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STATEMENT OF THE PROBLEM
OBJECTIVES
HYPOTHESIS (ES)
RESEARCH METHODOLOGY
RESULTS & DISCUSSION
FINDINGS
RECOMMENDATIONS/SUGGESTIONS
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PERSONALITY TRAITS AND BEHAVIOURAL BIASES OF EQUITY INVESTORS OF INDIAN CAPITAL MARKET – A STRUCTURAL EQUATION MODELLING AND CLUSTER ANALYSIS

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ABSTRACT

According to the traditional economic theory which is based on efficient market hypothesis, the stock prices can fully reflect all the relevant information of the capital market. Individual investors can only earn normal returns by analyzing available information in the public domain. In reality, investors are likely to make different decisions or they may follow the recommendations of the portfolio managers. Though the individual investors are able to obtain better information about the capital market, their decisions are not completely rational due to the existence of various investment biases. This study sought to determine the relationships among investor personality traits, investor behavioural biases, investment style and individual investor Investment performance at the Indian Equity Market. A Purposive sampling method was used and data was collected from 727 respondents. Statistical techniques such as Factor analysis, Structure Equation Model, Cluster analysis are used. The primary objective of Cluster Analysis is to classify objects into relatively homogeneous groups based on the set of variables considered. This study also serves as a reference point for investors to understand how their behaviour affects their Investment performance and thus learn to avoid those behaviors that negatively impact the value of their investment and also incorporate fundamental information in their buying and selling decisions.

KEYWORDS

behavioral finance, structural equation model, cluster analysis, behaviour biases, personality traits.

JEL CODE

G11

1. INTRODUCTION

Phycology plays an important role in explaining the financial behavior of investors and making the financial decision. As the psychology is involved in investment decision making, cognitive errors influence the financial decisions. When investors face uncertain conditions they make different decisions (Kahneman & Tverskey, 1979). To make profit from the optimal investment decisions they may follow the professional investor's recommendation or collect the related information from other sources. According to Kahneman and Tverskey (1979)'s prospect theory the psychological factors of investors are responsible for the deviation of actual decision making from rationality, Simon's (1957) argument of the bounded rationality also confirmed the prospect theory. Thus investors often tend to make systematic errors that lead toward acceptable investment choices but don't result in optimal decision.

According to standard financial theory, individual investors are perfectly rational. But the idea of fully rational investors that have perfect control on their decisions to maximize their utility is becoming less popular. In efficient markets investors are considered as rational, unbiased and consistent who make optimal investment decisions without the effects of psyche and emotions (Hayat, Bukhari, & Ghufran, 2006). But actually sometimes emotions and psyche influence their decisions, causing them to behave in an irrational way. Behavioral Finance provides the explanation for these psyche and emotions. Behavioral finance is an emerging field that combines the Behavioral or say Psychological aspects with standard economic and financial theories. Behavioral finance explains the irrational behavior of investors that can affect the stock market prices. It examines how cognitive and emotional errors influence investor's decision making process. The contribution of this field does not mean that it has completely neglected the importance of the fundamental work and the proponents of efficient market hypothesis. But it just tries to eliminate the unrealistic assumptions of traditional economic and financial theories in decision making process to make it more realistic.

2. LITERATURE REVIEW

Tversky and Kahneman (1973) introduced availability heuristic - a judgmental heuristic in which a person evaluates the probability of events by availability, that is, by the ease with which relevant instances come to mind. The reliance on the availability heuristic leads to systematic biases which make people think that what they have in mind to do is the most correct despite what the market indicators present. This means that people do not always act rationally nor do they fully utilize all the information available to them.

Kahneman and Tversky (1979) presented a critique of expected utility theory as a descriptive model of decision making under risk and developed an alternative model, known as prospect theory. Expected utility theory is unable to explain why people are often simultaneously attracted to both insurance and gambling. The paper found empirically that people under-weigh outcomes that are merely probable in comparison with outcomes that are obtained with certainty; also that people generally discard components that are shared by all prospects under consideration. Under the prospect theory, individual is risk-averse in relation to a known gain but risk-seeking in an effort to avoid a certain loss. Actual behaviour in a given situation depends on the sequence of events prior to that situation. For example, if an individual win immediately prior to the time of the decision he/she is less likely to take a further gamble. However, if a loss has been incurred recently, then the individual is more likely to take a gamble in the hope of recouping such loss.

