Impact of demographic factors on Mutual fund Individual Investors' investment behavior

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Abstract: Mutual Fund investment is most suitable investment vehicle for individual investors as it offers them an opportunity to avail the benefit of diversification with professionally managed portfolio at a relatively low cost. But all the investors do not enjoy the same benefit as it is affected by the presence of investor bias. This paper is an attempt to find the impact of demographic factors on mutual fund individual investors' investment behavior. With this aim data were collected from 526 mutual fund individual investors using a structured questionnaire. The data collected were analyzed and the presence of investor bias such as overconfidence, myth following and other irrational behaviors were found. When studied about the impact of demographic factors, it revealed that men behave more rationally than women and novice (inexperienced) investors behave more irrationally than experienced investors. This study will be beneficial to both investors and financial advisors as it helps them to understand the psychology and emotions underlying the investment decisions.

Keywords — Demographic factor impact, Individual investors, Investment behavior, Investor bias, Mutual fund investors, Overconfidence

I. INTRODUCTION

Post liberalization of Indian economy in 1991, the capital market in India has grown tremendously. Market capitalization in the equity segment has increased manifold. Mutual funds is another important and potentially strong segment in capital market. In India Mutual Fund industry has been in existence since 1963 with the establishment of Unit Trust of India. Much later in 1987, SBI Mutual Fund became first Non – UTI Mutual Fund in India. Subsequently the year 1993 heralded a new era in the mutual fund industry. This was marked by the entry of private companies in the sector. After the Securities and Exchange Board of India (SEBI) Act was passed in 1992, the SEBI Mutual Funds Regulations came into force in 1996. Since then, the Mutual Fund companies have continued to grow exponentially with foreign institutions setting up in India, through Joint Ventures and Acquisitions. The Assets Under Management of the Indian Mutual Fund Industry has grown from Rs. 3.26 trillion as on 31st March 2007 to Rs. 19.97 trillion as on 31st July, 2017, more than six-fold increase in a span of about 10 years (Source AMFI). As the size of mutual fund industry is growing, the total number of accounts from retail segment is also growing, indicating the increased participation of individual investors. A mutual fund is the most suitable investment vehicle for individual investors as it offers them an opportunity to avail the benefit of diversification with professionally managed portfolio at a relatively low cost. But all the investors do not enjoy the benefits of Mutual fund due to the influence of behavioral biases like overconfidence, herd behavior, cognitive bias and disposition effect.

Since September 2014, there is an increase in the investor accounts from 3.95 crore to 5.54 crore in March 2017. There are 55,399,631 accounts in the mutual fund industry as at March 2017, of which 99% is accounted for by individual investors (Source: AMFI website). This dramatic growth has raised policy makers and academicians concern with the understanding of investor's behavior and the presence of bias in their behavior. To provide perspective on these concerns the researcher had conducted a survey of randomly selected 526 individual investors of mutual funds in Coimbatore city.

The survey conducted using a structured questionnaire collected two types of data. First, the survey collected data on socio-demographic profile of the respondents. This data helps

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to build up the profile of mutual fund investors and understand how these characteristics differ in their fund investment behavior. Second, the survey collected information about the investment behavior depicted by mutual fund investors. In this paper, an attempt is made to build the relationship between the socio-demographic factors and their investment behavior.

The remaining sections of the paper is arranged in the following order. The second section describes the review of earlier papers. The third section describes the objectives of the study, fourth section deals with methodology adopted to carry out this study. The fifth section describes the results and its interpretation and the sixth section deals with the conclusion.

II. PREVIOUS LITERATURE

The assumptions of traditional economists portray investor as rational beings who always strive to maximize their utility. The proponents of behavioral finance continuously challenge this assumption and believe that numerous factors, including both rational and irrational thinking drive investor behavior. Empirical research and studies on investor behavior have shown existence of irrational behavior such as Overconfidence, Herd Behavior, cognitive bias and disposition effect.

