

Behavioural Biases of Individual Investors

Jenica S

Research scholar, Institute of Management in Government, Thiruvananthapuram, India.

Abstract- A dilemma every man has is whether to follow the head or the heart. Critical decisions require the efficient functioning of the grey cells; not emotions. Many contemporary examples show us the way our people get instigated, the reason being that we give more importance to emotions and feelings over skeptical and rational thinking. A growing body of research reveals that our behaviour and decision making are influenced by an array of psychological undercurrents and they are much more powerful and pervasive than most of us realize. Humans often make irrational choices when faced with challenging decisions. Researchers cite numerous examples of individuals displaying irrational behaviour, being inconsistent and making errors in judgment and incompetent decisions when faced with uncertainty. This study examines the impact of behavioural biases in decision making and proposes solutions for reducing such errors.

KEY WORDS: Behavioural finance, Prospect theory, Regret theory, Behavioral biases

I. INTRODUCTION

In this modern era, money plays an important role in one's life. In order to overcome the problems in future they have to invest their money. Investment of hard earned money is a crucial activity of every human being. Investors have a lot of investment avenues to park their savings. The risk and returns available from each of these investment avenues differ from one avenue to another. So making a correct investment decision is a crucial one. Decision-making can be defined as the process of choosing a particular alternative from a number of alternatives. It is an activity that follows after proper evaluation of all the alternatives. This need better insight and understanding of human nature in the existing global perspective plus development of fine skills and ability to get best out of investments. In addition, the investor's having to develop positive vision, foresight, perseverance and drive. Investor behaviour only starts to make sense when viewed through the lens of psychology. That's because investor's make decisions from the gut rather than from the head. Investors do not act wisely in taking decisions relating to investment. Investor behaviour is often emotional, irrational and illogical, and for that reason this behaviour is the best understood in emotional terms, not rational terms. They have behavioural biases in the event of taking investment decision. These biases prevent people from making rational (normal) decisions. This study examines the impact of behavioural biases in decision making and proposes solutions for reducing such errors. This study has relative importance due to lack of awareness in this area. There is no stock exchange and people are not fully aware about these kinds of biases that they are indulge in it. This study is helpful to the company to know the taste of masses and turn it towards best available investment avenue.

Behaviour finance attempts to understand and explain how human emotions influence investors in their decision-making process. Investors can improve their performance by recognizing the biases and errors of judgment to which all of them are prone. Understanding the behavioural finance will help the investors to select a better investment instrument and they can avoid repeating the expensive errors in future.

Behaviour is the response of an individual, group, or species to its environment. Anything a living being does that involves action and response to stimulation is considered behaviour. In real life, people do not always use logic and probability theories to make a decision. Past experience and individual factors are more likely to influence everyday decision-making. A rational decision would be based on hypothetical thinking and should be made after all the alternative actions are assessed and the most profitable one is chosen. If logic were applied to everyday issues decision-making would be much harder. Humans can be rational and irrational through their lives.

STATEMENT OF THE PROBLEM

Investor behaviour only starts to make sense when viewed through the lens of psychology. That's because investor's make decisions from the gut rather than from the head. Investors do not act wisely in taking decisions relating to investment. Investor behaviour is often emotional, irrational and illogical, and for that reason this behaviour is the best understood in emotional terms, not rational terms. They have behavioural biases in the event of taking investment decision. These biases prevent people from making rational (normal) decisions. Investors can improve their performance by recognizing the biases and errors of judgment to which all of them are prone. Understanding the behavioural finance will help the investors to select a better

investment instrument and they can avoid repeating the expensive errors in future. Using the principles of behavioural finance the present study explores the psychological concept of individual and the behavioural issues that influence the decision making process of investors-Do investors behave rationally or is it governed by their behavioural biases?

