

Impact And Interaction Between Demographic Variables and Behaviour Bias on Mutual Fund Investment Decision Among Academicians

Santha Ganesh Iyer¹,

Faculty, School of Economics and Commerce, CMR University, Bangalore 560043
santhagiyer@gmail.com

Akhila N²

Assistant professor, Department of Management and Commerce ,
Padmashree Institute of Management and Sciences #149,
Padmashree Campus Tavarekerw - Kommaghatta Bangalore 560060.
akki.prakash@gmail.com

Dr. Megha Sharma³

Department of Finance, Assistant Professor,
Thakur Institute of Management Studies and Research, Mumbai , Maharashtra.
megha_ca28@yahoo.co.in

Dr. L. Rajeshkumar⁴

Assistant Professor, Department of MBA, St.Joseph's College of Engineering Chennai – 119.
drrajeshmagt@gmail.com

Dr Balamurugan S⁵

Assistant Professor & Head, Department of Commerce (International Business),
Government Arts and Science College, Avinashi, Tamilnadu
balaselvan4387@gmail.com

Dr. Devendra Lodha⁶

Associate Professor, Gandhinagar Institute of Management ,Gandhinagar University
Khatraj-Kalol Road, Gandhinagar, Gujarat 382721.
dr.devendralodha86@gmail.com

Abstract

The impact of demographic variables and biases on investment performance can guide personalized investment strategies and product development within the financial services sector, catering to the unique needs and preferences of academicians as investors. With the growing importance of mutual funds in investment portfolios and the prevalence of behavioral biases influencing decision-making processes, understanding how demographic factors intersect with these biases is crucial. Moreover, the influence of demographic factors on these biases and their subsequent impact on investment outcomes remain underexplored within this specific demographic group. By uncovering how demographic characteristics intersect with behavioral biases in mutual fund investment decisions among academicians, it can inform tailored financial education programs aimed at mitigating biases and enhancing financial literacy among this demographic. The study seeks to provide valuable insights for both academicians and financial practitioners to improve investment decision-making processes and outcomes. Despite the increasing popularity of mutual funds as investment vehicles, academicians, like many investors, are susceptible to behavioral biases that can impede rational decision-making. The author concluded that addressing these implications has the potential to foster more informed and effective investment decision-making processes, benefiting academicians and the broader investor community alike.

Keywords: Demographic Variables ,Risk perception, Return perception, Mutual fund Investment Decision , Academicians, Tax Policy, Financial market Condition, Economic growth and Interest Rate

Introduction

Substantial growth has characterized the Indian mutual fund industry since its inception in 1963. In recent years, the Indian mutual fund industry has experienced substantial growth, which may be attributed primarily to the escalating value of money market instruments, bonds, and other securities [13]. Diverse investment options are available to individuals in order to achieve their objectives [2]. Each of these routes possesses unique characteristics and attributes, some of which compete to attract investors. Mutual funds are regarded by investors as a substantial opportunity to allocate their capital in pursuit of elevated returns while mitigating potential risks. Mutual funds amass assets from depositors and, in accordance with the investors' needs, invest in various equity-linked and non-equity-linked alternatives [7]. Mutual funds provide principal protection that is guaranteed, in addition to the possibility of capital appreciation and dividends or interest income. An individual can amass a collection of high-performing equities, including Reliance, ITC, and TISCO, through the use of mutual funds. Mutual funds facilitate the entry of small investors, whose limited investment capacity would otherwise render them unable to invest in large corporations. Education level can impact investors' understanding of financial concepts, investment products, and risk management strategies. Individuals with higher levels of education may conduct more extensive research before making investment decisions, leading to a better-informed and disciplined approach to investing. They are also more likely to seek professional financial advice and may have a deeper understanding of the implications of various investment options [1]. In contrast, individuals with lower levels of education may rely more on intuition or anecdotal evidence, potentially exposing them to higher levels of risk or making uninformed investment choices. Marital status can also influence mutual fund investment decisions, particularly regarding joint financial planning and investment goals. Married individuals may prioritize long-term financial security for their families, leading to more conservative investment strategies and a focus on wealth preservation. Conversely, unmarried individuals may have more flexibility in their investment choices and risk tolerance, as they are solely responsible for their financial well-being.

