



# Self-Attribution - Behavioural Bias in Investor Decision Making

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**Abstract.** Research on Behavioral Finance is gaining in its importance with respect to investor decision making. Behavioral Finance analyses how people behave in financial settings. Investors fail at times by the influence of behavioral bias in their decision making as the human choices are not made rationally. Behavioral finance models have identified different types of Biases. The objective of the study is to determine theory of self-attribution bias and to understand the relationship between self-attribution and investment decisions. The paper has adopted the structured questionnaire to analyze the investment behavior and psychometric tool to evaluate the Self attribution bias. Statistical tool regression was applied to understand the role of self-attribution in investment decision making.

**Keywords:** Behavioral Finance · Self-Attribution · Investor Decision Making

## 1 Introduction

Behavioral finance acquired its significance over most recent twenty years as new field of investigation as the possibility that the bankers seldom act according to the suppositions made in conventional hypothesis of money. Behavioral specialists have taken the view that finance theory ought to take the perception of human way of behaving. They use research according to mental perspective to foster a comprehension of venture navigation and make the discipline of social money. The experimental study describing why and when individuals engage in specific behavior, by the factors like social influences, motivation, contextual effects, conscious thoughts and habits is called Behavioral science. Behavioral science research is diverse and expansive. The experts applied Behavioral science to demonstrate the psychology of investors' in making decisions towards investments. It also elucidates why and how investors respond to the market. For several years sociologists and psychologists argued that human beings are irrational and inefficiency of financial markets in the real world minimizes the scope for utility. Whereas financial theory grips that investors are rational thinkers and concentrate on maximizing their wealth. But sometimes due to their irrational choices they lose everything. Behavioral finance explains why investors fail to make better choices; how can they make better choices? How do they get influenced?

Higher estimation of their own skills and decision making to the positive result and blame on the external factor for negative result, makes the investor as the victim

of not accepting their decisions as they forget the reasons or never tend to accept the reasons (Alrabadi et al., 2018) [1]. Behavioral finance approach assumes that investors are influenced by psychological factors such as risk, emotional loss, optimistic and self-esteem. Among the different factors of behavioral biases this paper discusses on the Self attribute bias to understand the impact on investment decision making. The objective of the paper is to understand the influence of the bias self-attribution on the investor decision making, with the application of statistical tool regression analysis.

## **2 Review of Literature**

### **2.1 Behavioral Finance**

Behavioral Research on Behavioral Finance is gaining in its importance with respect to investor decision-making. (Babajide and Adekunle, 2012) [2] analyzed that investors do not go with their rational decisions, but they are influenced by psychological factors. Behavioral Finance analyses how people behave in financial settings. Investors fail at times by the influence of behavioral bias in their decision making as the human choices are not made rationally and knowingly all the time. Behavioral Finance discusses the role of personality in investor behavior and involves a depth understanding of investor decision and its influence on performance in the stock market (Borghans et al., 2008) [3]. Chira, Adams & Thornton, (2008) [4] stated that personality effect the inclination of the investors. Big 5 personality traits have found to have an influence on the behavioral patterns.

### **2.2 Investment Behavior**

Investment behavior explains how investment decisions are made by an individual (Anurag, Rushidi and Katiyar 2020) [5] stated investment behavior is multidisciplinary study, combining the field of Psychology, economics, finance and other allied studies. It briefs on the decision-making process, thinking process and emotional issues of an investor (Jurevicien, 2012) [6]. Barenwall model identifies the investors as active investors and passive investors on their ability to invest. Passive investors raise their investment with less risk, and they are risk averters. Active investors adopt regular investment pattern, and they enjoy taking the risk.

The many researchers have worked on to understand the financial market efficiency and decisions which influence the variations of stock market. If the market analyses is done in an appropriate manner it is possible to rise funds in financial market. Last few years, financial theories have argued that investors have difficulty in making appropriate decisions regarding investment. It also explains that investors are not confused anymore; they are well-informed, consistent and careful because of the availability of the information and are not manipulated by their emotions. Even though traditional finance theory holds these explanations on investors but it's all assumption, in reality it's different. This led to new methodology in finance theory.

