

Behavioral Finance and Investor Psychology - An Empirical Study

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Abstract

Behavioral finance is a new subject in the field of finance and is very popular in stock markets across the world for investment decisions. However, in India, this subject is at very nascent stage in the stock market. The volume of research in the field of behavioral finance has grown over the recent years. Behavioral finance merges the concepts of finance, economics and psychology to understand the human behavior in the financial markets in order to form winning investment strategies. Behavioral finance explains how emotions and cognitive errors influence investors and the decision-making process. In this paper, the researchers had made an attempt to study the investor psychology while investing money in stock market. The researchers also explored the relationship between the success rate of beating the market and other related variables namely fundamental and technical analysis, opinion of broker, media etc.

Jel Codes: A10, C12, C83, D03, G11, G20

Keywords: Behavioral Finance, Investor Psychology, Herd Mentality, Chi square and ANOVA

INTRODUCTION

Behavioral finance is a study that merges the concepts of finance, economics and psychology to understand the human behavior in the financial markets, to form winning investment strategies. Behavioral finance is the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on markets. Behavioral finance is a framework that augments some parts of standard finance and replaces other parts. It describes the behavior of investors and managers, it describes the outcomes of interactions between investors and managers in financial and capital markets and it prescribes more effective behavior for investors and managers.

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Standard finance stand on the Arbitrage principle of Miller and Modigliani, the Portfolio principle of Markowitz, the Capital asset pricing theory of Sharpe, Lintner and Black, Option theory of Black, Scholes and Merton and the Efficient market hypothesis (EMH) theory. These approaches consider markets to be efficient and are highly normative and analytical. These theories are based on the assumption that people, for the most part, behave rationally and predictably. However, researchers have uncovered a surprisingly large amount of evidence of irrationality and repeated errors in judgment. The field of behavioral finance attempts to understand and explain how emotions and cognitive errors influence investors and the decision-making process.

Behavioral finance argues that people are ruled by emotions, cold logic and selfishness. While the emotions such as fear and greed often play an important role in poor decisions, there are other causes like cognitive biases, heuristics (shortcuts) that take investors to incorrectly analyze new information about a stock or currency and thus overreact or under react. Behavioral Finance is the study of how these mental errors and emotions can cause stocks or currency to be overvalued or undervalued, and to create investment strategies that gives a winning edge over the others investors.

Behavioral Traits

The researchers have explored the following behavioral traits that contribute to irrational and often detrimental financial decision-making.

- 1. Availability Heuristics:** Heuristics, or rules of thumb, make decision-making easier. However, they can sometimes lead to biases, especially when things change. These can lead to suboptimal investment decisions. Human beings tend to rely on the most recent or the most readily available information. That is the reason that front-page advertisements command a hefty premium to other pages in a newspaper. Many people follow growth strategies and chase the growth stocks as compared to value

investing strategies. Many brokers recommend the growth stocks, many fund-managers and analysts discuss them on TV shows and many investors chase them, thus making them press worthy and popular. Growth stock is always a hot story and everyone likes a stock that goes up very fast. Investors are more likely to act on this readily available information and fall prey to this availability heuristics.

- 2. Herd Mentality:** This availability heuristics creates such a huge following that all sorts of investors join the bandwagon. Research has suggested that 'following the herd' on investment decisions has the potential to provide investors with many psychological benefits. Herding reduces the time needed to properly analyze an investment decision. It can also reduce the feeling of regret if the investment choice was a bad one. Investors can find comfort knowing that they were not alone in their decision and they are not the only ones affected. This creates a herd mentality amongst the investors and they all buy what others are buying. Since this buying frenzy does not arise out of some firm conviction, it is always subject to fear and doubt. So, if few investors are noticed to be selling, than all follow the trend and tries to sell faster than the others do. This herd behavior is one of the reasons that growth stocks go up very fast and attract investor attraction. They also fall very fast as the herd comes to sell.

- 3. Chasing Fads and Fancies:** It is the lure of the new and the unknown that fascinates investors. Hence, when such opportunities come in the market there is a ready set of buyers chasing these fads and fancies. Investors are always looking at something new, as they believe that novelty can fetch them more money. This novelty becomes fancy when more and more investors chase it. This is also the effect of availability heuristics and herding. Thus, a fad and a fancy start quoting at fancy prices. This is termed as a growth stock as there is no available

explanation to justify the steep rise in price. Growth stocks become fads and fancies of the market and investors are known to run after them.

