

Role of Behavioral Factors in Share Market Investment Decision Making

Yathish Kumar, Radhakrishna Nayak

Abstract---Investment behavior of individual investors in the share market highly influenced to variety of psychological factors. All the psychological factors highly contribute for investors' decision of allocating the surplus financial resources for different instruments and stocks in the stock market. Major psychological bias broadly classified as Heuristic Bias, Prospect Bias, Market Bias and Hardening Bias. But, in this study authors concentrated in detail to investigate the impact of Heuristic bias on the investment decision making of Indian share market investors with special focus on the representativeness, over confidence, anchoring, gambler's fallacy and availability bias. 375 share market investors selected from different geographical areas and different share broking houses to answer structured questionnaire but response received for 310 questionnaires. Also, share broker, financial experts and regular investors informally interviewed to get in-depth knowledge on the issues related for influence of psychology on investment decision of individual investors of share market. Different behavioral variables in this study have been justified on the basis of respondents' age, gender, geography, kind of investor, recourses for investment, amount for investment etc. Indian share market investment lagging behind just with the participation of not more than 6% of the total population due to several issues, one among is failure of both investor and share service providing agencies to understand the influence of behavioral issues and its impact on investment decision. Final justification in the present empirical paper draw by applying different statistical techniques like chi-square test, factor analysis, co-relation analysis and ANOVA techniques of SPSS 20. This research attempt may be highly helpful for both the investors and financial service providers to reconstruct strategies after considering behavioral issues and its impact on investment.

Keywords---Heuristics, Investment, Psychological Factors, Share Market Performance

I. INTRODUCTION

Successful investor will take investment decision after careful analysis of economy, industry and company in the share market investment process. Most of the researchers in the capital market have proved that diversification will results in reduction of risk to the greater extent in the high volatile market conditions. Traditional economic theories assumed that investors behave rationally in the course of investment decision making, due to the fact that people are not always rational, their financial decisions may be driven behavioral preconceptions. Highly volatile market put forward a question mark on validity of efficient market

hypothesis. Behavioral finance is the new stream of study which tries to justify issues faced by traditional investors. Individual investors found to be influenced by many behavioral factors which restrict them acting rationally in the investment decision making process as supported by the traditional economic theories. Individual's behavior and emotional biases shows the direction for financial decisions such as allocation of resources for different securities and other relevant investment decisions.

Major behavioral factors influencing investors' decision-making:

Behavioral finance is based on psychology which suggests human decision process is subject to several cognitive illusions. Illusions are categorized into two groups: illusions caused by heuristic decision process and illusions rooted from the adaption of mental frames grouped in the prospect theory. Apart from this herding and market factors also contributes significantly in the individual decision making.

Table 1: Short Definitions of Major Cognitive Factors of Heuristic Theory

S.No	Factors	Short Definition
1	Representativeness	"The degree to which (an event) (i) is similar in essential characteristics to its parent population, and (ii) reflect the salient features of the process by which it is generated"
2	Availability Bias	"The availability heuristic bias is a mental shortcut that relies on immediate examples that come to a given person's mind when evaluating a specific topic, concept, methods or decisions"
3	Anchoring Factor	"Cognitive bias where an individual depends too heavily on an initial piece of information offered when making decisions"
4	Gambler's Fallacy	"A bias against deciding same way in successive situation"
5	Overconfidence	"A person's subjective confidence in his or her judgments is reliably greater than the objective occurrence of those judgments, especially when confidence is relatively high"

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Dr. Yathish Kumar, Associate Professor, Dept. of Commerce, University College Mangalore, D.K, India (Email: yathish313@gmail.com)

Radhakrishna Nayak, Research Scholar, Dept. of Commerec, University College Mangalore, D.K, India (Email: radhak1036@gmail.com)

Heuristic Theory:

A heuristic is a mental shortcut that allows people to solve problems and make judgments quickly and efficiently. These rule-of-thumb strategies shorten decision making time and allow people function without constantly stopping to think about their next course of actions. Nobel Prize winning psychologist Herbert Simon suggested that while people strive to make rational choices, a human judgment is subject to cognitive limitations.

Prospect Theory:

Prospect theory focuses on subjective decision-making influenced by the investors' value system. Prospect theory describes some states of mind affecting an individual's decision-making processes including: regret aversion, loss aversion, and mental accounting.

Market Theory:

Financial market can be affected by investors' behaviors in the way of behavioral finance. It is believed that the investors may have over or under reaction to price changes or news; extrapolation of past trends into the future, a lack of attention to fundamentals underplaying a stock, the focus on popular stocks and seasonal price changes cycle.

Herding Effect:

Herding effects in financial market is identified as tendency of investors' behavior to follow the others' actions. In the perspective of behavior, herding can cause some emotional biases, including conformity, congruity and cognitive conflict, the home bias and gossips. Investors may prefer herding if they believe that herding can help them to extract useful and reliable information.

Statement of Problem:

Indian share market has covered not more than 7% of the total population. There are thousands of stories who have got huge success in the stock market investment and, in another side people who lost everything including their live even share market investment. Unawareness and fear led India share market investment behind the dark shade. Purchasing and selling activities of the demat account holders completely influenced by their behavioral aspects which finally results in unexpected fluctuations of the share price movements. It is immediate requirement to evaluate, **“what extent different behavioral factors of the investors do influences purchase/selling decisions and performance in the share market investment process?”**

Research Objectives and Questions:

Present research is an attempt to achieve following objectives:

- Applying the behavioral finance to identify the possible behavioral factors of heuristic theory influencing the investment decisions of individual investors of Indian Stock Exchanges.
- Identifying the impact levels of behavioral factors of heuristic theory on the investment decisions and performance of individual investors of Indian Stock Exchanges.

