Investment Behaviour and Decision Making Alternatives - A Study

Kiruthika R*

Ph.D. Research Scholar (Full-Time), Department of Commerce, Srimad Andavan Arts and Science College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli, Tamil Nadu, India

S. Ramya

Assistant Professor & Research Supervisor, Department of Commerce, Srimad Andavan Arts and Science College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli, Tamil Nadu, India

**Corresponding Author Email:: kiruthikaraja94@gmail.com*

Abstract: *Behavioural finance, which integrates psychological and behavioral factors into investment decisions, contests conventional financial theories by analyzing investors' cognitive abilities and psychological phenomena. This study examines the investment behavior of individual investors in the Tiruchirappalli district. This study aims to understand the impact of demographic and psychological characteristics on investment behavior. The high savings rate in India emphasizes the importance of individual investors, who often lack comprehension and perception of various financial products. This study uses personality traits and demographic information to analyze investor behavior. The initial survey used a well-organized questionnaire to analyze the investment situation, knowledge, perception, and investments of individual investors in the Tiruchirappalli district. The data were examined using SPSS 26, and the frequency of demographic factors and investors' perceptions of various investment alternatives were examined using AMOS 24. Investors tend to choose traditional assets because they are more secure and easily convertible into cash. Individual preferences can effectively satisfy both consumers and service providers, thereby enhancing investors' risk appetite through heightened awareness. This study encompasses fields such as investor perception, preferences, behavior, demographic characteristics, and psychology.*

Keywords*:* Behavioral finance, Investors, Investors' behavior, Psychological factors, Investment decisions, Investment alternatives.

INTRODUCTION

Since the 1980s, saving and investment have undergone significant changes. Contemporary and classic investment options are available. Investors exhibit variations in their saving and investment strategies. Brown, R. (2012) says John Keynes defined investment as placing money in securities or assets created by financial institutions to produce returns over time. (Fletcher, G. A., & Fletcher, G. A. (1989)), According to the definition, investing involves committing money in expectation of future financial benefits such as interest, rent, or dividends. Markowitz, Sharpe, Litner, and Modigliani-Miller's portfolio theory underpins mainstream finance. Conventional finance states that investors choose based on risk and return, not emotions. It was anticipated that investors would use all available information before investing. Investors consider all essential factors before investing in a stock. Behaviorist finance originated in the 1970s and has since evolved. A person's behavior includes their emotions, personality, and psychology. Finance comprises data, balance sheets, risks, and returns. Markovits, et. al (2007).

This study analyzed how psychology affects behavior. Unlike traditional finance theories, behavioral finance examines non-rational people and dysfunctional markets. Behavioral finance suggests that people invest based on emotions and prejudices, which may be incorrect. According to behavioral finance, several psychological variables affect investing behavior. According to Ritter, J., cognitive psychology and arbitrage limits underpin behavioral finance. R. (2003). Cognitive psychology refers to how people think and make decisions in inefficient market conditions. They treat cognitive and psychological problems. Inaccuracies in behavior may take numerous forms. The predicted value relative to a benchmark (e.g., revenue) is used to assess the results. (Kahneman, D. (1979);Kahneman 2011). Prospect Theory states that people avoid risk because they fear loss. In conventional finance, risk and return are positive. Risk increases returns, whereas behavioral finance implies that risk and returns are inversely correlated. Behavioral finance suggests researching individual behaviors before investing to determine how these behaviors affect decisions.

Rational investors examine investment risk and return data and build portfolios of securities and assets.

Behavioral finance research has investigated the patterns of investor saving and investing based on demographic factors, financial expertise, risk tolerance, and cognitive biases. Most research has focused on employed women. Psychological and behavioral studies of individual investors are rare. This study examines the psychological factors that impact investment behavior to fill this research gap. This study assessed the correlation between five specific personality traits and investment. This research explores how demographic and psychological factors influence individual investors' investing behavior in the Tiruchirappalli district, highlighting the importance of effective money management in today's world, where generating income is insufficient.