4. **Instant Gratification:** People are always looking at short cuts, quick fixes, or quick results. People in their pursuit to grab a piece of something instant forget the inherent conventional wisdom of time-tested principles of investing. Growth stocks are able to give instant gratification. The number of growth stocks in the market multiples this instant gratification. That is the reason we have more growth stocks and more growth stock investors than value investors.
5. **Mental Accounting:** People sometimes separate decisions that should, in principle, be combined. For example, many people have a household budget for food, and a household budget for entertaining. At home, where the food budget is present, they will not eat lobster or shrimp because they are much more expensive than a fish casserole. But in a restaurant, they will order lobster and shrimp even though the cost is much higher than a simple fish dinner. If they instead ate lobster and shrimp at home, and the simple fish in a restaurant, they could save money. But because they are thinking separately about restaurant meals and food at home, they choose to limit their food at home.
6. **Framing:** Framing is the notion that how a concept is presented to individuals matters. For example, restaurants may advertise 'early-bird' specials or 'after-theatre' discounts, but they never use peak-period 'surcharges'. They get more business if people feel they are getting a discount at off-peak times rather than paying a surcharge at peak periods, even if the prices are identical. Cognitive psychologists have documented that doctors make different recommendations if they see evidence that is presented as 'survival probabilities' rather than 'mortality rates', even though survival

probabilities plus mortality rates add up to 100%.

7. **Conservatism:** When things change, people tend to be slow to pick up on the changes. In other words, they anchor on the ways things have normally been. The conservatism bias is at war with their presentativeness bias. When things change, people might under react because of the conservatism bias. But if there is a long enough pattern, then they will adjust to it and possibly overreact, under weighting the long-term average.
8. **Rationalization Trap:** Rationalization trap manifests in various forms, in the business and investment research space, as well. It is very common to come across business persons seeking evidence to support the decision they have already made. In spite of realizing severe losses by chasing a fancy by paying a fancy price, a growth investor continues to chase more emerging fancies and keeps on losing money by buying at ridiculous valuations. This behavioral tendency is known as Rationalization trap. It says that when one faced with an unexpected outcome or failure, one attributes one's failure to external factors and not to oneself, which might not be the case, and continues to keep on repeating the mistakes. This is what happens in growth investing. Instead of realizing the consequences of one's behavior of ignoring the price commanded by a company in a fancy while making a buy decision, one will blame the promoters or market experts or business news channel for misleading them. When the next fancy sector emerges, due to this sort of behavior, the investor is ready with his hard-earned money to chase another fancy sector and lose it all over again. He will again start blaming somebody else for his losses rather than his emotional indiscipline.
9. **Overconfidence:** The key behavioral factor and perhaps the most robust finding in the psychology of judgment needed to understand market anomalies is over

confidence. People tend to exaggerate their talents and underestimate the likelihood of bad outcomes over which they have no control. The combination of overconfidence and optimism causes people to overestimate the reliability of their knowledge, underestimate risks and exaggerate their ability to control events, which leads to excessive trading volume and speculative bubbles. The greater confidence a person has in himself the more risk there is of overconfidence. When one is overconfident, he under-reacts to any new information that comes because he believes that he is smarter than what he actually is.

10. Halo Effect: Halo effect denotes the tendency where the perception about something is based on a single variable rather than considering the overall picture. As an investor, every time we hear that ABC ltd. is a good buy because it is a growth stock or XYZ ltd. is a good buy because it is an infrastructure company. These are the examples of halo effect. Because after all, a good investment has to have many more factors to make it investment-worthy, in terms of management quality, valuation, dividend payout policy, business model etc.

11. Anchoring: The concept of anchoring draws on the tendency to attach or 'anchor' our thoughts to a reference point - even though it may have no logical relevance to the decision at hand. Anchoring can also be a source of frustration in the financial world, as investors base their decisions on irrelevant figures and statistics. For example, some investors invest in the stocks of companies that have fallen considerably in a very short amount of time. In this case, the investor is anchoring on a recent 'high' that the stock has achieved and consequently believes that the drop in price provides an opportunity to buy the stock at a discount. While, it is true that the fickleness of the overall market can cause some stocks to drop substantially in value, allowing investors to take advantage of this short-term volatility. However, stocks quite often

also decline in value due to changes in their underlying fundamentals.