- Recommendations for the individual investors and share broking houses to adjust their heuristic behavior to achieve good investment results.

Some questions are raised to get these research objectives subsequently followed by answering these following questions:

- What are the behavioral variables of heuristic theory influencing individual investors' of Indian Stock Exchanges?
- At which impact level these behavioral factors do influence the individual investors' decisions of Indian Stock Exchanges?
- At which impact level do these behavioral factors influence the investment performance of individual investors of Indian Stock Exchanges?

II. SIGNIFICANCE OF THE RESEARCH:

To the individual investors: Investors behavior may be very useful tool which shows direction for the individual investors to take effective investment decision by understanding the directions of the share market price movement because of behavioral factors.

To the security organizations: This research helps to understand behavioral factors affecting investment decision making and thereby to upgrade prediction and consultation work.

Limitations of the study:

Due to time constraints, this study concentrates only on behavioral factors of individual investor of Indian stock exchanges. Out of four different theories of behavioral factors, only heuristic theory is considered in-depth.

III. LITERATURE REVIEW

Table 2: Literature Review

Foreign Studies:	
Author(s)	Findings
Jagongo Ambrose, (2011)	Herding, market, prospect, over confidence, gamble’s and anchoring ability are having moderate impact on investment decision of investors at the Ho Chi Mihn Stock Exchange, whereas market factor as high impact. Also found three factors are found to influence the investment performance i.e., Herding (Including buying and selling; choice of trading stocks; volume of trading stocks; speed of herding), Prospect (including loss aversion, regret aversion and Mental accounting), and Heuristics (including overconfidence and gambles’ fallacy).
Seetharam et al (2017)	45.6 % of the variance in the extent of investors’ behavior can be explained by the asset familiarity, investment objectives and risk profile of the individual investors. Financial knowledge or understanding about particular investment product and investment objective has a significant impact on investors’ behavior but investors risk profile proved to be not having significant influence on investment decision.
Le Phuoc Luong & Doan Thi Thu Ha (2011)	Research thesis on behavioral factors influencing individual investors’ decision-making and performance, survey on Chi Minh Stock Exchange of Vietnam, tried to give detailed structure on survey to understand impact of behavioral variables and its impact on investment decision-making and performance. All behavioral factors played significant positive impact on Vietnam Stock Exchange. While performance and satisfaction on investment decision taken shown moderate impact on behavioral variables.

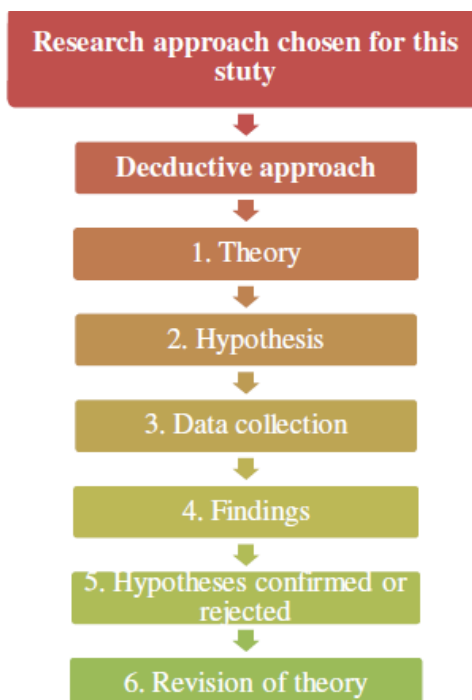
Foreign Studies	
Author(s)	Findings
Dr. V. Raman Nair, Anu Antony (2015)	<ul style="list-style-type: none"> Behavioral finance is not a replacement to the classical finance paradigm, but an alternative solution to explain the market inefficiency and the irrational behavior of investor. A frequency of obvious over-reaction to information is similar to that of under-reaction in terms of EMH by considering anomalies as chance results Considerable number of reasons as to why efficient hypothesis was so generally acknowledged in mainstream finance, at least in academic circles. The six anomalies are (a) Excessive volatility, (b)Risk premium puzzle (c)book to market ratio (d)close end fund discount (e)calendar effect (f) Stock market crash (Rubinstein, 2001). He also emphasized that several psychological assumptions and phenomena were considered in the EMH.
Sudhir Singh (2012)	<ul style="list-style-type: none"> Create awareness of the various human biases of investors and the high costs they impose on their portfolios
Dr.Mahabaleswara Bhatta HS (2010)	<ul style="list-style-type: none"> Intrinsic value being far less than the market value except a few exceptions. Study revealed that shares are overvalued to the greater extent and created bubble in the market which is expected be burst at any time. This paper proved with evidence that people will behave unpredictably and irrationally. Major issues which are unanswerable is The January Effect (Michael and William, 1976), The Winner’s Curse (Robert Thaler, 1988) and equity premium Puzzle. Investors trade both for cognitive and emotional reasons.
Mr.K.Riyazahmed, Dr.MG.Saravanaraj (2015)	<ul style="list-style-type: none"> * Heuristic variables are grouped into two factors: overconfidence gambler’s fallacy and Anchoring ability bias. All heuristic variables have moderate impact on investment decision making. *In the dimensions of prospect, all its three kinds of behavior: loss aversion, regret aversion and mental accounting have their representative variables influence on the decision making of the investors stock investment. *Changes in the stock prices, market information, and past trends of stocks are variables of market that have high influence. * Impact of Herding is high on Investment decision (Others choice - Volume - buying & selling decision of others - Immediate reaction towards other buying & selling decision)

