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QUESTIONNAIRE

INVESTMENT BEHAVIOUR

The research is related to the investment pattern, preferences and investment decision and it try to correlate it with intelligence and personality of the respondents. We ensure you that the information collected may keep confidential and used only for research purpose.

Rathi K N

PhD scholar

Under the Guidance of

Dr. D Geetha

Professor and Head (Retd.)

Department of Commerce, Avinashilingam Institute of Home science and Higher Education for Women, Coimbatore

The questionnaire has three parts. Part I – Investment decision related questions, Part II – Intelligence related questions and Part III – Personality related questions.

Name:

Occupation:

Institution:

Age: 21 – 30/ 31 – 40 / 41 – 50 / 51 – 60

Gender: Male/ Female/ Others

Marital status: Married / Single / Widow/ Separated

Income Level: Below 40000/ 40000-60000/ 60000 – 80000/
80000 – 100000/ Above 100000

Part I – Investment decision related questions

1. Percentage wise monthly saving

Saving Range				
Below 10%	10% to 20%	21% to 30%	31% to 40%	Above 40%

2. Factors Influencing While Selecting Investment Avenues

SI No	FACTOR	VERY HIGHLY INFLUENCED	HIGHLY INFLUENCED	MODERATELY INFLUENCED	LESS INFLUENCED	NOT INFLUENCED
1	Return					
2	Safety					
3	Liquidity					
4	Tax Saving					
5	Diversification					
6	Simplicity					
7	Affordability					
8.	Marketability					

3. Objectives of the Investment

SI No	OBJECTIVES	VERY HIGHLY INFLUENCED	HIGHLY INFLUENCED	MODERATELY INFLUENCED	LESS INFLUENCED	NOT INFLUENCED
1	Good Returns					
2	Capital Appreciation					
3	Liquidity					
4	Tax Saving					
5	Children Career					
6	Future Security					
7	Pension					

4. Preferences on Investment avenues

SI No	INVESTMENT AVENUES	HIGHLY PREFERRED	PREFERRED	NEUTRAL	LESS PREFERRED	NOT PREFERRED
1	Bank Deposit					
2	Post office savings					
3	Treasury savings					
4	Chit funds					
5	Non-Bank Financial Corporations (NBFCs)					

6	Co-operative sector					
7	Insurance					
8	Real Estate					
9	Tax-Saving Schemes					
10	Commodity					
11	Precious Metals (Gold/Silver/Others)					
12	Stock Market					
13	Mutual Funds					
14	Debt Market					

5. Tick in the cell as you perceived the Level of Risk Involved in the Investment Schemes

Sl No	Investment Options	Very High	High	Moderate	Low	Very Low
1	Bank Deposit					
2	Post office savings					
3	Treasury savings					
4	Chit funds					
5	Non-Bank Financial Corporations (NBFCs)					
6	Co-operative sector					
7	Insurance					
8	Real Estate					
9	Tax-Saving Schemes					
10	Commodity					
11	Precious Metals					
12	Stock Market					
13	Mutual Funds					
14	Debt Market					

6. Check the avenues which you have already invested

Sl No	Avenues	Tick if you have invested
1	Bank Deposit	
2	Post office savings	
3	Treasury savings	
4	Chit funds	
5	Non-Bank Financial Corporations (NBFCs)	
6	Co-operative sector	
7	Insurance	
8	Real Estate	
9	Tax-Saving Schemes	
10	Commodity	
11	Precious Metals	
12	Stock Market	
13	Mutual Funds	
14	Debt Market	

7. Investment Decision making

Instructions

In the table below, for each statement put tick mark how much you agree with on the scale where

SDA = Strongly disagree, DA= disagree, N=neutral, A= agree and SA= Strongly agree, in the box to the left of it.

Sl No	Statement	S A	A	N	D A	SD A
1	I consult my family members before taking investment decision					
2	I make my investment decision on my own					
3	I prefer investment where there is no loss in capital					
4	I review my investment decision frequently					
5	I feel I am making good investment decision					

6	I borrow money for making investment					
7	Investment decision do have impact on life style					
8	I prefer investment opportunities with potentially large return even if they are riskier					
9	I am getting good return because I have taken calculated decision					
10	Return is determined by external factors					
11	Having the right investment is important for being accepted in a group					
12	Publicity gives information which help us to take good investment decision					
13	Agents are pushing me to make investment					
14	I do save as and when I get extra income					
15	Increase in income is not helping to increase savings					
16	Savings will increase only when there is an increase in stable permanent income					
17	I save more when the interest rate is more					
18	I forego my present consumption for the purpose of future consumption					
19	Good investment opportunities induce behaviour investment					
20	I never withdraw my investment before maturity					
21	I prefer the investment in the avenues which give importance to environmental consideration					
22	I am interested in Socially responsible investment					
23	I will go through the recommendations of financial analyst while taking investment decision					

8. Irrational behaviour in investment (Behavioural Biases)

SL. No	Statement	SA	A	N	DA	SD
1	When thinking about selling an investment, I consider the price paid as a big factor before taking any action.					
2	I ignore the connection between different investment opportunities					
3	I can forecast the changes in stock prices in the future based on the recent stock prices					
4	I often take action on an investment right away, if it makes sense to me.					
5	Current performance of stock is an indicator for future performance					
6	I do habit of purchasing lottery tickets					
7	I imitate the actions of others in making investment.					
8	Other investors' success stories may impact on my investment decisions					
9	I want to invest in the avenues where my friends invest					
10	My investment decision is based on time horizon					
11	I invest as savings for retirement period					
12	I study about the market fundamentals of the stock before making investment					
13	I confident about my investment knowledge					
14	I have complete knowledge about investment avenues					
15	I may decide to seek more risk after a prior gain					
16	Poor past financial decision have caused me to change my carrier investing decision.					
17	If there is loss in past events, I tend to hold the investment in expectation that it gains profit in future					

18	My past investment successes were due to my specific skills and experience					
19	Many investment choices I make are based upon my knowledge of how similar past investments have performed.					
20	Before the investment decision I evaluate the past price movement to predict future success					
21	News about the avenue in newspaper/magazines affect my investment decision					
22	I tend to categorize my investments into various accounts such as leisure, bill paying, education, funding and so on.					
23	My investment decision is based on diversification					
24	I prefer to invest in the local investment avenues because of the information availability					

Part II – Intelligence related questions

Investors' Intelligence (Multiple Intelligence Inventory)

Sl No.	Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1	Reading is my hobby					
2	Writing is very interesting and stress relieving activity for me.					
3	I am very fond of expressing my views in speech					
4	I was good in Mathematics and Physical sciences during my elementary education					
5	I can solve a practical problem very interestingly					
6	I used to answer the mental puzzles at my childhood					
7	I am able to utilize the space around me					
8	I am able to visualize the complex multi-dimensional figures					

Sl No.	Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
9	I am able to draw the illustrative pictures					
10	I am good at handicraft works which needs muscular control					
11	I am very interested in games which need physical power					
12	I enjoy to practice any skill which is difficult to others					
13	I am able to recall a song very easily					
14	I am doing all the work in keeping a rhythm in my mind					
15	After hearing a music, I can able to recognize the instruments used and the pattern					
16	I am interested to make friends					
17	Even if in a strange crowd I find anyone to talk					
18	I can act as moderator to make cooperation among the team					
19	I am aware of my own thoughts and beliefs					
20	I am confident on my competence					
21	I used to enjoy solitude					
22	I am interested to travel to the aesthetic tourist destination					
23	I always prefer products which are not harmful to the environment					
24	I spend my leisure time in garden or farms					
25	I can foresee the accident					
26	I am interested in working in rescue operations					
27	I can survive at any situation					

