An Effect of Overconfidence Behavior of Investors' on Mutual Fund Investment Decision with Reference to Chennai

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ABSTRACT

Investors should choose mutual funds as the best investment vehicle since they provide them with the benefit of diversity through a professionally managed portfolio at a cheap cost. However, due to the prevalence of investor bias, not all investors receive the same benefit. This study aims to determine the impact of investors' overconfidence behaviour on mutual fund investment decisions, as well as the impact of demographic characteristics on mutual fund investors' overconfidence behaviour. With this aim, a standardized questionnaire was used to collect data from 100 mutual fund individual investors. The data was analyzed, and it was shown that investors have an overconfidence in mutual fund investments. While demographic parameters were examined, it was discovered that age, gender, marital status, occupation, and family nature were all influenced by overconfidence behaviour when making investment decisions.

1. INTRODUCTION

Behavioral finance is accurately the non-objective behaviour of market financial backers. Behavioural finance theory shows that financial backers settle on speculation choices rationally, by a discontinuous change from an earlier time and those venture choices can be taken affected by some psychological factors. This theory shows how human practices are powerful in the working of speculation choices. Divanoglu & Bagci (2018).

The most common behavioural finance biases are cognitive biases and emotional biases. Cognitive biases include things like availability, representativeness, confirmation bias, anchoring/conservation, overconfidence, an illusion of money, house money effect, mental accounting, and myopia. Loss aversion, fear of regret, optimism, aversion to ambiguity, endowment effect, and snakebite effect are all emotional biases. According to behavioural finance specialists, investors' decisions are influenced by a variety of beliefs and preferences. Gitman & Joehnk (2013).

One of the most important biases is overconfidence bias, which is defined as an individual's unreasonable faith in his evaluation and giving excessive weight to his judgment and knowledge. Individuals with excessive confidence overestimate their abilities, skills, and information, resulting in poor decision-making. They may grow confident in the positive consequence of their choices and create short-term forecasts. Optimism, confirmation, and illusion of control biases can all contribute to overconfidence. Investor feels that his decision will result in a positive outcome as a result of these biases, and he selects only evidence that confirms his previous beliefs. Manazir, Muhammad & Noreen, Misbah & Asif, Muhammad & Aziz, Bilal. (2016).

2. CONCEPTUAL FRAMEWORK

Overconfidence bias occurs when people place excessive trust in their own intuitive reasoning, judgments, and/or cognitive ability. Overestimating knowledge levels, abilities, and information access could be the cause of this overconfidence. People, for example, are generally bad at predicting probabilities; but, they believe they are good at it because they believe they are sharper and more knowledgeable than they are. Overconfidence bias comprises elements of both cognitive and emotional errors, but it's classified as emotional because it's predominantly caused by emotion. It's difficult to fix since it's difficult for people to change their minds about their own knowledge and abilities. Overconfidence is a psychological term drawn from a large number of psychological tests and surveys in which participants overestimate both their own predicting ability and the precision of the information they are given.

Financial Market Participants may act in the following ways as a result of overconfidence bias:

Overestimate expected returns while underestimating hazards.

Invest in portfolios that aren't well-diversified.

Excessive trading

Earn smaller returns than the market. **Pompian, M. M. (2012)**

3. LITERATURE REVIEW

Bao and Li (2020) found that the overconfidence impact is more visible during market boom periods or in inefficient market conditions. Furthermore, simulation analysis shows that overconfidence in particular markets can lead to high volumes of excess trading activity.

Adielyani & Mawardi (2020) identified that overconfidence, herding tendency, and risk tolerance have favourable and significant influences on stock investment decisions in millennial investors in Semarang City. Thus, the higher the degree of overconfidence, herding tendency, and risk tolerance of millennial investors in Semarang City, the higher the level of stock investing decisions and vice versa.

Qasim, M., Hussain, R. Y., Mehboob, I., & Arshad, M. (2019), argued that Pakistani financial backers' choices were essentially impacted by both grouping conduct and arrogance inclinations.

