

Analyzing the Relationship between Factors of Behavioural Finance and Investment Choice: A Case Study of Lucknow City



Savita Pandey
Research Scholar,
Deptt. of Management Studies,
Mewar University,
Chittoregarh, Rajasthan,
India



D.S. Chaubey
Dean,
Deptt. of Management Studies,
Uttaranchal University,
Dehradun, India

Abstract

Behavioural factors undeniably play a vital role in decision making process of investor. The present paper aims to find the behaviour of individual investors from Lucknow city towards available investment avenues in Indian financial markets. This also analyse the relationship between behavioural finance and investment choice with respect to demographic variables. In a survey of 269 respondents conveniently chosen from Lucknow city, it was found that most of the respondents prefer to invest in government securities. Further behavioural finance play important role in investors decision making and more factors of behavioural finance involve in investors consideration while they make decision of investment.

Keywords: Investment Decision, Demographic Characteristics, Government Securities, Investment Avenues Investment Behaviour, Investor Information etc.

Introduction

In the present information age the Decision-making has become a very complex activity. Any decision cannot be taken in isolation. It is to be taken by considering different dimension of personal resources and relied on complex models which are the reflective of the situation. All the variables of the human decision related problem are the outcome of the cognitive psychology of the individual. A decision- making activity includes not only the specific problem faced by the individual but also the environment. A investors investment decision can be briefly understood and concluded as the systematic process of choosing a particular investment from a large number of investment alternatives. It is considered as the human activity that follows after proper evaluation of all the available alternatives to the investor. For an effective decision making, a decision makers has to update himself in all the possible field so that they can achieve the objectives in the fast changing highly competitive and versatile business environment. This calls for managers to have in-depth understanding of human nature along with the improvement of fine skills and ability and competency to get best outcome. Every investor differs from other in terms of demography such as socio-economic status, educational level, age, income, gender and race. There are several investment opportunities/instruments available in the market at any particular time. It is the investor's rationality that how much investment he makes out of various investments opportunities/ instruments available to them. The combination of his selected investments forms his portfolio. The investor performance can be improved by recognizing their biasness and rationality of judgment to which all of us are habitual too. The knowledge and understanding of investor psychology will help in understanding investor behaviour and will be useful to evaluate investment instrument.

Behavioral Finance: An Overview

The study of behavioural finance is the study of human behavior from psychology, sociology, and anthropology to analyse the behavior of financial markets. In other words, behavioral finance is a field of finance that proposes psychology-based theories to explain stock market movement. Within behavioral finance, it is assumed that information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes. The field of behavioral finance has most of the field common to field of cognitive psychology that

tries to explain the irrational or emotional choices and actions of investors (Milevsky, M., & Salisbury, T. 2005). The neoclassical economics theory which states that savings determine investment, and is concerned primarily with market equilibrium and growth at full employment instead of with the under-employment of resources. This school of thought tries to explain that the market is efficient and that investors are rational in making their financial decision. Against this theory, behavioural finance theory states that due to versatility in the investors' individual psychology, stocks may be misquoted and markets may be inefficient and investing behavior and market behavior can be irrational and inconsistent. And hence the behavioural finance is an elaborate clarification for economic irrationality and economic anomalies in the market as well as a strategy for capitalizing on the unique psychology and decision-making processes of individual investors.

Behavioral finance models the cognitive ability of investor. The investors' social interaction, their moral motivation and emotional responses are transformed into economic modeling for better understanding of economic outcomes. Behavioral finance tries to explore the role of variables like individual Biases, self-control, mental accounting of investor, savings and investment relationship, decision fairness, selflessness, public good, learning, incentives, investors memory, individual attention and categorization for their affective economic decision-making. From academic point of view, behavioral finance is defined as domain of studying investment portfolio management approach (Stewart, 2006) whereas, financial analysts consider behavioural finance as the uses and application of behavioral finance to augment or supplement classical and neoclassical financial theory and approaches. In precise term, investors use their understanding of human psychology to analyze underpriced or overpriced stocks to purchase or sell. At the end eventually, behavioral finance confirms that financial decision-making is influenced by individual as well as market psychology.