Part III – Personality related questions
Investors' personality (Big Five Personality Inventory)

Sl No.	Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1	I am very curious to know new things					
2	I respect the artists and value the aesthetic experience					
3	I am interested to do the work in conventional way rather than my own way					
4	I depend on other's idea to take decision					
5	I am interested to do tough job					
6	I am ready to take responsibility					
7	I often careless in my work					
8	I tend to be late in attending a meeting or function					
9	I am very adventurous in nature					
10	I am wanted to become a leader not to become a follower					
11	I enjoy loneliness than social gathering					
12	I tend to be reserved in a social setting					
13	I am ready to accept the emotions of others					
14	I am ready to forgive others' mistake					
15	I sometimes do behave others in a rude manner					
16	I am suspicious on my co workers					
17	I can keep my temper in a tensed situation					
18	I am confident enough to take financial decisions					
19	I often feel unhappy					
20	I worry a lot on my work both in career and/ or personal life					

**INSTITUTIONAL HUMAN ETHICAL COMMITTEE
CLEARANCE**

INSTITUTIONAL HUMAN ETHICS COMMITTEE



Avinashilingam

Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3
of UGC Act 1956) Re-accredited with 'A++' Grade by NAAC.
Recognised by UGC Under Section 12 B
Coimbatore-641 043, Tamil Nadu, India

26th May 2022

Chairman

Dr. Sudha Ramalingam
Director-Research & Innovation,
Professor-Community Medicine,
PSG Institute of Medical Sciences
& Research, Coimbatore

Member Secretary

Dr. S. Uma Mageshwari
Professor and Head,
Department of Food Service
Management & Dietetics

Members

Mr. K. Arunmoli (Legal Expert)
Dr. Subhashini K. Sripathi
Dr. A. Saraswathy (Medical Officer)
Ms. D. Kavitha
Dr. A. R. Sudamani Ramasamy
Dr. G. Victoria Naomi
Dr. Judith Justin
Dr. Anitha Subash

To
Ms. Rathi. K. N
Department of Commerce
Avinashilingam Institute for Home Science and
Higher Education for Women
Coimbatore - 641 043

Dear Rathi. K. N.,

Ref: Your proposal No. IHEC/21-22/COM-12 entitled
"Investment Behaviour of Government Employees in Kerala"
resubmitted for approval to IHEC on 06.05.2022.

The Institutional Human Ethics Committee of our University
hereby grants approval to your research proposal No. IHEC/21-22/
COM-12 entitled "Investment Behaviour of Government Employees
in Kerala" resubmitted by you. The Approval number for the same is
AUW/IHEC/COM -21-22/XPD-12.

We wish you all the best in your research endeavours.

Regards

S. Uma Mageshwari
Dr. S. Uma Mageshwari
Member Secretary



PUBLICATION DETAILS



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

(Item No 5 of Check List) Details of Research Publications

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1	Socially Responsible Investment (SRI) in Relation to Personality Traits	International Journal of Professional Business Review (ISSN 2525-3654)	Vol. 8 No. 5 Page 01-12.	Scopus Indexed
2	Influence of Personality Traits and Behavioural Biases on Irrational Investment Decision Making of Public Officials	The Review of Finance and Banking (ISSN-2067-2713)	Vol. 15 No. 1	UGC-CARE listed

*Proof of list of Journals from Internet to be attached along with copies of reprints.

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2. The Review of Finance and Banking - indexed & active in UGC care Group I from June 2019 to present. The scholar published her article in Vol.15, No.1, June 2023.

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SOCIALLY RESPONSIBLE INVESTMENT (SRI) IN RELATION TO PERSONALITY TRAITS

Kuttallur Narayanan Rathi^A, Duraisamy Geetha^B



ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 20 February 2023</p> <p>Accepted 18 May 2023</p>	<p>Purpose: The aim of this study is to examine the impact of intellectual capital (human capital, structural capital, and employed capital) on the financial performance of listed insurance companies in the Amman Stock Exchange</p>
<p>Keywords:</p> <p>Socially Responsible Investment; Personality Traits; Government Employees.</p> <div data-bbox="172 891 480 1137" style="text-align: center;">  </div>	<p>Theoretical framework: Intellectual capital has become increasingly important in generating value for companies, and many researchers have linked it to corporate financial performance and strategic competitive advantage.</p> <p>Design/methodology/approach: The study population consist of 21 insurance companies listed on the Amman Stock Exchange in Jordan during the period of 2011-2020. Intellectual capital was measured using the value added intellectual coefficient model (Pulic, 2000), and its impact on financial performance was analyzed using published financial statements of the insurance companies.</p> <p>Findings: The results of the study found a statistically significant positive effect of human and employed capital on financial performance as measured by the rate of return on assets and return on equity. Furthermore, the study revealed a significant positive effect of intellectual capital, specifically human capital, on financial performance measured by market value (Tobin's Q).</p> <p>Research, Practical & Social implications: The study suggests that insurance companies should treat intellectual capital as a strategic resource and monitor and invest in it periodically for continuous development. The study suggests building a positive organizational culture that supports intellectual capital is recommended</p> <p>Originality/value: This study contributes to the understanding of the relationship between intellectual capital and financial performance for the first time in the insurance industry in Amman Stock Exchange. The findings highlight the importance of managing and investing in intellectual capital as a strategic resource to enhance financial performance.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i5.1183</p>

INVESTIMENTO SOCIALMENTE RESPONSÁVEL (SRI) EM RELAÇÃO A TRAÇOS DE PERSONALIDADE

RESUMO

Objetivo: O objetivo deste estudo é examinar o impacto do capital intelectual (capital humano, capital estrutural e capital empregado) sobre o desempenho financeiro das companhias de seguros listadas na Bolsa de Valores de Amã.

Estrutura teórica: O capital intelectual tem se tornado cada vez mais importante na geração de valor para as empresas, e muitos pesquisadores o associam ao desempenho financeiro corporativo e à vantagem competitiva estratégica.

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Projeto/metodologia/abordagem: A população do estudo consiste em 21 companhias de seguros listadas na Bolsa de Valores de Amã, na Jordânia, durante o período de 2011 a 2020. O capital intelectual foi medido com o uso do modelo de coeficiente intelectual de valor agregado (Pulic, 2000), e seu impacto sobre o desempenho financeiro foi analisado com o uso de demonstrações financeiras publicadas das seguradoras.

Conclusões: Os resultados do estudo revelaram um efeito positivo estatisticamente significativo do capital humano e do capital empregado sobre o desempenho financeiro, medido pela taxa de retorno sobre os ativos e pelo retorno sobre o patrimônio líquido. Além disso, o estudo revelou um efeito positivo significativo do capital intelectual, especificamente do capital humano, sobre o desempenho financeiro medido pelo valor de mercado (Q de Tobin).

Implicações sociais, práticas e de pesquisa: O estudo sugere que as seguradoras devem tratar o capital intelectual como um recurso estratégico e monitorá-lo e investir nele periodicamente para o desenvolvimento contínuo. O estudo sugere que é recomendável criar uma cultura organizacional positiva que apoie o capital intelectual

Originalidade/valor: Este estudo contribui para a compreensão da relação entre o capital intelectual e o desempenho financeiro pela primeira vez no setor de seguros da Bolsa de Valores de Amã. Os resultados destacam a importância de gerenciar e investir no capital intelectual como um recurso estratégico para melhorar o desempenho financeiro.