Devi, N. Nandhini & Joseph, Dr.A.Velanganni. (2017), discovered that men act more reasonably than ladies and unpracticed financial backers act more nonsensically than experienced financial backers. This examination will be advantageous to the two financial backers and monetary guides as it assists them with understanding the brain research and feelings hidden in the speculation choices.

Manazir, Muhammad & Noreen, Misbah & Asif, Muhammad & Aziz, Bilal. (2016), conducted the study to found that higher overconfidence investors make aggressive and excessive trading as contrast with low overconfidence investors, furthermore there is practically no effect of any awful news on the contributing conduct of the presumptuousness financial backers however consequences of the investigation shows that there is a huge effect of terrible news on the speculation conduct of low pompous financial backers.

Sakshi Taparia & Ramesh Chandra Babu (2019) argued that investors' risk-taking ability varies depending on their income level, and various economic aspects influence the investor's fund selection.

Fachrudin, K. R., Lumbanraja, P., Sadalia, I., & Lubis, A. N. (2018) found that gender has no major effect on overconfidence. Overconfidence can have a big impact on financial decisions.

Jagtap (2017) discovered that single people do not make large investments in mutual funds because they do not have any responsibilities other than their own requirements. However, married couples invested heavily in mutual funds to supplement their income. When it came to the age element, it varied based on the perceptions of each academician. Male investors are also more aware of and sensitive to mutual fund investments than female investors, according to the study.

Mishra & Metilda (2015), found that the level of overconfidence rises with the level of experience and education of the investor. Men are more overconfident than women, indicating that investing experience, education level, and gender all influence investor bias.

Yosra Mefteh Rekik & Younes Boujelbene (2013), found that depositors do not act genuinely when making venture choices. He emphasized that these biases influenced depositors' judgement while making financial decisions. Investors are swayed by the reactions and feelings of others. Age, income, education, experience, and gender, he claims, are all linked to financial psychological aspects.

4. RESEARCH GAP

1. To analyse the Mutual fund investors' overconfidence behaviour.

2. To analyse the influence of demographic variables on overconfidence behaviour

5. HYPOTHESIS

H0 - There is no influence of demographic factors on overconfidence behaviour when taking an investment decision.

H1 - There is an influence of demographic factors on overconfidence behaviour when taking an investment decision.

6. METHODOLOGY

A well-structured questionnaire was utilized to collect data from the respondents in order to achieve the study's goals. The study's questionnaire was divided into three components. Section 1 of the questionnaire was designed to gather information about the respondents' demographic and socioeconomic variables, while Section 2 asked them to express their opinions on investment details, and Section 3 asked them to express their opinions on the Overconfidence behavioural statements using a five-point Likert-type scale ranging from Strongly Disagree to Strongly Agree. The study's target group was mutual fund investors who had made investments in mutual funds. A total of 100 people were polled for information. The instrument's reliability was tested using the Cronbach's Alpha technique, which is a measure of internal consistency. The data was analyzed using a t-test to determine the investors' exact perceptions, including their overconfidence behaviour. The influence of the independent variable on the dependent component is estimated using Linear Multiple Regression Analysis.

7. ANALYSIS AND INTERPRETATION

One of the most difficult tasks for investors is to make investment decisions when their profiles differ, such as demographic parameters, socioeconomic characteristics, educational levels, age, and gender. Investors' investment decisions are influenced by a variety of behavioural finance biases, including Heuristics, framing theory, mental accounting, and other psychological biases are all examples of psychological biases. This research aims to answer certain questions in order to determine the exact view of investors' overconfidence. Also, to determine the impact of investor demographic characteristics

on their overconfidence behaviour. T-test, Linear Multiple Regression Analysis, and ANOVA are employed in this study. The following are the outcomes of numerous analyses.

T-test

The T-test is to identify the exact perception of the employees in particular their overconfidence behaviour. To measure the exact overconfidence behaviour the researcher applied t-test because the investors gave their response in Likert five-point scale.