Review of Literature

The financial instruments such as shares, debentures, insurance policies, mutual fund equity investment, etc. are the considered as financial investments that are helpful in capital formation of the country. Investment is essential for improving productivity and increasing the competitiveness in any form of economy. In another important paper, Tversky and Kahneman (1981) introduced framing of mental accounting. The researcher described the problem and stated that the psychological principles that govern the perception of decision related problems and the evaluation of probabilities and outcomes produce predictable shifts of preference when the same problem is framed in different ways. In line with this Plous (1993) in his book entitled "The Psychology of Judgment and Decision Making" states that making the right decisions is not easy. Situations change and choices confound. Faulty perceptions and biases can block clear thinking and undermine the ability to weigh alternatives rationally. Psychologist Scott Plous, winner of numerous awards and honors, studied about the

investors decision making and gives a comprehensive introduction to the field with a strong focus on the social aspects of decision making processes.

Kasilingam.R and Jayabal.G (2009) in their research work on "Alternative Investment Option to Small Investors" found that the funds invested in small savings schemes by the investors will yield good results not only to individual but it is also giving good result to the nation. Selvatharangini P.S (2009) in his research work on title "Post Office Savings Schemes in the Maze of Investment Alternatives" concludes that generally people differ in their taste and preference in making investment decision. Kaboor.A (2010) in his work on title "Determinants of investor's financial literacy" explore the financial literacy of the investor and found that financial literacy is not uniform among different groups of investors. *Alleyne and Broome* (2010) in their study on subject "factors influencing investment decisions of potential investors" examined the investment decisions of students. Researcher has used the theory of planned behavior and risk propensity among future investors. From the study, it was found that the theory of planned behavior is significant in predicting investment intentions. The study further indicates that investor attitudes as well as reference groups like peers, family and significant others as well as investors' belief about potential obstacles and opportunities significantly influence the investor in building intentions to invest. The influence of friends and relatives, and easy access to funds were significant predictors of investment intentions of students.

Mathivannan.S and Selvakumar.M (2011) in their research work on title "Savings and Investment Pattern of School Teachers – A Study with Reference to Sivakasi Taluk, Tamil Nadu" conducted a research to identify the saving and investment pattern of school teacher and study confirms that the teachers are saving their hard core money for the purpose of gaining their children's education, children marriage and other welfare expenses related to family. Manish Sitlani, Geeta Sharma & Bhoomi Sitlani (2011) in their research work on Investment choice of occupants of financial services industry", observe that there is no relationship between demographic variables and investment choices of occupants of financial services industry. *Mishra SK and Kumar M* (2011) in their research work on subject "The Impact of Level of Purchase Decision Involvement on the Investment Behavior of Mutual Fund Investors" tried to explore the purchase pattern of mutual fund and their level of involvement and investment Decision behavior. In a survey of 268 MF investor, it was found in the study that investor purchase decision involvement significantly impacts the investment behavior of MF investors. Further the finding of the study suggest that there is significant difference in the width and depth of information search and information processing by low MF investors and high MF investors. The author has also discussed the results of findings in depth and its implications as these are relevant to the marketing of Mutual funds.

The relationship between demographic characteristics and financial behavioral factors in investment decisions was studied by *Engin Demirel et*

al. (2011) in their study on topic “ Interaction between Demographic and Financial Behavior Factors in Terms of Investment Decision Making”. The study undertaken with the intention to assess and analyse the impact of demographic factors on individual investors’ behavior. It was found that gender interacts with five financial behavioral factors i.e. Overreaction, herding, cognitive bias, irrational thinking, and overconfidence. The level of individual savings interacts with only four of the financial behavioral factors viz; overreaction, herding, cognitive bias, and irrational thinking.

Tabassum.S.S and S.Pardhasaradhi (2012) in their study on “Factors Influencing Indian Individual Equity Investors’ Decision Making and Behavior” revealed that for any investor, Investment decision process is critical, especially when he is investing in equities as it involve high risk and uncertainty in return. Research has identified 40 attribute that influence investor buying decision while choosing a particular stock to make an investment. Factor analysis was carried and following ten factors namely Individual Eccentricity, Wealth Maximization, Risk Minimization, Brand Perception, Social Responsibility, Financial Expectation, Accounting information, Government & Media information, Economic Expectation and Advocate recommendation has come out which are influencing investor decision-making.