Background

The term "mutual fund" refers to an investment vehicle in which several investors combine their capital to buy a larger number of shares in a company. In order to have a larger economic impact, mutual funds combine the savings of many people and families and invest them in a variety of financial products, such as stocks and bonds [3]. There are a lot of factors that impact investors, and mutual funds are vital to market operations because of the role they play in risk management. For novice investors who lack expertise, experience, or a high risk tolerance, a mutual fund streamlines the investing process so they may put their money into profitable portfolios overseen by experts. The goal of these skilled technical managers is to increase client returns via the implementation of profitable and efficient financial solutions. An expansion of the concept of reasoned action, the theory of planned behaviour allows for the analysis of an individual's investment activity [5]. One goal of reasoned action is to foretell when people will alter their conduct. A person's attitude towards an active and subjective standard influences their behavioural intention, which in turn guides their conduct. Investment criteria (IC) are detailed standards that strategic and financial purchasers use to determine the value of an acquisition target [1]. The most astute purchasers often have two sets of criteria on hand: one to use during contract talks with brokers and investment bankers, and another to use internally when deciding whether or not to go forward with a deal. Geographical location, investment size, target business and industry are the most common publicly declared investment criteria. Management buyouts, troubled companies, and succession plans are examples of investing circumstances that many investors want to avoid. Finding investments with the highest rate of return on capital is a common criterion, and it's called equity."

Previous studies

Arathy et.al (2015) [2] determined the factors that influence investment choices in mutual funds and assess the attraction of these funds to retail investors. Additionally, the research attempted to identify the hurdles that prevent consumers from participating in mutual funds. According to the findings of the research, the characteristics of tax benefits, high return prices, and capital appreciation were key factors that influenced the choices of investors to invest in mutual funds respectively. The former factor is more essential than the latter. Some investors base their decisions on where to invest on the ratings that are supplied by organizations such as CRISIL and ICRA. In addition, the poll discovered that many factors, including tax advantages, possible returns, liquidity, low costs, and transparency, were the factors that discouraged consumers from investing in mutual funds. Economies of scale are a factor that contributes to the pushing force. Based on the findings of the research, the equity plan is the mutual fund choice that shows the highest level of effectiveness. Geetha and Vimala (2014) [5] discussed that both the ways in which demographic factors influence investment choices and the ways in which information technology has profoundly impacted the functioning of financial markets were the primary focuses of the study. There does not seem to be a significant association between the gender of the respondents and their risk-taking ability. Makwana Chetna (2015)[9] explored that the researchers wanted to shed light on the influence that heuristics, bias, and psychological variables have on the decisions that individual investors make about their investments, as well as how perception influences the whole mutual funds market. The other four factors that were investigated were examined. Research has indicated that the age group of investors is the demographic factor that has the greatest impact on the level of overconfidence that investor's exhibit. The researcher stated that perception had a major impact on the behavioural bias of participants in mutual funds, whereas awareness did not have any effect on the conduct of the participants.

Prevalence and magnitude of behavioral biases

Understanding the prevalence and magnitude of behavioral biases among academicians in mutual fund investment decisions is crucial for identifying potential areas of improvement in their investment strategies. Academicians, like any other demographic group, are susceptible to various behavioral biases that can significantly influence their decision-making processes. Similarly, loss aversion bias may cause them to hold onto poorly performing investments for longer periods than rational analysis would suggest, leading to missed opportunities for portfolio optimization. The magnitude of these biases among academicians may vary depending on individual differences in risk tolerance, investment experience, and psychological factors. By empirically assessing the prevalence and magnitude of these biases within the academic community, this study aims to provide insights into the specific behavioral challenges faced by academicians in their mutual fund investment decisions and to inform targeted interventions aimed at mitigating the impact of these biases on investment outcomes.

Research Objectives:

1. To examine the demographic profile of academicians participating in mutual fund investments.
2. To analyze the prevalence and magnitude of behavioral biases among academicians in mutual fund investment decisions.
3. To explore the relationship between demographic variables and behavioral biases in mutual fund investment decisions.

Analysis, Presentation and Results

The relationship between demographic variables such as gender, experience and behavioral biases in mutual fund investment decisions is a multifaceted and dynamic area of study. Research suggests that demographic characteristics can significantly influence individuals' susceptibility to various behavioral biases. The academicians (investors) are considered as sample respondents using purposive sampling technique. Total of 120 sample respondents were selected. The primary data were collected using the Google forms.

1. Gender

Table 1
 Gender and level of impact on mutual fund investment decision

Gender	Level of practice			Total
	Low	Moderate	High	
Male	28	30	21	79
	35.4%	38.0%	26.6%	100.0%
Female	12	18	11	41
	29.3%	43.9%	26.8%	100.0%
Total	40	48	32	120
	33.3%	40.0%	26.7%	100.0%

The above table 1 shows that the majority of the male (38.0%) and female (43.9%) respondents have moderate impact mutual fund investment decision. Older investors may exhibit a greater tendency toward conservatism and loss aversion, leading to a preference for safer, lower-risk investment options. Conversely, younger investors may be more prone to overconfidence and risk-taking behavior, seeking higher returns through aggressive investment strategies. Gender differences have also been observed, with studies indicating that women tend to exhibit less overconfidence and engage in more thorough decision-making processes compared to men.