Barber and Odean [1] found that men trade more excessively than women and concluded that women are risk-averse, while men are overconfident which leads to create losses. He also mentioned that overconfident investors' trade excessively and this leads to poor returns. Overconfidence in men was also found in the study conducted by Lewellen, Lease, and Schlarbaum [2]. This study found that men have stronger tendency to overconfident behavior than women.

But Female investors were more affected by biases like disposition effect and herd behavior than male counterparts Hon-snir et al. [3] but they also found that Past trading experience reduces this effect. But this results were contradicted by the study conducted by Pompian and Longo [4] administered personality test and a questionnaire to uncover investor bias and the results showed that many personality types and both genders are disposed to numerous behavioral finance biases. The researchers also suggested that personality type and gender can be used to create an investment program that will compensate for behavioral biases.

Studies were also conducted to find the influence of experience in investor's behavioral bias. Malmendier and Shanthikumar [5] examined that small investors are more influenced by optimistic stock recommendations by security analysts as compared to institutional investors. Feng and Seasholes [6] have examined account-level data in China and established that investor sophistication and trading experience can reduce behavioral bias like disposition effect.

Several mutual fund investor surveys have attempted to find the relationship between the investors profile and their fund selection ability. Mishra.K.C and Metilda.M.J [7] concluded from the study conducted with the response collected from 309 mutual fund investors that overconfidence is higher among men than women and increases with investment experience and education.

Noel Capon et al., [8] investigated the investment decision making of consumers. The data collected from 3386 mutual fund investors of continental United States explored the relationship among four sets of variables: information sources used for mutual fund purchases, selection criteria for deciding among alternative mutual funds, mutual fund purchase behavior and consumer demographic data. The results of the study state that information sources, selection criteria and mutual fund investment behavior are related. When investors were grouped by similarity of investment decision process, a single small group was found to be exceptionally knowledgeable about its investments. But most of the other investors were found to be naïve, having little knowledge of the investment strategies or financial details of their investments.

A critical analysis of the literature prevailing in the subject clearly depicts that there is need to study the impact of demographic profile of investors on their investment behavior.

III. OBJECTIVES OF THE STUDY

With the given analysis of past studies conducted on understanding the investor behavior, the present study was conducted to know the individual mutual fund investors' investment behavior. Individual mutual fund investors' invest in mutual funds to enjoy the benefit of diversification with professional management at a relatively low cost. But their investment behavior contributes to the success of their expectation in their selected investments. So, this study was conducted with the following objectives

i. To examine the investment behavior exhibited by mutual fund investors
ii. To identify the impact of demographic factors on investment behavior of individual investors of mutual fund

IV. METHODOLOGY

The present study adopted descriptive research design based on the survey method. To accomplish the objectives of the study, a well-structured questionnaire was used to collect data from the respondents.

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A. Survey Instrument

The questionnaire designed for the study contained 3 sections. Section 1 of the questionnaire was designed to gather information about the demographic and socio economic factors of the respondents, and in Section 2 the respondents were asked to indicate their view on the behavioral statements using five point Likert-type scale ranging from "Strongly Disagree" to "Strongly Agree". Before administering the questionnaire the researcher undertook a pilot study for 30 samples and the questionnaire was fine tuned.

B. Validity and Reliability of the survey Instrument

The content validity of the questionnaire was verified with the discussions with 5 experts, 2 academicians and 3 industry professionals as suggested by Devellis [9]. Accordingly the researcher made changes in the questionnaire by rewording, eliminating or adding some of the items of the questionnaire.

The reliability of the instrument was checked with the help of Cronbach's Alpha method which is a measure of internal consistency and found out how closely related set of items are formed as a group.

C. Sampling and data collection

The population of interest in this study was the mutual fund investors who had invested in Mutual Funds during the period from August 2015 to December 2016 in Coimbatore city. Mutual Funds are being distributed through different modes such as Asset Management Companies, Stock Brokers, Mutual Fund distributors and Banks. Out of the 42 Asset Management Companies in India 19 firms were directly present in Coimbatore city and other firms are indirectly present. As and when the investors visited Asset Management Companies (hereinafter AMC) and Stock Broking firms, the researcher collected data from every 3rd customer who visited AMC or the Stock broking firm. Data collection was carried out from August 2015 to December 2016. Since the population size was unknown the sample size was determined as 1200 using the formula developed by Cochran [10] as n0=Z2pq/e2 where, n0 is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute that is present in the population, q = 1 - p and e is the desired level of precision. From a total of 1200 questionnaires distributed, 647 questionnaires were returned and finally 526 questionnaires were found valid and complete thereby yielding a response rate of about 44 percent.