12. Mental Accounting: Mental accounting refers to the tendency for people to separate their money into separate accounts based on a variety of subjective criteria, like the source of the money and intent for each account. According to the theory, individuals assign different functions to each asset group, which has an often irrational and detrimental effect on their consumption decisions and other behaviors. Although many people use mental accounting, they may not realize how illogical this line of thinking really is. For example, people often have a special 'money jar' or fund set aside for a vacation or a new home, while still carrying substantial credit card debt. Some investors divide their investments between a safe investment portfolio and a speculative portfolio in order to prevent the negative returns that speculative investments may have from affecting the entire portfolio. The problem with such a practice is that despite all the work and money that the investor spends to separate the portfolio, his net wealth will be no different than if he had held one larger portfolio.

NEED OF THE STUDY

When using the labels 'conventional' or 'modern' to describe finance, we are talking about the type of finance that is based on rational and logical theories, such as the capital asset pricing model (CAPM) and the efficient market hypothesis (EMH). These theories assume that people, for the most part, behave rationally and predictably. For a while, theoretical and empirical evidence suggested that CAPM, EMH and other rational financial theories did a respectable job of predicting and explaining certain events. However, as time went on, academics in both finance and economics started to find anomalies and behaviors that couldn't be explained by theories available at the time. While these theories could explain certain 'idealized' events, the real world proved to be a very messy place in

which market participants often behaved very unpredictably. It is not strange that in spite of knowing the tricks of the trade and being smart, one yet fails. Most of the time investor fails and loses the money because they do not do any fundamental analysis on their own and get carried away by the analysis given by brokers or by media.

In the context of necessity of successful investing and realizing the importance of behavioral traits and investor psychology, an attempt is made to study the investors' psychology and behavior while investing.

LITERATURE REVIEW

Many researchers have studied behavioral finance from different views and in different contexts. The following are very interesting and useful for our research. Sewell (2001) defined the behavioral finance as the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on markets. Behavioral finance is of interest because it explains why and how markets might be inefficient.

Daniel et al. (1998, 2001) attempts to explain patterns in stock returns by using overconfidence and self-attribution. Overconfidence about private signals causes overreaction and hence phenomena like the book/market effect and long-run reversals whereas self-attribution maintains overconfidence and allows prices to continue to overreact, creating momentum. In the longer-run there is reversal as prices revert to fundamentals.

Behavioral researchers Barberis and Thaler (2003) have described the direction of behavioral research as 'We have now begun the important job of trying to document and understand how investors, both amateurs and professionals, make their portfolios choices. Until recently such research was notably absent from the repertoire of financial economists, perhaps because of the mistaken belief that asset pricing can be modeled

without knowing anything about the behavior of the agents in the economy'.

Barber and Odean (2000) conducted a study over 78,000 investors in a brokerage firm. Barber and Odean concluded that individual investors who hold common stocks directly pay a tremendous penalty for active trading. They divided the investors into five groups according to the frequency of trading and they showed that the annual return for the group that traded most frequently was about 6% less, after transaction costs, than the return for the group that traded the least. According to Barber and Odean, the poor performance is a result of the high level of trading which can be explained by the behavioral bias of over-confidence individual investors, which leads to excessive trading.

Hong et al. (2005) argue that mutual fund managers are more likely to buy stocks that other managers in the same city are buying, suggesting that one factor impacting portfolio decisions is a word-of-mouth effect by way of social interaction between money managers. The authors also suggest that stock market participation is influenced by social interaction. For example, agents that are more social, in the sense of interacting more with peers at collective gatherings such as at church, are more likely to invest in the stock market.

All the above studies provide us a solid base and give us an idea regarding behavioral finance and behavioral traits. While there has been enough research on the behavioral aspect of the people, there is a dearth of literature and research on behavioral finance in stock market. Thus taking into consideration the importance of behavioral finance and investors' psychology the research will help to understand whether the success of beating the market is dependent on factors like fundamental and technical analysis or is based on following herd mentality.

RESEARCH OBJECTIVES

The main objective to carry out this research is to understand the concept of Behavioral Finance as a whole and to link it with the Investors' Psychology. The other objective is to understand how the concept of behavioral finance works in the stock market.

RESEARCH DESIGN

The study is based on the survey done on the investment behavior of the investors. Tabular analysis techniques employed are Ratios, Percentages, Frequency Distribution, Crosstab, Chi square and ANOVA. The analysis is done through SPSS software.

