PSYCHOLOGICAL INFLUENCE ON INDIVIDUAL'S INVESTMENT DECISION MAKING: A STUDY BASED ON BILASPUR CITY OF CHHATTISGARH

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Abstract

The decision that leads to a good investment solely depends upon the psychology of an individual. Whether to invest in a particular financial instrument, it takes a lot of rationality along with experience. In this study, the researcher has intended to identify various factors that might influence an individual's psychology of whether to make an investment decision or not. Regarding this objective, the parameters that influences the investment decisions were explored upon through personal attributes, socio-cultural dominance, financial literacy and general awareness. The personal attributes are responsible greatly for risk taking capabilities as it mainly constitutes behavioural biasness. On the other hand, financial literacy and general awareness helps an individual to make a sound investment decision. The present study aims at studying the impact of these psychological factors on the investment decision making ability of individual investors.

Keywords: Psychological Influence, Financial Market, Behavioural Finance, Investment Decision

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1. Introduction

Individual investors focus their investment decisions on knowledge about the market that is readily available to the public, as demonstrated by Markowitz's portfolio theory (1952) and the Fama efficient market theory (1970). These conventional financial theories are predicated on the premise that all investors have comprehensive and simple knowledge of the markets regarding investments. Thus, every investment decision made by individual investors is logical (Sadiq & Amna, 2019). The rationality of investing decisions is, however, questioned by behavioural finance theories like the prospective theory and the theory of cognitive dissonance because investors have hardly any market information (Ricciardi & Simon, 2000).

According to behavioural finance, cognitive and affective biases, which everyone can display, lead to aberrations from logical conduct. Deeply ingrained psychological principles have been brought to light by this argument and examined in a financial context. Also, the argument that probabilities are not stochastic but rather subjective has made it possible for perceptions and attitudes to make better predictions of financial behaviour. Yet, the existing literature places a strong emphasis on socioeconomic and demographic characteristics to explain financial behaviour. In this regard, it is necessary for the literature to look into the behavioural and attitudinal variables that could cause individual differences.

As a result, investors make opportunistic investing decisions that are influenced by cognitive biases and personal preferences (Kourtidis, evi, and Chatzoglou, 2011).

Statement of the Problem

The area related to investment portfolio of individual investors in Bilaspur city of Chhattisgarh is largely undeveloped. The growing number of investors, the emergence of novel investment opportunities, and the expansion of financial markets made the study necessary. The rising trend of investments in stock markets, shares, SIPs, and other traditional investment routes has made it interesting to study the characteristics of investors in Bilaspur who make investment decisions. The current study has identified psychological aspects influencing investment decision-making as include personal characteristics, socioeconomic dominance, financial literacy, and general awareness.

Objectives of the study

- To identify psychological factors affecting investment decision making of individual investors.
- To identify the effect of psychological factors affecting investment decision making of individual investors.
- To identify the most impactful psychological factors among the four factors summarized on investment decision making of individual investors.

Review of literature

Participation in an activity is determined by its advantages, likelihood of success, and risks. Every decision we make involves risk, which is defined as the likelihood of experiencing negative outcomes as a result of a situation or activity and the prospect of sustaining damage or loss. (Vlek and Stallen, 1981; Vlek, 2004; Zuckerman, 2007). Six different types of loss were categorised by Yates and Stone (1992) as follows: monetary loss (money), performance loss (for a product), bodily loss (ranging from minor discomfort to death), psychological loss (self-esteem), social loss (esteem of others), and time loss.

Risk is a difficult topic, and risk assessment requires sophisticated approaches. (Wilson and Crouch, 1987). Individual risk assessment is a subjective issue that influences risky behaviour-related decision-making directly and can be different from objective risk indicators. (Zuckerman, 2007). The "experiential system" represents risk as a feeling, an individual's quick, instinctive, and intuitive response to danger, while the "analytic system," which brings logical, rational, and scientific considerations to risk management, represents risk as a concept. (Slovic et al., 2004, 2005). In actuality, the final choice is frequently made based more on a constrained perspective than on a thorough comprehension of the worth and significance of the risk.

The stock market is well known for being the most efficient way for businesses to raise funds.