Loss Aversion is a pervasive phenomenon in human decision making under risk and uncertainty, according to which people are more sensitive to losses than gains. It plays a crucial role in prospect Theory (Tversky and Kahneman, 1974) (Tversky and Kahneman,1992). A Typical financial example is in investor's difficulty to realize losses.

Mental accounting, a concept first named by Dr. Richard Thaler (1980) and developed by Tversky and Kahneman (1981), attempts to describe the process whereby individuals divide their current and future assets into separate, non-transferable accounts. Mental accounting as a bias plays an important role in decisions made about household budget (Thaler, 1985), transactions in stock exchanges (Shefrin & Statman, 1985) and consumption life cycle (Shefrin & Statman, 1985).

The concept of mental accounting was later developed by Thaler (1999) who identifies three components. The first captures how outcomes are perceived and experienced, and how decisions are made and subsequently evaluated. A second component involves the assignment of activities to specific accounts. The third component of mental accounting concerns the frequency with which accounts are evaluated (daily, weekly, yearly, and so on). Each of the components of mental accounting violates the economic principle of fungibility (money in one mental account is not a perfect substitute for money in another account). Applied to financial behavior the theory considers that individuals assign different levels of utility to each asset group, and this affects investor's investment decisions and other behaviors.

Herding in financial markets can be defined as mutual imitation leading to a convergence of action (Hirshleifer and Teoh, 2003). This is the most common mistake where investors tend to follow the investment decisions taken by the majority. That is why, in financial markets, when the best time to buy or sell is at hand, even the person who thinks he should take action experiences a strong psychological pressure refraining him to do so. The main reason for this is pressure from or influence by peers.

Chen et al. (2007) find that representativeness heuristic is only applicable to individual investors; institutional investors being unaffected by recent past return performance. Hence study hypothesizes that sophisticated investors are less prone to representativeness heuristic.
Anchoring makes investors to define a range for a share price or company's income based on the historical trends, resulting in under-reaction to unexpected changes. Anchoring has some connection with representativeness as it also reflects that people often focus on recent experience and tend to be more optimistic when the market rises and more pessimistic when the market falls (Waweru et al., 2008).
Investors who suffer from self-attribution bias tend to attribute successful outcomes to their own actions and bad outcomes to external factors. They often exhibit this bias as a means of self-protection or self-enhancement. Investors afflicted with self-attribution bias may become overconfident, which can lead to overtrading and underperformance. Keeping track of personal mistakes and successes and developing accountability mechanisms such as seeking constructive feedback from others can help investors gain awareness of self-attribution bias. (Baker and Riccardi,2014)

3. IMPORTANCE OF THE STUDY
This study has the significance for the individual investor, financial planners, financial managers and financial advisors. Investors with any personality trait will gain the knowledge about the respective bias that performs critical role while making financial decisions. By gaining the knowledge about the bias they can take steps so as to avoid the interruption of the biases while making financial decisions. Financial planners, financial managers and financial advisors by gaining the knowledge of the personality traits of the investor easily perceive types of investments that best suits the investor. Following are the objectives of the study.

4. OBJECTIVES
1) To measure the relationship between personality traits and behavioural biases.
2) To identify the relationship between behavioural biases and investment performance as well as reinvestment intension.

5. HYPOTHESES
1) Hypothesis 1: personality traits have no significant influence on Behavioral Biases.
2) Hypothesis 2: Behavioral Effect of trading have no significant influence on Investment Performance and Reinvestment Intention.