1. Data Collection

This study is based on the primary as well as on secondary data.

Secondary Research: It is done by studying research journals, business magazines, various financial dailies, reports, websites and surveys conducted in the area of behavioral finance.

Primary Research: It is done by capturing views of 150 investors from different age group and with different employment status through a detailed online questionnaire to study their investment style.

2. Data Analysis

Data processing is done using appropriate softwares like Microsoft excel and Statistical Package for the Social Sciences (SPSS).

DATA ANALYSIS AND FINDINGS

1. Univariate analysis using Frequency Tables: When we use one variable to describe a person, place, or thing, it is called as Univariate Data. Univariate analysis explores each variable in a data set, separately. It looks at the range of values, as well as the central tendency of the values. It describes the pattern of response to the

variable. It describes each variable on its own. Descriptive statistics describe and summarize data. Univariate descriptive statistics describe individual variables. Generally, a frequency is used for univariate analysis. A frequency distribution is a listing of categories of possible values for a variable, together with a tabulation of the number of observations in each category. Frequency distribution helps in comparing information between groups of individuals. Frequency distributions summarize and compress data by grouping it into classes and recording how many data points fall into each class. That is, they show how many observations on a given variable have a particular attribute.

From the frequency table, the following observations were made:

- a. Out of 150 respondents, 126 respondents are regular investors and 24 respondents are non-regular investors or 84% of the respondents are regular investors whereas 16% of the respondents are not a regular investors.
- b. Out of 150 respondents, 114 respondents i.e. 76% of respondents invest their money in Equity Shares whereas 27 respondents i.e. 18% of respondents invest their money in Debt Securities and 9 respondents i.e. 6% of respondents invest their money in Derivative products.
- c. Out of 150 respondents, 78 respondents i.e. 52% of respondents invest their money in financial instruments to get returns, whereas 18% of respondents invest their money for wealth creation, 14% of respondents invest their money for saving, 10% of respondents for security and 6% of respondents for getting tax-benefits.
- d. Out of 150 respondents, 120 respondents i.e. 80% of respondents invest their money through a broker, whereas 30 respondents i.e. 20% of the respondents invest their money themselves.
- e. While investing the money, 52% of respondents go by what the broker informs, whereas 22% of respondents go by media

- /expert opinions, 12% of respondents do fundamental analysis, 10% respondents go by info given from friends and relatives and only 4% of respondents do technical analysis.
- f. Out of 150 respondents, 12% of respondents have been investing in share market for more than 10 years, whereas 24% of the respondents have been investing from last 6 to 10 years, 40% of respondents have been investing from last 4 to 6 years, 18% of respondents have been investing from last 1 to 3 years, and only 6% of respondents have been investing from last 1 year.
 - g. Observing the trading pattern 58% are short term investors; 30% long term and 12% are intraday investors.
 - h. There were various answers on the frequency of making profits, 40% of respondents were able to be successful for 61-80 percent of times whereas 28% of respondents were able to be successful for 21-40 percent of times, 15% of respondents were able to be successful for 41-60 percent of times and 14% of respondents were able to be successful for More than 80 percent of times.
 - i. Out of 150 respondents, 88% of respondents say that investment in gold is much safer than investment in stock whereas 12% of the respondents say that investment in stock is much safer than investment in gold.
 - j. 68% of respondents always use stop losses in their trade, whereas 28% of the respondents sometimes use stop losses and 4% of respondents never use stop losses in their trade.
 - k. Out of 150 respondents, 52% of respondents some times consider the past performance of a stock before investing in it, whereas 40% of the respondents never used the past performance of a stock before investing in it and 8% of respondents always used the past performance of a stock before investing in it.
 - l. 56% of respondents do not read any magazines or books before investing whereas 44% of respondents read magazines or books to enhance Investing knowledge. Majority of investors read financial express, business standard and the intelligent investor.
 - m. The 2008 market slowdown and the massive movement in the stock market put 68% of the investors in a mixed frame of mind whereas 22% of investors lost interest in the stock market and 10% of investors managed to banked on the opportunity.
 - n. *Importance of Fundamental Analysis:* Average no. of respondents considers fundamental analysis as Neither unimportant nor important as the mean is 3.44. Out of 150 respondents, 50% of respondents consider fundamental analysis as Very Unimportant to Important and 50% of respondent consider fundamental analysis as Very Important as the median is 4. Q1 (First Quartile) is 2.75 i.e. 25% of respondents consider fundamental analysis as Very Unimportant to Neither unimportant nor important whereas 75% of respondent consider fundamental analysis as Important to Very Important. Q3 (Third Quartile) is 4 i.e. 75% of respondents consider fundamental analysis as Very Unimportant to Important whereas 25% of respondents consider fundamental analysis as Very Important.
 - o. *Importance of Technical Analysis:* Average no. of respondents considers technical analysis as Neither unimportant nor important as the mean is 3.44. Out of 150 respondents, 50% of respondents consider technical analysis as Very Unimportant to Neither unimportant nor important and 50% of respondent consider technical analysis as Important to Very Important as the median is 3. Q1 is 3 i.e. 25% of respondents consider technical analysis as Very Unimportant to Neither unimportant nor important whereas 75% of respondent consider technical analysis as Important to Very Important. Q3 is 4 i.e. 75% of respondents consider technical analysis as Very Unimportant to Important whereas 25% of respondents consider technical analysis as Very Important.
 - p. *Importance of Media:* Average no. of respondents considers Media as Neither unimportant nor important as the mean is 2.68. Out of 150 respondents, 50% of respondents consider media as Very