REVIEW OF LITERATURE

Tversky, A., & Kahneman, D. (1974), introduced behavioural finance and predicted utility theory, showing that people value probable events less than definite ones. According to the prospect theory of 1979, investors value perceived gains more than perceived losses. It also states that psychological factors affect investors' judgements. Framing theory, introduced in 1981, states that people avoid hazards when framed positively but seek them when framed negatively. Kahneman, D. & Tversky (1979) found that people are risk averters while making profit-oriented judgements and risk seekers when avoiding losses. In their 1984 research, "Explaining investor preference for cash dividend", Shefrin, H. M., & Statman, M. (1984) introduced "Mental Accounting". Human psychology, bias, preference, and beliefs influence investment decisions, according to Kahneman, D., & Riepe, M. W. (1998). Capital Asset Pricing was introduced by Shefrin, H., & Statman, M. (2000). Economics and finance theory were introduced by Thaler, R. H. (1999).Bell, D. E. (1985) and Shiller, R. J. (2the term behavioral financeural Conducting nance after significant research. The behavioral finance literature is abundant. In their research on behavioral finance and investor psychology, Waweru et al. (2008) discovered that market knowledge, biases, and fundamental analysis affect investment decisions. In "Modern Finance vs. Behavioural Finance: An Overview of Key Concepts and Major Arguments," Andrikopoulos, P. (2011) contrasted behavioural finance to conventional finance. Behavioral finance theories are preliminary estimations that require modification and development. Muradoglu, G., & Harvey, N. (2012) examined how psychology affects financial decisions. Surveys, interviews, and participations are more expensive and less successful than experiments. Practitioners should customize products to client needs and educate academics on better methods.

Oprean, C., & Tanasescu, C. (2014), examined whether behavioural finance affects the development of capital market traded volume and errors. Daily indices from June 2009 to June 2013 show that investor risk aversion and irrationality affect trade. Research shows that behavioral errors strongly influence investment decision-making. Overconfidence, conservatism, and availability bias caused gender differences in investor decision-making, according to Bakar, S., & Yi, A. N. C. (2016). Anju, K. J., & Anuradha, P. S. (20and predicted return choices, and, predicted return choices investment portfolio choice as saving and investing determinants. A two-way ANOVA and factor analysis demonstrated positive annual savings-expected return interactions for the two groups. Main investment safety, maturity, low initial investment, health, tax, product knowledge, liquidity, and income regularity impact investors' decisions. Somathilake, H. M. D. N. (2020), evaluated investor portfolio selection and investing attitudes and offered professional help to decrease portfolio management bias. Research has shown that emotions affect behavior and decision-making. Security, globalization, and other advantages are also required. Umamaheswari, S., & Kumar, M. A. (2014). evaluated investment awareness, returns, and satisfaction. Demographics increase awareness, enjoyment, and return expectations, according to 1000 respondents. Gowri, M. (2014) assessed Gen Y workers' financial literacy. The survey included 189 workers from Coimbatore. Due to their demographics, many respondents lack financial understanding and savings practices. Kaur, I., & Kaushik, K. P. (2016) analysed 450 Delhi-NCR investors to assess how knowledge, attitude, and socioeconomic variables impact investment. Research has revealed that investor knowledge, perception, and socioeconomics impact investing. Research demonstrates mutual fund expertise boosts investment Sailaja, V. N. (2018) examined 140 investors' mutual fund knowledge and family income. According to studies, investors know nothing about mutual funds [insert reference]. Family income favorably affects mutual fund selection. Agarwal (2020) analyzed women's interests and knowledge. Researchers have found that women invest in secure, tax-saving assets because of risk aversion.

Dickason, Z., & Ferreira, S. (2018) examined 1171 South African investors' risk tolerance and financial biases. Data analysis included mean, SD, and ANOVA. Risk-tolerant and risk-averse investors have self-control biases, whereas low-risk investors have loss aversion and mental accounting biases. Dhiman, B., & Raheja, S. (2018) examined personality and risk tolerance. A total of 500 Punjabi investors linked risk tolerance to agreeableness, extroversion, and new experiences. Money choices require emotional intelligence. Hamza, N., & Arif, I. (2019) say financial knowledge and personality affect investment. The researchers interviewed 235 investors from Karachi. Financial knowledge increases extraversion, agreeableness, and openness but decreases conscientiousness. Punitha and Gayathri explored psychological variables affecting 1627 Tamil Nadu and found that neuroticism and openness affect financial knowledge and investment. Personality attributes substantially affect risk-averse investors. Psychological biases and personalities impact investor trading by Imran, M., & Bhutto, Z. (2019).

OBJECTIVES OF THE STUDY

- To analyze the factors influencing the investment decisions of investors.
- To determine the investment perception and preferences of individual investors towards various investment alternatives.
- To determine the psychological factors that impact the investment behavior of individual investors' investment decisions in various investment alternatives.