6. METHODOLOGY
DATA COLLECTION, QUESTIONNAIRE DEVELOPMENT AND SAMPLE

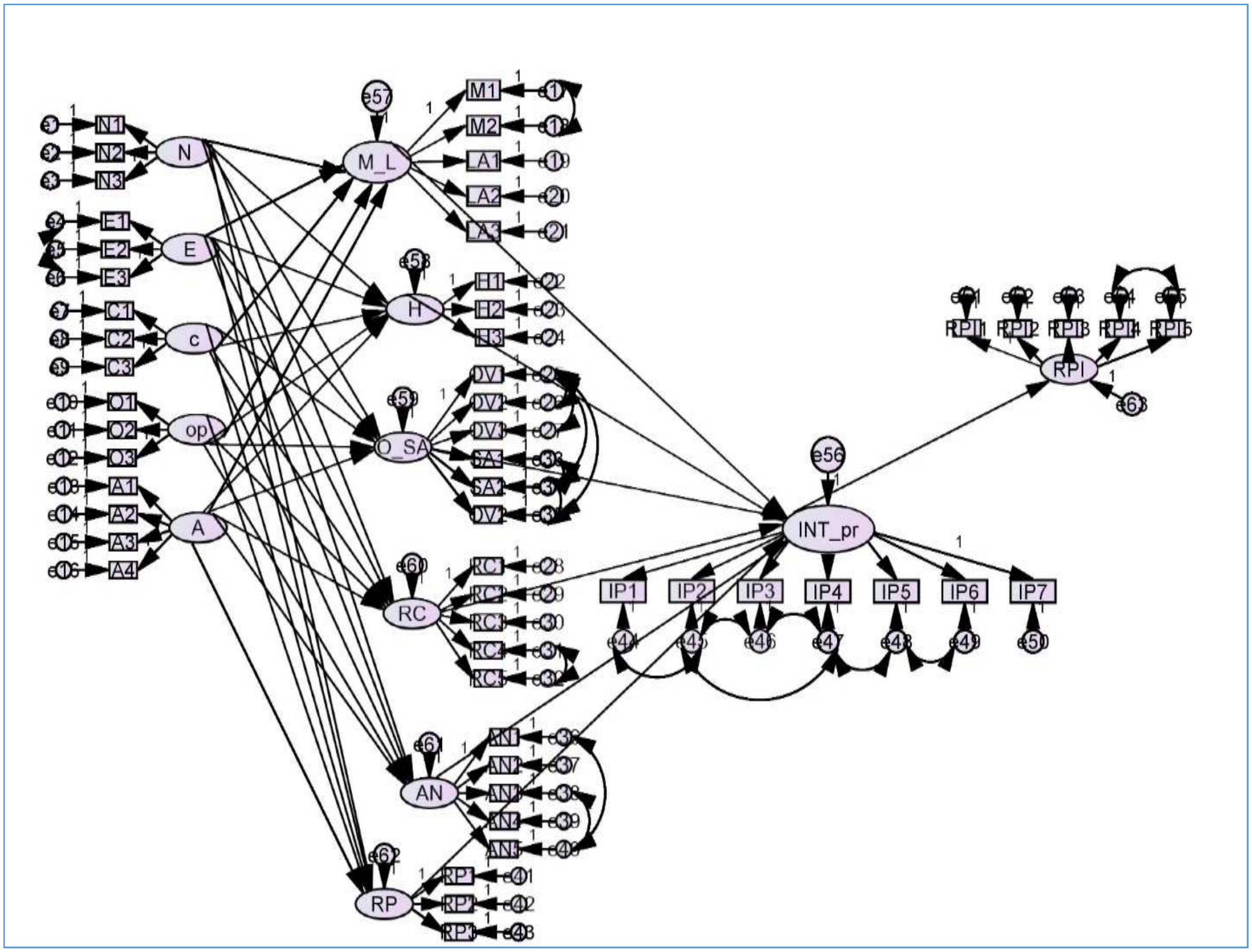
The present study is a descriptive survey in respect of its nature and because of its practical aim. This study performs a cross-section analysis via Structural Equation Modelling (SEM) that constructs a comprehensive path to link behavioural biases with three Investment Performance.
Objective of the study is to find out the relation among personality traits, the Behavioural Biases and Investment Performance as well as Reinvestment Intention. Structure Equation Modelling (SEM) that permit for the simultaneous estimation and testing of relationship between the two or more dependent and independent variables. Causal process is represented by a series of structural equations that can be modelled graphically to help in conceptualization of theoretical framework (Byrne, 2001). For analysis of data SPSS 16 and AMOS 20 are used. For the purpose of study, a survey was conducted from clients and dealers of brokerage house in Surat city.
Our primary data set for this research was information through circulation of questionnaire to 727 clients of brokerage firms from South Gujarat Region, Gujarat, India on their investment behaviour. The investment and behavioural traits are assessed by 5-point Likert scales with end points labelled "strongly agree" and "strongly disagree". Therefore, data from a total of 727 samples were included in construction of the Structural Equation Model[SEM]. Questionnaire was used as a data collection tool.