Source: developed for the study (2019)



IV. RESEARCH DESIGN AND RESEARCH METHODOLOGY RESEARCH APPROACH

Figure 1: Research Approach



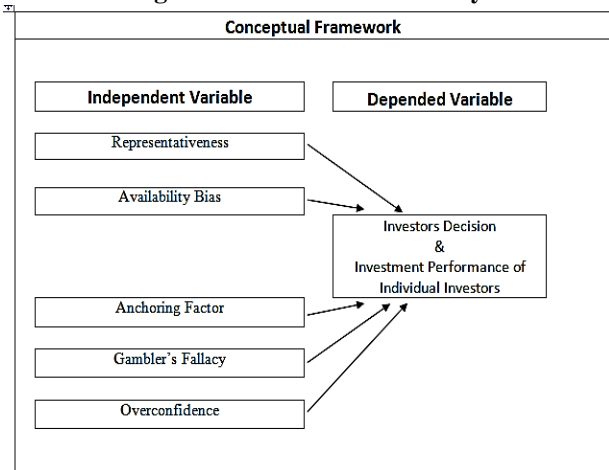
Source: developed for the study (2019)

Research Design and Methodology:

Research design provides framework for data collection and analysis. Since, large sample size required to study at a single time, cross-sectional design is preferred. Cross sectional design allows collecting and analyzing data from more than one case at one single time. The patent of association is then examined by using the collected quantitative or quantifiable data. Cross sectional design most relevant in this study due to an attempt in this study is to describe a common trend of investors' behavior rather than one specific case, and data is collected in a single time period.

Variables under the Study: (Independent and Dependent Variable)

Figure 2: Variable under study



Source: developed for the study (2019)

Data Collection Method and Respondents Selection:

The study is based on primary data that have been collected from 375 randomly selected individual investors of the stock market from different stock broking houses of the Udupi and Dakshin Kannada districts through a structured questioners using 5 point Likert scale ranging strongly disagree to strongly in appropriate areas. In this study data collected during the period January 2018 to March 2019. Questionnaires are sent to respondents using stratified random sampling by distributing 75 questionnaires each among the agents of top 5 share broking houses of Udupi and Dhakshina Kannada district, who are responsible for sending to investors randomly. Finally, 310 properly filled questionnaires are chosen for proposed empirical survey. Pre-determined set of objectives of the study analyzed used through several statistical and econometric tools such as Descriptive Statistics, Cronbach Alpha, Factor Analysis Correlation Co-efficient and Regression Model using SPSS. Also, unstructured discussions placed before share brokers, senior investors to understand the reality behind the investors' behavior in picking the securities in the share market.

Respondents Selection and Response Rate:

Table 3: Response rate from different

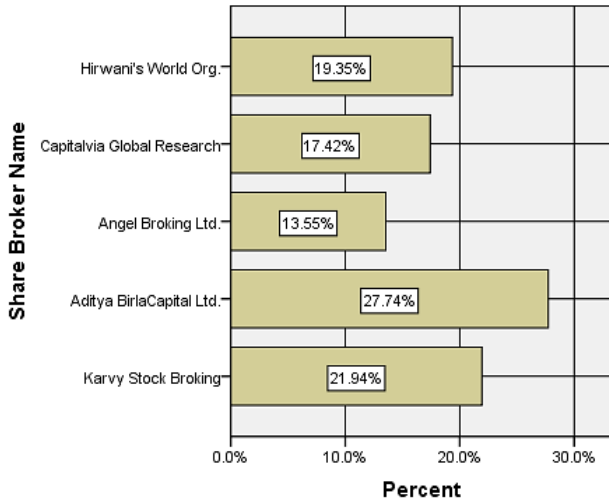
	Company Name	No. Questionnaire Sent	Number of Response Received	Response %
1.	Karvy Stock Broking	75	68	90.67
2.	Adithya Birla Capital Ltd.	75	71	94.67
3.	Angel Broking Pvt. Ltd.	75	57	76.00
4.	Capitalvia Global Research	75	54	72.00
5.	Hirvani's World Org.	75	60	80.00
	Grand Total	375	310	82.67

Source: developed for the study (2019)

It can be observed from the above table 3 that, out of sent 375 questionnaires, 310 samples selected after primary screening. Response rate of the survey is 82.67 % is highly acceptable for generalizing the final findings.



Figure 3: Percentage of samples from different Stock Broking Houses



Source: Developed for the study (2019)

As mentioned in the methodology 75 questionnaires each were sent to five well known stock broking houses and on the basis of final response distribution of samples spread between lowest 13.55% to highest 27.74%.

