

[16] Rana, H. M., S.Murtaza, F. Noor, Inam-u-dinand K. Rehman. (2011). Effects of Demographic Factors on Risky Decision-Making Behavior. European Journal of Social Sciences, ISSN 1450-2267 Vol.25 No.3, pp. 69-76

[17] Ruda,L.,&Kraus,O.(2024).Theimpactofglobalizationoninternationalfinancialmarkets.Innovationand Sustainability, 4(2), 53-59. https://doi.org/10.31649/ins.2024.2.53.59.

[18] Shubalyi,O., &Kosinskyi,P.(2024). Behavioral economics and economic growth in the context of sustainable development. Science Innovations and Advanced Technologies, 6(34), 1016-1027. https://doi.org/10.52058/2786-5274-2024-6(34)-1016-1027.

[19] Sood, K., Pathak, P., Jain, J., & Gupta, S. (2023). How does an investor prioritize ESG factors in India? An assessment based on fuzzy AHP. Managerial Finance, 49(1), 66-87. https://doi.org/10.1108/MF-04-2022-0162.

[20] Voznyak, H.V., &Benovska, L.Ya. (2021). Substantiation of behavioral patterns of decision-making by financial and economic entities at the regional level. Regional Economy, 99(1), 72-80. https://doi.org/10.36818/1562-0905-2021-1-8.

[21] Yang, M., & Wang, H. (2023). The decision of investment and financial influenced by executives with overseas values: Based on individualism – overconfidence. Applied Economics, 56(40), 4808-4826. https://doi.org/10.1080/00036846.2023.2216441.