(Zuravicky, 2005). The founders of behavioural finance are the cognitive psychologists Kahneman and Tversky (1979). since they have made significant contributions to this industry since the 1960s. Numerous research from ASEAN, the Middle East, and Western nations have in fact found links and effects between psychological aspects and investors' decisions in those countries' stock markets. (Bakar & Chui Yi, 2016). Psychologists have discovered that people do not act as logically as economists would have us believe. Anomalies in the stock market that frequently occur and empirical research by Babajide and Adetiloye (2012).In their study, Azam et al. (2013) found that investors are not always as sensible as they appear to be. A newly developing branch of finance known as behavioural finance can be used to explain these oddities. The

study of behavioural finance describes how different psychological characteristics influence how people or groups behave as analysts, investors, and portfolio managers. It also aims to comprehend how investor behaviour is influenced by emotions and cognitive flaws. (Kengatharan & Kengatharan, 2014). Additionally, it tries to explain why and how investors can behave in a variety of ways that are contrary to what they should.

A systematic mismatch between the "correct" response to a judging exercise, which is determined by a formal normative rule, and the decision maker's or expert's actual response to such a task is what is known as a cognitive bias. (Von & Edward, 1986). One definition of a cognitive bias is the error made in evaluating, thinking, remembering, or other cognitive processes that frequently results from keeping one's opinions and preferences despite knowledge to the contrary. Emotional biases do not result from conscious effort; rather, they emerge spontaneously from intuition or impulse. Compared to cognitive biases, emotional biases make investors make less-than-ideal decisions and are more difficult to overcome. (Pompian, 2012).

Tripathy (2014) did research on how psychological biases affect how individual investors make decisions cognitively. The results suggested that Bhubaneshwar Stock Exchange investors are victims of psychological biases, including anchoring, overconfidence, loss aversion, and regret, and that this affects their decision-making. In their study, Dao and Ton (2014) made the case that overconfident investors think they can profit more from the market by relying on their emotions, even if this is impractical. In addition, he discovered that 70% of investors on the Vietnamese Stock Exchange are overconfident in their ability to manage their portfolios. Their research revealed the influence of overconfidence, optimism, herd behavior, risk psychology, and pessimism on financial decisions.

2. Research Methodology

Data

A sample of 120 respondents, including professionals, government and private employees, business owners, and others, filled out questionnaires that are used to obtain the data. According to Hair, Black, Babin, Andersion, and Tatham (1998, p. 111) at least 100 respondents must be researched in quantitative research for the statistical methods of data analysis to work.

Sampling

As the overall investor population is unknown and the sampling frame could not be specified, individual investors are sampled using convenience sampling. (Lim 2012). In convenience sampling, the sample is chosen because the researcher has access to it. (Bryman and Bell 2007). Because of the researcher's proximity to these places, convenience sampling is utilised in this study to choose respondents from Bilaspur.

Data Sources

All of the resources and data for this study were acquired via questionnaires from primary sources. The self-assessment questionnaires have two sections, the first of which is for demographic information and the second of which is for behavioural considerations. Respondents react to questions on self-assessment questionnaires by completing the forms themselves. Bryman and Bell (2007) assert that there are numerous advantages to using questionnaires. The first is that administration is speedier and less expensive. The interviewer effect is also advantageously absent since people have a propensity to act socially desirable in front of an interviewer. Since every interview question will be posed in the same manner, there is no interviewer variability. Additionally, the respondents find it convenient.

The questionnaires incorporate Likert scales. Respondents can be asked how strongly they agree or disagree with a statement or sequence of statements using a Likert-style rating scale. (Saunders et al. 2009). In this study, individual investors are asked to rate how much they agree that psychological aspects have an impact on their investing choices using 5-point Likert scales. Strongly disagree, disagree, neither, agree, and strongly agree are the 5 responses on a scale of 1 to 5.

For each factor, closed-ended questions are prepared. Closed-ended questions have a number of benefits, according to Bryman and Bell's 2007 study. The ability to pre-code closed questions makes it easier to process data for analysis, which is one benefit of adopting them. Closed-ended questions also improve the comparability of responses from various respondents. Additionally, by providing replies, they assist in making the questions' meanings clearer. Because they are simpler and quicker to complete, closed questions are easier to manage for both the responders and the researcher.