Design and Measurement of Questionnaire:

Table 4: Personal Information and Other Related Details:

Personal Information	Questions	Types of Measurement
Classifying: Gender, Area, professional background and Stock Broking Agency	Questions 1,4,5 &10	Nominal
Classifying and Raking Order of : Age, Qualification, Average Annual Income, Amount reserved for all kinds of investment, average amount in share market Investment, Type of Investor & Experience in Share Market	Questions 2,3,6,7,8,9 & 11	Ordinal

Source: developed for the study (2019)

Table 5: Verification on Behavioral and Performance Factors

Groups	Dimensions Questions	Question	Measure ment
Heuristic Behavioral Factor	1.Representativ eness	Question 12 -13	6 - Point Likert Scale
	2.Over Confidence	Question 14	
	3.Achoring	Question 15 -16	
	4.Gambler Fallacy	Question 17	
	5.Ability Bias	Question 18-19	

Investment Performance	1.Meeting Return Rate Expectation,	Question 20,	6 - Point Likert Scale
	2.Beating Market return	Question 21,	
	3.Satisfaction in investment decision	Question 23	

Source: developed for the study (2019)

Hypothesis of the Study:

Hypothesis 1:

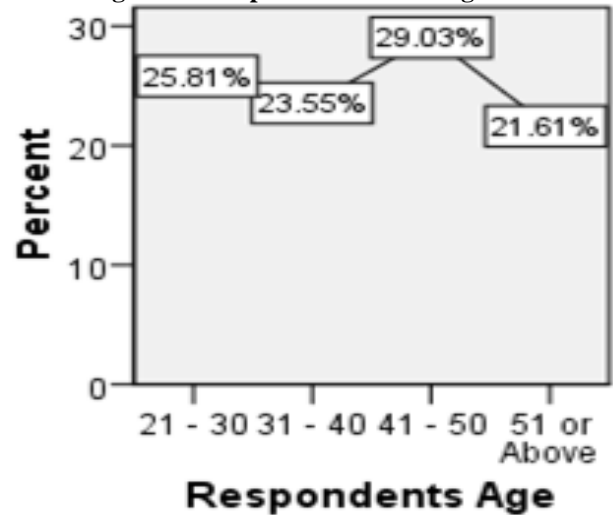
H_0 = There are no latent underlying structure and that all variables of heuristic load equally for investors investment decision.

Hypothesis 2:

H_0 = There is no significant impact of heuristic behavioral variables on investment performance.

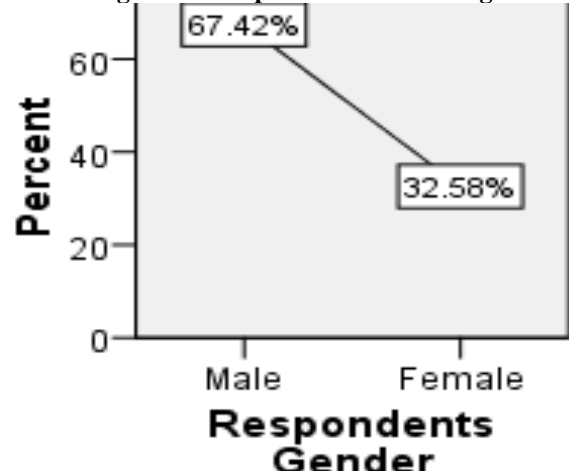
V. EMPIRICAL FINDINGS

Figure 4: Sample distribution of gender



Source: developed for the study (2019)

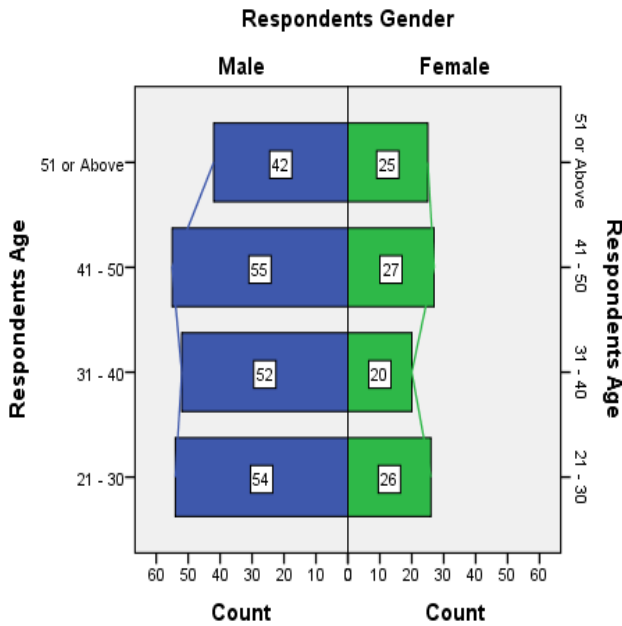
Figure 5: Sample distribution of age



Source: developed for the study (2019)



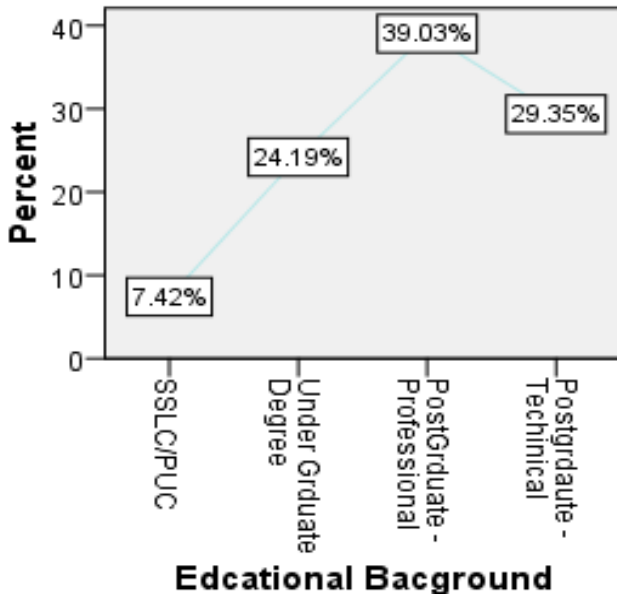
Figure 6: Combined distribution of age and gender