Palavras-chave: Investimento Socialmente Responsável, Traços de Personalidade, Funcionários Públicos.

LA INVERSIÓN SOCIALMENTE RESPONSABLE (ISR) EN RELACIÓN CON LOS RASGOS DE PERSONALIDAD

RESUMEN

Objetivo: El objetivo de este estudio es examinar el impacto del capital intelectual (capital humano, capital estructural y capital de los empleados) en los resultados financieros de las compañías de seguros que cotizan en la Bolsa de Ammán.

Marco teórico: El capital intelectual ha adquirido una importancia creciente en la generación de valor para las empresas, y muchos investigadores lo asocian a los resultados financieros de las empresas y a la ventaja competitiva estratégica.

Diseño/metodología/enfoque: La población del estudio está formada por 21 compañías de seguros que cotizan en la Bolsa de Ammán (Jordania) durante el periodo comprendido entre 2011 y 2020. El capital intelectual se midió utilizando el modelo de coeficiente intelectual de valor añadido (Pulic, 2000), y su impacto en el rendimiento financiero se analizó utilizando los estados financieros publicados de las compañías de seguros.

Conclusiones: Los resultados del estudio revelaron un efecto positivo estadísticamente significativo del capital humano y del capital empleado sobre el rendimiento financiero, medido por la tasa de rendimiento de los activos y el rendimiento de los fondos propios. Además, el estudio reveló un efecto positivo significativo del capital intelectual, concretamente del capital humano, sobre el rendimiento financiero medido por el valor de mercado (Q de Tobin).

Implicaciones sociales, prácticas y de investigación: El estudio sugiere que las aseguradoras deberían tratar el capital intelectual como un recurso estratégico y supervisarlos e invertir en él periódicamente para su desarrollo continuo. El estudio sugiere que es aconsejable crear una cultura organizativa positiva que apoye el capital intelectual.

Originalidad/valor: Este estudio contribuye a la comprensión de la relación entre el capital intelectual y los resultados financieros por primera vez en el sector asegurador de la Bolsa de Ammán. Los resultados ponen de relieve la importancia de gestionar e invertir en capital intelectual como recurso estratégico para mejorar el rendimiento financiero.

Palabras clave: Inversión Socialmente Responsable, Rasgos de Personalidad, Empleados Públicos.

INTRODUCTION

The investment is focused on the return from the current setback of the fund and not based on the social or environmental commitment before one decade. Developing countries like India have now faced the exploitation of natural resources for financial benefit. The investors'

decision on SRI avenues is the need of the hour for overcoming the situation. The investment process that properly considers the Social and environmental impact of investments in the financial analysis is termed Socially Responsible Investment (SRI). "Socially Responsible Investing" is the incorporation of an investor's social or ethical criteria in the investment decision-making process (Amy Domini and Peter D Kinder, 1994). When conducting SRIs, the investor avoids investing in businesses that are not socially responsible; on the one hand, the investor's specific interests or firmly choose to invest in companies that operate socially responsible. Most socially responsible investors want to avoid investing in companies that put people at risk of unhealthy, companies that harm the Environment, and companies with a bad reputation regarding human rights or employment policies and practices. SRI is also called green investment because of the widely used criteria for environmental screening. Given the nature of the company's activities, the investment is considered socially responsible. The term SRI is not much established or known to the rural people of Kerala, but the idea behind the concept may be familiar to them. SRI is the integration of Environmental and Social orientation into the investment decision. This concept further developed the concept of Environmental, Social and Governance (ESG) investment. SRI investors should make their decisions regarding investment not only with financial performance but also with business performance. It is a way of evaluating a company's strengths, its results based on its use of ESG standards, and its potential for future growth.

Personality can be described on three levels: characteristics, traits and life stories. Psychologists study individual differences through different ages. Some trait theories explain a different number of traits and dimensions of personality, like the sixteen-factor theory of Raymond Cattell and the five-factor theory of Robert McCrae and Paul Costa. Lewis Goldberg named the five-factor theory as Big Five personality. The Big five personality traits are Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism (OCEAN).

Openness is the response to the environmental and social background and changes; otherwise, it is the response to experience and its link with intellectual activity. It is the ability to think out of the box and creative and artistic value and interest in learning new things. Conscientiousness is the ability to control impulses, lead a disciplined life and fulfil goals within the limitations. The person with this trait will be thoughtful and careful and have a deep sense of duty and orderliness. Extroversion is a person's intensity or level of interaction with society and the Environment and a tendency to seek stimulation and company; make good relationships with society. This trait is the basis of an individual's sociability, assertiveness, and

emotional expression. Agreeableness is the tendency to keep the relationship and interactions with others. It is the willingness to accept others and cooperate with fellow mates. Neuroticism is the opposite of a stable personality and describes emotional stability and the ability to experience negativity. It is the tendency to experience and expect unpleasant emotions. In the current study, investigators try to check the relationship between attitude towards SRI and the personality of government employees and study their biases in financial decisions related to these variables.

This focus is on the investors' thoughts on environmental and social orientation and their perception of investment in the avenues using sustainability measures. The covid-19 pandemic may give the human community to think about social and environmental commitment and help to think about action for sustainability. This paper presents the investors' perception of SRI in relation to the current thoughts on the Covid pandemic situation. The study was conducted in the central part of Kerala state. The study concentrates on the perception of Govt. employees' on SRI and the avenues which provide positive and negative impacts on the Environment and society. The study also concentrates on the relationship between personality traits and attitudes towards SRI. The study may help screen positive and negative investment avenues and investors' preferences on these avenues.

Objectives of the study are:

1. To know the Govt. employees' awareness and attitude towards SRI
2. To study the differences in attitude on SRI according to demographic factors
3. To study the preferences of Govt. employees on investment avenues according to SRI
4. To study if there is any significant relationship between personality traits on the attitude towards SRI of select Government employees in Kerala

LITERATURE REVIEW

Al-Mahdi, M. M. A., & Faisal, M. Z. (2023) is tried to identify the most important challenges for the local investment commissions and to develop solutions and proposals to encourage local and foreign investment in local governments in Iraq. that research involved a mixed-methods approach through two stages: during the first stage, the researcher gathered quantitative data and the second stage used quantitative data. The study found a number of legal and administrative challenges.

Alzghoul, A., Al_kasasbeh, O., Alsheikh, G., & Yamin, I. (2023) examined the relationship between savings and investment in the Jordanian economy during the period 1980-2020. The study used the data collected from the Department of statistics Jordan. The analysis used Unit root method, and bond cointegration test. The study found that saving and spending have had a long-term relationship and a significant proportion of domestic saving remains in the Jordan economy to fund domestic investment.

Hellstorm, J., Lapanam, N., and Olsson, R. (2020) researched SRI among parents and adult children and evidenced the positive correlation between the investment behaviour of parents and their children in the SRI mutual fund. It found the influence of parents' behaviour on children's behaviour and the strong influence of mothers' socially responsible behaviour on children.

George, Gert, Blomme, Kraanen, and Ppadopoluos (2018) studied pension beneficiaries' behaviour on the SRI portfolio in 2018. The purpose of this study is to examine the intent of retirees to adopt an investment portfolio that is efficient and socially responsible. They use regression and determination analysis to understand retirees' attitudes, social goals, client performance, and intent to make these choices.