In India, Gnani V Dharmaja, Ganesh and Santhi (2012) in their study investigated the factors influencing investor in favour of investment specially in the context of financial literacy of investor. The study used five factors self-image or firm-image, accounting information, neutral information, advocate recommendation and personal financial needs. The survey reveals that the factors that affect the investor’s behavior have different levels of intensity. The study concluded that all these variables affect the investor’s decision making but with varying intensity.

Puneet Bhushan (2014), conducted a research work on subject “Financial Literacy and its Determinants” with the intention to determine financial literacy level of salaried individuals based on their various demographic and socio-economic factors. It was found in the study that overall financial literacy level of respondents were not very high and their Financial literacy level differs according to gender category, level of education, level of income, respondents nature of employment and their place of work. In other work Asness et al. (2015) in his work on “Fact, fiction, and value investing “ looks at value investing. Instead of looking whether value returns are a compensation for risk. The finding of the research is that value strategies are even more effective when implemented with quality measures such as profitability, and the strategies can also be used to generate returns by benchmarking some measure of value for different asset classes such as currencies, commodities, and bonds.

Statement of the Problem

The expectation of higher returns from various investment products & schemes lures the investors to

jump in to trading. These investments are majorly done without the support of essential information and knowledge. Regardless of the best scientific approaches, the price movement cannot always be predicted. The non-predictability of the price fluctuation and the desire to make huge bucks paves the path for irrational judgments and wrong investment choices. The problem need to be explored and investigated from behavioural finance angle, whether the human rationality prevails or investors are biased while taking decision to buy, sell or hold stocks. The problem raises the following research questions:

1. Do the investors really make their investment choices based on the assumption of efficient market hypothesis?
2. Can the tenets of behavioural finance throw light on rationality in the investment decision making process?

Objectives of the Study and Research Methodology

A decision-making process, which is based on making choices, results in the most optimal level of benefit or utility for the individual. Most conventional economic theories are created and used under the assumption that all individuals taking part in an action/activity are behaving rationally. Present research work has been taken up with the following objectives:

1. To study the capital market and analyze individual investors choice toward various equities investment
2. To study the various factors of behaviour finance and their relationship in individual investment choice.
3. To study how investor psychology govern the rationality of investment choices.
4. To study the relationship between human rationality in investment decision and EMH

Null Hypothesis

The following hypothesis has been formulated for the proposed study.

H1

“An individual’s preference of an investment option is not affected by his demographic characteristics

H2

Investor perception to risk and investor propensity to risky investment are not associated with each other

H3

Risk perception and returns expectations are not associated with each other

The present research study is exploratory as well as descriptive in nature. Convenient and justified sampling technique will be used to collect the data. The approximately 269 sample was chosen at random to collect the desired data. To test the hypothesis chi-square test, T- test, F test and factor analysis mean and ANOVA etc. are applied. The analysis and interpretation of the data collected will be represented in tables, pie charts using SPSS software.

Table 1 : Demographic characteristics of Respondents

	Description	No of respondents	Percentage
		269	100
Age wise Classification of Respondents	Upto 25 Years	15	5.6
	25-35 Years	110	40.9
	35-45 Years	77	28.6
	45 to 55 Years	19	7.1
	above 55 Years	48	17.8
Gender Category	Male	183	68.0
	Female	86	32.0
Marital Category	Married	169	62.8
	Unmarried	84	31.2
	Separated	16	5.9
Education level	Up to Matriculation	3	1.1
	Intermediate	34	12.6
	Graduate	86	32.0
	Post Graduate and others	129	48.0
	Super specialization degree	17	6.3
Income level	Upto Rs.15000	19	7.1
	Rs. 15001 to Rs 30000	61	22.7
	Rs. 30001 to Rs. 45000	86	32.0
	Rs. 45001 to Rs. 60000	54	20.1
	Rs 60001 to Rs.100000	34	12.6
	Above Rs. 100000	15	5.6
Family INcome	Upto Rs.30000	33	12.3
	Rs. 30001 to Rs 50000	91	33.8
	Rs. 50001 to Rs. 100000	92	34.2
	Rs. 100001 to Rs. 500000	50	18.6
	Above Rs. 500000	3	1.1
Occupation	Salaried	111	41.3
	Businessman	80	29.7
	Retired	9	3.3
	Independent professional	61	22.7
	Vocation (where specific skills are required)	8	3.0

The demographic profile presented in the above table 1 indicates that Though the sample represents all age groups , but majority of the respondents are in the age group of 25-35years. It is seen that more than three fourth respondents are from male categories and remaining from female categories

respondents. Sample is the composition of well qualified married category respondents having average family size of 3-4 members. It is observed that sample is dominated by the respondents of service class with average earning of Rs30000-Rs45000PM.