Source: developed for the study (2019)

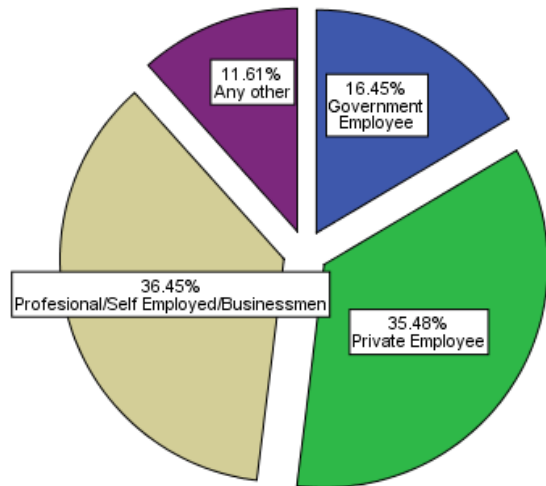
In the above three charts (Figure 4, 5 & 6) respondent’s classification is done on the basis of age, gender and combined classification of both gender and age. Approximately respondents are equally distributed in all age groups, but gender wise big gap was found between male and females to the extent of 67% and 33% respectively.

Figure7: Respondents educational status



Source: developed for the study (2019)

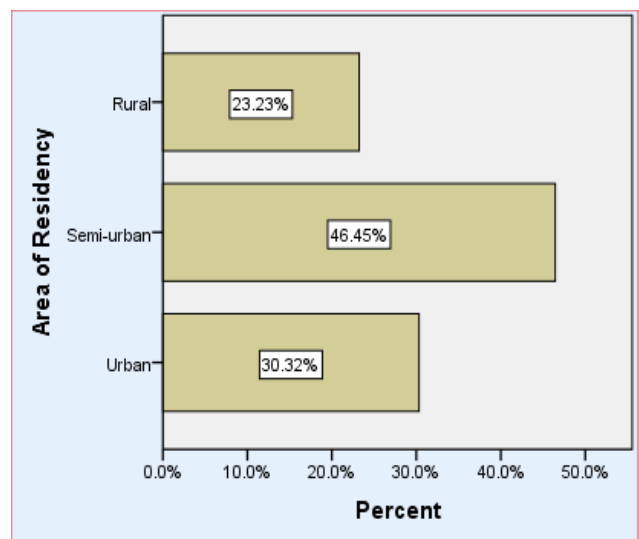
Figure 8: Respondents educational background



Source: developed for the study (2019)

In the above graphical representations (figure 7 and 8), it can be depicted that 40% of the respondents are having qualification of post graduation in professional subjects, whereas 30% of the respondents are from technical higher degree qualification. Private employees and professional self employed/businessman covered to the extent of 70% of the overall demat account holding. Only 17% of the government employees actively involved in share investment activities.

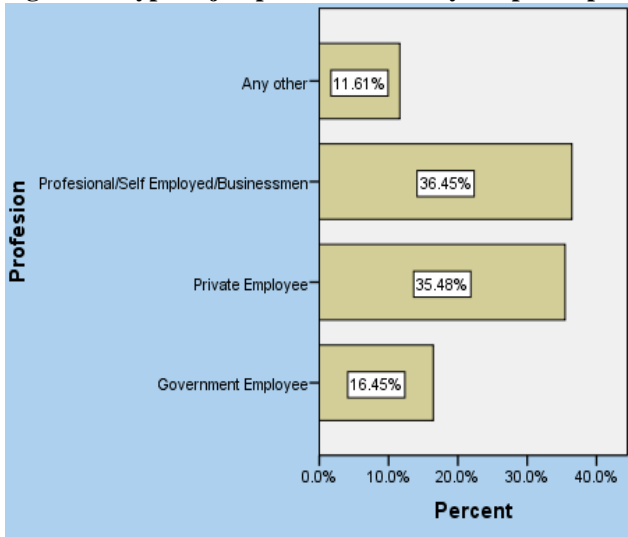
Figure 9: Table showing residential status of respondents



Source: developed for the study (2019)

Above charts (figure 9) shows that more than 75% of the demat account holders either from semi-urban or urban residency, whereas only 23% of the demat account holders from rural area.

Figure 10: type of job/profession held by the participants

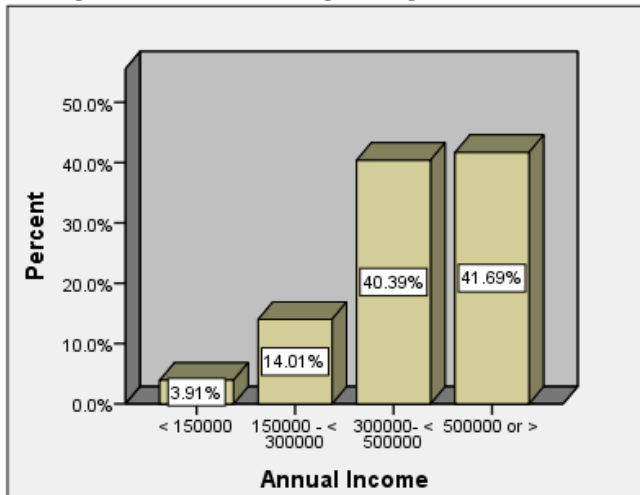


Source: developed for the study (2019)

Figure 10 depict that 16% of the government employees actively involved in share market investment.

