

CHAPTER V

SUMMARY AND CONCLUSION

A summary of this research study is presented here. As a result, key findings arising from the data analysis were made. The conclusions of this study also discuss some implications for future studies.

5.1 SUMMARY

Investment behaviour of individual investors can be conceptualised as a complex phenomenon, including investment patterns, investment preferences and decision-making behaviour – both rational and irrational. Investment behaviour of the individual is influenced by investors' personality and investors' intelligence as per the literature review. This study on 'Investment Behaviour of Government Employees in Kerala' has been carried out to explain the underlying factors that affect the investment behaviour of select Government employees. The basic premises used are provided by the Multiple Intelligence theory, Big Five Personality theory, rational behaviour (Prudence), and irrational behaviour (Behavioural bias).

Government employees are the stable income receiving middle-class individuals in Kerala, and thus, their investment behaviour will influence very much the development of the economy. Hence, this study is carried out to specifically answer research questions related to the investment behaviour of government employees and their relationship with the cognitive and behavioural aspects. The primary objective is to study the impact of personality, intelligence, risk level perception and objectives, and factors perceived in investment on investment pattern, preferences, and decision-making of government employees.

The descriptive method of research is adopted for this study. Primary data are collected using a structured questionnaire that includes three parts Investment behaviour questionnaires, the Multiple Intelligence Inventory and the Big Five Personality Inventory. The questionnaire captured the demographic profile, investment behaviour, investors' intelligence, and Personality. The study was carried out among Grade II Government employees in Kerala State who enrolled in SPARK. The sample size consists of 384 respondents. Statistical tools like correlation, multiple regression, Canonical correlation, t-

test, ANOVA and SEM are applied for analysing the data to achieve the following research objectives.

1. To study the Investment Pattern of select Government employees in Kerala
2. To find out Investment Preferences of select Government employees in Kerala
3. To identify Investment Decision Making behaviour of select Government employees in Kerala (Rational and irrational behaviour)
4. To assess the influence of demographic profile of the employees on investment behaviour
5. To examine the effect of intelligence and personality traits of select Government employees on their investment behaviour

5.2 FINDINGS

The findings of the study are based on the objectives and each objective is discussed in each section here.

5.2.1 Demographic Profile of the Respondents

As per Kerala State Budget 2019 -20, 5,15,639 government employees in Kerala are drawing salary from SPARK (Service and Payroll Administrative Repository for Kerala). The Government employees represent all social categories like scheduled caste, scheduled tribes, other backward castes and general categories. The samples selected are three hundred and eighty-four grade II employees (basic salary between 39,300 and 70,000). Among respondents, 43.8 per cent were from Grade II(a) employees (basic salary between 39,300 and 59,300) and 56.3 per cent from Grade II (b) category (basic salary between 59,300 and 70,000).

The majority of the respondents are men; as per age, the majority of respondents are from the 31-40 years age group, and the least are from the 21-30 years age group. In marital status, 85 per cent are married. Most respondents are from the Rs.60,000 - Rs.80,000 income level, but those above the Rs.100,000 income group are the least. Most respondents save between 10 and 40 per cent of their income.

5.2.2. Psychological Aspects like Intelligence and Personality of the Respondents

- ❖ For studying the cognitive aspects of the government employees, Multiple Intelligence theory was used. As per the descriptive study of investors' intelligence, it is proved that Naturalistic, Verbal, Interpersonal, Intrapersonal, and Logical

intelligences significantly contribute to their investors' intelligence, as they indicate a higher mean value of 14.00, 13.94, 13.89, and 13.87.

- ❖ For studying the behavioural aspects of the government employees, Big Five Personality theory was used. The personality traits like Openness, Conscientiousness, Extroversion, and Agreeableness are more significant in their investors' personality as they denote the higher mean scores of 13.51, 13.09, 12.72, and 12.86. In contrast, Neuroticism denotes a lesser mean of 10.82.

5.2.3. Investment Pattern of Select Government Employees in Kerala

The investment patterns of the select government employees have four components: Factors perceived on investment, Objectives of Investment, the actual selection of investment avenues, and Risk level perceived.