OBJECTIVES OF THE STUDY

- To understand the role of behavioural biases on investment decision.
- To understand whether the behavioural biases influence the investor's investment decision

SCOPE OF THE STUDY

This study is confined to investors in Kollam city only. The scope of the study is limited to selected behavioural biases such as Over confidence bias, Representative Bias, Self-attribution bias, loss aversion bias, Fear of regret/ regret avoidance, confirmation bias, Anchoring bias and Conservatism bias

II. REVIEW OF LITERATURE

- **RalucaBighiuQauri**, in his "Behavioural finance: is investor psyche driving market performance?", made clear that behavioural finance is a field of finance that proposes psychology based theories to explain stock market anomalies.
- **Sofia Jasmeen**, in her study "Investment choice of individual investors" identified the risk taken by individual investors while making investments.
- **Raja RajenVanjebo** in his study "Indian investor's investment characteristics" necessitated the understanding of the characteristics of investors in terms of their investment strategies, expectations etc.
- **Manish Mittal** in his study "Study of differences in behavioural biases in investment decision making between the salaried and business class investors", found that investment decision of the investors are influenced by their biases and prejudices.
- **Rama Krishna** in his study "Role of return, risk and correlation in investment decisions and portfolio selection" examined the role of return, risk and correlation in investment decisions and portfolio selection. For the purpose of this study, stocks listed in S & P CNX Nifty were considered as sample and S& P 500 was considered as market index.
- **Abyeet and Dinesh** in their study "Investment management by individual investors a behavioural approach", proposed to identify the major psychological biases that influence the individual investor's behaviour and that in return may drive a momentum effect in stock returns.

UNDERSTANDING INVESTOR BEHAVIOUR-DO INVESTORS MAKE RATIONAL OR EMOTIONAL DECISIONS?

Do investors in general act rationally? The question is being hotly debated by practitioners and academics alike. The assumption that all investors are rational has been greatly debated in the modern finance. When it comes to money and investing, we're not always as rational as we think we are – sometimes exhibit strange behavior. The discipline of behavioral finance provides insights into the ways we make financial decisions. While we are all subject to biases which systematically lead us away from "rational" decision-making, those with limited resources bear the most serious consequences of poor decisions. The behavioral finance deals with the irrational decision making of human beings.

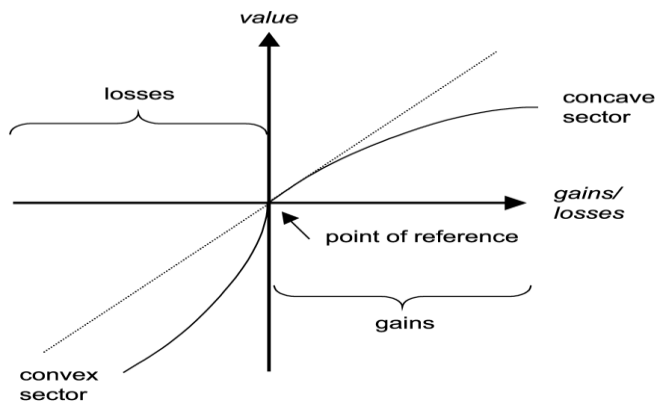
Behavioral finance is the new paradigm of finance, which seeks to supplement the standard finance theories of finance by introducing behavioral aspects of the decision making process. Behavioral finance helps investor to guide portfolio allocation decisions, both by helping us to understand the kinds of errors that investors tend to make in managing portfolios, and by allowing investor to understand better how to locate profit opportunities for investment. Most classical theories are based on two assumption one, investors make rational decisions and the other is investors are unbiased in their predictions about the future. Psychological studies, for example, have repeatedly demonstrated that the pain of losing money from investments is nearly three times greater than the joy of earning money. Small market corrections have often disintegrated into full-scale crashes as a result, fueled by panicked investors who made rash decisions to avoid losing money in the short-term rather than focusing on an investment's long-term potential. Hence not every choice investors make is in their best interests. Emotions such as fear and greed often play a pivotal role in investor decisions; there are also other causes of irrational decisions.

The following are the different theories of behavioral finance and various behavioral factors which affects the decision of investors.

(I) Prospect theory

Kahneman and Tversky have developed the Prospect Theory in 1976. Prospect Theory explains how investors actually behave when confronted with choice under uncertainty and formalizes an S-shaped value function. Prospect Theory is founded on two proportions. Firstly, investor utility is a function of gains and losses relative to a fixed reference point. Secondly, Investors utility functions are concave in the gains region and convex in the loss region. This is because investors respond differently to equivalent situations depending on whether it is presented in the context of a loss or a gain. Investors typically become distressed at the prospect of losses and are pleased by possible gains; even faced with sure gain, most in investors

are risk-averse but faced with sure loss they become risk-takers.