Unimportant to Unimportant and 50% of respondent consider media as Neither unimportant nor important to Very Important as the median is 2. Q1 is 2 i.e. 25% of respondents consider media as Very Unimportant to Unimportant whereas 75% of respondent consider media as Neither unimportant nor important to Very Important. Q3 is 3 i.e. 75% of respondents consider media as Very Unimportant to Neither unimportant nor important whereas 25% of respondents consider media as Important to Very Important.

- q. *Importance of Analysts view:* Average no. of respondents considers Analysts view as Important as the mean is 3.8. Out of 150 respondents, 50% of respondents consider analysts as Very Unimportant to Important and 50% of respondent consider analysts as Very Important as the median is 4. Q1 is 3 i.e. 25% of respondents consider analysts as Very Unimportant to Neither unimportant nor important whereas 75% of respondent consider analysts as Important to Very Important. Q3 is 4 i.e. 75% of respondents consider analysts as Very Unimportant to Important whereas 25% of respondents consider analysts as Very Important.
- r. *Importance of Views of friends and relatives:* Average no. of respondents considers views of friends and relatives as Neither unimportant nor important as the mean is 3.34. Out of 150 respondents, 50% of respondents consider views of friends and relatives as Very Unimportant to Neither

unimportant nor important and 50% of respondent consider views of friends and relatives as Important to Very Important as the median is 3. Q1 is 3 i.e. 25% of respondents consider views of friends and relatives as Very Unimportant to Neither unimportant nor important whereas 75% of respondent consider views of friends and relatives as Important to Very Important. Q3 is 4 i.e. 75% of respondents consider views of friends and relatives as Very Unimportant to Important whereas 25% of respondents consider views of friends and relatives as Very Important.

- 2. **Bivariate analysis using Crosstabs:** In statistics, bivariate data is data that has two variables. Bivariate analysis is the simultaneous analysis of two variables or attributes. It explores the concept of relationship between two variables, whether there exist an association and the strength of this association, or whether there are differences between two variables and the significance of these differences. Most of the bivariate analysis begins with a Crosstab or Cross tabulation. Crosstabs show the relationships between the two variables. It displays the joint distribution of two or more variables. They are usually presented as a contingency table in a matrix format.

From the Cross tabulation, we observe the following:

- a. Cross tabulation between Sample size and Demographics

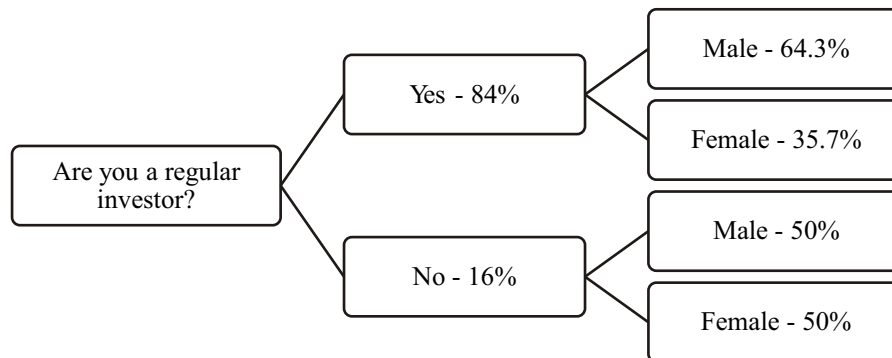


Figure 1: Cross Tabulation between sample size and Demographics

Out of 150 respondents, 126 respondents are regular investors and 24 respondents are not regular investors and among the regular investors, 81 or 64.3% are male and 45 or 35.7% are female. From the non-regular investors, 12 or 50% are male and 12 or 50% are female.