Research Model

The effects of psychological biases on investors' decision-making are depicted in Figure.1 below. The four psychological variables under analysis are personal attributes, socio-economic dominance, financial literacy and general awareness. According to previous research in other nations, all of these psychological elements are proven to have had a

significant impact on how investors made their investment decisions.

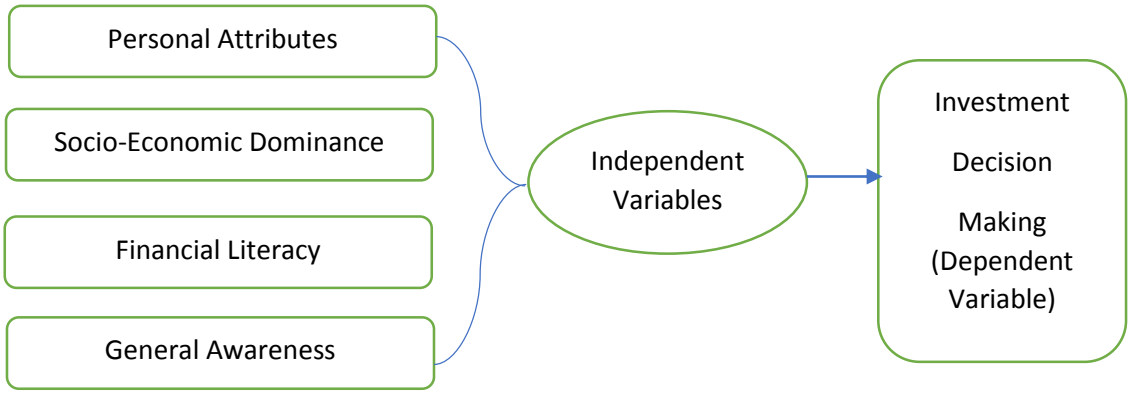

Figure 1: Research Model

Hypotheses

The study seeks to investigate the effect of personal attributes, socio-cultural dominance, financial literacy and general awareness of individual investors on their investment decision making. The following alternate hypothesis were proposed:

H_1: There is a significant impact of personal attributes on individual investor's investment decision making.

H_2: There is a significant impact of socio-cultural dominance on individual investor's investment decision making.

H_3: There is a significant impact of financial literacy on individual investor's investment decision making.

H_4: There is a significant impact of general awareness on individual investor's investment decision making.

Methodology

All analysis is carried out using IBM's Statistical Package for Social Science (SPSS) Version 22 software. To determine which of the variables has the greatest and smallest impact on the choice of an investment, multiple regression analysis is provided. Using multiple regression analysis, one can determine whether a number of independent factors have an individual or combined effect on the dependent variable, according to Srivastava and Rego (2012). For the present study, the regression formula following is employed:

$ID = \beta_0 + \beta_1$ Personal Attributes $+ \beta_2$ Socio-Economic Dominance $+ \beta_3$ Financial Literacy $+ \beta_4$ General Awareness $+ \varepsilon$

Where,

ID = Investment Decision, β_0 = Constant Value, β_1, β_2, β_3, β_4 = Regression Coefficient, PA_1 = Personal Attributes, SE_2 = Socio-Economic Dominance, FL_3 = Financial Literacy, GA_4 = General Awareness, ε = Error Term

Findings

The Table below depicts the Demographic details of sample of 120 respondents collected from the Bilaspur City of Chhattisgarh.

Table 1: Demographic Details of Bilaspur City of Chhattisgarh

Particulars	**Frequency**	**Percentage**
Age		
Below 20 Years	09	7.5
21-30	27	22.5
31-40	32	26.7
41-50	32	26.7
51-60	14	11.7
61 Years and Above	06	5.0
Gender		
Male	47	39.2
Female	73	60.8
Marital Status		
Single	43	35.8
Married	67	55.8
Divorced	06	5.0