Table 2: Main Objective of Investment

S. No.	Objective	Frequency	Percent	Valid Percent	Cumulative Percent
1	Capital Appreciation	25	9.3	9.3	9.3
2	Income Generation	165	61.3	61.3	70.6
3	Tax Shelter	27	10.0	10.0	80.7
4	Growth in income	52	19.3	19.3	100.0
	Total	312	269	100.0	100.0

Investment objective of the investors may vary from one to other. There are several investment schemes available in the market that are used by the investors as tax shelter and reduce the tax liability of the investors. The investors who want to avoid tax can invest on such schemes. Similarly, capital appreciation in the form of price increase in the future, income generation in the form of interest and dividend, and growth in a regular income may be some other objectives of the investment that the investor perceives. To know which objective is common or most preferred to fulfilled among the investors this study analyse the data gathered from the investors and results are presented in table 2 shows that additional income generation is the most common objective among the

investors followed by growth in income, tax shelter and capital appreciation.

Investment Choices of Individual Investors

There are number of investment options are available in the market for the investors. The selection of one or more investment option depends upon the requirement, expectation and risk taking ability of an individual investor. To get the answer for the set objective and question, what is the most preferred investment option of the investors?, this study included total 17 investments options in the questionnaire and respondents were asked to give their preference for given investment options. Frequency distribution is for the preference of the respondents, for these investment options, is presented in the following table 1:

Table3: Savings and Investment Choice: Cross Tabulation

			Saving					Total
			Less than 5000	5001 to 10000	10001 to 20000	20001 to 50000	Above 50000	
\$inv ^a	Government Securities	Count	8	11	6	7	0	32
	Commercial Papers	Count	0	8	5	3	1	17
	Equity Shares	Count	24	68	63	19	5	179
	Preference Shares	Count	2	7	7	3	0	19
	Real State	Count	9	24	40	17	4	94
	Derivatives Instruments	Count	0	2	5	6	1	14
	Certificate of Deposits	Count	6	5	5	2	1	19
	Call Money Market	Count	0	2	1	2	1	6
	Art, Paining, and Antique	Count	0	2	0	0	1	3
	Debentures/ Bonds	Count	15	42	50	9	4	120
	Mutual Funds	Count	1	7	9	3	2	22
	Postal Savings	Count	30	47	33	17	4	131
	Fixed Deposits	Count	35	59	51	25	3	173
	Life Insurance	Count	38	66	56	24	5	189
Provident Funds	Count	11	19	24	14	3	71	
Total		Count	179	369	355	151	35	1089
Pearson Chi-Square =80.66084 with 52 DF and 5% level of significant								
Percentages and totals are based on responses.								
a. Group								

Table 3 shows that life insurance is the most preferred investment choice of the investors. Out of total 269 respondents, 189 (70.26 %) respondents preferred life insurance as their investment choice. This is followed by equity (179), fixed deposits (173), debentures (120), and postal savings (131). On the opposite of this observation, it is also observed that art, painting and antiques (3) were the least preferred investment option of the investors followed by call money (6), derivatives (14), commercial papers (17), and certificates of deposits (19). It is to note that these findings are limited to the investors of Lucknow city only which is subject to vary in other states as the awareness, risk taking ability, demographic characteristics and socio-psychological factors vary from one state to other. Chi test was performed to test the relationship between individual saving and investmet patter assuming null hypothesis as "there is association of individual savings and Investment Choice". From the table the

calculated value of chi square is 80.66.84 with 52 DF and 5% level of Significance The calculated value is greater than the table value(69.83) hence null hypothesis is rejected and indicating that there is association of individual savings and Investment Choice

Relationship between Risk Perception and Return Expectation

It is generally believed in the financial market that Risk and return are directly associated to each other. This study also makes an attempt to examine the association between risk and return. The following null hypothesis has been formed:

"Risk perception and return expectations are not associated with each other".