V. ANALYSIS AND RESULTS

4.1. Profile of the respondents

Table 1 represents the summary of demographic profile of the respondents.

Table 1: Demographic Profile of the Respondents

Factors	Description	Percent
Gender	Male	74.7
	Female	25.3
Age Group (in Years)	Less than or equal to 30	13.7
	31-40	39
	41-50	21.9
	51-60	12.2
	Above 60	13.3
Educational Qualification	Upto School final	11.4
	Graduate	29.3
	Post – Graduate	32.7
	Professional Degree	23
	Others	3.6
Average Monthly Income of the Family in Rs.	Less than or equal to Rs.50000	31.7
	Rs.50001 - Rs.100000	36.9
	Rs.100001 - Rs.150000	11.6
	Rs.150000 - Rs.200000	8.7
	Above Rs.200000	11
Investment Experience of Investors	Less than 1 year	17.3
	1 to 3 years	36.1
	3 to 5 years	18.3
	5 to 7 years	17.1
	More than 7 years	11.2

4.2. Mutual Fund Investor Behavior

Mutual fund investor's investment behavior was studied with the responses collected through various statements using five point likert scaling from (1) Strongly Disagree to (5) Strongly Agree. Table 2 contains the statements used to study the behaviour of mutual fund investors.

Since analyzing 25 items individually may not give meaningful interpretation, factor analysis was performed to group them.

Before administering Factor analysis, suitability of data for factor analysis should be tested. Exploratory factor analysis was employed to find out the dimensionality of the mutual fund investor behaviour using SPSS 16.0. Through analysis, it is found that Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.94 indicating the sample data is suitable for factor analysis. A principal component factor analysis with Varimax rotation was performed and as a result 62.466 variance have been explained by the four factors namely Rational Behavior, Myth followers, Overconfidence and Irrational Behavior.

Reliability of the dimensions were tested using Cronbach's alpha. From Table 3 it can be seen that the Cronbach's alpha

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of dimension 'Rational Behaviour' is 0.936 indicating excellent reliability, alpha of 'Myth Followers' is 0.864 indicating good reliability and the alpha of dimensions 'Overconfidence' and 'Irrational Behavior' lie between 0.7 to 0.8 indicating acceptable reliability.

Table 2: Behavioral Statements

Item No.	Statements	Mean	Std. Deviation
1	I need to invest for long period	3.76	1.461
2	I will always analyse before making investment decision	3.47	1.442
3	I know the portfolio of my fund	3.46	1.323
4	I always read offer document before investing	3.24	1.402
5	Periodic review of fund performance is not required (reverse coded)	3.2	1.422
6	I can approach SEBI SCORES when there is any complaint	3.19	1.235
7	Only experts can invest in Mutual Funds (reverse coded)	3.1	1.314
8	I am aware of exit load of my fund	3.09	1.246
9	I am aware that AMFI protects the investor's interest	3.08	1.271
10	I know the expense ratio of my fund	3.06	1.274
11	Ups and downs of stock market will not affect the return (reverse coded)	3.05	1.404
12	I know the investment objective of my fund	3	1.335
13	I invested because my friend recommended (reverse coded)	2.95	1.216
14	Mutual Funds cannot be liquidated easily (reverse coded)	2.88	1.381
15	I frequently switch funds from one to another (reverse coded)	2.87	1.301
16	Return of principal is assured (reverse coded)	2.86	1.332
17	I should stop SIP when stock market is uncertain (reverse coded)	2.86	1.347
18	Mutual Fund with high expense ratio means fund performance will be good (reverse coded)	2.8	1.23
19	Mutual Funds always gives positive returns (reverse coded)	2.77	1.195
20	I will keep investing even if my fund doesn't give proper return	2.67	1.188
21	If AUM is too large then performance will be high	2.61	1.22
22	Holding too many funds will increase my returns	2.57	1.277
23	I quickly dispose of the funds when its price decreases	2.57	1.141
24	I will sell only when I need money	2.42	1.256
25	I prefer One time investment than Systematic Transfer Plan	2.42	1.179