5.2.3.1. Investment Pattern

- ❖ In the case of Factors perceived, safety has the highest mean value, 4.14 (Rank I). Return is the Factor next to it with a mean value of 4.09 (Rank II). For liquidity and marketability (Rank III & IV), the mean value is 3.77, 3.71 each.
- ❖ All the four other factors like Tax savings, Simplicity, Affordability and Diversification have a similar mean value which ranges from 3.41 to 3.61.
- ❖ In the case of Objectives of investment, Good return has the highest mean value, 3.94 and Future safety is the next highest mean value, 4.06. Children's career is next to it, with a mean value of 3.94, and for liquidity, the mean value is 3.84.
- ❖ All the other factors like Tax saving, Pension and Capital appreciation have a similar mean value ranging from 3.62 to 3.73.
- ❖ Actual investments made by those government employees are studied and found that the Bank Deposit is the favourite investment avenue (Rank I) and 71.09% of respondents invested.
- ❖ In insurance (57.55%) and in chit funds (46.09%), more persons had invested than other avenues like Mutual Fund (39.32%), Post Office (38.02%), Treasury Savings (37.50%), Cooperative sector (36.98%) and Real estate (35.94%) (Ranks II, III, IV, V, VI VII & VIII).
- ❖ The debt market is the least used by only 5.73 percent of them (Last Rank, XIV). Commodity (13.28%) and NBFC (16.15%) are next to it (Ranks XIII & XII).

- ❖ Stock market (30.73%), Tax Savings Scheme (30.73%) and Precious metal (33.85%) are the medium invested avenues (Ranks IX, X & XI).
- ❖ The Bank Deposit, Post Office savings and Treasury are the avenues with low risk (mean value below 2). The Stock market, Mutual fund and Debt market are high risks perceived avenues (mean value above 3.5).
- ❖ All the other avenues like Chit fund, NBFC, Insurance and Tax savings scheme are medium risk perceived (mean between 2 and 3.5).

5.2.3.2. Investment Patterns and their Relationship with Investors' Psychology like Intelligence and Personality

- ❖ The correlation coefficient of Investors' intelligence and primary factors (Return, Safety, Liquidity and Marketability) are significant at 0.05 level.
- ❖ The primary factors and personality were found to be significant at 0.01 level. The correlation coefficient of intelligence and other factors is also significant at a 0.01 level.
- ❖ However, R-value is not found to be significant for personality and other factors.
- ❖ Thus, the personality and intelligence of the respondents are related to the primary perceived factors, and the intelligence is only significantly related to other factors perceived (Tax saving, Diversification, Simplicity and Affordability).
- ❖ The correlation coefficient of Investors' intelligence and primary objectives are significant at the 0.01 level All other R values are not significant.
- ❖ The intelligence is only significantly related to Primary objectives, whereas the personality and intelligence of the respondents are not related to the other objectives.
- ❖ After factor analysis, the 14 investment avenues are divided into six categories: Safety and Security, Periodic Savings, Tax Consideration, Return Motive, Physical Assets, and Shares and Securities.
- ❖ The correlation coefficient of safety and security avenues and periodic savings avenues with the intelligence is significant at 0.05 level. All the other categories are not significantly related to intelligence. None of the actual investment made is related significantly to investors' personality.
- ❖ After factor analysis, the risk level perceptions of 14 investment avenues are divided into four categories High risk avenues, Risky avenues, Medium risk avenues and Low risk avenues.

- ❖ There is a significant relationship between investors' personality and High Risk level perception on different investment avenues. But the personality has no significant relationship on the perception of risk in Risky avenues, Medium risk avenues and Low risk avenues.
- ❖ There is no significant relationship between investors' intelligence and all categories of risk level perception on different investment avenues.

Investment patterns are significantly influenced by investors' intelligence, affecting primary objectives, factors, and investment choices. Personality traits impact perceived factors and risk perception. These findings align with Arora and Kumari (2020) and support existing research (Lam & Kirby, 2002; Hollander, 2012; Von Stumm, 2013) on intelligence's role in financial decision-making.

5.2.4. Investment Preferences of Select Government Employees in Kerala

Investment preferences are studied in relation to fourteen investment avenues prevalent in Kerala.