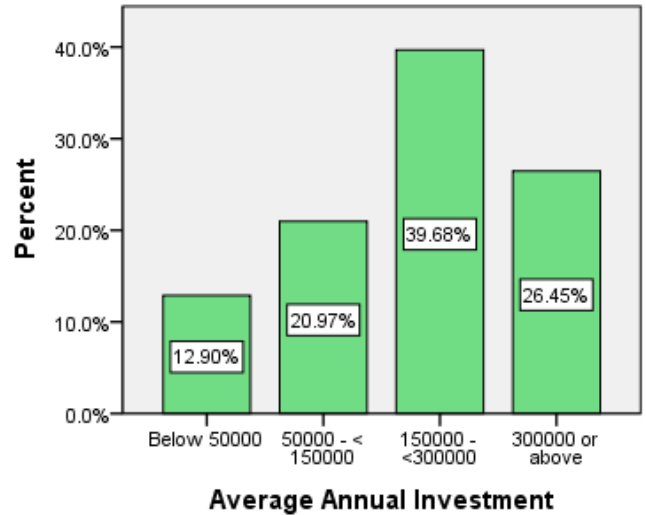
Four charts (figure 11- 14) below discuss the issues of annual salary, average annual investment, amount invested in the share market and experience in the share market investment of the respondents. More than 82% of the respondents have annual income grater then Rs. 3,00,000. Maximum 40% of the demat account holders average amount reserved for investment is between Rs. 1,50,000 to Rs. 3,00,00. Annual average investment in the share market is between Rs. 75,000 to Rs.1,50,000 for maximum 42% of the respondents. Finally average experience for the share market investment is 3 to 6 years for 45% of the investors.

Figure 11: Chart showing average annual income



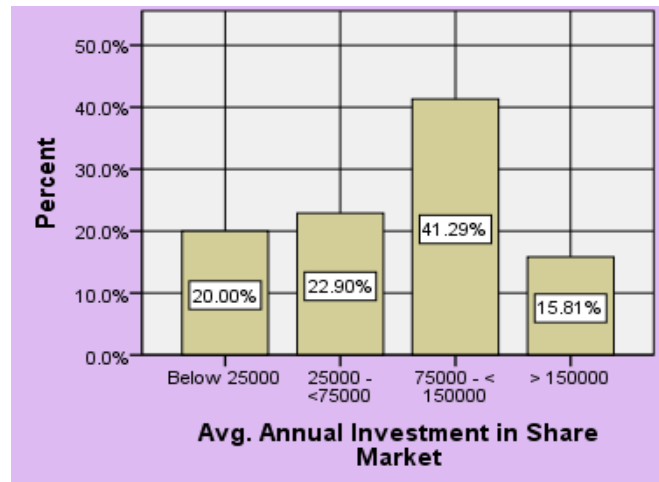
Source: developed for the study (2019)

Figure 12: Average annual investment



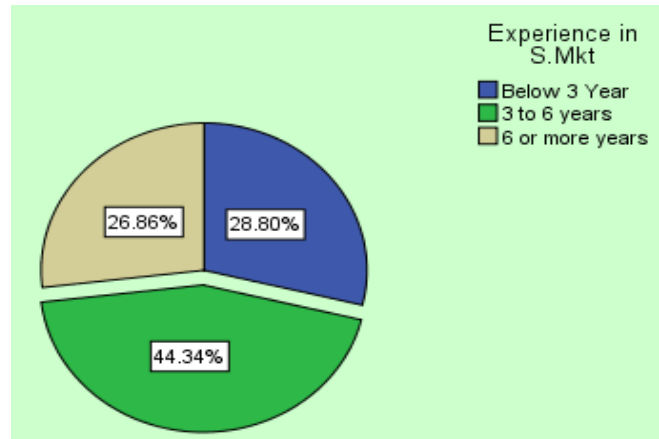
Source: developed for the study (2019)

Figure 13: Average annual investment in the share market



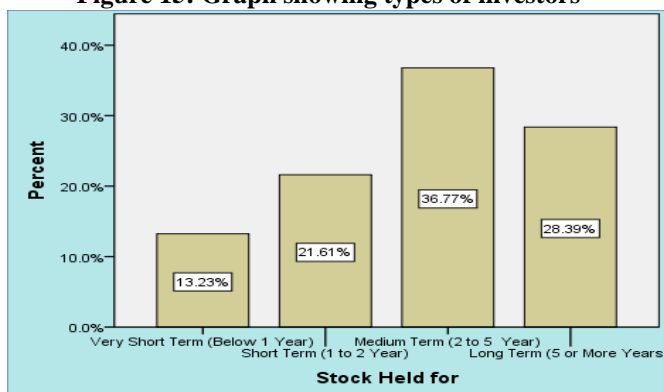
Source: developed for the study (2019)

Figure 14: Participants experience in share market investment



Source: developed for the study (2019)

Figure 15: Graph showing types of investors



Source: developed for the study (2019)

Investment tenure of the investors in share market investment is considered as a base to decide the variable, 'type of investor'. Maximum 37% of the investor will hold their securities for 2 to 5 years which shows the medium term investment characteristic. 29% of the investors are holding their positions for more than even 5 years shows long term attitude of the investors. Maximum people will have the fear of speculation and gambling which resulted negligible number of investors showing interest for short term or very short term investment in the share market. 75% of the demat account holders either from semi-urban or urban residency, whereas only 23% of the demat account holders from rural area.