The mean values of the dimensions show that there is presence of investment bias among the investor group under study. Even though Rational behaviour has got higher mean value of 3.2 among all other factors, Overconfidence bias, other irrational behaviours and myth following were also found to be present among the investors' investment behaviour with mean score value of 2.9 and 2.7 each.

Table 3: Factor analysis results and Dimensional reliability of Investor Behaviour

Dimension	Statements	Factor Loadings	Variance explained (%)	Mean	alpha
Rational Behaviour	I will always analyse before making investment decision	0.777	25.543	3.2	0.936
	I know the expense ratio of my fund	0.773			
	I know the portfolio of my fund	0.772			
	I need to invest for long period	0.755			
	I can approach SEBI SCORES when there is any complaint	0.745			
	I am aware that AMFI protects the investor's interest	0.713			
	I know the investment objective of my fund	0.694			
	I am aware of exit load of my fund	0.617			
	I should stop SIP when stock market is uncertain	0.560			

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	I will always analyse before making investment decision	0.552			
Myth Followers	If AUM is too large then performance will be high	0.831	18.202	2.7	0.864
	Holding too many funds will increase my returns	0.761			
	Mutual Fund with high expense ratio means fund performance will be good	0.661			
	Only experts can invest in Mutual Funds	0.577			
	I prefer One time investment than STP	0.526			
	Mutual Funds cannot be liquidated easily	0.511			
	Return of principal is assured in Mutual funds	0.471			
Overconfidence	Mutual Fund gives definite positive returns	0.827	10.404	2.9	0.782
	Ups and downs of stock market will not affect the return	0.613			
	Periodic review of fund performance is not required	0.507			
	I will keep investing even if my fund doesn't give proper return	0.484			
Other Irrational Behaviours	I will sell only when I need money	0.664	8.316	2.7	0.711
	I quickly dispose when price decreases	0.643			
	I frequently switch funds from one to another	0.585			
	I invested because my friend recommended	0.451			

4.3 Mutual Fund Investment Behaviour and Gender

Table 4: Investment Behaviour and Gender

Behavioural Dimensions	Gender	Mean	Std. dev.	T.value	Sig.
Rational	Male	3.29	1.02	2.479	0.014
	Female	3.01	1.16		
Myth followers	Male	2.79	0.93	1.765	0.078
	Female	2.62	0.99		
Overconfidence	Male	2.97	1.01	1.863	0.063
	Female	2.78	1.04		
Irrational Behaviour	Male	2.73	0.89	1.358	0.175
	Female	2.61	0.92		

Std. Dev., Standard deviation; T-value, ratio of two sample variances; Sig., Significance level.

Table 4 shows the behaviour of the respondents categorised on the basis of their gender. The mean score for Rational Behaviour given by Male respondents is 3.29 and by female respondents is 3.01. The t test output shows a t value of 2.479 and sig. value of 0.014. Since the sig. value is <0.05, the mean difference is significant which implies that difference in response based on gender is statistically significant. The mean score for Myth Following given by Male respondents is 2.79 and by female respondents is 2.79. The t-test output shows a t value of 1.765 and sig. value of 0.078. Since the sig. value is >0.05, the mean difference is not significant which implies that difference in response based on gender is not statistically significant in following myth in mutual fund investments. The mean score for Overconfidence given by Male respondents is 2.97 and by female respondents is 2.78. The t-test output shows a t value of 1.863 and sig. value of 0.063. Since the sig. value is >0.05, the mean difference is not significant which implies that difference in response based on gender is not

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statistically significant in overconfidence behaviour. The mean score for Other Irrational Behaviours given by male respondents is 2.73 and by female respondents is 2.61. The t test output shows a t value of 1.358 and sig. value of 0.175. Since the sig. value is >0.05, the mean difference is not significant which implies that difference in response based on gender is not statistically significant in other irrational behaviours.