5.2.4.1. Investment Preferences

- ❖ The highest mean value and the lowest standard deviation are for Bank deposit preferences, 4.08 and 0.904 (Rank I).
- ❖ Insurance, Chit funds, Post office deposits and Treasury savings are the avenues with higher mean values like 3.91, 3.82, 3.75 and 3.74 (Rank II, III, IV & V).
- ❖ Debt market, Commodity, and Mutual funds are the least preferred avenues as the mean value are 2.56, 2.90 and 3.01 (Rank XIV, XIII & XII).
- ❖ All the other avenues like the Cooperative sector, Real estate, Tax savings scheme, NBFC, Precious metals and Stock market indicate the medium preferences of 3.59, 3.43, 3.41, 3.30, 3.22, and 3.11 (Rank VI, VII, VIII, IX, X & XI).

5.2.4.2. Investment Preferences and their Relationship with Investors' Psychology, Investment Pattern and Investment Decision Making

The investment preferences are studied along with risk level perception. Simple correlation analysis of preferences of particular investment avenue with the risk level perception of the same avenue were analysed.

- ❖ The preferences of avenues like Bank deposit, Chit funds, NBFCs, Cooperative sector, Real estate, Commodity, Stock market, Mutual fund, and Debt market indicate a highly significant ($p < 0.01$) negative correlation coefficient with their risk

level perception. Preferences for Insurance and Tax saving schemes display a significant negative correlation ($p < 0.05$). Post office savings and Precious metals have negative, and Treasury savings has positive correlation, which are not significant ($p > 0.05$). Thus, it is inferred that the Government employees are risk averse investors.

- ❖ After Factor analysis, investment preferences are reduced to 4 components: Preferences in Less Risky Avenues, Preferences in Medium Risky Avenues, Preferences in Risky Avenues, and Preferences in High Risky Avenues.

Four Canonical correlation techniques were done to test the relationship of Investment preference with (a). Intelligence and Personality (b). Rational and Irrational behaviour in Investment decision making (c). Factors perceived and (d). Objectives.

- ❖ Model fit of all the four Canonical Correlation analyses evidenced all the p values of the three tests. The Pillai's criterion, Hotellings' trace and Wilks' test were less at a .01 level of significance.
- ❖ In the case of factors perceived as both primary and other factors, the F value is 3.87041.
- ❖ In the case of Objectives, both primary and other objectives F is 15.22661.
- ❖ The F value of Investors' intelligence and Investors' personality is 3.07392.
- ❖ The Investment decision making, both Rational and Irrational behaviour, is 4.81312. the degree of freedom for all the analyses is (8, 758), and all are significant at a 0.01 level, $p < 0.01$.
- ❖ This indicated that investment preferences are significantly related to factors perceived, objectives, intelligence, personality, and rational and irrational behaviour in investment decision-making.

Hence, it is concluded, Investment preferences have relationship with investors' intelligence, investors' personality, investment pattern and investment decision making.

This study validates the relationship between intelligence, personality, and investment preferences, aligning with prior research (Stanovich et al., 2013; Jabeen et al., 2018; Arora & Kumari, 2020; Showndhariya & Kavitha, 2018; De Bortoli et al., 2019) that establishes cognitive ability, intelligence, and personality as significant factors in shaping investment preferences.

5.2.5. Investment Decision Making Behaviour of Select Government Employees in Kerala

Investment decision-making is studied as Rational behaviour /Prudence and Irrational behaviour/ Behavioural bias.

5.2.5.1. Investment Decision Making

- ❖ All the dimensions in Prudence like Return, Economic consideration, influencing persons, Information dependence, Social consideration, Risk, Evaluation, and Sustainability have a similar mean ranging from 3.62 to 3.33. Return and Information dependence are most influencing factors because they have a high mean; that is 3.62 and 3.60. Influencing persons and Economic consideration shows a low score like 3.33 and 3.42 which indicate the less influence.
- ❖ The Behavioural biases data are analysed. Representative bias, overconfidence, mental accounting, regret aversion and availability bias are most incurred biases because they show higher mean scores like 10.90, 10.89, 10.88, 10.86 and 10.84.
- ❖ Biases like Herding, gamblers' fallacy and anchoring show mean scores of 10.69, 10.46 and 10.31. Gamblers' fallacy and anchoring bias have high scores of standard deviations of 3.03 and 2.957. All the other biases show a variation between 2.875 to 2.661.