(II) Regret theory

Regret is the emotional pain that comes with realizing that a previous decision turned out to be bad. Regret theory is about investor's emotional reaction to having made an error of judgment. There is a human tendency to feel the pain of regret for having made errors, even small errors. It's a feeling of ex post remorse about a decision that led to a bad outcome. If one wishes to avoid the pain of regret, one may alter one's behaviour in ways that would in some cases be irrational

VARIOUS BEHAVIOURAL FACTORS WHICH AFFECTS THE DECISION OF INVESTORS

1. Overconfidence:

People generally rate themselves as being above average in their abilities. They also overestimate the precision of their knowledge and their knowledge relative to others. They have a tendency to be overly confident about own capabilities and level of knowledge. Psychological research has discovered many ways how overconfidence affects human behaviour in several fields. The effects of overconfidence are strongly present in difficult decisions that include uncertainty. Thus financial decision making is very likely affected by overconfidence.

2. Representativeness:

The notion of 'representativeness bias' reflects the case where decisions are made based on a situation's superficial characteristics (what it looks like) rather than a detailed evaluation of the reality. Another way of putting this would be saying that decisions are made based on stereotypes. In investing, representativeness is a tendency to be more optimistic about investments that have performed well lately and more pessimistic about investments that have performed poorly. An investor may stereotype the immediate past performance of investments as "strong" or "weak." This representation then lets them ignore the statistical explanations at hand.

3. Self-attribution:

Self-attribution bias (or self-serving attribution bias) refers to the tendency of individuals to ascribe their successes to

innate aspects, such as talent or foresight, while more often blaming failures on outside influences, such as bad luck. This bias is a mechanism for individuals to protect or enhance their own self-esteem. Studies have shown that similar attributions are made in various situations, such as the workplace, interpersonal relationships, sports, and consumer decisions.

4. Loss aversion

Behavioural finance considers that investors are not risk-averse but lose-averse. Loss aversion refers to the notion that investors suffer greater disutility from a wealth loss than the utility from an equivalent wealth gain in absolute terms. Thus, investors will increase their risk, defined in terms of uncertainty to avoid even the smallest probability of loss. It is not so much that people hate uncertainty – but rather, they hate losing. The loss-aversion theory points to another reason why investors might choose to hold their losers and sell their winners: they may believe that today's losers may soon outperform today's winners. Investors often make the mistake of chasing market action by investing in stocks or funds which garner the most attention. Research shows that money flows into high-performance mutual funds more rapidly than money flows out from funds that are underperforming.

5. Confirmation

Confirmation refers to a type of selective perception that emphasizes ideas that confirm our beliefs, while devaluing whatever contradicts our beliefs. In investing, the confirmation bias suggests that an investor would be more likely to look for information that supports his or her original idea about an investment rather than seek out information that contradicts it.

6. Anchoring:

Anchoring is a phenomenon in which in the absence of better information, investors assume current prices are about right. Anchoring describes how individuals tend to focus on recent behavior and give less weight to longer time trends. People tend to give too much weight to recent experience, extrapolating recent trends that are often at odds with long run average and probabilities. In the absence of any better information, past prices are likely to be important determinants of prices today. Therefore, the anchor is the most recently remembered price.

7. Conservatism

Conservatism is a belief perseverance bias in which people fail to incorporate new information by continuing to hold their prior views/forecasts. Conservatism bias is a mental process in which people cling to their prior views or forecasts at the expense of acknowledging new information. This may cause the investor to under react to the new information, maintaining impressions derived from the previous estimate rather than acting on the updated information.

8. Availability

The availability bias is a rule of thumb, or mental shortcut, that allows people to estimate the probability of an outcome based on how prevalent or familiar that outcome appears in their lives. The availability bias suggests that the recent memory i.e., the available example influences more on investor's decision of investment i.e., if investors have recently seen huge loss in one investment avenue then he will not invest in that avenue. Investors are more likely to be fearful of stock market if they have recently seen any stock market crisis. People exhibiting this bias perceive easily recalled possibilities as being more likely than those prospects that are harder to imagine or difficult to comprehend.

III. RESEARCH METHODOLOGY

Data Collection and Sample

Data for this paper was collected using questionnaires. The population of the study was all individual investors. The target population was individual investors located at Kollam city, Kerala. Stratified Random sampling technique was used in the study and 100 investors responded.

Period of Study

The research is carried between august 2016 to December 2016

Data Analysis Technique

Data collected for this study was analyzed by using descriptive statistics and Pearson Chi-square test. Pearson Chi-square technique was used to analyze the relationship between occupational status and the behavioral biases.

