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BEHAVIOURAL BIASES INFLUENCING INVESTMENT DECISIONS OF INDIVIDUAL INVESTORS

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ABSTRACT

The aim of this present study is to ratify the scale of behavioural biases such as overconfidence, herding effect, loss aversion and investment decisions relating to individual investors who invest in Indian stock market. The present study assesses the influence of aforesaid behavioural biases on investment decisions made by individual investors. The study is based on a questionnaire investigation by including the individual investors of Indian stock market residing in Bihar (India) using a convenient sampling technique. 500 hundred questionnaires have been distributed among the individual investors and 428 responses has been taken into consideration for the present study. The collected data were analysed through multiple regression using SPSS. The present study found that the scale used to measure behavioural biases and investment decisions of individual investors were valid and overconfidence biases have a significant influence on investment decisions of individual investors. In contrary, herding effect and loss aversion does not significantly influence the investment decision of individual investor. The present study found that the individual investors are behaviourally biased while making investment decisions. The present study backs to the academia of behavioural aspects and individual investors who invest in Indian stock market. The present study supports in understanding the concept of behavioural biases of individual investors investing in Indian stock market.

KEYWORDS: Behavioural biases, Overconfidence, Herding Effect, Loss Aversion, investment Decision

INTRODUCTION

The theories and principles that form the foundation of standard finance, also referred to as traditional finance, include the arbitrage principles of Miller & Modigliani, the portfolio principles of Markowitz, the capital asset pricing theory of Sharpe, Lintner & Black, and the option-pricing theory of Black, Scholes & Merton. These theories contend that markets and market participants are organized and productive. According to the efficient market theory, financial asset values are determined in an

efficient market by taking into account all relevant information. The premise of the Efficient Market Hypothesis (EMH) is that investors act rationally in the financial market.

In an unpredictable environment, investors must make decisions by selecting a plan of action from a range of options. The expected utility theory (EUT) suggests that investors make a well-balanced selection by evaluating each option based on its usefulness and the risk involved.(Ullah, 2015).

A novel idea known as "behavioural finance" first surfaced in the 1980s, fusing psychological and behavioural factors into financial and economic decision-making. The efficient market theory is called into question by behavioural finance, which also explains why investors act a certain way while making investments in financial assets. (Kahneman & Tversky, 1979) Created the prospect theory as a counter to expected utility theory (EUT) to explain decision-making in the face of uncertainty.

According to behavioural finance theory, a variety of behavioural biases can impact an investor's decision-making process, leading them to make illogical judgments and stray from reason. Investors decide what to buy and sell depending on a variety of criteria. The choices made about investments include different investing techniques, frequency, duration, and goals, as well as a host of other aspects. When making investing decisions, behavioural biases are the most crucial element to consider (Bailey et al., 2011).

Very few empirical research has been conducted on the behavioural biases of individual investors. The following three prevalent biases overconfidence, the herding effect, and loss aversion that may influence an individual investor's choice of investments have been discussed.

This present study encourages the individual investors, in achieving clear understanding about behavioural biases. The present research establishes empirical evidence that reveal the relationship between aforementioned behavioural bias and investment decision and finds out that how investment decision is more likely to get influenced by which one of the above-mentioned behavioural biases.

LITERATURE REVIEW

This section of the present study takes on a comprehensive review of relevant research literature related to behavioural biases and investors investment decision-making with the intention of establishing a sound academic base for the present study. Existent literature on each of the variables such as overconfidence, herding effect, loss aversion and investment decision included in this study has been observed censoriously to build an understanding based on current academic realisms. Based on intuitions observed through such review this section of the study identifies gaps in research which can be worked upon to add value to future academic breaks as well as benefit individual investors and

practicing financial advisors.

Overconfidence: Frequently, investors have an excessive sense of self-worth and believe they are more knowledgeable than other investors. The consequent incorrect stock selection and this skewed perception frequently lower the return on their investments.

The phenomena of overconfidence and excessive trading among investors utilizing inexpensive brokerage accounts (Barber & Odean, 2000) contributed to the dissemination of this information. It is a well-known and pervasive bias that people who are overconfident in their skills and knowledge prefer to ignore the dangers associated with investing.