5.2.5.2. Investment Decision Making and its Relationship with Investors' Psychology and Investment Pattern

Simultaneous Multiple regression analyses were conducted to study the Rational and Irrational behaviour in investment decision making. Different dimensions of Multiple Intelligence, Big Five Personality Traits, Prudence, and Biases are taken as independent variables in analysing the rational and irrational behaviour as dependent variables.

- ❖ Intelligence accounts for 4.6% ($p < 0.05$) of the rational decision-making variance and 1.6% ($p < 0.05$) of the Irrational decision-making. Investors' intelligence significantly influences rational and irrational decision making.
- ❖ Among the Multiple Intelligences, Verbal, Logical, Spatial, Musical and Interpersonal intelligence positively influences rational decisions, and Intrapersonal, Naturalistic and Existential have a negative influence while Kinesthetic has no influence.

- ❖ Among the Multiple Intelligences, Verbal, Logical, Spatial, Musical, Intrapersonal, Naturalistic and Existential intelligence slightly positively influences irrational decisions. Kinesthetic and Interpersonal have a little negative impact.
- ❖ In case of Personality traits, the value of the F – ratio is equal to 2.68 ($p < 0.05$) in rational decision making and 3.55 ($p < 0.05$) in Irrational decision making. Then personality traits are proved as an influencing factor in investment decision making behaviour both rational and irrational.
- ❖ R square is 0.03 which indicates 3 percent of variation of Rational Investment Decision making can be explained with the help of Big Five Personality Traits. Among the personality variables, Openness, Extroversion, and Agreeableness have a positive influence and Conscientiousness, and Neuroticism has a negative influence on rational decision making.
- ❖ R square is 0.05 which indicates 5 percent of variation of Irrational Investment Decision making can be explained with the help of Big Five Personality Traits. Among the personality variables, Openness, Conscientiousness, and Neuroticism have a positive influence and Extroversion and Agreeableness have a negative effect on rational decision making.
- ❖ Perceived factors show that the model is a good fit, and 1.528 ($p > 0.05$) for objectives shows that the model is not fit. As per the results, Factors perceived on investment account for below 1 percent of the variance in rational decision making and Irrational decision making. Nevertheless, the objectives of investment do not influence both variables.
- ❖ Behavioural biases account for 21% ($p > 0.05$) of the rational decision-making variance. Among the behavioural biases, Mental accounting only has a negative influence, and all other biases positively impact rational decision making.
- ❖ The Prudence account for 21.9% ($p > 0.05$) of the variance in Irrational decision making. Among the dimensions of Prudence, influencing persons has a negative influence, and all other dimensions positively influence Irrational decision-making.

In conclusion, this study identifies investors' personality, investors' intelligence, and perceived primary factors as significant influencers of investment decision-making. These findings align with previous research (Sarwar & Afaf, 2016; Woods et al., 2017; Jabeen et al., 2018) highlighting the relationship between cognitive mental factors, intellectual ability, and rational decision-making. However, the results diverge from existing studies

(Raheja & Dhiman, 2019; Arora & Kumari, 2020) that established a link between intelligence and irrational behaviour or biases in investment decision-making, suggesting that the relationship between intelligence and irrational decision-making may be more complex.

5.2.6. Influence of Demographic Profile of Select Government Employees on their Investment Behaviour

Demographic, social and economic factors are described in the study concerning investment behaviour. The factors like gender, age, category of employment, marital status, income level and Volume of savings are taken for the analysis. Demographic factors are studied in relation to investment behaviour like investment decision making – both rational and irrational, investment preferences, investors' intelligence and personality. The statistical techniques used for this data analysis were t test and ANOVA.

5.2.4.1. Gender

- ❖ In case of investment pattern, male and female are differing in case of secondary factors perceived (Tax savings, diversification, simplicity and affordability) and no difference on account of objectives and primary factors (Return, safety, liquidity and marketability) influencing investment.
- ❖ No significant difference between male and female on account of investment objectives both primary (Return, Capital appreciation and liquidity) and other objectives (Tax savings, children education future safety and pension).
- ❖ Preferences for investment in Post office, Chit funds, and precious metals are significantly different between male and female respondents, with t values of 2.00, 2.30 and 2.27 ($p < 0.05$). The gender of the respondents does not influence all the other factors.
- ❖ Investment decision making of male and female employees are similar both in rational and irrational behaviour.
- ❖ Both men and women are similar in investors' personality and investors' intelligence.