Factor Analysis of behavioral variables influencing the individual investment decisions and variables of investment performance:

Table 6: KMO and Brtlett’s test results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.701
Bartlett's Test of Sphericity	Approx. Chi-Square	64.676
	df	28
	Sig.	.000

Source: developed for the study (2019)

The data were entered in into Microsoft Excel and imported to SPSS and factor analysis supported by principal components analysis and was conducted to develop archetypes of investors based on heuristics and biases they exhibited. The data were screened first creating a correlation matrix. The results revealed that there were many coefficients in the moderate-to-high range, which encouraged continuing with the factor analysis. The first test, “KMO Test for Sample Adequacy” which resulted in a score of .701. Any value greater than .6 for the KMO test indicates that factor analysis can be used. The next test, Bartlett’s, also indicated that the data were suitable for factor analysis, which a chi-square test significant at .000. Satisfaction of both the test allowed us to move with principle components factor analysis.

The analysis provided evidence (Table 7 and 8) of the underlying structure and the existence of four components (latent variables). The first components explained 17.396% of the variance, second, third and fourth components explained 15.634%, 13.640% and 12.930% of the variance

respectively. Together they explained 59.599% of the variance in our all variable.

Naming our newly discovered components, we look at the Components Matrix and the Rotated Components Matrix. When Varimax rotation is applied there is a very little changes are expected, so we can select either matrix.

Hypothesis 1:

H₀ = There are no latent underlying structure and that all variables of heuristic load equally for investors investment decision.

Hypothesis rejected and it can be concluded that all variables of the heuristic behavioral factors doesn’t contribute equally on investors investment decision making.

Finally it can be predicated that anticipation of returns (Gambler Fallacy), Use of trend analysis (Representativeness Bias), role of previous experience in next purchase (Anchoring Bias) and information from the friends/relatives (Ability bias) plays a significant role in purchasing behavior of individual stock market investor.

Impact level of heuristic factors on the individual investment performance:

Sample mean of each variable will help us to understand the impact levels of heuristic behavioral variables on the investment decision making. In similar, the variables of investment performance are scored by identifying the mean values of the respondents’ evaluation for each variable. Because 6-point scales are used to measure the impact levels of these variables, the mean values of these variables can decide their impact levels on the investment decision making as the following rules:

- Mean values are less than 2 shows that the variables have very low impacts
- Mean values are from 2 to 3 shows that the variables have low impacts
- Mean values are from 3 to 4 shows that the variables have moderate impacts
- Mean values are from 4 to 5 shows that the variables have high impacts.



Table 7: Variables of factor analysis

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.392	17.396	17.396	1.392	17.396	17.396	1.350	16.879	16.879
2	1.251	15.634	33.029	1.251	15.634	33.029	1.219	15.236	32.115
3	1.091	13.640	46.669	1.091	13.640	46.669	1.149	14.365	46.481
4	1.034	12.930	59.599	1.034	12.930	59.599	1.049	13.119	59.599
5	.893	11.167	70.767						
6	.878	10.978	81.744						
7	.823	10.288	92.033						
8	.637	7.967	100.000						

Extraction Method: Principal Component Analysis.
Source: developed for the study (2019)

Table 8: Results of factor analysis

Rotated Component Matrix ^a				
	Component			
	1	2	3	4
Purchasing Hot Stock	-.261	-.047	.756	-.158
Use of Trend Analysis	-.736	.044	-.187	-.002
Out-Perform Through own skill	-.177	.684	-.017	-.074
Previous Exp. in Next Purchase	.215	.089	.681	.188
Forecast Mkt. Price	.288	.559	.080	-.238
Anticipation of Return	.011	-.028	.029	.897
Local stock Purchase	.759	-.026	-.266	.005
Information from friends/relatives	-.048	.653	.012	.350

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 9: Performance analysis

Descriptive Statistics					
	N	Maximum	Mean	Std. Deviation	
Reaching Expected Return	310	6	3.50	1.243	
Out form Market Return	310	6	4.30	1.307	
Satisfaction of Investment Return	310	6	4.15	1.172	
Valid N (list wise)	310				

Source: developed for the study (2019)

From the above table 9, it can be seen that heuristic factors moderately impacts on reaching expected returns of the investors with mean value of agreement 3.50. Both, in terms of outperforming market in achieving actual return and satisfaction in investment decision taken by investor has shown high impact of heuristic factors.

Hypothesis 2:

H₀ = There is no significant impact of heuristic behavioral variables on investment performance.

H₀ = There is no significant impact of heuristic behavioral variables on investment performance.