b. Cross tabulation between investment through broker or self and the securities of investment

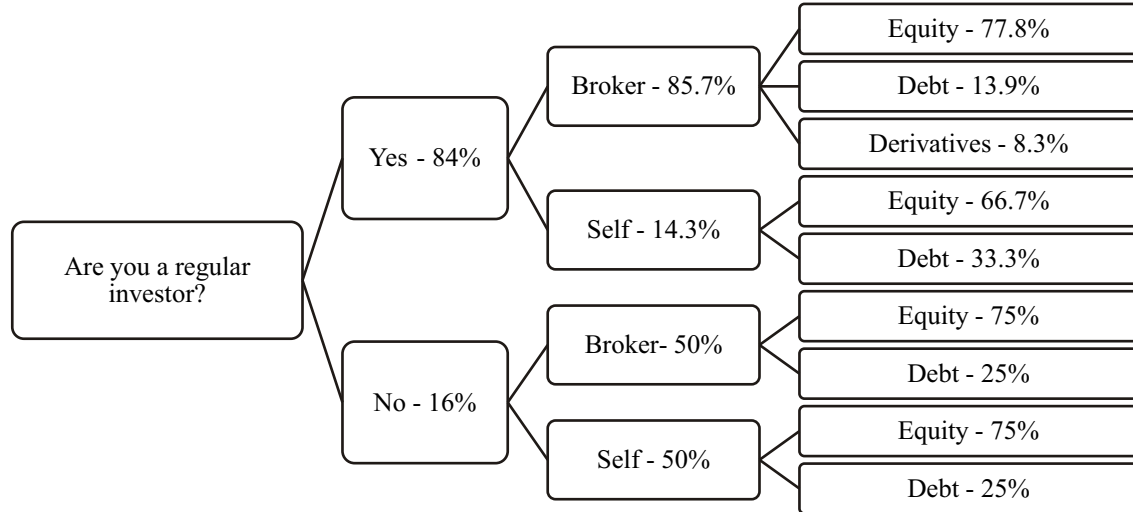
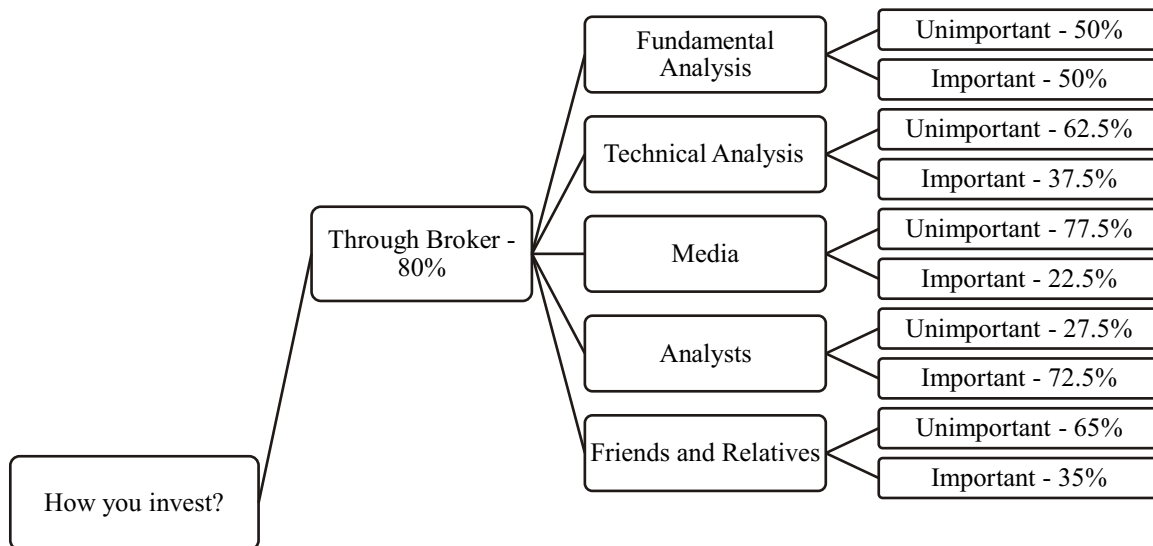