Table 2
 Chi-Square test

Test	Chi-Square	df	CC	Sig.
Result	0.860	2	0.035	0.630

The calculated Chi-Square value is 0.860 for the degree of freedom 2 is insignificant (p-0.630). The value of CC test is very less (0.035). Hence, it is understood that there is no relationship between the gender and level of impact.

2. Experience

Experienced investors tend to have a deeper understanding of market dynamics, risk management strategies, and the performance history of different funds. This knowledge allows them to assess fund managers' track records, analyze fund objectives, and anticipate potential market shifts more effectively.

Table 3
 Level of experience and impact on mutual fund investment decision

Experience	Level of Impact			Total
	Low	Moderate	High	
Less than 5 Years	11	17	7	35
	31.4%	48.6%	20.0%	100.0%
5-10 years	24	19	13	56
	42.9%	33.9%	23.2%	100.0%
More than 10 years	5	12	12	29
	17.2%	41.4%	41.4%	100.0%
Total	40	48	32	120
	33.3%	40.0%	26.7%	100.0%

The above table depicts that the maximum of the respondents from the entire group based on the experience are moderately impact on mutual fund investment decision. Experience level can impact individuals' access to financial information, risk perception, and cognitive abilities, all of which may influence their susceptibility to biases such as herd mentality or anchoring.

Table 4
Chi-Square test

Test	Chi-Square	df	CC	Sig.
Result	2.117	4	0.059	0.683

With 4 degrees of freedom, the computed Chi-Square value of 2.117 is not statistically significant. A similarly tiny CC value of 0.059 was also found. At 0.683, the p-value is statistically significant at the 5% level. The results demonstrate the absence of a meaningful correlation. When considering mutual fund investments, individuals often weigh various factors to make informed decisions, and experience plays a crucial role in this process.

3. Mutual fund investment decision

Understanding the interplay between these demographic variables and behavioral biases is essential for designing targeted interventions and personalized investment strategies that take into account investors' unique characteristics and preferences. By elucidating these relationships, this study aims to contribute to the development of more effective financial education programs and investment advice tailored to the diverse needs of investors across different demographic groups.

Table 5
Factors influencing mutual fund investment decision

Dimension	Mean	Std. Deviation	Mean Rank	Rank
Risk perception	3.45	1.180	4.80	II
Return perception	1.99	1.728	2.99	V
Tax Policy	1.93	1.775	2.41	VI
Financial market Condition	3.63	0.685	5.10	I
Economic growth	3.01	0.728	4.19	III
Interest Rate	1.92	0.762	3.17	IV
No of Respondents	120			
Chi-Square	3.129			
difference	5			
Sig.	0.611			

The results show financial market condition was ranked first (5.10) followed by Risk perception and Economic growth as second and third. Chi-Square value (3.129) for the degree of freedom 5 is significant at 61.1% level. The study results revealed that there is no significant difference in the mean rank of Factors influencing mutual fund investment decision. Investors may have weathered market downturns and witnessed various economic cycles, providing them with valuable insights into long-term investment strategies and the importance of staying resilient during volatile periods. Consequently, their experience influences their investment decisions, guiding them towards funds that align with their risk tolerance, financial goals, and overall investment philosophy.

Discussion

Age plays a pivotal role in shaping investors' attitudes towards risk and investment strategies. Younger investors, typically in their twenties and thirties, often exhibit a higher risk tolerance and a preference for growth-oriented investments. They are more likely to allocate a larger portion of their portfolio to equities and aggressive mutual funds, aiming for long-term capital appreciation [6]. As individuals age, their risk tolerance tends to decrease, leading them to favor less volatile investments such as bond funds and dividend-paying stocks. Gender is another demographic variable that can influence mutual fund investment decisions. While both men and women participate in the financial markets, studies have shown that they may approach investing differently. Women tend to exhibit a more conservative investment style, prioritizing capital preservation and long-term financial security. They may be more inclined towards balanced funds and diversified investment strategies that mitigate risk. In contrast, men often display a higher propensity for risk-taking and may be more attracted to aggressive growth funds. Income level is a critical determinant of investors' ability to allocate funds towards mutual fund investments [1]. Higher income individuals typically have more disposable income to invest and may opt for more sophisticated investment vehicles such as actively managed mutual funds or alternative investments. In this comprehensive analysis, we delve into the intricate relationship between demographic variables and mutual fund investment decisions, examining how each factor impacts investors' behavior and choices.