According to earlier research in this area, the overconfidence bias influences rational decision-making behaviour (Kumar & Goyal, 2015). Certain biases, like as overconfidence, are thought to be the most common. It won't, however, assist investors in developing any workable strategy only because it is general information that a certain bias exists in the market. Investors need to be aware of the particular stocks or investments where they are committing behavioural errors in order to combat bias (Prosad, 2017). (Ahmad, 2020) show that an investor's propensity for overconfidence is correlated with their personality. Additionally, by modulating the relationship between personality factors and overconfidence, the study shows how risk-attitude might alter (induce or prevent) investor behaviour.

Loss Aversion: (Kahneman & Tversky, 1979) developed the concept of loss aversion bias, which extended the prospect theory. This theory states that investors assess earnings and losses differently and will base their actions more on expected profits than on perceived losses. A person will then choose the option that would result in a profit if they are given two alternatives that are identical and one of them is described in terms of possible profits and the other in terms of potential losses (Kiran et al., 2017). This concept is also known as "loss-aversion theory" or "prospect theory." According to this idea, people often have a larger propensity to avoid losses than to profit (Thaler et al., 1997).

Due to loss aversion bias, investors hang onto the portfolio's underperforming stocks and only sell the winning ones since they are particularly reluctant to losing money. Even if the time spent holding the losing stocks lowers their value, they would still be kept in the portfolio until they turn a profit (Isidore R & Christie, 2019). In uncertain situations, investors have frequently exhibited a tendency to defer making decisions. Moreover, loss aversion has been shown to encourage investors to keep things as they are (Saivasan & Lokhande, 2022).

Herding Effect: Investors frequently follow the lead of a bigger group without questioning the reason for their actions. This conduct is innate to human nature. This kind of instinct can be linked to people's

innate desire to fit in better with the group they are a part of. Hur et al. (2010) and Wermers (1999) have carried out a limited number of noteworthy research regarding the use of herd behaviour in investment decision-making. (Ahmad, 2020) show herding tendencies as a result of their insecurity and caution while making financial decisions.

On the other hand, risk-takers who possess a high degree of neuroticism are less likely to display herding behaviour. Due to their low-risk perception and tendency, market participants follow the herd. This has a negative impact on their investing selections. Investors' financial decisions and decision-making processes are significantly impacted by herding behavior (Ahmed et al., 2022).

Investment Decision-Making:

Investors choose based on their knowledge and experience in the stock market. The study of behavioural finance focuses on how individuals really behave and how they use financial data to make decisions. Investors are beginning to place more weight on behavioural finance since it has a significant impact on their choices (Weixiang et al., 2022).

Biases are better understood in terms of defective reasoning influenced by feeling or emotion than by their initial dictionary meaning, which is congruent with flawed cognitive reasoning or thinking. The term "behavioural bias" refers to a pattern of variation in judgment that arises in certain contexts and can occasionally result in irrationality, faulty judgment, illogical interpretation, or altered perception. Bias, according to Shefrin (2002), is nothing more than an error-prone disposition. Investors and their advisers may be able to enhance economic results and meet stated financial objectives by understanding the impact of behavioural biases on the investment process. Michael M. Pompian, "Behavioural Finance and Wealth Management," states that merely recognizing behavioural biases at the appropriate moment might protect clients from impending financial ruin.

RESEARCH GAP:

There is a dearth of empirical support despite the abundance of research on behavioural biases and investing decisions. There is still much to learn about behavioural decision-making in this field. This present study strives to identify empirical evidence related to the behavioural biases such as overconfidence, herd effect and loss aversion in investment decision-making with a focus on individual investors. To our knowledge, till date, there is no empirical study in which above mentioned different behavioural biases have been examined in a single study in Bihar (India) where individual investors are not aware of such kind of behavioural biases. By exploring the connection between individual investors' investment decisions and behavioural biases, this study adds to the paucity of research on the behavioural element of various investing avenues.