5.2.4.2. Age

- ❖ As per age, the majority of respondents, 44.3 percent, are from the 31-40 years age group, and least 3.4 percent are from the 21-30 years age group.
- ❖ Factors perceived on Investment and investment objectives of government employees are studied in relation to age. The F value is found significant in case of

other investment objectives (Tax savings, children education future safety and pension) only. The primary objectives (Return, Capital appreciation and liquidity) of investment are found similar in all age groups. There is no significant difference in Factors perceived on Investment among different age groups.

- ❖ In case of investment preferences, the F value is significant in preferences in Treasury savings, and Real estate and Tax saving schemes. Age group above 40 years prefer treasury savings than others. The real estate investment is least preferred by the age group below forty years. The age group below thirty years show low preferences in real estate and tax saving scheme investments.
- ❖ The F value is significant in case of Irrational decision making. Irrational decision making shows a low mean to age group above 40 years than others. On account of rational decision making, there is negligible differences between different age groups.

5.2.4.3. Category of Employment

- ❖ The most significant proportion is from the general education department, 32.6 per cent and the least were from technical education and agriculture department; that is 1.8 per cent each.
- ❖ The sample taken is 43.8 percent from category (a) from Grade II employees and 56.3 percent from category (b).
- ❖ In case of investment pattern, no significant difference between Grade II a and Grade II b Government employees.
- ❖ Preferences for Precious metals are significantly different between Grade II a and Grade II b respondents, with t values of 1.93 ($p < 0.05$). Preferences of all other investment avenues analysed are similar to both the categories.
- ❖ Rational decision making is significantly different between Grade II a and Grade II b respondents, with t values of 2.02 ($p < 0.05$). Irrational decision making is similar to both the categories.

5.2.4.4. Marital Status

- ❖ Concerning their marital status, around 85 percent of them are married, and the rest, 15 percent, are either single, widow/er, or separated.
- ❖ Investment preferences on Real estate and tax saving schemes significantly differ among these different groups as the F value is significant at 0.05 level, and the employees' marital status does not influence all other investment-related variables.

- ❖ The employees with a single status show very low preferences for real estate and tax saving schemes than other groups.

5.2.4.5. Income Level

- ❖ It is observed that the majority of the respondents are from Rs.60,000 - Rs.80,000 income level (49.7%) Above Rs.100,000 income groups are the least (3.84%).
- ❖ Irrational decision-making, intelligence, and investment preferences on Bank deposits, NBFC and real estate significantly differ among different income levels.
- ❖ All other investment-related variables are not influenced by the income level of the employees, as the F value is significant at 0.05 level.

5.2.4.6. Volume of Savings

- ❖ Around 29.40 percent of the sample saves 10-20% and 28.90 percent saves 20-30% of their income. Nearly 10 percent of the sample save only less than 10%. Among the respondents, 24 percent can save 30-40% of revenue, and 8 percent save more than 40%. A majority (82%), save around 10% to 40% of their income.
- ❖ Rational and irrational decision making and investment preferences on Bank deposits significantly differ among different groups as the F value is significant at 0.05 level.
- ❖ The volume of savings of the employees does not influence all other investment-related variables.

In case of gender, investment pattern and investment preferences are differing between the groups. At the same time, investment decision making, investors' intelligence and investors' personality are similar between male and female. Suriyamurithi et al. (2012), Varghese (2015) and Lall (2018) proved the difference between males and females in investment preferences. Pandian and Thangadurai (2013) and Kumar and Kumar (2020) reported the gender differences in investment preferences and decision making. Kandregula et al. (2020) have reported a significant difference in investment decision-making according to investors' gender.

As far as age is considered, investment preferences and irrational decision making are influenced. But investment pattern, investors' intelligence and investors' personality are not much influenced by age of investor. Research by Pandian & Thangadurai (2013), Lall (2018), Kumar & Kumar (2020), and Kandregula et al. (2020) reveals age-based differences in investment preferences. Conversely, Panwar (2021) finds no age-related differences in investment patterns.