Widowed	04	3.3
Educational Qualification		
Higher secondary	03	2.5
Bachelor's Degree	33	27.5
Master's Degree	47	39.2
Professional Degree	37	30.8
Nature of Work		
Private Employee	14	11.7
Business Person	28	23.3
Professional	13	10.8
Government Employee	30	25.0
Entrepreneur	19	15.8
Others	16	13.3
Work Experience		
0-5 Years	40	33.3
6-10 Years	44	36.7
11-15 Years	18	15.0
16-20 Years	11	9.2
21 Years and above	7	5.8
Annual Income		
0 to 1 lakh	12	10.0
1 to 5 lakhs	64	53.3
5 to 10 lakhs	40	33.3
10 lakhs and above	4	3.3
Total	**120**	**100.0**

Source: Primary Data

The demographics selected from Bilaspur city for the study are age, gender, marital status, educational qualification, nature of work, work experience (in years) and annual income. According to the data collected the respondents were majorly between age 31-40 and 41-50 years with 60.8% females. (Since it was easier for the researcher to get in touch with women as compared to men). 55.8% were married among the total sample respondents followed by 35.8% singles. Most of the respondents were majorly post graduate with master's degree followed by professional degree holders. The prime respondents were government employees (25%) and business persons (23.3%). Mostly the respondents had the work experience of 6-10 years. 53.3% are having annual income ranging between 1-5 lakhs followed by 33.3% of them having it between 5-10 lakhs.

Hypothesis Testing

The hypotheses framed above are here tested using Regression analysis and the results are shown below:

Table 2: Hypotheses Results

Hypotheses	Regression Weights	B	t	p-value	Results
H_1	PA→ID	-.324	-3.273	.005	Supported/Accepted
H_2	SE→ID	.231	2.453	.001	Supported/Accepted
H_3	FL→ID	-.270	-3.014	.003	Supported/Accepted
H_4	GA→ID	-.245	-2.499	.009	Supported/Accepted
P value	.008				
R	0.769				
R^2	0.591				
Adjusted R	0.570				
F	103.684				

NOTE. *p<0.05. PA: Personal Attributes, SE: Socio-economic Dominance, FL: Financial Literacy, GA: General Awareness, ID: Investment Decision

Source: Computed Data

The estimated coefficient of correlation (R= 0.769) shows a relatively high linear correlation between the dependent and independent variables. The coefficient of multiple determinants (R Square) is the square of the sample correlation coefficient between outcomes and predicted values. It explains

the extent to which changes in the dependent variable can be explained by the changes in the independent variables or the percentage of variation in the dependent variable that is explained by all the chosen independent variables. The coefficient of multiple determinants (R Square) is found to be 0.591 in this model. It means that the dependent variable which is the investors' decision making can be explained by the independent variables namely personal attributes, socio-economic dominance, financial literacy and general awareness by 59.1 percent. In other words, the four independent variables contribute about 59.1 percent to the investors' decision making while the other factors not studied in this research contribute 40.9 percent to the investors' decision making.

Hence, it is accepted that it is a good model as it has included the necessary right variables. Hence the R square result is acceptable and appropriate in this field. The Adjusted R Square which is 0.570 is smaller than the R Square (0.591) as the Adjusted R Square is adjusted by the number of degrees of freedom. The F statistic is substantiated at the 5% significance level, implying that the null hypothesis that the regression coefficients are all zeros can be rejected at the 5% significance level. Thus, the estimated regression is efficient for prediction. The global test using R Square and F statistic indicates that the independent variables as postulated in the regression model have the ability to explain the variance of the dependent variable which is investors' decision making. The regression model is reliable and robust for prediction.

The regression equation,
ID = 12.988 - .324 personal attributes + .231 socio-economic dominance - .270 financial literacy - .245 general awareness

From the regression equation established, taking all the factors which are personal attributes, socio-economic dominance, financial literacy and general awareness to be constant at zero, the investors' decision making would be 13.707. Furthermore, the personal attributes has a negative effect on investors' decision making as the estimated coefficient which is 0.324 is negative. In other words, if all the other variables are kept constant, a unit increase in personal attributes will lead to a 0.324 decrease in risk taking in investors' decision making, and vice versa. On the other hand, a unit increase in socio-economic dominance will lead to a 0.231increase in risk taking in investors' decision making, a unit increase in financial literacy will lead to a 0.270 decrease in risk taking in investors' decision making, while a unit increase in general awareness will lead to a 0.245 decrease in risk taking in investors' decision making. These results imply that socio-economic dominance contributes the most to investors' decision making, followed by general awareness, then financial literacy, while personal attributes the least to investors' decision making. The unstandardized coefficients include the constant term, while the standardized coefficients normalize the constant to zero. The t-statistic for each coefficient can be estimated by dividing the estimated coefficient with its standard error. The rule of thumb for interpreting the t-statistic is if the t-value result obtained is more than the benchmark of 2.4, the null hypothesis is rejected.