Implication of the study

Regulatory organizations and mutual funds both stand to benefit from the findings of this research [5]. The results of this analysis indicate that some groups of people in society have a fundamental misunderstanding of mutual funds, which is one of the factors that has contributed to the failure of mutual funds [11]. The research has a number of consequences for public policy. Furthermore, these results are advantageous for investors because they provide essential insights into the characteristics of funds that have the potential to improve performance [7]. Through the course of the inquiry, an investor's perspective on the risk, returns, transparency, and disclosed processes associated with mutual funds is studied in respect to other financial possibilities. Based on the factors that were investigated, the research conducted an analysis of the important variables of mutual funds that impacted investor perception [9].

Conclusion

The research has the potential to improve academics' financial literacy and reduce prejudice in mutual fund investing choices by shedding light on the ways in which demographic factors interact with behavioral biases. To further address the specific requirements and preferences of academics as investors, understanding how demographic characteristics and biases affect investment performance might direct the creation of tailored investment strategies and products in the financial services industry. Both academics and the investing public stand to gain from a better educated and efficient investment decision-making process if these implications are adequately addressed. Demographic variables play a significant role in shaping mutual fund investment decisions. Gender and experience contribute to investors' risk tolerance, investment preferences, Interest Rate, financial market Condition and Economic growth. Demographic factors, investment professionals can better tailor their products and services to meet the diverse needs of investors and help them achieve their financial objectives.

Reference

1. Abbas, K. S., Usman, M., and Aftab, M. (2019). Public and private sector response to mutual funds in Pakistan using binary logistic regression. *Rev. Cienc. Social. Human.* 4, 728–737.
2. Arathy, B., Aswathy, A Nair, Anju Sai P., Pravitha N R(2015), “ A Study on factors affecting investment on mutual funds and its preference of retail investors” , *International Journal of Scientific and Research Publications*, Volume 5, Issue 8, 1-4.
3. Chowdhury, E., and Steve, D. R. (2018). Impact of attitude and awareness of investors on their investment behavior - a study on Bangladesh stock market. *Bangl. Account.* 50. 81–89.

4. Dhar, S., Salema, S. M. K., and Saha, A. (2017). Factors affecting individual investor behavior: empirical evidence from mutual fund investors in Dhaka city. *Manage. Dev.* 31, 79–101.
5. Geethaa, S., Vimala, K.(2014), “Perception of Household Individual Investors towards Selected Financial Investment Avenues (With Reference to Investors in Chennai city)”, *Procedia Economics and Finance* , Symbiosis Institute of Management Studies Annual Research Conference (SIMSARC13), 360 – 374,
6. Jagtap Uttam and Deo Rahul(2016), “A Review of Effects of Demographic variables on Mutual Fund Investment Decision”, National conference on “Dynamism of Global Era and Changing management practices”, Acropolis Institute of Management Studies and Research ,Indore on May, 2016.
7. Jain Dhiraj and Mandot Nikhil (2012), “Impact of Demographic factors on investment decision of investors in Rajasthan”, *Researchers World- Journal of Arts, Science and Commerce*, Volume– III, Issue –2, 81-92.
8. Khan Ali Akbar and A. Kotishwar (2013), “Investor Behavior towards Investment in Mutual Funds – A Comparative Study in Telangana region in the State of Andhra Pradesh”, *Madras University Journal of Business and Finance*, Vol-1, Number-1, Pg no 23-37.
9. Makwana Chetna (2015), “Interaction between Demographic Variable and Behavior Bias of Mutual Fund Investors”, *GJRA - Global Journal for Research Analysis*, Volume-4, Issue-7, Pg no 105-109.
10. Mehta Shantanu and Shah Charmi (2012), “Preference of Investors for Indian Mutual Funds and its Performance Evaluation”, *Pacific Business Review International*, Volume 5, Issue 3, pg no 62-75.
11. Rajdev Ankita (2013), “The Effect of Demographic factors on Investment Choice of Investors: A Study on Investors of Bhopal”, *IRC’s International Journal of Multidisciplinary Research in Social & Management Sciences*, Volume-1, Issue-3, Pg no 110-116.
12. Rathnamani, V.(2013), “Investor’s Preferences towards Mutual Fund Industry in Trichy”, *IOSR Journal of Business and Management (IOSR-JBM)*, Volume 6, Issue 6, Pg no 48-55.
13. Sehdev, R., and Ranjan, P. (2014). A study on Investor's perception towards mutual fund investment. *Sch. J. Econ. Bus. Manage.* 1, 105–115.
14. Singh Kumar Binod (2012), “A study on investors’ attitude towards mutual funds as an investment option”, *International Journal of Research in Management*, Vol. 2, Issue2, 61- 70.