Perception of Investors' Overconfidence Behaviour Towards Mutual Fund Investment

Table 1

OVER CONFIDENCE		Mean	Std. Deviation	Std. Error Mean
I have a well knowledge about the MFs.	00	3.7400	.94943	.09494
I am an experienced investor.	00	3.4600	1.04852	.10485
I can trade excessively with more risks.	00	3.1000	1.20185	.12019
I take the investment decisions on my own idea	00	3.7100	1.10367	.11037
I can beat the stock market with my knowledge and skills.	00	3.1600	1.17825	.11783

From the above table, it is found that the mean values are ranging from 3.1600 to 3.7400. The standard deviation as its range from 0.94943 to 1.20185. Range of Standard mean from 0.09494 to 0.12019. This states that all of the mean values are greater than 3 and the standard deviation are very consistent along with the standard error mean. These values are very much useful to compute the t-value for the present test.

Table 2 - One Sample Test

OVER CONFIDENCE	Test Value = 3				95% Confidence Interval of the Difference
	T	f	Sig. (2-tailed)	Mean Difference	Lower
I have a well knowledge about the MFs.	7.794	9	.000	.74000	.5516
I am an experienced investor.	4.387	9	.000	.46000	.2520
I can trade excessively with more risks.	.832	9	.407	.10000	-.1385
I take the investment decisions on my own idea	6.433	9	.000	.71000	.4910
I can beat the stock market with my knowledge and skills.	1.358	9	.178	.16000	-.0738

The t-values of all the five variables of overconfidence are ranging from 0.832 to 7.794. Among these five values, 3 of them are statistically significant and 2 of them are not statistically significant. The values and variables which are statistically insignificant are: I can trade excessively with more risks, t-value is 0.407 and I can beat the stock market with my knowledge and skills, t-value is 0.178. The remaining 3 variables are significant. Therefore, for the 2 insignificant variables, the investors from Mutual fund in Chennai gave a neutral opinion "Neither agree Nor Disagree". They are not able to decide. So, they are given a neutral opinion. **Niyam Raj Shrestha(2019)** identified that the investors with a college education and a net worth of Rs 2 to 5 million are confident in their own abilities. They consider themselves to be better investors than their counterparts and trade more excessively with more risks. But

in this study, the investors are not taking more risk to trade excessively and cannot beat the market with their ability and skills. Since it is less than 0.05, it is insignificant and the Null hypothesis is rejected.

The Influence of Demographic Variables of Investors on their Overconfidence Behaviour

The total average scores of the overconfidence behaviour are considered as a dependent variable whereas the demographic variables like age, gender, marital status, education, occupation, Annual income are taken as independent variables. The influence of the independent variable is over the dependent factor is estimated through Linear Multiple Regression Analysis and it is shown below the table.

Table 3 - Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.565ᵃ	.319	.267	1.83294

Predictors: (Constant), 2. Age, 3. Gender, 4. Marital status, 5. Education, 6. Occupation, 7. Annual Income, 8. Nature of Family.

From the above table, it is found that R2 value is 0.319, adjusted R2 value is 0.267. This shows that the variance of overconfidence behaviour ranging from 26.7% to 32.9%. The actual computation of F value would indicate the best relationship between the overconfidence behaviour and demographic variables of the investors.

Table 4 - ANOVA

Model	Sum of Squares	f	Mean Square	F	ig.
Regression	144.938		20.705	6.163	000ᵇ
Residual	309.089	2	3.360		
Total	454.028	9			

Dependent Variable: Overconfidence

Predictors: (Constant), 2. Age, 3. Gender, 4. Marital status, 5. Education, 6. Occupation, 7. Annual Income, 8. Nature of Family.

From the above table that F=6.613, P=0.000 are statistically significant at a 5% level. This shows that there is a significant relationship between demographic variables and the overconfidence behaviour of investors of MFs. This leads to the measurement of individual influence of demographic variables on the overconfidence behaviour as stated in the co-efficient table.

