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RELEVANCE OF BEHAVIORAL FINANCE IN INVESTMENT DECISION OF INDIVIDUALS

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ABSTRACT

Behavioural finance proclaims that instead of being rational and calculating, people often make investment decisions based on affections and cognitive biases. It helps us understand how investment decisions are greatly influenced by emotion, biases, and cognitive restrictions of the human mind in processing and responding to information. It is necessary to remain rationale instead of being emotional, prejudiced, and biased while investing and thus, behavioral finance delivers a blueprint to guide people in making better, more rational decisions of investment matters. This research is being conducted to analyse the relevance of behavioral finance in investment decision of an individual. The data of 485 respondents is collected through Likert based structured questionnaire on behavioural influences related to Investment Decision. Responses are analysed through descriptive statistics and bi-variate analysis using SPSS, AMOS and Smart PLS. Results of statistical analysis- EFA, CFA and SEM demonstrate that investment decision of people is highly influenced by their psychological components which can lead them towards irrational investment decisions. Overconfidence, Representativeness, Self-Attribution Bias, Familiarity and Representativeness are the major psychological determinants affecting investment behaviour as per the statistical results of this research. Moreover, the relevance of these psychological elements varies as per the demographic profile of an individual as found in non-parametric test results. Due to these psychological components, people don't remain balanced while selecting different investment avenues for their investment. They assign less or more importance to the specific component of investment decision which can hinder the growth of their portfolio return. Thus, this study on the relevance of behavioral finance while planning for investment would help financial planners and investment advisors in suggesting rationale and customized portfolio of investment to their clients by convincing them to avoid mistakes that will decrease their personal wealth.

Key words: Overconfidence, Representativeness, Self-Attribution, Familiarity Representativeness

I. INTRODUCTION

It is being proved through many reaches that investors do not play rational always while investing their money. People get confused when the greed, risk and uncertainties regarding investment decision immerses them. Neither people are always rational nor markets are always efficient. Researches also shows that many investment decisions are based on emotions and not on logic. Behavioral finance is the study of both psychology and sociology on the behavior of the financial entities and the subsequent effect on the finance and investment. Hence, Behavioral Finance explains the reasons behind irrationality of investors and inefficiency of markets. Chaudhary, A. K. (2013)

Behavioral finance is a comparatively new arena that pursues to associate behavioral and cognitive psychological theory with conventional economic and finance to explain the reasons behind irrationality and biases in the financial decisions of people. Forbes (2009) has demarcated behavioral finance as a science concerning the influence of psychology on financial market. This interpretation highlights that the individuals are affected by emotional factors like cognitive biases in their decision-making, instead of being rational and wealth maximizing.

Thus, behavioral finance is the application of scientific research on the psychological, social, and emotional aids in selection of investment avenues and building of investment strategies. It also studies the psychological and sociological issues that influence the investment decision making process of investors.

(Lusardi & Mitchell, 2011) promoted that financial and investment planning simply is not the saving of money but it requires a greater acquaintance of finance, risk and return calculations, determination of objectives for which investment has to be done. It is a constant process of investigation and execution of strategies suitable to individuals' financial requirements. Financial planning focuses on the increments of individuals' hard-earned money to utilize it in the emergencies and to meet the future needs. The increment in money depends upon the investment planning of individuals. (Chatterjee & Zahirovic-Herbert, 2010) recommended that while deciding for investment, people must concentrate on availability of different investment avenues with their features.

As per individuals' risk-taking capacity and income, they should invest in appropriate investment options. The choice of investment instrument should be according to their requirement of return to satisfy their future goals and expenses. One should get the assistance from formal advisors like financial service providers and investment consultants instead of short cuts, emotions, and cognitions. Also, they should contact for informal assistance from friends, relatives, colleagues etc. while making the portfolio of investment options. Due to lack of knowledge and awareness, Investors do have behavioural biases while investing money for future. These biases can be overcome or removed by creating awareness about various investment avenues with their advantages and drawbacks.

(Dash, 2010) supplemented in the existing research by saying, In the modern era, Indian investor has become more mature and has developed an analytical and logical talent to take rational decision suitable to their future requirement and risk-taking capacity. Risk averse investors select more of debt instrument where in risky investments like equity are selected by risk takers. They also try to overcome different behavioural biases by consulting different reference groups of family members and professional advisors. This helps in taking decision in overconfidence and contracted framing.