Marital status influence only the investment preferences. Investment pattern, decision making, investors' intelligence and investors' personality do not differ between different status group. Pandian and Thangadurai (2013) and Kumar and Kumar (2020) have reported the same result regarding investment preferences.

Investors' intelligence of different income level are differing significantly. Investment preferences and management decision making are influenced by income level. Investment pattern and investors' personality are not influenced by income level. The category of employees had influenced the Investment preferences only. All other variables like investment pattern, decision making, investors' intelligence and investors' personality are not differing with different categories like a and b. Thangadurai (2013) and Kumar and Kumar (2020) have reported the same result regarding investment preferences.

Saving volume of investors influence investment preferences and decision making only. Investment pattern, investors' intelligence and personality are not much influenced.

5.2.7. Inter Effect of Intelligence and Personality of Select Government Employees on their Investment Behaviour

The independent variables taken for the study are psychological concepts like intelligence and the personality of investors. Dependent variables are different dimensions of investment behaviour like investment pattern, investment preferences and investment decision making.

5.2.7.1. Model Identification and Evaluation

- ❖ A conceptual model is developed in the study after reviewing several studies in the field. The model has established relationship of investors' intelligence and investors' personality on investment behaviour like investment pattern, preferences and decision making.
- ❖ The model shows an overall acceptable fit as RMSEA is 0.013 and is well below the recommended limit of 0.05, and Root Mean Square Residual (RMSR) 0.011 is also well below the recommended limit of 0.02 at 0.011. The model is an identified model.
- ❖ The confirmatory factor analysis showed an acceptable overall model fit, and hence, the theoretical model fits well with the observed data. It can be concluded that the hypothesised factors CFA model fits the sample data very well.

- ❖ These two statistical methods effectively confirm that a hypothesised model provides a good fit for collected data and investigates whether a set of non-observed or latent variables can significantly predict an outcome measure. The procedures outlined in this analysis show that intelligence and personality have the analytic capabilities to affect investment behaviour.
- ❖ Thus, it is proved that intelligence and personality have a causal relationship with investment patterns, preferences and decision making.
- ❖ The path coefficients of personality with investment pattern, preferences and decision making are 0.71, 0.74 and 0.73 respectively and that of intelligence are 0.67, 0.71 and 0.69 respectively. Thus, the personality traits are more influence on investment behaviour of Government employees.

5.2.7.2. Investors' Intelligence and Personality on Investment behaviour

The results of dimension wise analysis of intelligence and personality on the different dimensions of investment behaviour are presented here.

5.2.7.2.1. Multiple Intelligences and Investment Behaviour

In relation to investment pattern, primary factors and other factors perceived are influenced by investors' intelligence. Primary objectives of investment also influenced by investors' intelligence. Actual selection of investment avenues is influenced by intelligence.

Investor's intelligence is not influencing much on investment preferences of medium risk investment avenues as per analysis. Investors' intelligence influences the preferences of all other avenues like low risk avenues, risky avenues and high risk avenues.

In case of Investment decision making, Rational decision making is influenced by Multiple Intelligences especially Verbal, Logical, and Spatial intelligences. Irrational investment decision making is not much influenced by Multiple Intelligences. Existing literature on Multiple Intelligence and investment behaviour is scarce. This study pioneers an exploration of this relationship in the context of Government Employees' investment behaviour

5.2.7.2.2. Big five Personality Traits and Investment Behaviour

In relation to investment pattern, primary factors perceived on investment are influenced by investors' personality. Other factors perceived are not influenced by investors'

personality. Actual selection of investment avenues and risk level perception also not influenced by personality traits.

Preferences of all the investment avenues irrespective of risk associated like Low, Medium, Risky and High risky avenues are influenced by personality.

Both rational and irrational decision making are influenced by investors' personality. While Openness influence positively, Neuroticism influence negatively in relation to Rational decision making. Openness and Neuroticism influence positively and Extroversion and Agreeableness influence negatively in Irrational decision making.

The study confirms the influential role of investors' intelligence and personality on investment behaviour dimensions. This outcome supports earlier research findings (Raheja, 2018; Ahmad, 2018; Sashikala & Chitramani, 2019) highlighting the interconnectedness of cognitive and non-cognitive factors in investment decisions.