IV. DATA ANALYSIS / RESULTS

Demographics characteristics of the respondents

The demographics characteristics of respondents such as gender, occupation, age and income is as follows

Table.1 Demographics characteristics of respondents

Variables	Response characteristic	Number of respondents	Percentage
Gender	Male	63	63
	Female	37	37
Occupation	Government employees	25	25
	Private employees	25	25
	Business	25	25
	Profession	25	25
Age group	Below 30 yrs	15	15
	30-40 yrs	20	20
	40-50 yrs	28	28
	Above 50yrs	37	37
Annual income	Below Rs.1,00,000	10	10
	Rs.1,00,000- Rs.3,00,000	19	19

	Rs.3,00,000- Rs.5,00,000	23	23
	Above Rs.5,00,000	47	47
Total		100	100.00

Source: Primary data

V. TESTING OF HYPOTHESIS

To understand whether the behavioural biases such as overconfidence bias, representative bias, self attribution bias, loss aversion bias, fear of regret, confirmation bias, anchoring bias and conservatism influence the investor's investment decision, hypothesis were set with reference to occupational status. For interpretation the hypothesis set was tested using chi- square test. If the calculated value is less than table value null hypothesis is accepted. On the other hand calculated value is more than table value null hypothesis is rejected.

Hypothesis

There no significant difference between the occupational status of the investors with respect to behavioral biases.

1. Over confidence bias

This bias was studied by asking the investor about their investment decisions.ie. Are they sure their investment decisions are far better than your friend? . The null hypothesis set as there no significant difference between the occupational status of the investors with respect to over confidence biases. And the result of hypothesis testing is as follows:

Table.2 Chi-Square test result of Overconfidence biases with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Overconfidence biases	4.778	3	7.815	Not significant

Source: Calculated data

Fail to reject null hypothesis, This means that occupational status of the investors and the over confidence biases are independent of each other.

2. Representative Bias

In order to study this representative bias, investors were asked on what basis would select a stock for investment. The null hypothesis set as there no significant difference between the occupational status of the investors with respect to representative biases. The result of hypothesis testing is as follows:

Table .3 Chi-Square test result of Representative bias with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Representative bias	3.618	6	12.592	Not significant

Source: Calculated data

As the calculated value is less than the table value, the null hypothesis is accepted. That is, there is no significant difference between the occupational status of the investors with respect to representative bias.

3. Self attribution bias

Self-attribution bias occurs when people attribute successful outcomes to their own skill but blame unsuccessful outcomes on bad luck. To study this bias investors were asked how good an investor are you related to other investors? Investors who rate themselves as “above average” or “well above average” in skill are likely to suffer from self-attribution bias. The null hypothesis set as there no significant difference between the occupational status of the investors with respect to self-attribution biases .The result of hypothesis testing is as follows:

Table .4 Chi-Square test result of Self-attribution bias with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Self-attribution bias	10.4144	9	16.919	Not significant

Source: Calculated data

As the calculated value is less than the table value, the null hypothesis is accepted. That is there is no significant difference between the occupational status of the investors with respect to self-attribution bias.

4. Loss aversion bias

To study the loss aversion bias investors were asked to select two of the outcomes either. An assured gain of Rs.475 or 25 percent chance of gaining Rs.2000 & a 75 percent chance of gaining nothing. The rational response were “b,” but loss-averse investors are likely to opt for the assurance of a profit in “a.”The null hypothesis set as there no significant difference between the occupational status of the investors with respect to loss aversion biases .The result of hypothesis testing were as follows:

Table .5 Chi-Square test result of Loss aversion bias with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Loss aversion bias	3.5343	3	7.815	Not significant

Source: Calculated data

As the calculated value is less than the table value, the null hypothesis is accepted. That is there is no significant difference between the occupational status of the investors with respect to loss aversion bias.

5. Fear of regret/ regret avoidance

The investors were asked to select a stock either A or B to dispose in case of emergency. The stock A was purchased for Rs.100 where as stock B was purchased for Rs.200 and now the market value of both this share is Rs.150. The null hypothesis set as there no significant difference between the occupational status of the investors with respect to fear of regret biases .The result of hypothesis testing were as follows:

Table .6 Chi-Square test result of Fear of regret bias with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Fear of regret	2.43	3	7.815	Not significant

Source: Calculated data

As the calculated value is less than the table value, the null hypothesis is accepted. That is there is no significant difference between the occupational status of the investors with respect to regret avoidance bias.