Pearson's chi-square statistics was worked out at 95 percent confidence level (5 percent level of significance) to test the null hypothesis. Outcomes are presented in the following table 4:

Table4 Risk Perception and Return Expectations

		Percentage of Loss Can Bear from Investment						Total
		0 %	1% to 5%	6% to 10%	11% to 20%	21% to 30%	More than 30%	
Percentage of Return Expected from Investment	5% to 10%	39	12	0	1	0	0	52
	11% to 15%	34	116	15	2	2	3	172
	16% to 25%	0	11	11	3	1	0	26
	26% to 30%	1	1	5	0	4	0	11
	31% to 40%	0	0	3	1	2	0	6
	More than 40%	0	0	2	0	0	0	2
Total		74	140	36	7	9	3	269

Pearson's Chi-Square Value = 205.807a, DF =25 , p = 0.000

Outcomes of the chi-square test (chi-square value = 205.807 and p value = 0.000) reject to our null hypothesis (H₄) that "Risk perception and return expectations are not associated with each other". In other words risk perception and return

Relationship between Demographic Characteristics of the Investor and their Rationality

To analyse whether the demographic characteristics of the investor influence his/her

rationality or not the present study hypothesized that "There is no significant relationship between demographic characteristics of the investor and their rationality". The mean score of individual statement measuring the rationality as well as the overall mean score of the scale measuring the rationality has been compared across the different levels of the independent factor (demographic variable) using the one way ANOVA is presented in the table5 ;

Table 5: Rationality of the Investors: A Descriptive Statistics

	N	Mean	Std. Deviation
I often use information gained from news or magazines when making investment decisions	269	3.7435	.94888
I tend to treat each element of my investment portfolio separately	269	3.1896	1.15146
I ignore the connection between different investment possibilities.	269	3.8476	.98638
I analyze the companies' customer preference before I invest in their stocks.	269	3.4907	1.05665
I study about the market fundamentals of underlying stocks before making investment decisions.	269	3.8141	1.01978
I mostly rely on company historical financial data when making investment decisions	269	3.4349	1.10648
I mostly rely on company recent financial data when making investment decisions	269	3.8364	.97507
I value company recent information over historical one	269	3.5428	1.09401
Combined total		3.6125	.34876

Rationality of the investors tends to lead his/her to take investment decision. It is one of the assumptions of the behavioural finance that all the investors are irrational. To measure such rationality on the basis of responses of the investors on five point Likert scale. Descriptive analysis of various components showing investors rationality presented in the table indicates that statement like I ignore the connection between different investment possibilities

has scored highest mean of 3.8476 followed by I mostly rely on company recent financial data when making investment decisions with mean 3.8364. higher standard deviation of 1.1514 of statement like I tend to treat each element of my investment portfolio separately indicates that respondents view on this issue is heterogeneous. Combined together rationality has scored a mean of 3.6125 and SD = .34876.

Table 6 Demographic Factors and Rationality: one Way ANOVA

S. No.	Statements	age		Gender		Marital status		Education Level	
		F	p	F	p	F	p	F	p
1	I often use information gained from news or magazines when making investment decisions	3.566	.007	.803	.371	7.740	.001	.775	.542
2	I tend to treat each element of my investment portfolio separately	3.638	.007	.663	.416	4.668	.010	3.135	.015
3	I ignore the connection between different investment possibilities.	5.668	.000	1.246	.265	2.278	.104	1.855	.118
4	I analyze the companies' customer preference before I invest in their stocks.	2.763	.028	.778	.378	2.160	.117	.785	.536
5	I study about the market fundamentals of underlying stocks before making investment decisions.	1.791	.131	1.525	.218	2.527	.082	.718	.580
6	I mostly rely on company historical financial data when making investment decisions	.380	.823	.764	.383	2.213	.111	.165	.956
7	I mostly rely on company recent financial data when making investment decisions	3.246	.013	.012	.914	1.231	.293	1.076	.369
8	I value company recent information over historical one	5.761	.000	.083	.774	.369	.692	.070	.991
	Overall	2.647	.034	2.882	.091	.608	.545	.664	.618