5.3. IMPLICATIONS OF THE STUDY

Theoretical Implications

- 1. Investor Intelligence:** Government employees with higher levels of Naturalistic, Verbal, Interpersonal, Intrapersonal, and Logical intelligences tend to perform better in investment decisions, indicating a strong connection between cognitive abilities and investment success.
- 2. Personality Traits:** Government employees with personality traits like Openness, Conscientiousness, Extroversion, and Agreeableness are more likely to make informed investment decisions, while those with higher Neuroticism may be more prone to impulsive or emotional decisions.
- 3. Investment Decision-Making:** Understanding individual cognitive strengths and personality traits can help government employees make more informed investment choices, leading to better financial outcomes. Investors' prudence and behavioural biases significantly impact their investment decisions
- 4. Behavioural Biases:** Investors are prone to various behavioural biases, with Representative bias, Overconfidence, Mental accounting, Regret aversion, and Availability bias being the most common.
- 5. Bias Variability:** Gamblers' fallacy and Anchoring bias have higher standard deviations, indicating more significant variability in their occurrence.

- 6. Multiple Intelligences have varying effects:** Investors' intelligence significantly influences rational and irrational decision-making. Different types of intelligence have distinct effects on rational and irrational decision-making.
- 7. Personality traits play a role:** Personality traits significantly influence both rational and irrational decision-making, with specific traits having positive or adverse effects.
- 8. Big Five Personality Traits explain variation:** Big Five Personality Traits explain a small but significant percentage of variation in both rational and irrational decision-making.
- 9. Perceived factors have limited impact:** Perceived factors have a limited impact on decision-making, while investment objectives do not significantly influence rational or irrational decision-making.

Practical Implications

1. Employer-Sponsored Programmes:

Government organizations can consider offering employer-sponsored investment programs or financial literacy initiatives to support employees' financial well-being. Government organizations can design training programs to enhance employees' cognitive abilities and positive personality traits, improving investment decision-making and overall financial well-being.

2. Financial Literacy Programmes:

Targeted programs can enhance investors' intelligence and improve investment decisions. Targeted programmes can enhance investors' knowledge and understanding of investment avenues. Investors may benefit from education on prudence and behavioural biases to improve their financial decision-making. Targeted programmes can enhance investors' intelligence, leading to better investment decisions and helping them understand how their personality traits impact investment decisions. There is a need for financial literacy programmes to educate government employees on investment options, risk management, and diversification strategies.

3. Personalized Financial Planning:

Financial advisors and planners can use these findings to create personalized plans tailored to an individual's cognitive strengths, personality traits, individual investor preferences and

risk tolerance. When creating plans, they can also consider investors' intelligence, personality traits, individual prudence, and biases.

4. Investment Product Design:

Products can be designed to cater to different risk perceptions, investor profiles, and investors' prudence and biases. Products can be designed to cater to investors with different levels of intelligence and personality traits.

5. Risk Management Strategies:

Employees perceive bank deposits, post office savings, and treasury as low-risk, while stock markets, mutual funds, and debt markets are seen as high-risk. Recognizing the role of personality traits like Neuroticism in investment decisions can help government employees and financial advisors develop strategies to mitigate potential risks and biases. Investors can develop strategies to manage risk based on their risk aversion and behaviour, personality traits and intelligence. Investors can develop strategies to mitigate the impact of behavioural biases, personality traits and intelligence on their investment decisions.

6. Financial Education:

Educating investors about various investment avenues and risk levels can improve their financial literacy. Educating investors about the impact of intelligence on investment decisions can lead to more informed decision-making.

7. Regulatory Implications:

Regulatory bodies can consider investors' prudence and biases when designing investor protection policies. When designing investor protection policies, regulatory bodies can consider investors' intelligence and Multiple Intelligences. Investors can select advisors who understand the impact of intelligence and personality traits on investment decisions.

8. Policy Implications:

Policymakers can use these findings to design investment products and programs that cater to government employees' preferences and needs.

5.4. CONCLUSION

The study on 'Investment Behaviour of Government Employees in Kerala' has proposed a conceptual framework incorporating the factors influencing Investment behaviour, the Theory of Multiple Intelligence and the Theory of the Big Five Personality. The research study's findings have clearly indicated that such a conceptual framework can explain the

path from the cognitive and behavioural aspects to the Investment behaviour of Government employees in Kerala. Personality, intelligence, social, and demographic factors are included in the independent variables. At the same time, risk level perception of investment patterns, investment preferences, and investment decision-making (Rational and Irrational behaviour) are dependent variables.