METHODOLOGY

This study employs a purposive research approach, combining quantitative and qualitative research, and a

structured questionnaire is used in the research study. This study applied a descriptive research design to analyze the investment behavior of individual investors in different financial and physical assets. The target respondents were persons from diverse educational, occupational, and income backgrounds who participated in personal financial planning and investment decisions. Experts in education, finance, and stock trading assessed the questionnaire to confirm its content validity. The instrument comprises four sections: socio-demographics, savings and investing behavior, investment awareness, perception of individual investors, and investment preference and psychological profile. The target population consisted of individual investors in the Tiruchirappalli district with varied backgrounds, occupations, and income levels. The study employs primary data and a variety of statistical tests to analyze the gathered data using SPSS 26 and AMOS 24.

RESULTS

Table 1: Demographic Variables

Variables	Category	F	%
Gender	Male	52	57.78
	Female	38	42.22
	Total	**90**	**100**
Age	18- 25	20	22.22
	26-35	36	40
	36-45	19	21.11
	46-60	11	12.22
	Above 60	4	4.44
	Total	**90**	**100**
Education	Higher Secondary	6	6.67
	Under Graduate	39	43.33
	Post Graduate	24	26.67
	Professionals	21	23.33
	Total	**90**	**100**
Monthly Income	Below 15000	9	10
	15001-25000	15	16.67
	25001- 40000	33	36.67
	40001-50000	16	17.78
	Above 50000	17	18.89
	Total	**90**	**100**

Source: Author's Compilation

FACTORS INFLUENCING INVESTMENT DECISION –GARRETT'S RANKING TEST

Investors evaluate the safety of the primary amount, economic conditions, and financial ability of a company before deciding on investments. They prioritize government securities over private ones and consider consistent returns essential. Because irregular income makes investments riskier, investors seek low-risk options. Consider liquidity and prioritize tax benefits, such as Public Provident Fund and Life Insurance. Alternatives for saving taxes, such as the Public Provident Fund and Life Insurance, are also considered.

Table 2: Factors influencing investment decision – Garrett's Ranking Test

Factors	Total score	Average Score	Rank
Regularity of income	27354	50.66	IV
Risk tolerance level	33724	62.45	I
Convenience in investment	32868	60.87	II
Liquidity	30365	56.23	III
Tax saving benefits	15539	28.78	V

Source: Author's Compilation

The table above displays several elements that influence an investor's investment decisions. Investors' risk tolerance significantly influences their investment decisions, followed by the ease of investment. An investor's risk tolerance can be categorized as low, moderate, or high, and this greatly influences their decision to invest. Investors prefer to invest in alternatives that are convenient and have readily available information. Investors prioritize liquidity as the third most important factor for accessing their funds quickly in case of an emergency. Income stability was ranked fourth in importance, whereas tax-saving benefits had the least impact.

INVESTOR'S PERCEPTION OF VARIOUS INVESTMENT ALTERNATIVES

Investment decisions are significantly influenced by the selection of investment alternatives. Investors make decisions based on their financial goals, limitations, market circumstances, and perceptions of both risk and return. Investment choice is the decision of where to invest monetary resources, whereas preference is the favored option, regardless of financial constraints. The table displays the frequency distribution of respondents according to their investment preference.

Table 3: Investor's perception of various investment alternatives

Investment alternatives	Mean Score	Rank
Bank savings/ Post office savings	469.5	II
Bonds & debentures	289.1	V
Equity	405.3	III
Fixed deposit schemes	285.8	VI
Government Securities	166.9	X
Life Insurance	251.7	IX
Mutual Funds	368	IV
Gold and Diamonds	504.8	I
Provident Fund	277.1	VII
Real estate	262.2	VIII

Source: Author's Compilation

The table presents investors' perceptions of the various investment alternatives available to them. A score of 504.80 is a high value for gold and diamonds, while a score of 469.50 is assigned to bank and post office deposits, which is the average value. The Mean score of equity was 405.30, and 368.00 respondents preferred to invest in Mutual Funds. The mean score of Bonds & Debentures is 289.1, while a score of 285.80 is routine for fixed-deposit schemes. The mean score for provident funds was 277.10, and the mean score for real estate was 262.20. The mean score for life insurance is 251.70, while the score for 166.90 is Government securities. The respondents believe that precious metals provide the greatest return on their investment, whereas there is a perception that bank savings and post office savings provide the least return on investment. Growth in value is often the objective of investors willing to take on a high level of risk. In addition to precious metals such as gold and silver, many people like to invest in real estate.