II. LITERATURE REVIEW

Kumar, S., & Goyal, N. (2016) interpreted that overconfident people overreact to private information instead of publicly available information. They over trade even if expected returns are less and misplace their hard-earned money. These kinds of tendencies are more applicable to male as compare to female investors. Also, people intimate the strategies followed by others without comparing all other important and situational differences among people. They blindly follow others considering them their representatives. This type of tendencies is usually adopted based upon investment avenues available in the market. Apart from this, there exists a difference in influence and relevance of cognition as per demographic profile of people consisting of age, income, gender, education etc. people with demographics behave differently in line with their investment strategies.

Overconfidence make people too much confident about their knowledge and confidence that they cannot predict the risk related to particular investment avenue. People do not realize the irrationality inducing due to overconfidence and thus evade their gain by taking undesired overconfident decision. Kumar, S., & Goyal, N. (2015)

Individuals' risk perception and risk tolerance greatly influences their selection of investment avenue. People with low-risk perception go for safe investment unlike risky investment of high-risk perceiver. Also, an individuals' risk-taking capacity is relevant to their choice of investment option. But both these decisions are based on cognitions of individual as per information received and interpreted by them. Apart from this, Overconfidence also is relevant in investment pattern as people with more confidence take more risk and vice-versa. Thus, at times, these cognitions led towards wrong selection of investment avenue which increases the possibilities of less return than possible one. Ainia, N. S. N., & Lutfi, L. (2019)

Adil, M., Singh, Y., & Ansari, M. S. (2022) found that the impact of various behavioral aspects like risk perception and tolerance, overconfidence etc. varies depending upon the gender of an investor. Male are more overconfident and risk tolerant while investing as compare to women. Also, these psychological influences are connected to financial literacy of investors. People with more financial literacy are less influenced by cognitions and vice versa.

Shukla, A. (2021) stated that all investors do not suffer from all the behavioural biases simultaneously. An individuals' own experience in past, information, personal and social influences eventually affect the consideration of cognitive elements affecting investment decision. As situational context of people changes, their reflection of behavioural factors also changes. Thus, there is no static rule of thumb while determining the influence of psychological component affecting their investment decision.

An investors' investment decision is impacted by its own investment attitude, social norms, behavioural control, and past experience. These psychological factors directly influence an individuals' investment strategy as they develop the familiarity with them. It induces a sense of relatedness and relevance for an

investor and so investors are being more confident cannot avoid the deliberation of them. Raut, R. K., Das, N., & Kumar, R. (2018)

(Statman, 2003)stated, it is essential to contemplate the whole range of investment option for improved return. This strategy expands the portfolio and minimizes the risk of investment. Also, people can choose churning within the portfolio as per the time and money requirement. This permits an investor substituting between various investment instruments as per the situation. So, one should not focus only on return requirement due tohigh-riskassociation between risk and return. People should not invest in risky assetssimply based on cognitive components, especially while planning for future which is uncertain. Thus, one must draw a specific attention towards investment and determine an appropriate investment pattern while allocating money. In 21st century though information source and frequency of information has increased yet it has not improved investment and saving pattern of individuals significantly. There is no transformation in human tendency and nature that were years ago. Today's investor like 19th century's investor, wants safety with richness, wants to spend yet want to save, wants joy of pride but do not want to regret. Such psychology of investors makes it difficult to execute the needed investment strategy even in the presence of required money and professional advice.

(Benartzi & Thaler, 2007) explicated that balance between risk and return require a proper planning and consideration of all probable investment options. But due to less knowledge and other psychological elements, people do not realize it. Also, investors want easy and simple strategies of investment. They do not revise their portfolio of investment once money is invested. Moreover, the selection of investment avenues should be based on one's risk-taking capacity and accessibility of money but while capitalizing money people do not do this required exercise and simply follow the advice that is easily available. Furthermore, people also go for mental accounting while accumulating and contributing money for the later life and thus have lack of money in future. So, it has become mandatory for an individual to take investment planning seriously and not do select short cuts while taking this crucial decision of their life.