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OBJECTIVES OF THE STUDY

I. To validate the behavioural biases scale influencing the investment decisions of individual investors; and

II. To analyse the relationship between behavioural biases and investment decision of an individual investors.

RESEARCH METHODOLOGY

Questionnaire Design:

The study focuses on behavioural biases (overconfidence, herd effect and loss aversion) of individual investors investing in Indian stock market. After studying the extensive literature review 11 items related to behavioural biases and 3 items related to investment decisions are taken into consideration. The study is quantitative and is based on primary data which is a better indicator for measuring the behaviour of individual investors than secondary data. The questionnaire design used in the study was divided into three sections viz., Section 1 holds information related to the demographic profile of investors, section 2 holds questions related to behavioural biases using a five-point Likert scale i.e., (1-5) starting from strongly disagree to strongly agree and section 3 describes questions of investment decision using five-point Likert scale where 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Sampling and Data Collection:

Every individual investor in the Indian stock market who resides in Bihar made up the study's sample frame. A convenient sampling strategy was used to get the data. The sample size is determined using the Cochran formula for an infinite population, which is 384, as the population's size is infinite (Cochran, 1977). We carried out pilot testing with 50 responders to examine the scale's internal consistency and dependability. 428 data were ultimately gathered for the research.

Proposed Model of the Study

The research model has 4 constructs such as overconfidence consists 5 item scale, herd effect consists 4 item scale, loss aversion consists 2 item scale and investment decision consist 3 item scale therefore, before testing the hypotheses of the study the validation of the instrument was tested by measuring construct validity using Cronbach’s alpha and composite reliability (Pandey & Jessica, 2019). The validation of the instrument was executed using SPSS software and the proposed hypotheses of the study were teste using multiple linear regression through SPSS.

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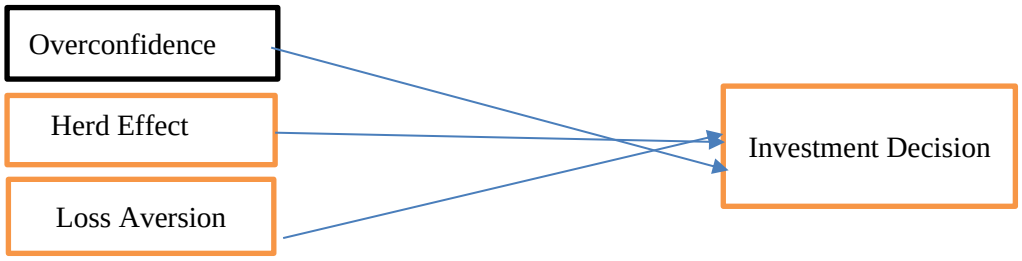

Figure 1: Relation of behavioural biases and investment decisions

Hypothesis of the Study

H: There is a significant relationship between behavioural biases and investment decisions of individual investors.

The four hypotheses inducted for this study are as follows:

H(a): There is a significant relationship between overconfidence bias and investment decisions of individual investors.

H(b): There is a significant relationship between herding bias and investment decisions of individual investors.

H(C): There is a significant relationship between loss-aversion bias and investment decisions of individual investors.

DATA ANALYSIS AND INTERPRETATION

Demographic Profile of Respondents

Table 1 displays the characteristics of the respondents. The study constituted a majority of the male sample (60.7%) than the female sample (39.3%). The majority of respondents belong to the age group of below 25 and (25-40) years comprising 47.7% and 34.6% of the population respectively. Around 44.80% of the population earns income below 2.5 lacs. And nearly half of the populations i.e., 49.7% were graduates. The cause behind entailing majority of the male sample is that the Indian society is a male-dominating society and most of the decisions related to investment are taken by male members of the families (Baker et al., 2019).

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Table 1: Demographic profile of respondents

Demographic factors	Values	Frequency	Percent
Gender	Male	260	60.7%
	Female	168	39.3%
	Total	428	100.0
Age (in years)	Below 25	204	47.7%
	25-40	148	34.6%
	41-55	46	10.7%
	Above 55	30	7%
	Total	428	100.0
Annual Income	Up to 2.5 lac	192	44.8%
	2.5-5 lac	76	17.7%
	5-7.5 lac	55	12.8%
	Above 7.5 lac	105	24.6%
	Total	428	100.0
Educational qualification	Matriculation	24	5.60%
	Intermediate	47	10.98%
	Graduate	213	49.7%
	Post graduate	109	25.46%
	Doctoral degree	35	8.17%
	Total	428	100.0

In order to ascertain the validity and reliability of the scale, we first examined the measuring model. The impact of behavioural biases on the investment choices made by individual investors was then assessed via testing the structural model.