Rizvi and Fatima (2014) studied the relationship between the personalities of investors with stock market investment, type, objective, factors influencing the investments, and so on, and they found that there is a relationship, and they helped their clients to develop portfolios according to their personality.

Berry, T.C., & Junkus, J. C. (2013) studied the investor perspective on SRI using the data on individual investors' equity mutual fund portfolios from 2003 to 2007. This study examines a unique group of about five thousand investors, including investors who use SRI and non-SRI criteria in their investment decisions and SR investment criteria. It covers a large circle. They found that investors want to see the SSR as a whole rather than using a subordinate format that supports more SRI funding.

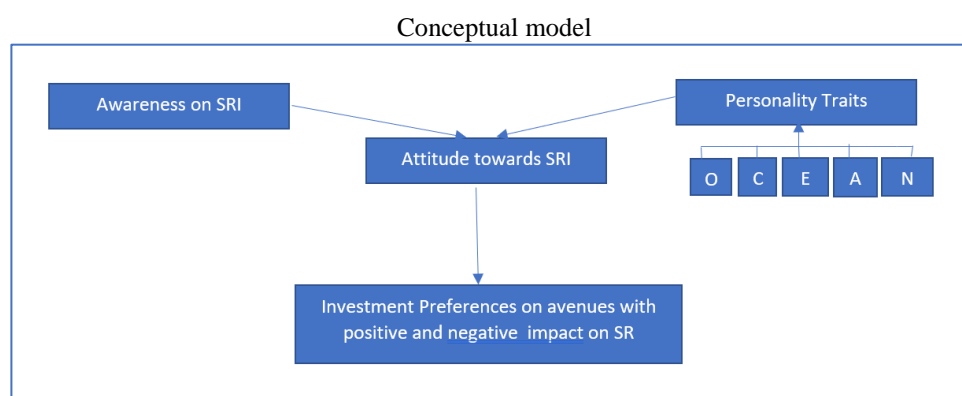
Pandian, V. A., & Thangadurai, G. (2013) studied the investor preference towards various investment avenues in Dehradun district. They found that all the investors invest their surplus money in the select avenues based on their risk-taking attitude. However, they concluded that the investors prefer bank deposits and gold investments to other avenues.

Mayfield, Perdue, and Wooten (2008) examined several psychological antecedents to both short-term and long-term investment intentions with big five personality traits, and they

concluded that extroverts are interested in short financing and neurotic people are interested in avoiding the activity.

Showndhariya and Kavitha (2018) studied the influence of personality type on the investment decision of individual investors. They found that the personality type of the individual investors has no influence on the preference of the traditional investment avenues but has an influence on modern investment avenues

Research gap found for the relationship study of personality and attitude on SRI among investors. The research was focused on the population of government employees in Kerala.



Source: Prepared by the authors (2022).

The hypotheses of the study are:

H₀₁: The difference in the attitude of Male and Female Govt. employees towards SRI is not significant

H₀₂: The difference in the attitude of Govt. employees with different age groups towards SRI is not significant

H₀₃: The relationship between awareness and attitude of Govt. employees towards SRI is not significant

H₀₄: There is no relationship between the personality traits and attitude towards SRI

H₀₅: The attitude on SRI has no discriminant ability on the preferences of investment in the business dealing with negative practices with respect to Social responsibility.

H₀₆: The attitude on SRI has no discriminant ability on the preferences of investment in the business dealing with positive practices with respect to Social responsibility.

MATERIAL AND METHODOLOGY

The descriptive survey method was used to collect data from Govt. employees of Kerala. The sample for the study was selected from the Govt. employees of Kozhikkode, Palakkad and

Kottayam districts which represent the North, Central and South region of Kerala state and the sample size from districts are proportionate to the population. The total sample selected is hundred and forty, thirty-five and twenty-five from each district, respectively. The data were collected by using a questionnaire. The questionnaire has three parts; personality inventory, SRI awareness test, and SRI attitude scale.

The tools used for analysis were t-test, ANOVA, Regression, Multiple regression and Discriminant analysis.

RESULTS AND DISCUSSIONS

Although Corporate social responsibility is mandatory as per the Company's Act 2013, Indian corporates are not much involved in ESG practices. In 2019 and 2020, there is an upward trend among investors depending on the volume of investment.

The list of companies which are included in the performance rank list are:

Table 1 Performance rank list

1	Infosys Ltd.
2	Mahindra & Mahindra Ltd.
3	Tata Chemicals Ltd.
4	ITC Ltd.
5	Vedanta Ltd.
6	Wipro Ltd.
7	Hindustan Unilever Ltd.
8	Godrej consumer products Ltd.
9	Grasim industries Ltd.
10	Bharat Petroleum Corporation Ltd.

Source: Futurescape

ESG Funds in India

ESG funds are integrated investment portfolios which include equities and bonds for Environmental, Social and Governance factors. ESG funds include the equities or bonds of the entities with positive practices for the Environment, society and investors. These funds are the ESG integrated portfolios. In India, the ESG Funds are

Table 2 ESG Funds

1	Aditya Birla Sun Life ESG Fund
2	Axis ESG Fund
3	ICICI Prudential ESG Fund
4	Kotak ESG Opportunities Fund
5	Mirae Asset ESG Sector Leaders ETF
6	Quantum India ESG Equity Fund
7	Quant ESG Equity Fund
8	SBI Magnum Equity ESG Fund

Source: www.morningstar.in

Table 3 Descriptive analysis of Socially responsible funds

Thought about responsibility towards society * Investment in Socially Responsible Funds Cross tabulation				
		Investment in Socially Responsible Funds		Total
		No	Yes	
Thought about responsibility towards society	o	5	0	5
	es	36	59	95
Total		41	59	100

Source: Prepared by the authors (2022).

Table 3 shows that 95% of the respondents think about social responsibility, but only 59% invest in socially responsible avenues.

Table 4 Descriptive analysis of Environment-friendly funds

Thought about your responsibility towards Environment * Investment in Environment-Friendly Stocks based Mutual Fund Cross tabulation					
			Investment in Environment-Friendly Stocks based Mutual Fund		Total
			No	Yes	
Thought about responsibility towards the Environment	o	4	2	6	
	es	84	10	94	
Total			88	12	100

Source: Prepared by the authors (2022).

Table 4 shows that 94% of the respondents think about the responsibility toward Environment, but only 12% of them invest in mutual funds based on Environment-friendly stocks.

Table 5 Descriptive statistics of Personality traits

Variables	M	S.D.
Openness	3.88	0.708
Conscientiousness	3.25	0.632
Extroversion	2.80	0.711
Agreeableness	3.18	0.655
Neuroticism	3.16	0.746

Source: Prepared by the authors (2022).

All the personality traits are above average mean values, and as the weighted score is five, the trait extroversion has less, and openness has a high mean value.

Table 6 Testing the difference between male and female
 Gender-wise analysis of Attitude towards SRI (testing of differences)

Group-wise analysis						
	Category	No.	M	S.D.	t value	Significant level
Attitude towards SRI	Male	41	3.520	0.7299	-0.743	0.461
	Female	59	3.6341	0.6009		

Source: Prepared by the authors (2022).

Table 6 shows no difference in attitudes towards SRI between men and women. The hypothesis H_{01} is therefore accepted. That is to say, the difference in the attitude of Male and Female Govt. employees towards SRI is not significant.