(Muradoglu and Harvey,2012) reviewed that it is common practice of individuals to select the investment avenue with which they are familiar and to avoid which they cannot examine. Also, people choose the option which is accepted by many

individuals to avoid risk. Investors do follow to group while investing money. They consult their friends and relatives to seek their involvement and attitude towards various investment avenues. Instead of consulting financial service providers they join the plan accepted by their colleagues, friends, and relatives leading them towards anchoring bias.

Mentality plays very important role in shaping the attitude towards saving of individuals. Those who have clear idea about their goals and future requirements of money can always have positive attitude towards investment. Also, people prefer a smaller number of goals for efficient financial planning and they believe that it is difficult to plan for more objectives. Hence, individual should have less but very well-defined objectives of investment. (Hershey,M. Jacobs-Lawson, McArdle and Hamagami,2007)

III. RESEARCH METHODOLOGY

Objective

The study aims to analyse the relevance of Behavioural Finance on investment decisions of individuals.

Significance

This would help financial planners and professionals while designing the customized portfolio of investment. They would be able to correct and convince their clients in taking rational decisions over affectionate and illusion-based decision for better return.

Type of Research and Data Collection

Descriptive Research is used to describe the behavioural aspects influencing investment decisions of individuals. The information related to psychological factors and behavioral elements is collected using Primary data collection mode of structured questionnaire, using Likert Scale. Secondary Datais collected through Newspapers. Business Magazines, Internet.

Sample Size and Techniques

Data is collected through Non-Probability Convenience Sampling method. Data from 485 individuals is collected in the study.

Analytical Tools and Techniques

Data is analyzed through descriptive and inferential statisticusing SPSS, AMOS and Smart PLS. Advance statistical techniques- Factor Analysis, CFA and SEM is used to examine the responses of people.

IV. RESULTS and DISCUSSIONS

Non-Parametric Test Results

<Table 1>

As shown in the table 1, the investment decision varies as per individuals' age, education, income and availability of other income sources where in gender has no impact. Also, it is found from the non-parametric test results that people with varied demographic profile shows different behavioual consideration while taking invesment decision.

Factor Analysis

The KMO Value as shown in the table 2 is more than 0.7 indicating the acceptable adequacy of responses and Bartlett's significant value of 0.000 indicates the strong relationship among the variables of identified factors. Also, the total variance explained by the identified factors extracted is more than 60%signifying the consistency of data and data collection process.

CFA (Confirmatory Factor Analysis)

CFA is used to test how well the measured variables represent the number of constructs. Table 3 shows the correlation among latent variables of CFA indicating the strong consistency among the variables of identified factors.

Model fit assessment:

Constructs' indicator loading:

Loading above 0.7 is indicated as accepted level of reliability. In this research all the construct items have loading of approximately 0.7 or more and thus, they are meeting the criteria of reliability.

Construct Reliability and Validity:

(A) Composite Reliability (CR) Check:

Higher values of CR is the indication of high reliability. The standard value of CR between 0.6 to 0.7 is considered as acceptable level. As shown in the result table, all the values of CR are between 0.8 to 0.9 admitting the good statistical results.

(B) Internal Consistency Check (Cronbach Alpha):

Alpha is measure of internal consistency of items and has threshold limit of 0.7. All the constructs of the research as shown in the table have Alpha values more than 0.7 explaining the pleasing outcome of internal consistency of items.

(C) Construct Reliability (Rho):

Rho is the measure of Construct Reliability and should be greater than 0.7 and it lies between Cronbach Alpha and Composite Reliability. Both these conditions are met in the result of this research as shown in the table.

(D) Convergent Validity Check:

Convergent validity is the degree to which the construct converges to explain the variance of its items. It is measure through average variance extracted (AVE) for all items on each construct with acceptable value of 0.5 or more. AVE value in above table shows that all the constructs are meeting the threshold limits of 0.5 and thus approving the convergent validity of constructs.

Discriminant Validity Check:

Discriminant Validity shows the extent to which constructs are distinct from each other. It is measured through two criteria. (I) Fornell and Larcker and (II) HTMT criteria.

(A) F n L (Fornell and Larcker) criteria:

Fornell and Larcker (1981) proposed the traditional metric and suggested that each construct's AVE should be compared to the squared inter-construct correlation (as a measure of shared variance) of that same construct and all other reflectively measured constructs in the measurement model. In the table 5 value of Fornell and Larcker for constructs of this research.