Measurement Model Assessment

The in-depth study has been done to find out which dimensions of behavioural biases are related to investment decisions and which are not related to investment decisions. Thus, multiple regression analysis has been used. The dimensions of behavioural biases include overconfidence, herding effect, and loss aversion.

Table 1 shows the model's significance at a 95% confidence interval. It demonstrates how well the model creates a prediction level of 0.557, or 55.7%. According to the coefficient of determination, the

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change in the independent variables defines the change in the dependent variable. The coefficient of determination, or R-square value, indicates how much the independent variable accounts for the variability of the dependent variable. 31.1%, or 0.311, of the dependent variable (investment decisions) can be explained by the independent variable.

ANOVA is used to determine the model's relevance in the research. The total fitness of the regression is displayed by the F-ratio. The study's various independent variables are shown to be significant at F (3, 424) = 63.696, p <0.05 in Table 2. It demonstrates how well-fit the study's model was.

Table 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.557[a]	.311	.306	.21242	.311	63.696	3	424	.000

a. Predictors: (Constant), Loss Aversion, Overconfidence, Herd Effect

b. Dependent Variable: Investment Decision

Table2

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	773.880	3	257.960	63.696	.000[b]
	Residual	1717.136	424	4.050		
	Total	2491.016	427			

a. Dependent Variable: Investment Decision

b. Predictors: (Constant), Loss Aversion, Overconfidence, Herd Effect

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Table 3
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4.240	.569		7.453	.000	3.122	5.358		
	Overconfidence	.353	.028	.540	12.758	.000	.299	.408	.909	1.101
	Herd Effect	.009	.030	.014	.298	.766	-.051	.069	.740	1.351
	Loss Aversion	.060	.065	.043	.913	.362	-.069	.188	.722	1.385

a. Dependent Variable: Investment Decision

Table 3 exhibits that the t-test is significant for overconfidence at 0.05 level. Therefore, the hypotheses H(b) and H(c) are not accepted and H(a) is accepted. It shows that there is a significant relationship between overconfidence and investors investment decisions. There is no significant relation between herding effect and investor's investment decisions, loss aversion and investors investment decisions.

The intercept is 4.240. The coefficients are 0.353 for X(a) which is for significant variables. X(a) (Overconfidence) has the largest value among the coefficients as in Table 3. Thus, overconfidence is the main predictor of investors investment decisions. When there is increase of one point in overconfidence it will result in increase of 0.353 points in investors' Investment Decisions. Investors are over-confident regarding the decisions they have taken for the investment. They think that they make all the right decisions regarding investment. The results of the present study also gain support from the findings in the past years.

SUGGESTIONS

Individual investors and financial advisors will receive the following recommendations based on the aforementioned results.

- It is imperative that investors should not follow the herd mentality. Whenever they purchase any stock, they ought to be aware of his securities.
- In order to effectively identify these types of biases, financial practitioners and advisers, as well as individual investors, should concentrate on the overconfidence, herd effect, and loss aversion behavioural biases while making investment decisions.
- In order to act rationally, individual investors need to exercise patience while making investing decisions.
- Individual investors need to pay close attention to analyse behavioural biases that have a big impact

on their decision-making while making investments.

• To make informed decisions about which investment option is best, each individual investor has to be financially literate.

• Every company should morally provide imperative information to all type of investors regarding taking investment decision in the financial market.

CONCLUSION

The relationship between behavioural biases and investing decisions has been considerably strengthened by the current study. The work has made several contributions, even if we do not claim to have generalized the findings. By offering verified scales for overconfidence, the herding effect, loss aversion, and investment decisions, the study adds to the body of literature. The study discovered a strong correlation between overconfidence bias and investing choices. When people invest, they believe they can make all the correct choices and are willing to take on a significant amount of risk. Additionally, the study discovered no connection at all between investing decisions, loss aversion, and the herding effect. Behavioural biases, then, provide a better explanation for investing decisions. Investors who make judgments solely based on historical performance eventually invest more in the stock market because they incur more risks. As a result, altering behavioural biases will have an impact on each investor's investing choice. In order to help individual investors and financial advisers make lucrative investment decisions, this study will help them become more rational by identifying their behavioural biases.