Table 5

Module	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	13.418	2.281		5.883	.000
Age	-1.006	.417	-.374	-2.411	.018
Gender	-1.329	.484	-.254	-2.747	.007
Marital Status	-2.679	.694	-.621	-3.861	.000
Education	-.179	.297	-.062	-.602	.549
Occupation	.418	.186	.195	2.249	.027

Annual Income	.099	.115	.096	.860	.392
Nature of Family	.957	.374	.223	2.556	.012

From the above table, it is estimated that age (b = -0.374, t=-2.411, P= 0.018), Gender (b= -0.254, t= 2.747, P= 0.007), Marital status (b= -0.621, t= -3.861, P= 0.00), Education (b= -0.062, t= -0.602, P=0.549), Occupation (b=0.195, t= 2.249, P= 0.027), Annual Income (b= 0.096, t=0.860, P= 0.392), Nature of family (b= 0.223, t= 2.556, P= 0.012) are statistically significant at 5% level.

The negative value of age denotes that age is negatively influencing, means when age is increasing, the overconfidence behaviour is decreasing. **Chetna Makwana (2015)** argued that, among other demographic indicators, the investor's age group is the most important factor influencing their overconfidence. Therefore, age is negatively influencing thus, the Null Hypothesis is accepted.

Similarly in this study, gender also has a significant difference between male and female investors in perceiving the emotions. The overconfidence behaviour of male and female difference significantly. Marital status and Education also make them differ significantly. **Obamuyi (2013)** discovered that investors' age, gender, marital status, and educational credentials all had a substantial impact on their investment decisions in Nigeria. **Mishra & Metilda (2015),** found from the exploration that financial backers experience, level of education, and gender do affect financial backers. Occupation and Nature of family create a positive impact.

Table 6 - ANOVA

After Linear Multiple Regression Analysis, the researcher applied Analysis of Variance and brought down the results.

Independent Variable	Dependent Variable	F	Sig.	Category	Mean Values
Age	Overconfidence	3.002	0.034	50-60	3.6667
Gender	Overconfidence	6.590	0.012	Male	3.5000
Marital status	Overconfidence	4.755	0.032	Married	3.6786
Occupation	Overconfidence	5.367	0.023	Professional	3.9231
Nature of family	Overconfidence	11.765	0.001	Nuclear Family	3.6364

From the above table, it is found that investors whose age is in the category 50 -60, strongly agree for the overconfidence rather than the age groups (Mean = 3.6667), Regarding gender, Male investors had a significant impact on overconfidence behaviour, Mean value = 3.5000, When it is checked with the investors about Marital status, Married couples (Mean = 3.6786) had influenced on overconfidence. It is observed that occupation (Mean = 3.9231) and nature of family (Mean =3.6364) had an impact on the overconfidence behaviour of investors.

All the above independent factors in the table are influenced the dependent factor overconfidence, because all significance value is less than 0.05. So, the Null hypothesis is rejected and the alternate hypothesis is accepted.

To discuss that the age group 50-60 of investors having a high overconfidence level towards investment decision because they having a good experience and knowledge when investing in the mutual fund. Regarding gender, male investors had a stronger overconfidence bias than female investors, which backs with a prior study by **Kumar and Goyal (2016),** who found that male investors have more confidence in making investment decisions than female investors. **Zaiane, S., & Abaoub, E. (2010)** argued that Men are more confident than women. In this study, married couples are overconfident when compared to an individual person as same in the literature by **Obamuyi (2013)** discovered that in terms

of marital classification, married people had a substantial impact on their investment decisions in Nigeria. According to **Banarjee et al. (2018),** an investor's occupation has no effect on investor bias. However, the findings of the study found that demographic factors such as occupation have an impact on investment. **Tania, Zahidur & Jannatul (2015)** argued that the occupation of the respondents impacts significantly, the same as derived in this study that occupation of the investors has high overconfident behaviour towards investment decisions. The nuclear family type has influenced the overconfidence behaviour when making investment decisions since they are less in numbers in the family.

7. CONCLUSION

The study concludes that women entrepreneurs face problem on the business because of the lack in marketing skills and knowledge. Illiterate women face more problems when compared to literate women. Women entrepreneurs struggles to bear the risk of the business. They are not properly guided by the financial institutions and family members. Adequate training programmes for women and financial guidance slightly decrease the problems of women entrepreneurs.

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