7. RESULTS OF THE STUDY
The present study has conducted Factor Analysis and Structural equation model (SEM) to identify and portray relationships among variables. This model is used to confirm which behavioural factors have an impact on investment decision of individual investors as well as estimate the regression weights among them to accept or reject hypothesis. Various fit indices were calculated to check the model fit.

7.1) Structure Equation Modeling (SEM)

In this study Structure Equation Modeling (SEM) was used to estimate and test how latent variables and their dimensions are related with each other. After extensive literature review, a hypothetical structure equation model was anticipated and analyzed with the software AMOS 20 version respectively. The research investigated the relationship among Behavioural biases, Behavioural biases' effect on trading and investment performance as well as reinvestment intention. Factors were confirmed applying the factor confirmatory analysis on AMOS 20, all factors were confirmed.

FIGURE 7.1.1: THE STRUCTURE RELATIONSHIP AMONG PERSONALITY TRAITS, INVESTMENT BEHAVIOURAL BIASES, INVESTMENT PERFORMANCE AS WELL AS REINVESTMENT INTENSION



N= Neuroticism**, E =** Extraversion**, C=** Conscientiousness**, O=** openness**, A=** Agreeableness**, M_L =** Mental Accounting & Loss Aversion**, H=** Herd Bias**, O_SA=** Over-confidence & self-attribution Bias**, RC=** Recency Bias**, AN=** Anchoring Bias**, Rp=** Representative Bias**, INT_pr=** Investment Performance**, RPI =** Reinvestment intention

The present study analyses that Model between personality Traits and Behavioural Biases are fit according to the fitness criteria of SEM on the basis of AMOS 20 results.

The structural model fit is very good with GFI (Goodness-of-Fit Index) = 0.948; TLI (Tucker-Lewis Coefficient) = 0.947; CFI (Comparative Fit Index) = 0.951; RMSEA (Root Mean Square Error of Approximation) = 0.044, CMIN/df = 2.422, and p-value = 0.00. These indexes indicate a strong predictive validity of the model for the surveyed data.

Chi- Square = 3342.5

D.F = 1380

Probability Value =.000

TABLE 7.1: FITNESS CRITERIA MODEL

Sr. No.	Fitness Criteria	General rule acceptable fit – According to *Criteria for an accepted SEM (Source: Schreiber, et al., 2006, p.330)*	Result of Present study
1	CMIN/df	<= 2 or 3	2.422
2	GFI	>= 0.95	0.948
3	AGFI	>= 0.95	0.951
4	NFI	>= 0.95	0.952
5	IFI	>= 0.95	0.953
6	TLI	>= 0.95	0.947
7	CFI	>= 0.95	0.951
8	RMSEA	<0.06	0.044