Impact of demography on Rationality

To know the whether there is any difference among male and female for their mean score on rationality following hypothesis was formed and tested: *“There is no significant difference in mean score of rationality of the investor across the demographic characteristics of respondents”*. Results show that there is significant difference exit across age categories of respondents as p value is less then .05. similarly there is no such difference exist between male and female as all p values shown in table are more than 0.05 hence accepts to our null hypothesis. It reveals that Marital status is another variable included under the demographic characteristics of the respondents may have an impact on the rationality of the investor. To examine the relationship between the marital status and rationality of the investors we see that the p value

is less than the set significance level and rejects to the null hypothesis for only these two statements. As the p value is not less than 0.05 for any of the other statement as well as for the overall mean core, hence results accept to our null hypothesis that, *The mean score of rationality of the investor does not remain same for the investors of different marital status”*. Similarly we find that t there is a significant difference in mean score only for statement 2 (F = 3.135 and p = 0.015) hence, reject to our null hypothesis for this statement only. The results for other statements as well as for overall mean score of the response on rationality do not show any significant difference between different educational levels and accept to our null hypothesis and concluded that *There is no significant difference in mean score of rationality of the investor across the demographic characteristics of respondents.*

Table 7 : Relationship between Saving and Rationality: one Way ANOVA analysis

		Sum of Squares	df	Mean Square	F	Sig.
I often use information gained from news or magazines when making investment decisions	Between Groups	2.303	4	.576	.636	.637
	Within Groups	238.998	264	.905		
	Total	241.301	268			
I tend to treat each element of my investment portfolio separately	Between Groups	4.795	4	1.199	.903	.463
	Within Groups	350.536	264	1.328		
	Total	355.331	268			
I ignore the connection between different investment possibilities.	Between Groups	8.903	4	2.226	2.333	.056
	Within Groups	251.848	264	.954		
	Total	260.751	268			
I analyze the companies' customer preference before I invest in their stocks.	Between Groups	4.671	4	1.168	1.047	.384
	Within Groups	294.555	264	1.116		
	Total	299.227	268			
I study about the market fundamentals of underlying stocks before making investment decisions.	Between Groups	1.905	4	.476	.454	.769
	Within Groups	276.801	264	1.048		
	Total	278.706	268			
I mostly rely on company historical financial data when making investment decisions	Between Groups	5.405	4	1.351	1.105	.354
	Within Groups	322.707	264	1.222		
	Total	328.112	268			
I mostly rely on company recent financial data when making investment decisions	Between Groups	4.244	4	1.061	1.118	.348
	Within Groups	250.559	264	.949		
	Total	254.803	268			
I value company recent information over historical one	Between Groups	5.552	4	1.388	1.163	.328
	Within Groups	315.206	264	1.194		
	Total	320.758	268			
Combined					.241	..916

To know whether any significant difference exists in mean scores of rationality for different savings, the following null hypothesis has been formed and tested: *“The mean score of rationality of the investor does not remain same for different savings”*. On the basis of the output of the ANOVA, as presented in table7, it is inferred that mean score for only one statement (statements 3) of the scale rationality out of total eight statements are significantly different across the different saving groups at 95 percent level of

confidence, as the p value for this statement is less than 0.05. Results reject to our null hypothesis for this statement. The overall mean score was also compared. Results show that there is no significant difference in mean score between the various groups at 5 percent level of significance with $f = 0.999$ and $p = 0.413$ hence, accept to our null hypothesis that *“The mean score of rationality of the investor does not remain same for different savings”*.

Table 8: Relationship between Factors of Behavioural Finance and Investment Choice

S. No.	Factors of Behavioural Finance	Calculated Chi-Square Value at 5 % Level of Sig.	DF	Tabulated Chi-Square Value at 5 % Level of Sig.
1	Rationality	36.65877	42	58.12404
2	Risk Aversion	46.90975	42	58.12404
3	Predictability	38.17238	42	58.12404
4	Awareness	60.78542*	42	58.12404
5	Confidence	21.44904	28	41.33714
6	Overreaction	103.8005*	42	58.12404
7	Representative Bias	48.85613	56	74.46832
8	Herding	55.8735*	28	41.33714
9	Anchoring	18.17587	42	58.12404
10	Regret Aversion	124.8476459*	56	74.46832
11	Gambler’s Fallacy	41.9863676	56	74.46832
12	Mental Accounting	49.35066384	56	74.46832
13	Confirmation Bias	49.35066384	56	74.46832

To analyse whether there is any significant relationship between the factors of behavioural finance and investment choice or both variables are independent, Pearson’s chi-square test was worked out. The chi square test (alpha critical value) at 5 percent was calculated using spss software to test Null hypothesis as *“There is no significant relationship between the factors of behavioural finance and investment choice of the respondents”*. The outcomes of the chi-square test are present in table 8indicates that out of total 13 factors taken in this study, only 4 factors i.e. Awareness, Overreaction, Herding, and Regret Aversion, show statistically significant relationship with the investment choice, as calculated chi-square value for these factors are more than the critical (tabulated) value. On the basis of these findings we conclude that our sample rejects the null hypothesis for these four factors that *“There is no significant relationship between the factors of behavioural finance and investment choice of the respondents”*. Findings for remaining factors fail to reject our null hypothesis that leads us to conclude that these factors do not show any

significant relationship with the dependent variable ‘investment choice of the investors’.