Figure 2: Cross Tabulation between investment through broker or self and the securities and investment

From Figure 2, it was observed that out of 150 respondents, 126 or 84% respondents are regular investors and 24 or 16% respondents are non-regular investors and among the regular investors, 108 or 85.7% of respondents invest the money in stock market through brokers and 18 or 14.3% of respondents invest the money on their own. Among the non-regular investors, there is an equal number of respondents that invest money through broker or self. It is also observed that

Equity is the first choice of the investors to park their money followed by Debt securities and then followed by Derivative products like futures and options.

c. Cross tabulation between investment through broker or self and the importance of tools of analysis like fundamental, technical, views of media etc.



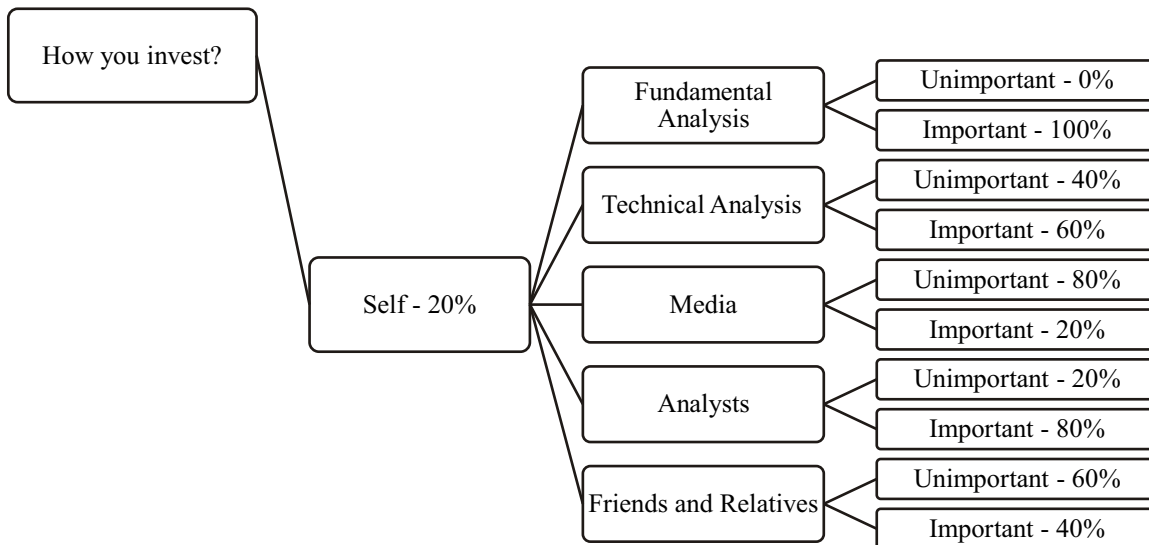


Figure 3: Cross tabulation between investment through broker or self and the importance of tools of analysis like fundamental, technical, views of media

From Figure 3 It is clearly observed that 120 or 80% respondents invest their money through brokers. It is also observed that most of the respondents follow the advice given by their broker and watch the news and corporate actions and they do not do any type of analysis before investing the money whereas, the respondents, who invest their money on their own focus on fundamental analysis. Observing the trading pattern, we can conclude that Brokers along with the news and other information are the choice of the current investor.

3. Bivariate analysis using Chi Square: Chi square is a non-parametric statistical

technique used primarily to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. It is used to check whether the numbers of individuals or objects that fall in each category differ significantly from the number expected or not. The chi-square test is basically used to discover if there is a relationship between two variables or not.

Testing of Hypothesis:

- H_0 : Success rate of investment is Independent of investment done through broker or self.
- H_1 : Success rate of investment is Dependent of investment done through broker or self.

Table 1: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.123 ^a	3	.547
Likelihood Ratio	2.102	3	.552
Linear-by-Linear Association	.454	1	.501
N of Valid Cases	150		

The Pearson Chi-Square value is 0.547 and it is greater than α which is 0.05, so we accept H_0 . It can be concluded that the success rate of investment is independent of investment done through broker or self. Therefore, we can say that

even if the investment is done through own and not through the broker the percentage of success is almost the same as compare to investment done through the broker. From the descriptive statistics, we have observed that the mean values

are generally close to each other. It is observed that the mean value of being successful is 3.25, if the investment is done through Broker and the mean value of being successful is 3.60, if the investment is done through Self.