TABLE 7.2: REGRESSION WEIGHTS FOR MODEL

			Estimate	S.E.	C.R.	P	Result
Mental Accounting & Loss Aversion	<---	Neuroticism	.242	.028	8.725	***	significant
Herding Bias	<---	Neuroticism	.244	.029	8.261	***	significant
Overconfidence & Self-Attribution	<---	Neuroticism	-.098	.033	-2.994	.003	significant
Recency Bias	<---	Neuroticism	.173	.025	6.813	***	significant
Anchoring	<---	Neuroticism	.191	.026	7.221	***	significant
RepresentativeBias	<---	Neuroticism	.159	.031	5.183	***	significant
Mental Accounting & Loss Aversion	<---	Extraversion	.029	.018	1.628	.103	
Herding Bias	<---	Extraversion	.080	.025	3.209	.001	significant
Overconfidence & Self-Attribution	<---	Extraversion	.056	.021	2.547	.010	significant
Recency Bias	<---	Extraversion	.028	.021	2.373	.040	significant
Anchoring	<---	Extraversion	.057	.022	2.544	.011	significant
RepresentativeBias	<---	Extraversion	-.006	.027	-.217	.828	
Mental Accounting & Loss Aversion	<---	Conscientiousness	.004	.020	.225	.822	
Herding Bias	<---	Conscientiousness	.043	.027	1.604	.109	
Overconfidence & Self-Attribution	<---	Conscientiousness	.018	.034	.534	.593	
Recency Bias	<---	Conscientiousness	.140	.025	5.552	***	significant
Anchoring	<---	Conscientiousness	.148	.026	5.605	***	significant
RepresentativeBias	<---	Conscientiousness	.154	.032	4.842	***	significant
Mental Accounting & Loss Aversion	<---	Openness	.033	.026	1.260	.208	
Herding Bias	<---	Openness	.146	.023	6.337	***	significant
Overconfidence & Self-Attribution	<---	Openness	.162	.034	4.755	***	significant
Recency Bias	<---	Openness	.181	.026	6.899	***	significant
Anchoring	<---	Openness	.180	.027	6.713	***	significant
RepresentativeBias	<---	Openness	.133	.031	4.283	***	significant
Mental Accounting & Loss Aversion	<---	Agreeableness	-.046	.020	-2.317	.021	significant
Herding Bias	<---	Agreeableness	-.005	.026	-.188	.851	
Overconfidence & Self-Attribution	<---	Agreeableness	.136	.034	4.034	***	significant
Recency Bias	<---	Agreeableness	.136	.025	5.537	***	significant
Anchoring	<---	Agreeableness	.142	.026	5.540	***	significant
RepresentativeBias	<---	Agreeableness	.172	.032	5.434	***	significant
Investment Performance	<---	Mental Accounting & Loss Aversion	.161	.056	2.881	.004	significant
Investment Performance	<---	Herding Bias	.088	.041	2.135	.030	significant
Investment Performance	<---	Overconfidence & Self-Attribution	.068	.026	2.652	.008	significant
Investment Performance	<---	Recency Bias	.275	.068	4.021	***	significant
Investment Performance	<---	Anchoring	.115	.050	2.318	.020	significant
Investment Performance	<---	RepresentativeBias	.153	.050	3.058	.002	significant
Repurchase intension	<---	Investment Performance	.552	.058	9.485	***	significant

Interpretation

Accordingly, in the above Model, the values state personality Traits such as Neuroticism, Extraversion, Conscientiousness, openness and agreeableness were regressed significantly and positively impact on the Investor' Behavioural Biases. Neuroticism have positive and significant impact on Mental Accounting & Loss Aversion Bias with regression estimate of 0.497 with critical ratio of 8.725 (sig=0.000) but Agreeableness has significant and negative impact on Mental Accounting and Loss Aversion with regression estimate -0.094 of critical value of -2.317 (sig=0.021). Neuroticism, extroversion and openness have positive and significant impact on Herding Bias with regression estimate of 0.495, 0.529, 0.554 respectively with critical ratio of 8.261(sig=0.000) and 3.209(sig=0.001) and 6.337(sig= 0.000).

Extroversion, openness and Agreeableness have positive and significant impact on Overconfidence & self attribution Bias with regression estimate of 0.489, 0.592, 0.361 respectively with critical ratio of 2.547(sig=0.010) and 4.755(sig=0.000) and 4.034(sig=0.000). Neuroticism has significant but negative impact on Overconfidence and self attribution Bias with regression estimate of -0.115 with critical ratio of -2.994(sig= 0.003). All personality Traits have positive and significant impact on Recency Bias with regression estimate of and all personality Traits have positive and significant impact on Anchoring Bias.

Except Extroversion personality, all personality Traits have positive and significant relationship with Representative Bias.

The results revealed that null hypothesis **H1** can be rejected and conclude that there is a relationship between personality Traits and Behavioural Biases.

Also in the Model, the values state that Behavioural factors such as Mental Accounting & Loss Aversion (Prospect Theory), Overconfidence and self attribution Bias, Recency Bias, Anchoring, RepresentativeBias and Herding factors were regressed significantly and positively impact on the Investment Performance. Herding Bias and Overconfidence & Self attribution Bias have higher impact on Investment Performance with the regression estimate of 0.467 and 0.499 respectively with Critical ratio of 2.135(sig=0.03) and 2.652(sig=0.008). The Prospect behaviour which related to Mental Accounting _ Loss Aversion has also positively influence the Investment Performance with regression estimate of 0.235 and critical ratio of 2.881(sig=0.004). The Recency Bias has also positively influence the Investment Performance with regression estimate of 0.237 and critical ratio of 4.021(sig=0.000). The Anchoring Bias has also positively influence the Investment Performance with regression estimate of 0.216 and critical ratio of 2.318(sig=0.020). The RepresentativeBias has low positive influence on Investment Performance with regression estimate of 0.164 and critical ratio of 3.058 (sig=0.002). The results revealed that null hypothesis **H2** can be rejected and conclude that there is a positive relationship between the factors of Behavioural Biases with Investment Performance as well as reinvestment intention.