REFRENCES

Ahmad, F. (2020). Personality traits as predictor of cognitive biases: moderating role of risk-attitude. *Qualitative Research in Financial Markets*, *12*(4), 465–484. https://doi.org/10.1108/QRFM-10-2019-0123

Ahmed, Z., Rasool, S., Saleem, Q., Khan, M. A., & Kanwal, S. (2022). Mediating Role of Risk Perception Between Behavioral Biases and Investor's Investment Decisions. *SAGE Open*, *12*(2). https://doi.org/10.1177/21582440221097394

Bailey, W., Kumar, A., & Ng, D. (2011). Behavioral biases of mutual fund investors. *Journal of Financial Economics*, *102*(1), 1–27. https://doi.org/10.1016/j.jfineco.2011.05.002

Baker, H. K., Kumar, S., Goyal, N., & Gaur, V. (2019). How financial literacy and demographic variables relate to behavioral biases. *Managerial Finance*, *45*(1), 124–146. https://doi.org/10.1108/MF-01-2018-0003

Barber, B. M., & Odean, T. (2000). Trading is hazardous to your wealth: The common stock investment performance of individual investors. *Journal of Finance*, *55*(2), 773–806. https://doi.org/10.1111/0022-1082.00226

Cochran, W. G. (1977). *Cochran WG. Sampling Techniques. 3rd ed. New York: John Wiley & Sons;*

1977. https://d1wqtxts1xzle7.cloudfront.net/68847310/COCHRAN_W._Sampling_techniques_compressed-libre.pdf?1629705063=&response-content-disposition=inline%3B+filename%3DCOCHRAN_W_Sampling_techniques_compressed.pdf&Expires=1713544441&Signature=J~heRe9z0t2lXgbsn6Td

Hur, J., Pritamani, M., & Sharma, V. (2010). Momentum and the Disposition Effect: The Role of Individual Investors. *Financial Management*, *39*(3), 1155–1176. https://doi.org/10.1111/j.1755-053X.2010.01107.x

Isidore R, R., & Christie, P. (2019). The relationship between the income and behavioural biases. *Journal of Economics, Finance and Administrative Science*, *24*(47), 127–144. https://doi.org/10.1108/JEFAS-10-2018-0111

Kahneman, B. Y. D., & Tversky, A. (1979). PROSPECT THEORY: AN ANALYSIS OF DECISION UNDER RISK BY. *World Scientific Handbook in Financial Economic Series.*, *47*(2), 263–291.

Kumar, S., & Goyal, N. (2015). Behavioural biases in investment decision making – a systematic literature review. *Qualitative Research in Financial Markets*, *7*(1), 88–108. https://doi.org/10.1108/QRFM-07-2014-0022

Pandey, R., & Jessica, V. M. (2019). Sub-optimal behavioural biases and decision theory in real estate: The role of investment satisfaction and evolutionary psychology. *International Journal of Housing Markets and Analysis*, *12*(2), 330–348. https://doi.org/10.1108/IJHMA-10-2018-0075

Prosad, J. M. (2017). *Overconfidence and Disposition Effect in Indian Equity Market : An Empirical Evidence*. *C*. https://doi.org/10.1177/0972150917726660

Saivasan, R., & Lokhande, M. (2022). Influence of risk propensity, behavioural biases and demographic factors on equity investors' risk perception. *Asian Journal of Economics and Banking*, *6*(3), 373–403. https://doi.org/10.1108/ajeb-06-2021-0074

Shefrin, H. (2002). *Beyond Greed and Fear*.

Ullah, S. (2015). An Empirical Study of Illusion of Control and Self-Serving Attribution Bias, Impact on Investor's Decision Making: Moderating Role of Financial Literacy. *Research Journal of Finance and Accounting Www.Iiste.Org ISSN*, *6*(19), 109–118. www.iiste.org

Weixiang, S., Qamruzzaman, M., Rui, W., & Kler, R. (2022). An empirical assessment of financial literacy and behavioral biases on investment decision: Fresh evidence from small investor perception. *Frontiers in Psychology*, *13*(September), 1–18. https://doi.org/10.3389/fpsyg.2022.977444

Wermers, R. (1999). Mutual fund herding and the impact on stock prices. *Journal of Finance*, *54*(2), 581–622. https://doi.org/10.1111/0022-1082.00118