It is clearly observed from the statistical results of Fornell and Larcker that constructs are fulfilling the condition criteria and distinguishing the constructs from each other.

(B) HTMT(Heterotrait-Monotrait) Criteria:

Discriminant validity problems are present if HTMT values are high than the standard values of 0.85 to 0.90.

The results in the table 6 show that, all the constructs have HTMT value less than the standard range of 0.85 to 0.90. Hence, discriminant validity also is achieved for the measurement model of this research.

SEM (Structural Equation Modelling)

SEM is executed using Smart PLS. Further analysis is as below.

1. Coefficient of Determination (R square):

R square measures the explanatory power of factors in the model. The standard range of R square is 0.25, 0.50 and 0.75 explaining the weak, moderate, and substantial explanatory power of various factors in the table 7 represents the explanatory power of specific construct of the present study.

As shown in the table 7, the identified factors have moderate to good explanatory power in the model developed.

2: The blindfolding-based Redundancy measure Q square:

The benchmark values of Q square are 0, 0.15 and 0.35 depicting the small, medium, and large predictive relevance of latent variables on dependent variable. As shown in the table 8, Q square value of DV is 0.401824> 0.35, indicating the large predictive relevance of identified factors on the investment decisions.

3: Observation of Statistical Significance and relevance of path coefficient determination.

The last step of SEM analysis requires an analysis of statistical significance and relevance of path coefficient determination. The lower values of RMSE (Or MAE) in comparison with the values of Q square value is the indication of high effect. The same results are found in this study as shown in the table 9.

V. CONCLUSION

From the above results, it is determined that psychological variables in one or the other way affect investment decision. These variables can be grouped into numerous factors. The influence of factor varies as per the demographic profile of an individual. Thus, it is necessary for an individual to concentrate on the compatibility of these factors intheir own circumstances.

VI. SCOPE FOR FURTHER STUDY

In the current study, the broad components of behavioural finance are identified. It would be interesting and helpful if further study carries in-depth research on individual elements of major behavioural cognitions like Overconfidence, anchoring and self-attribution. It would help in solving the problem of biased decision by overcoming the specific psychological error occurring in investment.

References

Ainia, N. S. N., & Lutfi, L. (2019). The influence of risk perception, risk tolerance, overconfidence, and loss aversion towards investment decision making. Journal of Economics, Business, & Accountancy Ventura, 21(3), 401-413.

Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behaviour biases and investment decision?. Asian Journal of Accounting Research, 7(1), 17-30.

Benartzi, Shlomo, & Thaler, Richard. (2007). Heuristics and biases in retirement savings behavior. Journal of Economic perspectives, 21(3), 81-104.

Chaudhary, A. K. (2013). Impact of behavioral finance in investment decisions and strategies–a fresh approach. International journal of management research and business strategy, 2(2), 85-92.

Chatterjee, Swarn, & Zahirovic-Herbert, Velma. (2010). Retirement planning of younger baby-boomers: who wants financial advice? Financial Decisions, 22(2), 1-12.

Dash, Manoj Kumar. (2010). Factors Influencing Investment Decision of Generations in India: An Econometric Study. Int. J. Bus. Manage. Econ. Res, 1, 15-26.

Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., &Hamagami, F. (2007). Psychological foundations of financial planning for retirement. Journal of Adult Development, 14(1-2), 26-36.

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making–a systematic literature review. Qualitative Research in financial markets.

Kumar, S., & Goyal, N. (2016). Evidence on rationality and behavioural biases in investment decision making. Qualitative Research in Financial Markets, 8(4), 270-287.

Lusardi, Annamaria, & Mitchell, Olivia S. (2011). Financial literacy and planning: Implications for retirement wellbeing: National Bureau of Economic Research.

Muradoglu, G., & Harvey, N. (2012). Behavioural finance: the role of psychological factors in financial decisions. Review of Behavioural Finance, 4(2), 68-80.

Raut, R. K., Das, N., & Kumar, R. (2018). Extending the theory of planned behaviour: Impact of past behavioural biases on the investment decision of Indian investors. Asian Journal of Business and Accounting, 11(1), 265-291.

Statman, Meir. (2003). A century of investors. Financial Analysts Journal, 59(3), 52-59.