4.4 Mutual Fund Investment Behaviour and Age

Table 5: Investment Behaviour and Age

Behavioural Dimensions	Age Group	Mean	Std. dev.	F.value	Sig.
Rational	Less than 31 yrs	3.4	0.9	1.125	0.344
	31 to 40 yrs	3.2	1.1		
	41 to 50 yrs	3.3	1.1		
	51 to 60 yrs	3.1	1.1		
	Above 60 yrs	3.1	1.1		
Myth followers	Less than 31 yrs	2.7	0.8	0.204	0.936
	31 to 40 yrs	2.7	1.0		
	41 to 50 yrs	2.8	0.9		
	51 to 60 yrs	2.8	1.0		
	Above 60 yrs	2.8	1.1		
Overconfidence	Less than 31 yrs	3.1	1.1	1.148	0.333
	31 to 40 yrs	2.8	1.0		
	41 to 50 yrs	2.9	1.0		
	51 to 60 yrs	3.0	1.0		
	Above 60 yrs	3.0	1.0		
Irrational behaviour	Less than 31 yrs	2.7	0.7	0.712	0.584
	31 to 40 yrs	2.7	0.9		
	41 to 50 yrs	2.7	0.9		
	51 to 60 yrs	2.9	1.0		
	Above 60 yrs	2.7	0.9		

Table 5 shows the behaviour of the respondents categorised based on their age group. The mean score for Rational Behaviour given by respondents of age group less than 31 years is 3.4 higher than all other groups. The ANOVA output shows the F value of 1.125 and sig. value of 0.344. Since the sig. value is >0.05, the mean difference between different age of the respondents with rational investment behaviour is not statistically significant. The mean score for Myth followers given by respondents of age groups above 40 is 2.8 and less than 40 are 2.7. The ANOVA output shows the F value of 0.204 and sig. value of 0.936. Since the sig. value is >0.05, the mean difference between different age of the respondents with the behaviour of following Myth is not statistically significant. The mean score for Overconfidence is high among the respondents of age group less than 31 years (3.1). The ANOVA output shows the F value of 1.148 and sig. value of 0.333. Since the sig. value is >0.05, there is no statistically significant difference among the different age groups with Overconfidence behaviour. The mean score of irrational behaviour of the respondents in the age group of 51 to 60 is high (2.9) compared to all other age groups. The ANOVA output shows the F value of 0.712 and sig. value of 0.584. Since the sig. value is >0.05, there is no significant difference between the different age group of the respondents with Irrational behaviour.

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4.5 Mutual Fund Investment Behaviour and Education

Table 6: Behaviour and Education

Behavioural Dimensions	Education	Mean	Std. dev.	F.value	Sig.
Rational	Upto School final	3.2	1.2	0.033	0.998
	Graduate	3.2	1.0		
	Post Graduate	3.2	1.0		
	Professional Degree	3.2	1.1		
	Others	3.3	1.2		
Myth followers	Upto School final	2.8	1.1	0.306	0.874
	Graduate	2.7	0.9		
	Post Graduate	2.7	0.9		
	Professional Degree	2.7	1.0		
	Others	2.9	1.1		
Overconfidence	Upto School final	2.8	1.0	1.046	0.383
	Graduate	2.9	0.9		
	Post Graduate	3.0	1.1		
	Professional Degree	2.9	1.0		
	Others	3.2	1.0		
Irrational Behavior	Upto School final	2.6	1.0	0.925	0.449
	Graduate	2.8	0.9		
	Post Graduate	2.7	0.9		
	Professional Degree	2.7	0.9		
	Others	2.8	1.0		

Table 6 shows the behaviour of the respondents categorised based on their educational qualification. The mean score of other educational qualification holders in Rational behaviour (3.3), Myth followers (2.9), Overconfidence (3.2) and Irrational Behaviour (2.8) is higher compared to others. The ANOVA output shows the sig. value is >0.05 in all the behavioural groups and therefore there is no statistically significant difference between the different educational qualification of the respondents.