7.3 CLUSTER ANALYSIS: CLASSIFICATION OF SAMPLE INTO HOMOGENOUS GROUPS THROUGH CLUSTER ANALYSIS

The primary objective of Cluster Analysis is to classify objects into relatively homogeneous groups based on the set of variables considered. Objects in a group (cluster) are relatively similar in terms of these variables and different from the objects in other groups (clusters). Cluster Analysis makes no difference between independent and dependent variables, rather the interdependent relationships between the whole set of variables is examined.

First perform a hierarchical method to define the number of clusters 2. Then use the k-means procedure to actually form the clusters

7.3.1 AGGLOMERATION SCHEDULE BY USING WARD'S METHOD FOR CLUSTER ANALYSIS

PART 1: AGGLOMERATION SCHEDULE WARD METHOD

Ward

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	713	714	.000	0	0	483
2	687	688	.000	0	0	3
3	29	687	.000	0	2	5
4	685	686	.000	0	0	5
5	29	685	.000	3	4	6
6	29	684	.000	5	0	101
7	682	683	.000	0	0	8
8	474	682	.000	0	7	9
9	474	681	.000	8	0	230
10	679	680	.000	0	0	11
11	115	679	.000	0	10	13
12	677	678	.000	0	0	13
13	115	677	.000	11	12	15
14	675	676	.000	0	0	15

PART – 2 AGGLOMERATION SCHEDULE WARD METHOD

703	66	77	3435.506	696	676	712
704	27	53	3474.272	99	517	721
705	59	119	3515.772	692	681	716
706	43	100	3557.461	644	658	713
707	25	57	3599.854	702	678	715
708	1	5	3642.395	697	562	717
709	9	12	3687.892	664	682	710
710	2	9	3742.408	699	709	719
711	3	17	3798.028	700	691	722
712	15	66	3853.955	698	703	720
713	29	43	3912.850	701	706	721
714	13	24	3974.681	693	689	718
715	8	25	4037.967	672	707	718
716	45	59	4101.295	686	705	720
717	1	11	4179.317	708	684	725
718	8	13	4263.433	715	714	722
719	2	28	4357.808	710	626	723
720	15	45	4452.881	712	716	724
721	27	29	4549.328	704	713	723
722	3	8	4682.985	711	718	724
723	2	27	4842.291	719	721	726
724	3	15	5019.202	722	720	725
725	1	3	5450.038	717	724	726
726	1	2	6190.968	725	723	0

Above Table shows Step-2 cluster solution is identified because at this step highest percentage change in co-efficient but sample size in two clusters are getting unequal i.e. cluster -1 has sample size of 700 and cluster -2 has sample size of 27. so, such clusters cannot represent proper solution. Step- 3 cluster solution can be also considered because there are also higher percent Age change in co-efficient but same problem of unequal sample size i.e. cluster 1 has sample size of 400, cluster-2 has sample size of 287 and cluster-3 has 40.

At step 4-5 cluster solution has higher changes in co-efficient as compare to 3-4 step cluster solution. So finally, 5 clusters solution is considered for study.

By using Hierarchical cluster analysis, No. of cluster had identified. 5 clusters were identified from 727 cases. After that, Non-Hierarchical cluster analysis method i.e. K- Mean Method was applied. Finally, K-Means Method was done, using the five personality Traits, Extraversion, Agreeableness, Conscientiousness, Openness and Neuroticism,7 Behavioural Biases, Investment Performance, Repurchase intension and the based on the review of literature and similar investor taxonomies, the number of required clusters was taken as five.