Table 7 Testing the difference between different age groups

Age-wise analysis (ANOVA)					
Attitude towards SRI					
	N	Mean	Std. Deviation	F value	Sig. (2 Tailed)
Below 25	12	3.58	0.29344	0.334	0.855
25-35	51	3.58	0.67404		
35-45	20	3.68	0.73895		
45-55	12	3.44	0.50413		
55-65	5	3.41	0.74618		
Total	100	3.57	0.63254		

Source: Prepared by the authors (2022).

Table 7 shows no significant difference in attitudes towards SRI between different age groups. Thus, hypothesis H_{02} is accepted. So, to speak, the difference in the attitude of Govt. employees with different income levels towards SRI is insignificant.

Table 8 Testing the relationship between Awareness and Attitude
 Relationship between Awareness and Attitude towards SRI

Correlations		
		Awareness on SRI
Attitude towards SRI	Pearson correlation	0.493
	Sig	0.000
	N	100

Source: Prepared by the authors (2022).

Table 8 shows that the Correlation coefficient is significant at 0.00 level, and so the hypothesis H_{03} , the relationship between awareness and attitude of Govt. employees towards SRI is not significant, is rejected.

Table 9 Attitude on SRI in relation to Personality traits - Regression coefficients

Variable	B	Beta	SE.
(Constant)	3.706		0.434
Openness	0.31	0.191	0.017
Conscientiousness	0.034	-	0.019
Extroversion	0.094	0.062	0.019
Agreeableness	0.124	-	0.018
Neuroticism	0.006	-	0.019
R ²	0.064		
AR ²	0.014		
F value	1.285*		

(* - p < 0.05) Source: Prepared by the authors (2022).

Table 9 reveals that the personality factors account for 6.4% of the variance in attitude towards SRI. Among the personality variables, Openness and Extroversion have a positive influence and Agreeableness, Conscientiousness, and Neuroticism have a negative effect on attitude towards SRI. The result of the regression model has been tested using ANOVA. The value of the F – ratio is equal to 1.285 (p < 0.05), which shows that the model is a good fit. It also indicates that adjusted R² is equal to 0.014.

Table 10 Preference in negative practice business in relation to attitude on SRI – Discriminant Analysis
 Wilk's lambda = (1- canonical correlation²) 1-.560² = 0.686

Function	Eigenvalue	Canonical Correlation	Wilks' Lambda	Chi-square	Degree of freedom	Significant level
1	.457	.560	.686	36.138	4	.000

Source: Prepared by the authors (2022).

Table 11 Preference in negative practice business in relation to attitude on SRI – Group statistics

Preferences in investing the business dealing with this negative practice:				Unweighted	Weighted
Preferred	Attitude towards SRI			2	2.000
Often Preferred	Attitude towards SRI			5	5.000
Sometime Preferred	Attitude towards SRI			19	19.000
No Preferred	Attitude towards SRI			35	35.000
Never Preferred	Attitude towards SRI			39	39.000
Total				100	100.000

Source: Prepared by the authors (2022).

The null hypothesis is that the canonical correlations associated with the functions equal zero.

This chi-square statistic verifies that the canonical correlation of the given function is zero. In other words, the null hypothesis is that the function has no capacity to discriminate. This hypothesis is tested using this chi-square statistic.

The table shows that the chi-square test is significant at the 0.00 level. Hypothesis H₀₅ is rejected. ie. The attitude on SRI has no discriminant ability on the preferences of investment in the business dealing with negative practices with respect to Social responsibility.

Table 12 Preference in positive practice business in relation to attitude on SRI – Discriminant Analysis

Function	Eigenvalue	Canonical Correlation	Wilks' Lambda	Chi-square	Degree of freedom	Significant level
1	.136	.346	.880	12.305	3	.006

Source: Prepared by the authors (2022).

Table 13 Discriminant Analysis

Group Statistics				
Preferences in investing in the business dealing with or supporting the positive practice:				
		Unweighted	Weighted	
No Preferred	Attitude towards SRI	10	10.000	
Sometime Preferred	Attitude towards SRI	6	6.000	
Often Preferred	Attitude towards SRI	25	25.000	
Preferred	Attitude towards SRI	59	59.000	
Total		100	100.000	

Source: Prepared by the authors (2022).

Table 12 shows that the chi-square test is significant at 0.05 level. Hypothesis H₀₆ is accepted. ie. The attitude on SRI has no discriminant ability on the preferences of investment in the business dealing with positive practices concerning Social responsibility.

CONCLUSION

Almost all the respondents have positive thoughts on social responsibility but only half of them invest in SRI avenues. Almost all the respondents have positive thoughts on social responsibility but only a few of them investing in mutual funds based on Environment-friendly stocks. Age and gender are not the factors that affect the attitude of Govt. employees towards the SRI. There is a significant correlation between Awareness on SRI and Attitude toward SRI. Persons with different personality traits are different in their attitude towards SRI. The attitude on SRI has no discriminant ability on the preferences of investment in the business dealing with

positive practices concerning Social responsibility. However, at the same time, it has a discriminant ability on the preferences of investment in business dealing with negative practices concerning social responsibility. The gender-wise analysis of preferences of investment avenues with positive and negative practices found that the first one has differ between male and female Govt. employees, and the latter have no difference.

The study has a limitation that the sample size is hundred and the population is only the government employees. Further research can be suggested on different category of investors and the actual investment in SRI avenues.

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INFLUENCE OF PERSONALITY TRAITS AND BEHAVIORAL BIASES ON IRRATIONAL INVESTMENT DECISION MAKING OF PUBLIC OFFICIALS

RATHI N. AND D. GEETHA

ABSTRACT. This study examines the behavioural and personality factors in the investment of public officials. Investment Decision Making (IDM) of the individual investors may be rational or irrational and here the study focused on the irrational IDM. The influence of eight types of behavioural biases and Big five personality traits (BFPT) on irrational IDM are studied along with mediation effect. Significant findings of the study are that BFPT and Behavioural biases pointedly influence public officials' Irrational IDM. Personality traits have a mediating role in behavioural bias and irrational decisions. The results suggest that personality traits and Behavioural biases are key in investment decisions and the investor education and awareness programmes are vital in overcoming the biases and lead to rational decisions.

1. INTRODUCTION

Individual investors' behaviour in decision-making has a vital role in economic development of the country. Like all other decisions, investment decisions are made after several calculations and thinking by the person. Decision-making is selecting one course of action among different courses of action available in front of a person. Any decision-making process requires appropriate mental and financial resources to acquire and process information. It is intellectual and emotional and may be determined by the individual's Personality. The process of decision-making is affected by commitment, beliefs, age and individual differences, past experience, cognitive biases, and the impact of the past decision also affect the new decision as fear of loss or passion for success (Dietrich, C., 2010).