This research study has focused on the cognitive and behavioural factors influencing the investment behaviour of Government employees. The study has led to the construction of a model that explains the investment behaviour of Government employees concerning their intelligence and personality. The constructs of the model are confirmed after confirmatory factor analysis. The model was identified and evaluated using Structural Equation Modelling (SEM), and the model is confirmed as a good fit. Thus, it is concluded that government employees' intelligence and personality impact their investment patterns, preferences and decision-making. The personality of the employees has more impact on investment behaviour than intelligence. It means behavioural aspects has more influence on investment than cognitive aspects. Further, the results of this study show that Government employees are prone to various behavioural biases and make irrational decisions and sometimes take rational decisions using Prudence. The investment preferences showed that they are selecting the traditional avenues that are more familiar to them, commonly than using any security analysis.

Government employees are a more significant part of the upper-middle class in the Kerala economy, and their investment behaviour is fundamental to the economic development of the State Economy. Practically, the findings of this research study offer implications for financial consultants, policymakers and individual investors to adopt the best investment options.

5.5. SUGGESTIONS

According to the findings of the research study, suggestions were provided to Kerala Government, Investors, Financial managers and Financial consultants.

5.5.1. For Government of Kerala

Kerala Government should give some instructions on financial planning to their employees in accordance with their psychological and economical needs. Likewise provide some investment education programmes to employees. Now government started Medisep, the compulsory health insurance scheme for employees. It is helpful for many of them.

5.5.2. For Investors

In this research study, it is found that the Kerala Government employees are more behavioural investors than intelligent investors. For making wise investment decision, they follow the intelligence rather than emotions. Intelligent investors can succeed over behavioural investors. It is suggested to consult with financial consultants or experts before taking investment decisions.

5.5.3. For Financial managers in Banks, Non-Banking Financial Corporations (NBFCs), and Mutual Funds

In this research study, it was found that the Kerala Government employees prefer more traditional avenues than new ones. Thus, it is suggested to provide necessary guidance to the customers in relation to their psychological aspects. Expand Know Your Customer (KYC) policy to maintain good rapport with the investors and can educate them with special programmes.

5.5.4. For Financial Consultants

In this research study, it was found that the Kerala Government employees are taking investment decisions without much security and portfolio analysis, thus it is suggested that before giving guidance or advice to clients, study thoroughly their intellectual and behavioural characteristics. Help them to select the security apt for their purpose and satisfaction.

5.6. SCOPE FOR FURTHER RESEARCH

- ❖ The sample is limited to Grade II Government employees drawing a salary from SPARK, the state government of Kerala only. Considering the vast population and differences among the people of India, this is a smaller sample. Therefore, future studies should focus on larger samples and probably across the country, revealing a better picture of individuals' investment behaviour.
- ❖ This study has been carried out by salaried individuals only. Future research might study the investment behaviour of investors like individuals other than the salaried class, institutions, and mutual fund managers and their impact on financial markets.
- ❖ The study has been carried out with select variables identified by the researcher. However, there may be other factors that may significantly influence investment behaviour. Some examples include present economic conditions, financial literacy

level, and the other different investment avenues. Therefore, future research may include these suggested variables to increase the strength of the findings.

- ❖ The study included Multiple Intelligence as a whole in relation to investment behaviour. An in-depth study on each intelligence with the investment-related factors may be established in further studies.
- ❖ Longitudinal research studies can be carried out to study individual investors' Personalities and investment behaviour. According to economic changes, studies about individual investors' behavioural changes could be studied.
- ❖ Cross country studies on the investment behaviour of different types of investors could be carried out, including the independent variable Multiple Intelligence.
- ❖ This study did not focus on the economic aspects that influence the investment behaviour of individual investors. It is focused on the cognitive and behavioural aspects of the government employees and does not include the environmental and political aspects. Thus, there is a scope for further study, including those aspects.
- ❖ Future research studies could include more detailed characteristics such as the volume of investment and returns made to study the investment behaviour of investors with success and failure, which is not considered in this study.