Table 9 depicts the information on average points of performance of share market investment due to heuristic variable and shows high level impact on all three cases. **Therefore null hypothesis is rejected and it can be concluded that heuristic factors have impact on share market performance and satisfaction level.**

VI. RESULT AND DISCUSSION

Findings of the study:

- a. All age group respondents found to be equal in the share market investment but, ratio of male and female is found big gap.
- b. 3/4th of the demat account holders either from urban or semi-urban areas. Because of lack of knowledge and confidence, still in villages people stick to traditional investment avenues.
- c. 7/10th of the investors in the stock market are having double degree.
- d. Professional master degree holders covered to the extent of 4/10th of the total demat account holdings and coverage from the technical master degree holders is about 3/10th proportion. Degree holders or people with lesser qualification do not believe on the Indian share market.
- e. 7/10th of the total demat account holders are employed either from private employer or having their own business/profession. Lack of government employees' involvement in the share dealing is found to the larger extent.
- f. More than 82% of the respondents have annual income greater than Rs. 3,00,000.
- g. 4/10th of the demat account holders reserved Rs. 1,50,000 to Rs. 3,00,00 for all kinds of investments.
- h. Annual average investment in the share market is between Rs. 75,000 to Rs.1,50,000 for maximum of 42% respondents.



- i. Early half of the demat account holders having experience in the share market to the extent of 3 to 6 years. Only 29% of the individual investors do have experience lesser than 3 years, it shows lack of new entry to the share market investment.
- j. Maximum 37% of the investor will hold their securities for 2 to 5 years which shows the medium term investment characteristic. 29% of the investors are holding their positions for more than 5 years, which shows long term attitude of the investors.
- k. Maximum people will have the fear of speculation and gambling which resulted in only 1/3rd of investors showing interest for short term or very short term investment in the share market.
- l. Anticipation of returns (Gambler Fallacy), Use of trend analysis (Representativeness Bias), role of previous experience in next purchase (Anchoring Bias) and information from the friends/relatives (Ability bias) plays a significant role in purchasing behavior of individual stock market investor. **(Hypothesis 1)**
- m. Heuristic factors have high degree positive impact on share market performance and satisfaction level of share market investment decision. **(Hypothesis 2).**

Recommendations:

Recommendations for individual investors of Indian stock exchanges:

In Indian not more than 7% of the total population is investing in share market due to several reasons. One of the major facts behind this is fear of unexpected movement in share price and risk of loss. Influence of the heuristic behavioral factors on investment decision making and share market performance was verified through factor analysis depicted valuable findings. Recommendations offered to the individual share market investors for better understanding market price movement.

- a. Variables purchasing hot stock by avoiding poor performer and using trend analysis for purchase decision (Representativeness Bias) has shown high degree of positive correlation relations with investment decision making and performance of overall decisions.
- b. Over confidence will not result in outperforming the market performance.
- c. Variable use of previous experience in next purchase of (Anchoring bias) yielded high degree of positive correlation with investment decision and performance, but this vice-versa in case of variable forecasting market price based on recent stock price (Anchoring Bias).
- d. Strong positive correlation was found in respect of variable forecasting return of good or poor market conditions. (GamblerFallacy).
- e. Variable reference from friend or relatives while purchase decision(Ability Bais) as shown high degree positive correlation, but purchasing local stock (Ability Bias) doesn't resulted in positive impact.

An individual should refer these points before moving for actual investment thereby he can tackle negative issues rising because of heuristic behavioral factors.

Recommendations for Stock Brokers:

Immediate requirement of the stock broking houses to understand the inner minds of investor and suggest them in a way, which will results them with high positive return. Because of huge competitions among the agencies, it is must to formulate strategies which will consider behavioral aspects and its role on investment decision as well as on investment performance.

Chances of further research:

In this study importance is given only on impact of heuristic behavioral factors on investment decision making and on performance of share market. This study could be extended for other remaining factors like prospect theory, market theory and hardening effects.

VII. CONCLUSION

This study reaches final stage by answering all the questions raised during the in chapter 1.3. Here with we would like to conclude by presenting main points to answer the research questions.

What are the heuristic behavioral factors influencing individual investors' decision in Indian stock exchanges?

There are five behavioral variables of heuristic behavioral factors that impact the investment decisions of individual investors of Indian stock exchanges: Representativeness, Over Confidence, Anchoring, Gambler Fallacy and Ability Bias. The finding suggested that Hypothesis 1 is rejected and concluded that all variables of the heuristic factors are contributing not equally for investors' investment decision making.

At what impact level heuristic behavioral factors influence the individual investors' decisions in Indian share market?

Except over confidence, forecasting market price based on recent stock price of Anchoring variable and local stock purchase from ability bias shown high degree of impact on investment decision making.

At which impact levels do the behavioral factors influence the investment performance of the individual investors of Indian stock exchanges?

It was found in the study that all heuristic factors played significant role in the investment performance of the individual investors of stock exchanges. Mean value of stock market is found to be highly acceptable due to highest mean value.

The study draws over all conclusions on the heuristic factors, its influence on investors' investment decision making and performance of share market investment.

REFERENCES

1. Allen, D. W. and Evans, A. D. (2005). Bidding and overconfidence in experimenting financial markets. *Journal of Behavioral Finance*, 6 (3), 8–120.
2. Ali, N. A., Zairi, M. and Mahat, F. (2006). Quality HR-TQM Model in Service Context.
3. Anderson, J. C., & Gerbing, S. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
4. Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327> Staff paper, University of Putra Malaysia.

AUTHORS PROFILE



Dr. Yathish Kumar (Guide), Associate Professor at Department of Commerce, Mangalore University.



Radhakrishna Nayak, Research Scholar (2017 Batch), Mangalore University, D.K. Published 15 papers in UGC approved ISSN journals. Attended and presented 12 international conferences held in different places of state and outside states.