6. Confirmation bias

In order to study the confirmation bias the investors were asked to how will they react when they hear some good rumor in some liquid stock. And provide options as Buy aggressively, Abstain and wait for confirmation or Abstain and wait for market reaction . People who select “Abstain and wait for confirmation” are more likely to exhibit confirmation bias implies that the respondent will avoid seeking out information that might contradict previously held beliefs regarding the quality of the investment than people who select “Buy aggressively.” is the more economically rational choice. The null hypothesis set as there no significant difference between the occupational status of the investors with respect to confirmation biases .The result of hypothesis testing were as follows:

Table .7 Chi-Square test result of Confirmation bias with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Confirmation bias.	7.8213	6	12.592	Not significant

Source: Calculated data

As the calculated value is less than the table value, the *null hypothesis is accepted*. That is there is no significant difference between the occupational status of the investors with respect to confirmation bias.

7. Anchoring bias

People often base their decisions on the first source of information to which they are exposed. For studying this bias the investors were asked about an imaginary question: ‘investor A owns a stock which he originally bought for Rs.100. investor B has the same stock but he bought it as Rs.200. the value of the stock is now Rs.150. who according to you is more upset?’ So those who affected by the anchoring bias have the tendency to prefer the investor B as their response. The null hypothesis set as there no significant difference between the occupational status of the investors with respect to anchoring biases .The result of hypothesis testing were as follows

Table .8 Chi-Square test result of Anchoring biases with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Anchoring bias	8.623	3	7.815	Significant

Source: Calculated data

As the calculated value is more than the table value, the *null hypothesis is rejected*. That is there is significant difference between the occupational status of the investors with respect to anchoring bias.

8. Conservatism bias

In order to study the conservatism bias investors were asked their reaction when they receive some bad news about some stock related to some well established company. It provides some option as Indifferent, Maintain position, Sell and liquidate position or reduce his position. The investors who are affected by conservatism bias cling to their prior views or forecasts at the expense of acknowledging new information. The investors who opt the option ‘Indifferent’ and ‘Maintain position’ indicate susceptibility to conservatism bias. The null hypothesis set as there no significant difference between the occupational status of the

investors with respect to conservatism biases .The result of hypothesis testing were as follows:

Table .9 Chi-Square test result of Conservatism biases with reference to occupational status

Variables	Calculated chi-square value	Degree of freedom(df)	Table value at 5% level	Result
Conservatism bias	4.1054	9	16.919	Not significant

Source: Calculated data

As the calculated value is less than the table value, the *null hypothesis is accepted*. That is there is no significant difference between the occupational status of the investors with respect to conservatism bias.

VI. SUGGESTIONS

1. In order to overcome these biases, the investor to review trading records then calculates the performance of the trades and updated information can often help investors to understand the error of their ways.
2. The investor should have proper knowledge about his risk taking ability and understand that he cannot always win the markets was one of the way to overcome *over confidence bias*.
3. To overcome *loss aversion bias*, proper budgeting, and financial planning, and Understanding clearly your risk taking ability, followed by appropriate asset allocation.
4. Do not think about results of past decisions while taking present decisions is the best way to overcome *fear of regret*.
5. In order to overcome the *confirmation bias* make sure that the investor are ready to take blame on his part of wrong investing decisions and ensure that he was self-aware of his investment bet skills and limitations
6. In order to overcome *conservatism bias*, investors must first avoid clinging to forecasts; they must also be sure to react, decisively, to new favorable information.

VII. CONCLUSION

The investors not always act in a rational manner due to the behavioural biases they have to deal with. The behavioural factors are important in financial markets because they influence the investors who make the financial decisions. If the environment is uncertain and complex, biases and heuristics can be an effective and efficient aim for decision making. Under these circumstances a more comprehensive and careful decision making is not possible. Behavioural finance highlights the psychological edge of investment

decision. It is obvious that the separation of an investor's personality and their investment decisions making is not possible. Therefore, it cannot be ignored the importance of understanding of the individual financial behaviour of investors. In the present study the behavioral biases such as Over confidence bias, Representative Bias, Self-attribution bias, loss aversion bias, Fear of regret/ regret avoidance, confirmation bias, Anchoring bias and Conservatism bias studied and these biases are tested using chi square test by setting hypothesis set as there are there no significant difference between the occupational status of the investors with respect to behavioral biases. The study found that all the biases have no difference among the change in occupational pattern except anchoring biases. This indifference was due to the psychological behaviour is personal so it change according to the person to person and not change according to occupation.