### 2.3 Behavioural Biases

Pompian (2008) [7] evaluated that in the field of financial decision making, the decision making with respect to gaining of investment which is made by rational thinking is influenced much by irrational factors as like overconfidence, emotions, group behavior and are defined as behavior bias. Individual investors are not always rational (Barber and Odean, 2011) [8]. They exhibit a lot Behavioural biases. The biases are described by different models. Types of biases identified are mental accounting, emotional gap, self-attribution, herd behavior and anchoring bias.

### 2.4 Self-Attribution

Self-attribution bias is a behavioural concept studies for long time to understand consumer behaviour and it mentions an individuals' tendency to attribute successes to personal skills and failures to factors beyond their control this behavioral concept was explored from twentieth century. Austrian psychologist Fritz Heider identified that in uncertain situations, individual choose choices to keep up their self-esteem and their own decision making. Self-attribution bias describes how an individual hold their success to their personal traits and self-esteem and when failure happens they relate it with environment, other influencers like other people wrong judgments, bad luck (Sathishkumar and Vijayalakshmi 2019) [9] stated it is the phenomenon where people attribute failures to the external factors. This bias tends the investor to believe on the facts which they wish to get.

Hoffmann, and Thomas (2014) [10] inferred in their research work, they did match survey and trading data of brokerage clients. They did infer that, they did agree more that the recent successful performance in investment is the outcome of their investment skills and with related to less gains they relate to market return do not have effect. For better investment it is important for the investor to understand the self-attribution bias to accept the errors they make, it is assumed that self-attribution bias makes the active investors to be overconfidence about their investment skills and which intensifies their trading volume over time (Daniel et al., 2008) [11].

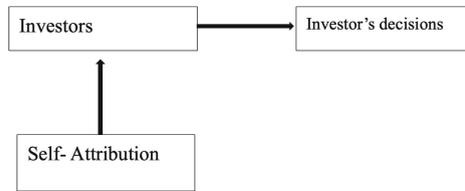
## 3 Methodology

### 3.1 Conceptual Model Framed for the Study

Based on the reference to the reviews, conceptual model was developed and framed to analyze the impact of self-affirmation, a behavioral bias factor on investor decision making (Fig. 1).

### 3.2 Data Collection and Research Design

Investors from different background are taken as respondents for the study. The study adopted questionnaire for collection of data from the respondents. Closed questionnaire was framed and data was obtained from 76 investors and from those 64 questionnaires was considered for analysis, as data was filled completely and taken as sample. The



**Fig. 1.** Conceptual Research Framework

questionnaire comprised of questions to obtain demographical data of the respondents. Attributes were constructed in the questionnaire to understand the pattern of investment and set of question adopted from psychometric tool to analyze the behavioral trait with respect to Self-attribution. The study adopted descriptive study.

## 4 Data Analysis and Interpretation

### 4.1 Demographic Profile

Table 1 presented the respondent's profile. It is inferred that majority of the respondents (43.8%) belong to the age group of 35–40 years, likewise majority of the respondents are female (51.6%). 39.1% of the respondents belong to 6 lakhs-9lakhs of Annual income, only 9.4% of respondents get an annual income of 3lakhs – 6 lakhs. Majority of the respondents (28.1%) have family income of 8lakhs-12 lakhs and only 9.2% of respondents have 4 lakhs-8 lakhs of family income. 23.1% of respondents belong to IT sector. Majority of the respondents invest either on equity (52.3%) or on gold (46.2%). 37.5% of respondents invest their money for investments once in a month and 34.4% of respondents invest yearly once in the investments. Only 4.7% of respondents invest once in a week on the investments.