Relationship between Human Rationality in Investment Decision and Efficient Market Hypothesis

The Relationship between Human Rationality in Investment Decision and Efficient Market Hypothesis was tested by investors Access to information and availability of information. According to the Efficient Market Hypothesis, investing markets are informationally efficient”. All individuals can have access to available information, and as a result, investment news cannot be exploited. However, the specific theoretical model has generated considerable debate in terms of two concepts: access and availability. The rapid movement of events in time, globalized markets and the increasing number of the available investing methods make people incapable of catching up with changes. Information is disseminated through a huge number of different information channels (web sites, blogs, radio,TV), but people are incapable not only of assimilating, but also Efficient Market Hypothesis V/S Behavioural Finance.

Table 9: Efficient Market Hypothesis : Descriptive Statistics

	N	Mean	Std. Deviation
Market Information are easily available to me	269	4.0669	1.06294
I am very fast in reacting with market information	269	3.9219	.90058
The market information helps me a lot in creating my effective portfolio	269	3.7138	.89975
Market information help me in getting desired result	269	3.9145	1.10466
I always take decision on the basis of fundamental and technical analysis	269	3.5911	1.02764
Valid N (listwise)	269		

Table 10: Human Rationality in Investment Decision and Efficient Market Hypothesis: A regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.693	.263		14.041	.000
	rationality	.041	.072	.035	.567	.571
R=.035 ^a , R Square = .001, F=.322, P=..571 ^b						

a. Dependent Variable: emh

The regression analysis indicates (R Square = .001) insignificant positive relationship between the variables and its not near to be conclusive about existence of any relationship between rationality and the efficiency of the market. It shows the behavior of investors which looks inconsistent with efficient markets, even if everyone is quite rational. In the ANOVA test as well as the students'-test the similar conclusion can be explained and the variables seem to be independent. Rational learning can explain another thing that seems inconsistent with efficient markets - the fact that people trade so much even though doing so loses money. This means that market efficiency and investor rationality can be two different things.

Discussion and Conclusion

It's found that behavioral finance influence investors decision of investment. Behavioral factors undeniably play a vital role in decision making process of investor. Cognitive behavior of investors is critical that suggests that human behavior cannot be ignored while making investment decision. Irrationality exists in behavioral finance due to factors of prospect theory and Heuristics. Investor's rational view of investment and efficient market hypothesis plays important role for generating more profit but in developing countries like India it is not possible rational decision due to uncertainty and lake of available information to investors. There are many other factors like cost and time waste or opportunity elimination threat in case for searching rational information for investment. For analysis of different studies its concluded that behavioral finance play important role and have more role in investors decision making than the rational investment decision and more factors of behavioral finance involve in investors consideration while they make decision of investment.

Expected Impact on Academics and Industry

In the light of prevalent uncertainties in the stock market and financial downturns, it is very difficult to access the investment behaviour of individuals. The evidences show repeated patterns of irrationality in the way humans arrive at decisions and choices when faced with uncertainty. This fact contradicts the conventional economic and financial theories presuming that individuals act rationally in the process

of decision making, by taking into account all available information. Here the behavioural finance has a role to play. Behavioural finance is a study of the market based on human psychology. It throws light on what goes behind the minds of individuals when they buy or sell stocks. Hence, it is not always the market uncertainties, but the profit made, or losses incurred by an investor can be attributed mainly to his decision-making abilities. This point can be established with the fact that even the most prominent and well-educated investors were affected by the collapse of the speculative bubble in the 2008 subprime lending crisis, leaving the speculation that there is something fundamentally missing in the models of rational market behaviour. This study aims not to undermine the fundamental theories of investment and human rationality, but combine it with various psychological biases, to govern the investment decision-making process.

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