4.6 Mutual Fund Investment Behaviour and Monthly Income

Table 7: Behaviour and Income

Behavioural Dimensions	Education	Mean	Std. dev.	F.value	Sig.
Rational	Less than or equal to Rs.50000	3.2	1.1	0.088	0.986
	Rs.50001 - Rs.100000	3.2	1.1		
	Rs.100001 to Rs.150000	3.3	1.0		
	Rs.150001 to Rs.200000	3.2	1.1		
	Above Rs.200000	3.2	1.1		
Myth followers	Less than or equal to Rs.50000	2.7	1.0	1.123	0.345
	Rs.50001 - Rs.100000	2.8	0.9		
	Rs.100001 to Rs.150000	2.9	0.9		
	Rs.150001 to Rs.200000	2.8	0.9		
	Above Rs.200000	2.6	1.0		
Overconfidence	Less than or equal to Rs.50000	2.8	1.0	2.835	0.024
	Rs.50001 - Rs.100000	3.0	1.0		
	Rs.100001 to Rs.150000	3.1	1.0		
	Rs.150001 to Rs.200000	3.0	1.0		
	Above Rs.200000	2.7	0.9		

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Irrational Behavior	Less than or equal to Rs.50000	2.6	0.9	1.274	0.279
	Rs.50001 - Rs.100000	2.7	0.9		
	Rs.100001 to Rs.150000	2.8	1.0		
	Rs.150001 to Rs.200000	2.8	1.0		
	Above Rs.200000	2.8	0.9		

Table 7 depicts the behaviour of the respondents categorised based on their monthly income. The ANOVA output of the rational behaviour shows F value of 0.088 and sig. value of 0.986. Since the sig. value is >0.05, there is no statistically significant difference in response based on their income level. The ANOVA output of Myth followers shows F value of 1.123 and sig. value of 0.345 which is greater than 0.05 and therefore there is no statistically significant difference in response based on their income category. The ANOVA output of Overconfidence shows F value of 2.835 and sig. value of 0.024. Since the sig. value is less than 0.05, the mean difference is significant which implies that the difference in response based on income for overconfidence behaviour is statistically significant. The ANOVA output of Irrational behaviour shows F value of 1.274 and sig. value of 0.279 which is >0.05 therefore there is no significant difference in the response based on income of the respondents.

4.7 Mutual Fund Investment Behaviour and Experience

Table 8: Investment Behaviour and Experience

Behavioural Dimensions	Experience	Mean	Std. dev.	T.value	Sig.
Rational	Less than 3 years	3.17	1.09	1.2	0.231
	Over 3 years	3.28	1.03		
Myth followers	Less than 3 years	2.78	0.93	0.615	0.539
	Over 3 years	2.72	0.97		
Overconfidence	Less than 3 years	2.94	1.06	0.433	0.665
	Over 3 years	2.90	0.97		
Irrational Behaviour	Less than 3 years	2.81	0.91	2.626	0.009
	Over 3 years	2.61	0.88		

Table 8 shows the behaviour of investors based on their investment experience. Investors with an experience less than 3 years are considered as novice investors and investors with more than 3 years of experience are considered as experienced investors. The mean score for Rational behaviour given by novice investors is 3.17 and by experienced investors is 3.28. T-test output shows a t value of 1.2 and sig. value of 0.231.0. Since the sig. value is >0.05, the mean difference is not significant. The mean score of Myth followers given by novice investors is 2.78 and experienced investors is 2.72. T-test output shows the t value of 0.615 and sig. value f 0.539. Since the sig. value is >0.05, the mean difference between novice investors and experienced investors with respect to Myth following is not statistically significant. The mean score of Irrational investors given by novice investors is 2.81 and by experienced investors is 2.61. T-test output shows the t value of 2.626 and sig. value of 0.009. Since the sig. value is <0.05, the mean difference between novice investors and experienced investors is statistically significant.