For the personal attribute factor, its t- value is -3.273 which is less than the benchmark of 2.4 while its significance value is 0.005 which is highly significant at the 0.05 level. Thus, from the results obtained, the null hypothesis is rejected and it can be concluded that personal attribute has a negative significant impact on investors' decision making at the 0.05 significance level. This means that investors are mostly overconfident with their decisions and they think that their decisions are right. They attribute the gains in their investment success to their competence as investors. For the socio-economic dominance, its t-value is found to be 2.453 which exceeds the range of 2.4 benchmark, while its significance value is 0.001 which is highly significant at the 0.05 level. Thus, the null hypothesis is rejected and it can be concluded that socio-economic dominance has a positive significant impact on investors' decision making at the 0.05 significance level. It is suggested that the majority of the investors tend to invest based on the socio- economic influence they face within the environment. It is accompanied by the belief that family background, lead of larger groups, advice and outside sources and other cultural norms tend to affect risk and returns. The financial literacy factor has t value as -3.014 which exceeds -2.4 and has significant value .003 which is highly significant at 0.05 % significance level. Thus, from the results obtained the null hypothesis is rejected and financial literacy has negative impact on investors' decision making. The investors generally invest in traditional instruments and have less information regarding financial instruments, they are observed to favour long term investment compared to short term and young investors do prefer risky instruments to invest in as compared to traditional investors. From this model, it is found that the t-value of the general awareness factor to be -2.499 and its significance value is 0.009. Its t-value is more than the benchmark of -2.4 and its significance value is less than the 0.05 significance level. Thus, it is concluded that the null hypothesis is rejected and the alternated hypothesis is accepted. The general awareness has

negative significant impact on investors' decision making. Investors generally depend upon economic stability and income level along with past experience.

The dependent variable (investment decision) was regressed on predicting variables of personal attributes, socio-cultural dominance, financial literacy and general awareness. The independent variables significantly predict investment decision, F (103.684), p = .008 which is less than 0.05, this indicates that the four factors under the study have a significant impact on investment behaviour of investors.

3. Conclusion and Recommendations:

It is logically assumed that the sample and study design chosen are adequate to accomplish the intended research goals. However, this study is vulnerable to a number of underlying issues, just like any prior research. One of them is that this study is limited to 120 respondents, even if the standards of statistical methods are met by this sample size of investors.

Furthermore, because the information gathered for this study is personal in nature, it is somewhat influenced by each person's attitude, interest, eagerness, and cooperation. Therefore, the data could not accurately reflect the respondents' genuine sentiments or ideas. The results demonstrate that personal attributes, socio-economic dominance, financial literacy and general awareness have notable effects. Additionally, it has been discovered that psychological aspects depend on an individual's gender, age, income and profession. The majority of the findings of this study are in agreement with the supporting evidence from other researches.

Perhaps this research will make investors more conscious of the influence of their own psychological aspects on their investment decision-making, boosting the sanity of those decisions for greater efficacy in the market.

To accurately reflect the entire phenomenon of decision making of investors of Bilaspur and to confirm the conclusions of this work, we urge that a bigger sample size of investors be included in future research and expanded to cover other areas and states.

Since behavioural finance is a vast and developing topic, there are countless new opportunities and difficulties to be faced. Numerous psychological elements remain to be explored. To fully understand their influence on investors' decision-making, additional psychological aspects including guilt tendency and the binding effect might be properly investigated. These elements could turn out to be significant predictors of investors' willingness to take risks.

The research presented in this paper will aid the government and regulatory agencies of the financial markets in better comprehending the influence that psychological aspects have on investors' decision-making. Further research might be done to see whether these implementations were successful in making the financial market more efficient when the proper policies were put in place to address the psychological variables and misconceptions.

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