Thinking is the base of any type of decision-making which may or may not be rational. Rational and irrational thinking are part of human thinking and associated behaviour (Simon, 1993). Irrational thinking is an addition of rational thinking, as an impulse of blending thinking in to 'n' pattern repeated to logic and extra logic assemblies to reach an objective. Emotions, imaginations, intuitions, and other skills are the components of non-rational thinking. (Burciu, A & Hapenciuc, C. V., 2010). Rational thinking is based on proven evidence and hypotheses that measure experiences and interactions to determine rational actions and decisions. Irrational thinking is usually based on emotions, often mixed with those emotions and biased or selective evidence. Rational thinking creates motivation because there is structure and unmistakable evidence, while irrational thoughts cause anxiety (Brain, P., 2022). The steps in intelligent decision-making are identifying the current opportunity, defining the markets that need to be

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fulfilled, calculating the prices to be paid and the profits that can be added. The decisions termed as rational if it made based on the intellectual understanding of human thinking or behaviour and bearing in mind the human features and limitations that limit human action. In an effort to make a rapid and easy decision, persons tend to depart from rationality, or what is essential for a standard decision-making process when he or she is rational. Intuition is an all-inclusive form of information processing that differs from investigation and can be higher in some cases. (Julmi, C., 2019). In economic theory, the ultimate end of rational behaviour is to exploit company profits and take full advantage of benefits in the case of people in general (Katona, 1963). The basic postulation of rational IDM is the concept of exploiting usefulness or return. The limitation of a rational model is that it does not consider aspects that cannot be measured, such as personal feelings, ethics, or altruism. Prospect theory (Kahneman, & Tversky, A., 2013) and bounded rationality theory (Simon, H. A., 1957) are the basis of the thoughts related to non-rationality in economic decision-making. In financial circumstances, decision-makers only sometimes have all the information available at any given moment to be cautious or follow the steps economists suggest for rational decision making. They claim that rationality is bounded and that the perfect conditions leading to full rationality are not really in question (Lacatus, M. L., 2018). In the present study, the investigators concentrate on the irrational IDM rather than the rational.

The other variable taken for the study is investor personality. Personality is the sum of all the factors relating to an individual, which includes the physical, psychological and emotional adjustment of an individual to his/her environment. Personality traits are the stable features that describe an individual's behaviour. Psychologists have identified several traits and dimensions that differentiate individuals. Some trait theories explain different traits and dimensions of Personality, like the sixteen-factor theory of Raymond Cattell and the five-factor theory of Robert McCrae and Paul Costa. Lewis Goldberg named the five-factor theory the Big Five personality traits (BFPT). BFPT are Openness (O), Conscientiousness (C), Extroversion (E), Agreeableness (A), and Neuroticism (N), otherwise known as OCEAN. 'O' is the response to the environmental and social background and changes; otherwise, it is the response to experience and its link with intellectual activity. It is the ability to think out of the box and creative and artistic value and interest in learning new things. Sub-dimensions identified under this trait are Curiosity, Aesthetic, Ideas, and Action. 'C' is the ability to control impulses, lead a disciplined life and fulfil goals within limitations. The person with this trait will be thoughtful and careful and have a deep sense of duty and orderliness. Sub-dimensions identified under this trait are Competence, Deliberation, Order, and Self-discipline. 'E' is a person's intensity or level of interaction with society and environment and a tendency to seek stimulation and company; make good relationships with society. It is the base of sociability, assertiveness, and emotional expression. Sub-dimensions identified under this trait are Excitement seeking, Assertiveness, Gregariousness, and Warmth. 'A' is the tendency to keep the relationship and interactions with others. It is the willingness to accept others and cooperate with fellow mates. Sub-dimensions identified under this trait are Modesty, Altruism, Straightforwardness, and Trust. 'N' is the opposite of a stable personality and describes emotional stability and the ability to experience negativity. It is the tendency to experience and expect unpleasant emotions. Sub-dimensions identified under this trait are Vulnerability, Self-consciousness, Depression, and Anxiety (McCrae & Costa, 2008). Like any other decision, the investor's Personality may be a determining factor in IDM.

Irrational decisions are sometimes based on behavioural biases. Biases are classified as Emotional bias and Cognitive bias. The heuristic bias includes representativeness, availability bias, anchoring bias and gambler's fallacy. While in cognitive bias includes overconfidence bias, mental accounting bias, herd effect, and regret aversion. Behavioural biases are outcomes of non-rational thinking, and they are the factors that may depend on the performance of individual investment. The role of behavioural biases in the IDM of public officials is tried to study here.

Investor personality and behavioural biases are the variables taken for the study because the variables affect the investment performance of the investors and collectively influence the investment environment and economy. Public officials are the stable income group in the country and the influencing group in society. Here the investigators studied the dependence of the irrational IDM of public officials on their behavioural biases and personality traits. The study is original and novel idea on the influence of personality and biases on irrational investment. This study must pave way to the researches in the field of behavioural finance and behavioural economics.

2. LITERATURE REVIEW

The researchers come to different conclusions from the previous research on personality traits and investment. There is a relationship between Personality and portfolio selection, and it may be helpful for stock brokers to develop portfolios according to the personality of the clients (Rizvi & Fatima, 2014). After examining different psychological backgrounds for both short and long-term investment goals with BFPT, it can be concluded that extroverts are interested in short-term financing, and neurotic people are interested in avoiding this activity. (Mayfield, Perdue, & Wooten, 2008). Some studies differentiated the investment preferences with different types of personalities, while others analyzed the different avenues in relation to BFPT. Individual investors' personality type does not influence traditional investment avenues' preference but modern investment avenues (Showndhariya & Kavitha, 2018).

The review found that that the personality traits are studied along with investment pattern and behaviour and decision making. There is a research gap that the personality traits are not studied in relation to rational and irrational IDM separately.

Investment decisions can be derived from different financial models from the technical side. Decisions also consider incidental factors, which consider the location and psychology of the market, in other words. It invites investors to learn about the various biases that may appear in them and then take steps to avoid them, thus increasing their performance (Shunmugathangam, 2017). Moods and emotions can play helpful and disruptive roles in decision-making. Feelings can be consistent to lead to good or bad decisions (Shiv et al., 2004). Investors' psychological tendencies have a significant impact on the purchase of securities. The investor's psychological biases and subsequent investment-related behaviour are persistent and systematic (Pandit & Yeoh, (2014). The investor will select the portfolio which will maximize his utility. The temperament and psychology of the investor are other crucial considerations in making an investment decision by the investors. (Bindu, 2017). Behavioural biases like Representativeness, Availability bias, Anchoring bias, Herd effect, Mental accounting, Gamblers' fallacy, Overconfidence and Regret aversion are the apparent biases in investment. (Kahneman & Tversky, 1979); (Benartzi & Thaler (1995); Prelec & Loewenstein (1998); Thaler (1999)).). According to the researchers, IDM may be affected by cognitive and emotional bias.

Availability bias may be the selection of more familiar and available avenues to the investor, and the person should refrain from trying to experiment with other avenues (Kahneman & Tversky, 1972). When making an investment decision, the individual may depend on the first information as the prime factor. All other information may not be provided with due consideration and may call as Anchoring bias. In the Herd effect, the investor tends to follow the majority in society without analyzing the investment opportunities (Tversky, & Kahneman, 1974). Investors sometimes make false assumptions about the avenues, time of investment, volume of investment, and expected return and risk; it is termed Mental accounting (Richard Thaler, 1999). In the Gamblers' fallacy, the individual may depend more on experience while selecting an investment, assuming that past occurrences may repeat. Representativeness is the bias of the investors getting confused with similar types of investment, and it may lead to a biased decision. An investor may be biased as Overconfidence when he or she believes his knowledge, skill, and mental power is much better than others, and he or she may not make any error in decision-making (Chen; Kim; Nofsinger, & Rui, 2007). Some individuals always

think about the harmful consequences; thus, they avoid the regret that may arise in the future, which is considered the Regret aversion bias (Kahneman & Tversky, 1979).

Heuristic factors and Prospect theory both influence individual investors in India (Chandra & Kumar, 2012). Loss-averse behaviour is the most common when making an investment decision (Muhammad N. M. N., 2009). Herding behaviour is higher in emerging markets with more significant information asymmetry (Poshakwale & Mandal, 2014). Daniel, Hirshleifer, Subrahmanyam, et al. (1998) proposed a securities market under and overreactions theory.