4.8 Correlation between the behaviour of investors

Table 8 shows the correlation among the different behaviours exhibited by Mutual fund individual investors.

Table 8: Correlation Matrix of Behavioural Dimensions

S. No.	Behavioral Dimensions	Mean Score	SD	Behavioral Dimensions			
				Rational	Myth followers	Over confidence	Irrational Behavior
1	Rational	3.2	1.1	1	.732**	.677**	.675**
2	Myth followers	2.8	1	———	1	.677**	.593**
3	Over confidence	2.9	1	———	———	1	.566**
4	Irrational Behaviour	2.7	0.9	———	———	———	1

**. Correlation is significant at the 0.01 level (2-tailed).

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Correlation analysis was carried out to find the degree of association between the investment behaviours of mutual fund investors. As shown in table the association between Rationality behaviour and Myth Following (r=.732, p<0.000), Over confidence (r=0.677, p<0.000) and Irrational Behaviour (r=0.675, p<0.000) depicting positive statistically significant correlation existing between Rational behaviour and all other three behaviours. When tested for association between Myth Followers and Over confidence investors (r=0.677, p<0.000) and Irrational behaviour (r=0.593, p<0.000), there exists statistically significant positive correlation between Myth followers and Over confident and Irrational Behaviours. The correlation matrix in table 8 shows that there exists positive correlation between Overconfidence and Irrational Behaviour (r=0.566, p<0.000).

VI. DISCUSSION AND CONCLUSION

This study has showed that there is presence of investor bias in their mutual fund investment behaviour. This is in line with the previous studies of Mishra.K.C and Metilda.M.J [7], Barber and Odean [1], Lewellen et al. [2], Hon-snir et al. [3], Gervais and Odean [11] and Feng and Seasholes [6]. The investment behaviours are grouped as Rational Behaviour, Myth Followers, Overconfident behaviour and other Irrational behaviours. The results of the study indicated that Rational behaviour is higher than the biased behaviour. Overconfidence behaviour is high among biased behaviours.

When studied about the impact of demographic factors on the investment behaviour, this study has indicated that investor's gender has an impact on their investment behaviour. The findings of the study are similar to the earlier study results of Mishra.K.C and Metilda.M.J [7], Lewellen et al. [2], Barber and Odean [1] where they have found that men are overconfident than women. Our study results also show that Rational behaviour is higher among men. Even though the difference is not significant, other behaviours like Myth following, Overconfidence and other Irrational behaviours are also higher among men than women.

When it comes to the role of investment experience in mutual fund investment, most studies confirm that level of overconfidence decreases with the increase of experience. The findings of this study is also similar to the earlier study results of Gervais and Odean [11], Feng and Seasholes [6] and Hon-snir et al. [3] even though the difference is not significant, the mean score value is higher for male investors than female investors. This study results also indicate that the rational behaviour increases with the increase in experience, irrational behaviour and following of myth reduces with the increase of investment experience. However, the difference is not significant between novice and experienced investors for irrational and myth followers.

To summarize, the results of our study show that (1) rational behaviour is high among the mutual fund investors (2) presence of bias is found and overconfidence bias is high among these investors (3) Men are behaving more rationally than women (4) there is no significant difference between the different age group of investors in their behaviour (5) there is no significant difference between the level of education in their investment behaviour (6) the overconfidence increases with the increase in income (7) irrational behaviour is high among novice investors than experienced investors (8) there is an association between the investment behaviours of mutual fund investors. This study brings out the behaviour of mutual fund investors and confirms the presence of bias. Investor experience, gender and income do have impact on their investment behaviour. Further there is association between the various investment behaviours. This study contributes to the existing literature on investor behaviour, especially on the impact of demographic factors on their behaviour. Further studies can be conducted using controlled experiments to come out with a behavioural model. This study can be beneficial to both investors and financial advisors from the perspective of understanding the psychology and emotions underlying investment decisions for better planning and formulating financial goals.

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