INVESTOR BEHAVIOUR AND INVESTMENT DECISION WITH SEM

This model analyzes the correlation between investor behavior and investment decisions. Investor behavior is the independent variable, while investment decisions are the dependent variables.

H_{01}: There is no statistical influence of investment decisions on the investment behavior (psychological factors) of individual investors in Tiruchirappalli.

Model 1: Relationship between Employee Behaviour and Investor Behaviour and Investment Decision

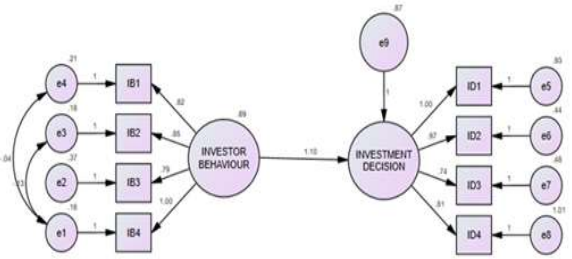

Fig. 1: Relationship between Investor Behaviour and Investment Decision

Source: Author's Compilation (Using AMOS)

Figure 1 highlights the correlation between investor behavior and investment decisions. Investor behavior strongly and positively influenced investment decisions, with a path value of 1.10. The model fitness indices and estimate summaries for the above-mentioned model are displayed in Table 3.

Table 4: Relationship between Investor Behaviour and Investment Decision – Model fit

Model	Chi square	CMIN/DF	P-Value	GFI	AGFI	CFI	RMSEA
Study model	25.086	1.476	0.093	0.941	0.876	0.981	0.073
Recommended value		Acceptable fit [1-3]	Greater than 0.05	Greater than 0.9	Greater than 0.8	Greater than 0.9	Less than 0.08
Summary of estimates							
			Beta	SE	CR	P value	Result
ID	<---	IB	1.098	0.192	5.721	0	Significant

ID- Investment Decision, IB- Investment Behaviour

Source: Author's Compilation

The fitting indices measure how well the model matches the data. Model fitness indicators, such as chi-squared, normed Chi-Square, RMSEA, GFI, AGFI, and CFI, evaluate the goodness of fit of a statistical model. The Chi-Square test compares the observed and expected covariance matrices. The error between the sample and estimated covariance matrices was examined (Hooper et al., 2008). A value closer to zero indicates a better fit between the expected and observed covariance matrices. Effective models have non-significant chi-square results; therefore, the model fit p-value should be greater than 0.5. Chi-Square is called "Badness of fit" for this reason. Dividing Chi-Square by degrees of freedom yields the normed Chi-Square for p-values greater than 0.5. The acceptable standardized chi-square index was 1–5. The RMSEA evaluates the model fit to the population covariance matrices. A strong fit is less than 0.8. The universal threshold values of 0.05 or 0.10 for model fit are unsupported empirically. The RMSEA and other fit indices help the chi-square test statistic. These indices improve the chi-square test for model fit (Chen, F., et al., 2008). RMSEA results are classified as close (.00–.05), fair (.05–.08), mediocre (.08–.10), and bad (.10+). The goodness-of-fit index (GFI) measures the estimated population covariance variance contribution. The Adjusted Goodness of Fit Index (AGFI) adjusts the GFI based on the degrees of freedom. Even with small sample sizes, the Comparative Fit Index (CFI) is reliable. All three indices were above 0.9, indicating excellent fitness. Values between 0.8 and 0.9 indicate a good but limited fit. Poor fits have indices below 0.8. Bartholomew et al. (2011)

The Chi-square value for Table 4 is 25.086, while the normed chi-square value is 1.476. The Goodness of Fit Index (GFI) for this model was 0.941, the Adjusted Goodness of Fit Index (AGFI) was 0.876, the Comparative Fit Index (CFI) was 0.981, and the Root Mean Square Error of Approximation (RMSEA) was 0.073. All these values fall within a commonly accepted range, indicating that the model is acceptable or fits. The summary of estimates in the table shows that the association between Investor Behavior and Investment Decision is significant, as demonstrated by the Critical Ratio (5.721), which is more than 1.96, and the p-value, which is less than 0.05. In the model shown in Figure 1, the covariances between error components e1 and e3 and e1 and e4 were included to enhance the model's fit. Investors' behavior positively and directly influences investment decisions. The availability of various investment options improves investors' decisions regarding their investments.