4. Data analysis using ANOVA: The Analysis Of Variance, popularly known as the ANOVA, can be used in cases where there are more than two groups. In general, the purpose of ANOVA is to test for significant differences between means. When we have only two samples we can use the t-test to compare the means of the samples but it might become unreliable in case of more than

two samples. If we only compare two means, then the t-test (independent samples) will give the same results as the ANOVA. It is used to compare the means of more than two samples.

Testing of Hypothesis:

a. Relationship between the times the investor have been successful (dependent variable) with age (independent variable)

$$H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4$$

(Success rate of investment is Independent of age)

$$H_1 : \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$$

(Success rate of investment is Dependent of age)

Table 2: Relationship between Age and Success as Investor

ANOVA					
How many times have you been successful as an investor?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.556	2	3.778	3.596	.030
Within Groups	154.444	147	1.051		
Total	162.000	149			

As it is one side hypothesis and non - directional, α is 0.05. The P value is 0.030, which is less than α ; therefore, we can say that there is no evidence to accept H_0 and hence H_1 is accepted. This means that the success rate of investment is dependent of age.

b. Relationship between the times the investor have been successful (dependent variable)

with education (independent variable)

$$H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

(Success rate of investment is Independent of education)

$$H_1 : \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

(Success rate of investment is Dependent of education)

Table 2: Relationship between Education and Success as Investor

ANOVA					
How many times have you been successful as an investor?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.253	3	2.084	1.954	.124
Within Groups	155.747	146	1.067		
Total	162.000	149			

As it is one side hypothesis and non - directional, α is 0.05. The P value is 0.124, which is greater than α , therefore, H_0 is accepted. This means that the success rate of investment is independent of education.

Employment Status (independent variable)

$$H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

(Success rate of investment is Independent of employment status)

$$H_1 : \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

(Success rate of investment is Dependent of employment status)

Table 4: Relationship between the times the Investor have been Successful (Dependent Variable)

ANOVA					
How many times have you been successful as an investor?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	33.099	4	8.275	9.308	.000
Within Groups	128.901	145	.889		
Total	162.000	149			

The α is 0.05. The P value is 0.000. Since the P value is less than α , we can say that there is no evidence to accept H_0 and hence H_1 is accepted. This means that the success rate of investment is dependent on employment status.

Family's monthly household income (independent variable)

$$H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$$

(Success rate of investment is Independent of family's monthly household income)

$$H_1 : \mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4 \neq \mu_5$$

(Success rate of investment is Dependent of family's monthly household income)

Table 5: Relationship between the times the Investor have been Successful (Dependent Variable)

ANOVA					
How many times have you been successful as an investor?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	39.991	4	9.998	11.882	.000
Within Groups	122.009	145	.841		
Total	162.000	149			

The α is 0.05. The P value is 0.000. Since the P value is less than α , we can say that there is no evidence to accept H_0 and hence H_1 is accepted. This means that the success rate of investment is dependent on the level of family's monthly household income.

CONCLUSION

An attempt has been made in this study to understand the investors' psychology while investing the money in the stock market. The data analysis using different statistical tools like crosstabs, chi square and ANOVA, shows that investors prefer brokers while investing money

instead of investing the money on their own. It is also observed that most of the investors follow the tips given by brokers or friends and relatives or they follow the opinion shared by the analysts on media instead of doing fundamental or technical analysis. Investors feel that their decision based on the tips will be right and they will be able to beat the market. However, this research shows that the percentage of success while investing money in stock market is almost the same for the investor who invest the money through own or through broker. Still we see that majority time investors follow the tips and opinion of others and behave like herds.

commodities, companies and bonds. It is also inside us – in the way we misinterpret information, fool ourselves into thinking we know more than we do, and overreact to market swings. Information is useless if we misinterpret it or let emotions sway our judgment. Human beings are irrational about investing. Correct behavior patterns are absolutely necessary for successful investing. Therefore, to be financially successful one has to overcome these tendencies. If we can recognize these destructive urges, we can avoid them. Thus, Behavioral Finance is a very good study, which combines the disciplines of economics and psychology specifically to understand this phenomenon.

SUMMARY

It is to be kept in mind that risk resides not only in the price movements of dollars, gold, oil,

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