Shukla, A. (2021). Behavioural Biases and its Implications on Investment Decision-Making: A Literature Review. PalArch's Journal of Archaeology of Egypt/Egyptology, 18(10), 311-319.

List of Tables

Table: Table 1 - Mann whitney and Kruskal Wallis Test Results

	Investment Decision	Over Confidence	Anchoring	Self Attribution	Represent-ativeness
Age	0	0.016	0.16	0.008	0.082
Gender	0.069	0.943	0.431	0.844	0.019
Education	0.003	0.009	0.192	0.671	0.058
Income	0	0	0.014	0	0.106
Other Income Source	0	0	0.043	0	0.078

Table 2-Factor Analysis

KMO Measure of Sampling Adequacy.	Bartlett's Significant Value.	Total Variance Explained
0.844	0	70.799%

Table 3-Latent Variable Correlations

	Investment Decision	Over Confidence	Anchoring	Self Attribution	Represen tativeness
Investment Decision	1	0.791547	0.685935	0.786259	0.805008
Over Confidence	0.791547	1	0.731214	0.858617	0.791222
Anchoring	0.685935	0.731214	1	0.76179	0.732716
Self-Attribution	0.786259	0.858617	0.76179	1	0.83813
Representati veness	0.805008	0.791222	0.732716	0.83813	1

Table 4-Reliability and Validity Results

	Alpha	Rho	CR	AVE
Investment Decision	0.824409	0.825558	0.835262	0.546702
Over Confidence	0.788743	0.791246	0.808993	0.50035
Anchoring	0.706363	0.708228	0.767166	0.568632
Self-Attribution	0.823441	0.824653	0.833683	0.501891
Representativeness	0.765422	0.775406	0.796951	0.556514

Table 5-constructs' F n L results

	Investment Decision	Over Confidence	Anchoring	Self Attribution	Represent-ativeness
Investment Decision	0.739393				
Over Confidence	0.691547	0.757354			
Anchoring	0.644935	0.731214	0.754077		
Self-Attribution	0.586259	0.658617	0.74179	0.708443	
Represen-tativeness	0.575954	0.631523	0.603256	0.631971	0.745999

Table 6-HTMT of construct

	Investment Decision	Over Confidence	Anchoring	Self Attribution	Represen-tativeness
Investment Decision	1				
Over Confidence	0.866453				
Anchoring	0.899642	0.860122			
Self-Attribution	0.885568	0.86917	0.877581		
Represent-ativeness	0.87137	0.85873	0.85509	0.858294	

Table 7-R square Values

	R square	R square adjusted
Over Confidence	0.737223	0.734541
Anchoring	0.580324	0.576042
Self-Attribution	0.535781	0.531044
Representativeness	0.702462	0.699426

Table 8-Q square value (Blindfolding)

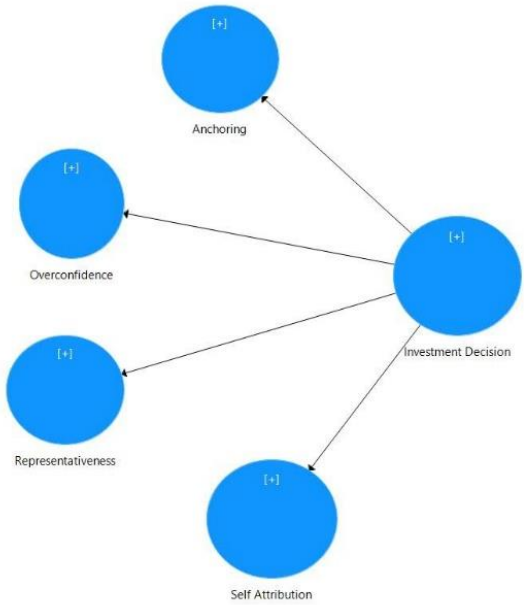
	Q square
Investment Decision	0.401824

Table 9-LV Prediction Summary (PLS predict)

	RMSE	MAE	Q sq. predict
Investment Decision	0.547254	0.495792	0.60145
Over Confidence	0.531155	0.44859	0.728151
Anchoring	0.467296	0.364178	0.569442
Self-Attribution	0.504651	0.488956	0.52368
Representativeness	0.564945	0.440031	0.692877

List of Charts

Chart: 1 Factors



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