TABLE 7.3.2: DISTANCES BETWEEN FINAL CLUSTER CENTERS

Cluster	1	2	3	4	5
1		1.806	1.707	3.615	2.212
2	1.806		1.527	2.648	2.172
3	1.707	1.527		3.238	2.679
4	3.615	2.648	3.238		4.234
5	2.212	2.172	2.679	4.234	

TABLE 7.3.3: ANOVA TABLE FOR CLUSTER ANALYSIS

	Cluster		Error			
	Mean Square	df	Mean Square	df	F	Sig.
Neuroticism	77.457	4	.440	722	175.910	.000
Extroversion	19.464	4	.497	722	39.181	.000
Consciousness	12.882	4	.447	722	28.832	.000
Openness	15.679	4	.479	722	32.743	.000
Agreeableness	26.985	4	.355	722	75.950	.000
Mental Accounting and Loss Aversion Bias	28.348	4	.326	722	86.905	.000
Herding Bias	46.388	4	.449	722	103.229	.000
Overconfident and self attribution Bias	10.595	4	.310	722	34.212	.000
Recency Bias	19.500	4	.370	722	52.661	.000
Anchoring	8.227	4	.297	722	27.672	.000
RepresentativeBias	25.076	4	.529	722	47.426	.000
Disposition effect	87.795	4	.487	722	180.250	.000
Ostrich effect	8.655	4	.410	722	21.101	.000
Status Quo effect	30.017	4	.455	722	65.918	.000
Investment Performance	20.474	4	.310	722	66.018	.000
Repurchase intension	16.071	4	.378	722	42.563	.000
The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.						

TABLE 7.3.4: NUMBER OF CASES IN EACH CLUSTER

Number of Cases in each Cluster		
Cluster	1	148.000
	2	181.000
	3	139.000
	4	86.000
	5	173.000
Valid		727.000

TABLE 7.3.5: FINAL CLUSTER CENTERS

Final Cluster Centers					
	Cluster				
	1	**2**	**3**	**4**	**5**
Neuroticism	Very High	low	moderate	low	low
Extroversion	low	Very High	low	high	moderate
Consciousness	Moderate	Low	Very high	moderate	high
Openness	low	high	moderate	Very high	moderate
Agreeableness	moderate	high	high	moderate	Very high
Mental Accounting and Loss Aversion Bias	high	low	high	low	Low
Herding Bias	Very High	Very High	low	High	Low
Overconfident and self attribution Bias	low	High	Moderate	High	Moderate
Recency Bias	high	high	moderate	high	High
Anchoring	high	High	Moderate	moderate	High
Representative Bias	High	Moderate	moderate	moderate	high
Disposition effect	high	moderate	high	moderate	moderate
Ostrich effect	high	low	high	low	moderate
Status Quo effect	high	Moderate	moderate	low	moderate
Investment Performance	Moderate satisfaction	High satisfaction	moedrate satisfaction	High satisfaction	High satisfaction
Repurchase intension	moderate	high	high	High	Moderate
Researcher's Nomenclature	**Vulnerable investors**	**Gregarious investors**	**Achievement striven investors**	**Adventurous**	**Altruistic / Modesty investors**

Interpretation of the Result

Cluster Analysis, using the K Means Method was carried out on the data. Based on only ten iterations, five final clusters were identified from the initial five groupings. The final clusters were then subjected to one way ANOVA to establish the heterogeneity between the clusters and the homogeneity within the clusters. The minimum distance between the final cluster centres is 1.527 between Cluster 2 and 3, and the maximum distance is 4.234 between Cluster 4 and 5.

The final number of cases in each cluster was calculated as 148 for Cluster 1, 181 for Cluster 2, 139 for Cluster 3, 86 for Cluster 4 and 173 for Cluster 5.

8. CONCLUSION

The conclusion of this study values state that personality traits has significant impact on Behavioural biases while trading in stock market. This study also state that behavioural factors such as Mental Accounting & loss aversion (prospect theory), Overconfidence and self-attribution bias, Recency bias, Anchoring, Representative bias and herding factors were regressed significantly impact on Investment Performance. The results revealed that null hypothesis can be rejected and conclude that there is a relationship between the Behavioural biases Investment performance as well as Reinvestment intention also.

A deep study of the characteristics of the Five Clusters, revealed the following:

CLUSTER 1

Consists of individuals who score Very High on Neuroticism, Moderate Agreeableness, moderate Conscientiousness, low Openness to Experience and low Extraversion. These people are More prone to psychological distress- negative affectivity like anger, hostility, depression, anxiety, feel like something dangerous is about to happen. They however score high on Mental Accounting and Loss Aversion Bias, Recency Bias and RepresentativeBias, even very high Herding Bias but low Overconfidence and self attribution Bias have observed. Such kind of person has confusion and feel helplessness under press. This leads to them for high disposition effect. High neuroticism and low Extraversion so as to avoid the less resulted from the Biases of disposition effect. As such person feel nervousness, in unfavourable situation, he afraid to take any action and prefer to keep position as it as. As low openness and moderate agreeableness, he even does not like to listen negative news for his Investment. So, ostrich effect is high. Such person is moderately satisficed from his Investment Performance and Reinvestment intention. The researcher gives this individual a name, **The Vulnerable Investors**.