It suggests that investors react more to private information and less on public information signals. The reviews pointed out several biases, and the investigators have identified eight behavioural biases prominent in the Indian market per the review like Anchoring (AN), Gamblers fallacy (GF), Herding Bias (HB), Mental Accounting (MA), Overconfidence Bias (OB), Regret aversion (RA), Availability Bias (AB) and Representativeness Bias (RB).

The review found that that behavioural biases are studied in behavioural finance and decision making in security market. There is a research gap that behavioural biases are not studied in relation to the personality traits and irrational IDM.

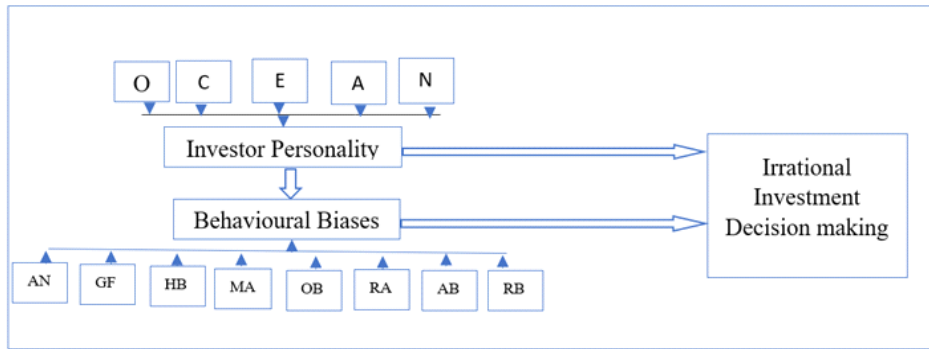


Figure 1: The conceptual model for this research

Aims of the study:

Following the recent advancement in IDM, this study aims to present trends in research, drift in main themes and offer future directions.

Thus, this review efforts to address the research questions such as:

R.Q. 1. How the investor personality effect on Irrational IDM?

R.Q. 2. How the behavioural biases effect on Irrational IDM?

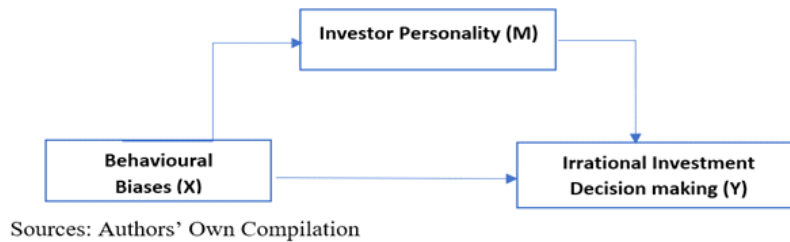


Figure 2: Behavioural biases on Irrational decision making as Personality is a mediating factor

This conceptual model has been derived from gap analysis. Investors sometimes use mental shortcuts and they may not always behave rationally even though the traditional finance

proposes so. Behavioural finance validates the psychological impact on individuals' investment and financial activity. This research aims to know how the Personality of the investor effect the selected behavioural biases on the Irrational IDM of individual investors. The primary aim of the investigation is to empirically examine the impact of Investor personality on behavioural biases through irrational IDM.

Behavioural biases are studied by different researchers but they are not studied the mediating effect of personality traits in between biases and decision making. Here the original contribution of the article sticks on the mediation analysis of BFPT on the relation between Behavioural biases and IDM.

Objectives of the study:

1. To find the influence of Investor Personality on Behavioural biases and Irrational IDM
2. To find the influence of behavioural bias on irrational IDM
3. To find the mediation effect of Investor Personality between Behavioural biases and

Irrational investment decisions.

Hypotheses to be tested:

H01: The Personality traits of the investors are significantly related to their Behavioural biases and Irrational IDM

H02: Behavioural biases have a significant role in irrational IDM

H03: The personality traits of the investors mediate the relationship between Behavioural bias and irrational IDM

The aims are achieved by testing the hypotheses using statistical inferential analysis.

3. RESEARCH DESIGN

The study was descriptive, and the data were collected from 384 public officials in Kerala using a questionnaire. The sample was selected according to the proportionate stratified random sampling method. Samples were selected proportionately from different departments.

Table 1: Demographic Characteristics of the Respondents

Variables	Categories	No. of respondents	Percent
Geographical area	South zone	128	33.3
	Central zone	128	33.3
	North zone	128	33.3
	Total	384	100
Age	Between 20 and 30 years	13	3.4
	Between 30 and 40 years	170	44.3
	Between 40 and 50 years	119	31
	Between 50 and 60 years	82	21.4
	Total	384	100
Gender	Male	200	52.1
	Female	184	47.9
	Total	384	100
Income level	Below 40,000	27	7
	Between 40,000 - 60,000	108	28.1
	Between 60,000 - 80,000	191	49.7
	Between 80,000 - 100,000	47	12.2
	Above 100,000	11	2.9
	Total	384	100

Primary data were collected for this research through a five-point Likert scale questionnaire. The research instrument includes the BFPT inventory, the Behaviour bias scale and the IDM questionnaire. The target population, the public officials, were asked closed-ended questions, and they were supposed to answer on the scale.

Hundred public officials responded for preliminary study for testing the validity and reliability of the tool. The scale's reliability provides consistency and accuracy that helps make the instrument error-free. Cronbach's alpha (α) was used to check the internal consistency to ensure the tool's reliability. The uniformity between each construct item needs to be checked and those above 0.7 (Table 2) for all constructs (Nunnally & Bernstein, 1967; Fornell & Larcker, 1981).

Dimensions	α	No. of elements
Irrational Decision making	.749	8
Behavioural Biases	.881	16
Investor Personality	.774	20

Construct validity is very important in psychological tests, and here there is a psychological conducted based on the theory of BFPT. The researchers used a correlation coefficient for testing construct validity. There are five personality traits, and each one has 4 statements; the correlation between these four statements is calculated, and all the statements are significant. Content validation is a mixed method, both quantitative and qualitative process that is applicable to all elements of the research instrument (Lawshe, 1975). This technique was used for validation of the IDM scale, personality trait scale and Behavioural bias scale. CVR ratio, which depends on how accurately the concept is defined and the degree to which "experts" approve the construct, was calculated. Only statements which have a score of 0.50 or above in the CVR ratio have been included in the final research instrument.

4. RESULTS

The data were examined using mean and standard deviation for descriptive, correlation, and multiple regression analysis for testing Hypotheses.

4.1. Descriptive analysis.

Personality Traits	Mean	Std. Deviation
O	13.51	3.684
C	13.09	3.739
E	12.72	3.523
A	12.86	3.634
N	10.82	3.433
Investor Personality	12.60	1.934

Table 3 shows the Mean scores of the personality traits like O, C, E, A, and N are 13.51, 13.09, 12.72, 12.86, and 10.82, respectively. Standard deviations are ranging from 3.433 to 3.739 respectively. The mean total personality score is 12.60, and the standard deviation is 1.934. hence it is observed that personality traits like O, C, E, and A are more significant in their investor personality.