SUGGESTIONS FOR FURTHER STUDY

Further study should base on a bigger sample to increase the confidence level for the study findings. The same study can be extended to other geographical scope to individual investors in other districts in Kerala could be carried out. Additionally, a study on the influence of gender on individual investor decisions could be carried out to determine how gender would affect such decisions.

REFERENCE

- [1] Michael M. Pompian, "Behavioral Finance and Wealth Management", 2006, Published by John Wiley & Sons, Inc., Hoboken, New Jersey, page no.51-248
- [2] Malcolm Baker and Jeffrey Wurgler, "Behavioral Corporate Finance" (Handbook of the Economics of Finance) edited by Espen Eckbo, in 2007, page no. 355-390
- [3] Dr. D. Harikanth and B. Pragathi, "Role Of Behavioural Finance In Investment Decision Making - A Study On Select Districts Of Andhra Pradesh, India.", Shiv Shakti International Journal In Multidisciplinary And Academic Research (SSIJMAR), vol.1, no. 4, November-December, pp. 1-15
- [4] Raluca Bighiu Qauri, "Behavioural finance: is investor psyche driving market performance?", Behavioural finance :The IUP journal of behavioural finance , Vol vii, no 4, 2010
- [5] Raja Rajen Vanjebo , "Indian investor's investment characteristics", Finance India, Vol xxiv, no 4, Dec 2010
- [6] Ravinder Kumar and Abhijeet Chandra, "Selection behaviour of individual investors: evidence from mutual fund investment" , The Journal of Venture capital and financial services, Vol: 4, No 1, Jan-June 2010
- [7] Manish Mittal, "Study of differences in behavioural biases in investment decision making between the salaried and business class investors", Behavioural finance, Vol vii, no 4, 2010
- [8] Prof. y. Rama Krishna, " Role of return, risk and correlation in investment decisions and portfolio selection", Indian journal of finance, Vol 4, No 1, November 2010
- [9] Prof. Sohan Patidar, "Investor's Behavior Towards Share Market", International Research Journal, October 2010, VOL I,ISSUE 13, October, 2010, pp. 55 -57
- [10] Faten Zoghalmi and Hamadi Matoussi, "A Survey of the Tunisian Investors' Behaviours", International Research Journal of Finance and Economics, Issue 31 (2009), page 66-82
- [11] Gnani Dharmaja .V, Ganesh .J, and Dr. Santhi .V, "A Study on the Individual Investor Behavior with Special Reference to Geojit BNP Paribas Financial Service Ltd, Coimbatore", IRACST- International Journal of Research in Management & Technology (IJRMT), Vol. 2 No.2, April 2012,page no. 243- 252
- [12] Dr. Kaushal A. Bhatt, " Investment and Trading Pattern of Individuals Dealing in Stock Market", The Standard International Journals (The SIJ)), Vol. 1, No. 2, May-June 2013, page no. 67- 71
- [13] Dr. Arifur Rehman Shaikh and Dr. Anil B. Kalkundarikar, "Analysis of Retail Investor's Behaviour in Belgaum District, Karnataka State", International Journal for Management Research, Vol.1.No.2, July 2011, page no. 22-39
- [14] Dr. D. Harikanth and B. Pragathi, "Role Of Behavioural Finance In Investment Decision Making - A Study On Select Districts Of Andhra Pradesh, India.", Shiv Shakti International Journal In Multidisciplinary And Academic Research (SSIJMAR), vol.1, no. 4, November-December, page no. 1-15
- [15] Prof. Sohan Patidar, "Investor's Behavior Towards Share Market", International Research Journal, October 2010, VOL I,ISSUE 13, October, 2010, page n. 55 -57
- [16] Suman and Dr. D. P. Warne, "Investment Behaviour Of Individual Investor In Stock Market" , International Journal of Research in Finance & Marketing, Volume 2, Issue 2 (February 2012), page no. 244- 250
- [17] David Dreman, Stephen Johnson, Donald MacGregor and Paul Slovic, "A Report on the March 2001 Investor Sentiment Survey" , The Journal of Psychology and Financial Markets,2001, Vol. 2, No. 3, page no. 126-134
 - www.investmentz.com
 - www.economicstimes.indiatimes.com
 - www.moneymangementideas.com
 - www.moneymangementideas.com