### 4.2 Regression Analysis

Table 2 presents the coefficients of regression analysis. The calculated r-square value is 0.466, which shows 46.6% of variation in predicting the confidence of investor from start to end of trade can be explained by six independent variables namely I am risk averter, I focus on long term investments, satisfied with less investing and less gain, I approach slow and steady before investing, I am aware of multiple type of investments and risk associated with it and I like to own little bit of lot of shares. The analysis of variance table shows that  $F = 8.281$  at the significance of  $F$  is 0, which indicates that the model is statistically significant at a confidence level of 100%.

From Table 2 the equation can be written as,  $Y = 1.432 - 0.482$  (I approach slow and steady before investing)  $+ 0.282$  (I focus on long term-investments)  $+ 0.576$  (I am satisfied with less investing and less gain)  $+ 0.190$  (I am risk averter)  $+ 0.114$  (I am aware of multiple type of investments and risk associated with it)  $- 0.234$  (I like to own a little bit of lot of shares). Where  $Y$  is the confidence of investor from start to end of trade. Here  $Y$  is  $Y$  is the confidence of investor from start to end of trade. An increase or

**Table 1.** Respondents Profile

S.no	Demographic	Values	Frequency	Percentage
1	Age	25–30	6	9.4
		30–35	21	32.8
		35–40	28	43.8
		40–45	9	14.1
		Above 45	0	0
2	Gender	Male	31	48.4
		Female	33	51.6
3	Annual Income	Below 3 lakhs	0	0
		3 lakhs–6 lakhs	6	9.4
		6 lakhs–9 lakhs	25	39.1
		9 lakhs–12 lakhs	12	18.8
		12 lakhs–15 lakhs	9	14.1
		Above 15 lakhs	12	18.8
4	Family income	Below 4 lakhs	0	0
		4 lakhs–8 lakhs	6	9.4
		8 lakhs–12 lakhs	18	28.1
		12 lakhs–16 lakhs	15	23.4
		16 lakhs–18 lakhs	12	18
		Above 18 lakhs	13	20.3
5	Profession	Educational Institution	12	18.8
		IT sector	15	23.4
		Manufacturing sector	12	18.8
		Health care sector	3	4.7
		Home maker	12	18.8
		Own Business	9	14.1
		Freelancer	1	1.6
6	Types of Investment	Equity	34	53.1
		Gold	30	46.9
		Real Estate	0	0
		Debt	0	0
7	How frequently do you invest?	Everyday	0	0
		Once in a week	3	4.7
		Once in a month	24	37.5
		6 months once	15	23.4
		Yearly once	22	34.4

**Table 2.** Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.432	.522		2.745	.008
I approach slow and steady before investing	-.482	.131	-.478	-3.688	.001
I focus on long-term investments	.282	.116	.310	2.435	.018
I am satisfied with less investing and less gain	.576	.096	.675	5.988	.000
I like to own a little bit of lot of shares	-.234	.152	-.171	-1.537	.130
I am aware of multiple type of investments and risk associated with it	.114	.179	.083	.637	.527
I am risk averter	.190	.111	.195	1.714	.092

<sup>a</sup> Dependent Variable: I am confident in start and end of the trade

decrease in Y value depends on the independent variables. The optimistic values of the independent variables reveal a direct proportion to the dependent variable (confidence of investor from start to end of trade).

From Table 2 it is also inferred that, 0.001 (I approach slow and steady before investing), 0.18 (I focus on long term-investments), 0.000 (I am satisfied with less investing and less gain), 0.130(I like to own a little bit of lot of shares), 0.527(I am aware of multiple type of investments and risk associated with it), 0.092(I am risk averter) are the significant values. H1a, H1b and H1c have significant values less than the p value 0.05, hence reject H0. H1d, H1e & H1f have significant values greater than the p value 0.05, hence accept H0.

## 5 Conclusion

Investor decision is expected to be made rationally and at times irrational influence the decision making. Experts on finance, explore the role of different psychological factors influence the investors decision making. This paper analyzed the impact of self-attribute as one of the influencers of decision making. It becomes important for the investor to understand the mistakes they make.

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