Behavioural biases	Mean	Std. Deviation
Anchoring	10.31	2.957
Gamblers' fallacy	10.46	3.030
Herding	10.69	2.875
Mental Accounting	10.88	2.608
Overconfidence	10.89	2.786
Regret Aversion	10.86	2.661
Availability Bias	10.84	2.753
Representative Bias	10.90	2.801

Table 4 evidenced that Representative bias, Overconfidence, mental accounting, regret aversion and availability bias show higher mean scores like 10.90, 10.89, 10.88, 10.86 and 10.84. 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. Hence it indicates that Representative bias, Overconfidence, mental accounting, regret aversion and availability bias are the most significant factors considered in behavioural investment.

	Mean	Std. Deviation
Irrational decision making	3.578	0.489

Table 5 shows that the mean value of the Irrational decision is 3.58, and the standard deviation is 0.489.

4.2. Hypotheses testing.

Variable	B	Beta	S.E.
(Constant)	18.552		4.274
O	0.651	0.204	0.18
C	0.098	0.031	0.202
E	-0.34	-0.102	0.207
A	-0.144	-0.045	0.168
N	0.035	0.01	0.179
R2	0.045		
AR2	0.032		
F-value	3.55		
(* - $p < 0.05$)			

Table 6 reveals that the personality factors account for 4.5% of the variance in Irrational IDM. Among the personality variables, O, C, and N have a positive influence and E and A have a negative effect on Irrational IDM. The F value of is equal to 3.550 ($p < 0.05$), which shows that the model is a good fit. It also indicates that adjusted R^2 is equal to 0.032.

Variable	B	Beta	S.E.
(Constant)	7.069*		.412
O	0.063	.204	.017
C	0.005	.016	.019
E	-0.31	-.096	.020
A	-0.008	-.025	.016
N	0.001	.004	.017
R2	0.203		
AR2	0.041		
F-value	3.245		
(* - $p < 0.05$)			

Table 7 reveals that the personality factors account for 20.3% of the variance in Behavioural biases. Among the personality variables, O, C, and N have a positive influence and E, and A have a negative effect on Behavioural biases. The F-ratio value is 3.245 ($p < 0.05$), which shows that the model is a good fit. It also indicates that adjusted R^2 is equal to 0.041.

Variable	B	Beta	Std. Error
(Constant)	0.091**		1.53
Anchoring	0.013	0.017	0.038
Gamblers' fallacy	0.018	0.005	0.046
Herding	0.038	0.021	0.047
Mental Accounting	-0.07	-0.015	0.006
Overconfidence	0.020	0.004	0.009
Regret Aversion	0.010	0.005	0.102
Representative Bias	0.091	0.019	0.110
Availability Bias	0.003	0.100	0.015
R2	0.89		
AR2	0.93		
F-value	137.98		
(** - p < 0.01)			

Table 8 reveals that behavioural biases account for 89% of the variance in Irrational IDM. Among the Bias variables, Anchoring, Gamblers' fallacy, Herding bias, Overconfidence, Regret aversion, Representativeness and Availability bias have positive influences on irrational IDM. However, Mental accounting has a negative effect on Irrational IDM. The value of the F – ratio is equal to 137.98 ($p < 0.01$), which shows that the model is a good fit. It also indicates that adjusted R^2 is equal to 0.93.

Behavioural biases (X) on Irrational IDM (Y) as BFPT (M) is a mediating factor

For the mediation test, researchers used linear regression analysis for direct effect testing and the Sobel test for indirect effect testing. Three linear regression analyses, Y on X, Y on M and M on X are done.

Sobel test formula

$$z = \frac{ab}{\sqrt{(b^2 SE_a^2) + (a^2 SE_b^2)}}$$

Where:

a – Regression coefficient of M on X, b – Regression coefficient of M on Y
 SE_a – Std. Error of M on X, SE_b – Std. Error of M on Y

Direct effect analysis (Regression)			
		B	S.E.
Path A	M on X	0.103	0.087
Path B	Y on M	0.001	0.005
Path C	Y on X	0.405	0.008
Indirect effect analysis			
Point Effect	A * B	0.000103	
Sobel test			
Test statistic	17.156**		
(** - p < 0.01)			

In this case, the p-value is less than 0.05; therefore, it is concluded that the indirect effect among behavioural bias (X) and irrational IDM (Y) via BFPT (M) is statistically significant ($p\text{-value} \leq 0.05$). So there found a mediation effect.

5. DISCUSSION

BFPT of investors influence the irrational IDM, and out of these, Consciousness is the more influential trait, followed by O and A. N has comparatively less influence on the investment decision, and trait E negatively influences investment decisions. (Priyadharshini, (2020). Irrational IDM has no relationship with the attributes A and C. Overconfidence fully mediates the relationship of E and N with irrational IDM and partially mediates the relationship between O and irrational IDM (Kanagasabai, B. & Vaneeta A. 2021). Here, irrational IDM is studied and O, C, and N have been found a positive influence and E and A have a negative effect on Irrational IDM.

There are many types of Biases which influence an investor's decision-making. It plays an essential role in the decision-making of a person, organization or any other financial matter of investors. (Gill, R. K. & Bajwa, R., 2018). Here the eight biases are taken for study and found to influence the biases on irrational IDM.

N, E, O and all behavioural biases are significantly associated. N greatly influences behavioural biases while E has a positive relationship with availability bias only (Baker, H. K., Kapoor, S. & Khare; T., 2022). In the present study, O, C, and N have a positive influence and E and A have a negative effect on Behavioural biases.

Investment performance have highly influenced by Overconfidence and gamblers' fallacy while herding behaviours are described to impact on investment performance positively at the lower level. In contrast, the other biases have a negative impact on investment performance. Gamblers' fallacy and herding have a low effect on investors' decisions, while mental accounting greatly impacts investment decisions. (Luong, L., & Ha, D.T., 2011). Prospect behavioural factor has been found to correlate with investment performance negatively. Herding, Market volatility and Heuristic (including Overconfidence and focus bias) are found to positively correlate with investment performance (Silwal, P.P., & Bajracharya, S. 2021). Here mental accounting only has a low negative influence on irrational IDM, and all the other biases positively influence irrational investment decisions.

As per the analysis, the study found that the investor personality has a significant mediation role on their behavioural bias and irrational decision making.

6. CONCLUSION

This study investigates the relationship between behavioural biases, investor personality and investment decision making. The study was successfully taken the samples from public officials representing from different geographical region and departments. This research aims to check the influence of bias on individual irrational decision making with the mediating role of investor personality that the indirect effect is 17.156 ($p < 0.01$). The observed results supported that behavioural biases influence irrational investment decisions as R^2 is 0.89 and F 137.98 ($p < 0.01$). It means 89% of the irrational decisions are made by the predictive variables. The personality traits of the investors were also found to influence irrational decision making as R^2 is 0.203 and F 3.245 ($p < 0.05$). This means 20.3% of the irrational decisions are made by the predictive variables.

This study will throw light to the behavioural and psychological aspects of investors on their investment practices. The findings of this study boost the individual investors to understand and identify their biases or irrational thoughts. It will help generate Consciousness among investors to decide on their investment capacity after assessing all available alternatives. Investment is an active method of using cash to generate wealth, meet financial goals, save for old age and manage inflation. Smart investing of individuals and institutional investors helps improve productivity and increase the economy's competitiveness. This study proved the personality biases are key in investment behaviour and thus the study may lead to the conclusion that investor education is vital in rational investment decision of investors and development of Indian economy.

The study definitely helps the researchers in this field for further study. The present study concentrated on public officials with stable incomes compared with others like business people or professionals. There is a scope to study the institutional and individual investors other than public officials on the variables. Irrational decision making of investors can also be studied with several other aspects like risk perception, objectives of investment, and intellectual capacity of the investors.

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