Investors' decision-making processes are significantly influenced by their behavior, which is psychologically driven by the current situation and the available avenues for investment. Among the psychological factors, conscientiousness has the most significant influence on all aspects of investment behavior and enhances investors' decision-making in investments.

DISCUSSION:

Individuals should be aware of their preferences and expectations to make rational investment decisions, considering their future financial requirements. Research indicates that investors often lack clarity regarding their investment goals. They usually invest their money in gold, fixed deposits, stocks, post office deposits, and real estate. However, additional investment opportunities offer returns and fund safety. To improve their knowledge, individuals should explore financial alternatives, analyze demographic and psychological factors, and broaden the scope of research. Investment service providers should offer tailored products and awareness to improve investor awareness. Moreover, behavior-oriented training programs should be arranged for policymakers and market creators.

CONCLUSION

A study in Tiruchirappalli district, Tamil Nadu, India, examined how psychological factors influence investment decisions. The results indicate that male and female residents make larger investments, whereas the salaried class invests for consistent returns. Psychological

factors such as conscientiousness, risk tolerance, and investment convenience were significant. Investors are cautious and tend to favor traditional alternatives over modern alternatives. Respondents showed moderate awareness of conventional investment alternatives but were unaware of unconventional and riskier alternatives. This study highlights the complexity of financial decision-making and the need for the investment industry to consider each individual's personality and demographics when making investment decisions. This emphasizes the importance of considering these factors when making investment decisions and considering the unique needs and preferences of investors.

REFERENCES

1. Bakar, S., & Yi, A. N. C. (2016). The impact of psychological factors on investors' decision making in Malaysian stock market: a case of Klang Valley and Pahang. Procedia Economics and Finance, 35, 319-328. https://doi.org/10.1016/S2212-5671(16)00040-X
2. Bell, D. E. (1985). Disappointment in decision making under uncertainty. Operations research, 33(1), 1-27. https://doi.org/10.1287/opre.33.1.1
3. Chen, F., Curran, P. J., Bollen, K. A., Kirby, J., & Paxton, P. (2008). An empirical evaluation of the use of fixed cutoff points in RMSEA test statistic in structural equation models. Sociological methods & research, 36(4), 462-494. https://doi.org/10.1177/0049124108314720
4. Dhiman, B., & Raheja, S. (2018). Do personality traits and emotional intelligence of investors determine their risk tolerance?. Management and Labour Studies, 43(1-2), 88-99. https://doi.org/10.1177/0258042X17745184
5. Dickason, Z., & Ferreira, S. (2018). Establishing a link between risk tolerance, investor personality and behavioural finance in South Africa. Cogent Economics & Finance, 6(1), 1519898. https://doi.org/10.1080/23322039.2018.1519898 https://doi.org/10.1016/S2212-5671(16)00040-X
6. Kahneman, D. (1979). Prospect theory: An analysis of decisions under risk. Econometrica, 47, 278. http://dx.doi.org/10.2307/1914185
7. Kahneman, D., & Riepe, M. W. (1998). Aspects of investor psychology. Journal of portfolio management, 24(4), 52-+. https://doi.org/10.3905/jpm.1998.409643
8. Markovits, Y., Davis, A. J., & Van Dick, R. (2007). Organizational commitment profiles and job satisfaction among Greek private and public sector employees. International journal of cross cultural management, 7(1), 77-99. https://doi.org/10.1177/1470595807075180
9. Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. Review of Behavioural Finance, 4(2), 68-80. https://doi.org/10.1108/19405971211284862
10. Oprean, C., & Tanasescu, C. (2014). Effects of behavioural finance on emerging capital markets. Procedia Economics and Finance, 15, 1710-1716. https://doi.org/10.1016/S2212-5671(14)00645-5
11. Ritter, J. R. (2003). Behavioral finance. Pacific-Basin finance journal, 11(4), 429-437. https://doi.org/10.1016/S0927-538X(03)00048-9
12. Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. Journal of financial and quantitative analysis, 35(2), 127-151. https://doi.org/10.2307/2676187
13. Shiller, R. J. (2000). Measuring bubble expectations and investor confidence. The Journal of Psychology and Financial Markets, 1(1), 49-60. https://doi.org/10.1207/S15327760JPFM0101_05
14. Thaler, R. H. (1999). Mental accounting matters. Journal of Behavioral decision making, 12(3), 183-206. https://doi.org/10.1002/(SICI)1099-0771(199909)12:3%3C183::AID-BDM318%3E3.0.CO;2-F
15. Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. science, 185(4157), 1124-1131.