CLUSTER 2

Consists of individuals who score very high on Extraversion, high Agreeableness and Openness to Experience, but low on Conscientiousness and neuroticism. These people are seen to be inclined to actively manAge their Investments in an effort to achieve good return. They however have a markedly positive and trusting attitude towards Investment Advisors. He has a positive view of life and people as because of high Extroversion as well as agreeableness. Sometimes, on account of low neuroticism score and low conscientiousness, they have quite lack of self-efficacy. They might be disorganised and scattered in his decision, generally ready to do first thing that comes in mind and says by others without thinking other alternatives. For such personality, Herding, Overconfidence and self-attribution, Recency and Anchoring Biases are highly observed. Mental Accounting and Loss Aversion Bias and Representative Biases are also moderately observed. So disposition effect and Status Quo effect are also observed moderately and very low score of ostrich effect as because of high score of extroversion and agreeableness. Result is also supported by some researches like Extravert people face with psychological Biases of representativeness heuristic, Overconfidence and herd behaviour.

But such person is highly satisficed from his Investment Performance and highly agree for Reinvestment intention. The researcher gives this individual a name, **The Gregarious investor**.

CLUSTER 3

Consists of individuals who score Very High Agreeableness and high Conscientiousness, moderate Openness and neuroticism, but Low on Extroversion. These people are seen to be very Aggressive achievement striving nature, who engage in a lot of active portfolio Management and have focused objectives. They however, have a moderately negative attitude towards Investment advisors or advice from other as because of low Herding Bias. A hyper-active individual, who is very ambitious and is willing to take a lot of calculated, well-researched risk to achieve his objectives. He is a generally going with his calculation for Investment. Mental Accounting and Loss Aversion Bias has been observed with high score but Herding Bias is scored low whereas Overconfidence and self-attribution Bias, Anchoring, Recency, Representative Bias are scored moderately. Disposition effect and ostrich effect are highly observed in Trading while Status Quo effect is scored moderately as Mental Accounting and Loss Aversion Biases score high and Herding Bias scores low. The researcher gives this individual a name, **The Achievement Striven investor.** This kind of investors are moderately satisfied with their Investment Performance as they want more achievement in it. They have high Reinvestment intention also.

CLUSTER 4

Consists of individuals who score Very Low on neuroticism, moderate agreeableness and Conscientiousness but very high both Biases Openness to Experience and Extraversion. These people are seen to be very risk taker and also very active in their Investment approach. They are very social beings and too much communicate with any friends, or family members. However, they hold a fairly positive attitude towards the Investment process as a whole as they have a highly positive attitude towards Investment advisors. They consider themselves as know-it-all's, who are perfectly capable of making their own Investment decisions. However, when things do not go their planned way, they may not be devastated and dejected. Mental Accounting and Loss Aversion Biases are scored at low but Herding, Overconfidence and self-attribution Bias, Recency Bias are scored high. Anchoring Bias and Representative Bias are observed at moderate. Disposition effect has observed with score in Trading whereas ostrich effect and Status Quo effect have scored at low. The researcher gives this individual a name, **The Adventurous Investors.** Such kind of investors are highly satisfied with their Investment Performance and also have high Reinvestment intention.

CLUSTER 5

Consists of individuals who score Very high agreeableness and high on Conscientiousness, moderate on extroversion and Openness to Experience. These people are calculative risk. They are empathetic, helpful and considerate and generally agreeable individuals, who have a moderate level of inertia towards new experiences. However, being high conscientious, they put themselves to the Investment process in a rigorous manner, and also do quite a lot of research for their Investment decisions. They are emotionally strong and not affected to a great degree by the results of their decisions. Recency, Representative and Anchoring Biases are scored at high. Mental Accounting and Loss Aversion and Overconfidence and self-attribution Bias and Herding Bias are scored at moderate level. Disposition effect, ostrich and Status Quo effect are moderately observed. The researcher gives this individual a name, **The Modesty Investors**.

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