ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

Behavioural Biases and Investment Decision-Making Behaviour Among Individual Investors in Madhesh Province

Abdul Rahman[1]; Parameshwara Acharya[2]

[1](Ph.D.), Faculty of Management, Madhesh University.
[2](Ph.D.), Associate Professor, Mangalore university (India)

Publication Date: 2026/11/28

Abstract: Investment decisions are influenced not only by financial knowledge and market information but also by psychological factors. This study examines the relationship between five behavioural biases overconfidence, herding, anchoring, loss aversion, and availability bias and investment decision-making behaviour among individual investors in Madhesh Province, Nepal. The study uses a quantitative, cross-sectional and explanatory approach. A five-point Likert-scale framework is used for the study analysis with a sample structure of 400 records equally distributed across the eight districts of Madhesh Province. Multiple linear regression is used to examine the relationships between the behavioural biases and investment decision-making behaviour, supported by descriptive statistics, reliability analysis, Pearson correlation, and regression diagnostics. The analysis shows positive and statistically significant associations of overconfidence, anchoring, loss aversion, and availability bias with investment decision-making behaviour, while herding bias is not significant at the 5 per cent level. The model reports an R^2 of 0.212, indicating that the five biases account for 21.2 per cent of the variation in investment decision-making behaviour in the analysis survey data. The findings highlight the role of behavioural biases in investment decision-making and provide insights into the behavioural factors influencing individual investors in Madhesh Province, Nepal.

Keywords: *Behavioural Finance, Investment Decision-Making Behaviour, Overconfidence Bias, Herding Bias, Anchoring Bias, Loss Aversion, Availability Bias, Individual Investors.*

How to Cite: Abdul Rahman; Parameshwara Acharya (2026) Behavioural Biases and Investment Decision-Making Behaviour Among Individual Investors in Madhesh Province. *International Journal of Innovative Science and Research Technology,* 11(11), 2085-2095. https://doi.org/10.38124/ijisrt/26nov1142

I. INTRODUCTION

Investment decision-making is an important financial activity that involves selecting investment opportunities based on expected returns, risks, and available information. Traditional financial theories assume that investors make rational decisions to maximise their utility (Markowitz, 1952; Fama, 1970). However, in practice, investment decisions are also influenced by psychological factors, emotions, personal experiences, and cognitive biases. Behavioural finance explains how these factors affect investors' judgement and financial decisions. Kahneman and Tversky (1979) demonstrated that individuals perceive gains and losses differently, while Tversky and Kahneman (1974) explained that people often rely on mental shortcuts when making decisions under uncertainty. Behavioural biases can influence how investors interpret market information, assess risk, and select securities. Overconfidence may lead investors to overestimate their knowledge and investment abilities (Odean, 1998). Herding occurs when investors follow the decisions of others rather than relying on their own analysis (Bikhchandani et al., 1992). Anchoring may cause investors to rely heavily on previous prices or initial information, while loss aversion makes them more sensitive to losses than equivalent gains (Kahneman & Tversky, 1979). Similarly, availability bias may lead investors to rely on recent or easily recalled information when making investment decisions (Tversky & Kahneman, 1973). These biases may affect investors' choices, risk perception, and overall investment decision-making behaviour.

The Nepalese stock market, particularly the Nepal Stock Exchange (NEPSE), provides a relevant context for examining behavioural influences on investment decisions. Previous studies in Nepal have reported varying effects of behavioural biases on individual investors, indicating that investment decisions may be influenced by different psychological factors. However, limited attention has been given to investors in Madhesh Province, where differences in financial knowledge, investment experience, education, and access to market information may shape investment behaviour.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

This study examines the influence of overconfidence, herding, anchoring, loss aversion, and availability bias on investment decision-making behaviour among individual investors in Madhesh Province, Nepal. Using a quantitative approach and multiple linear regression, the study aims to provide empirical insights into the role of behavioural biases in individual investment decisions and contribute to the understanding of behavioural finance in Nepal's capital market.

II. LITERATURE REVIEW

Prospect theory, developed by Kahneman and Tversky (1979), is a central foundation of behavioural finance. It explains how individuals evaluate risky alternatives relative to a reference point rather than assessing outcomes only in terms of final wealth. The theory proposes that individuals generally respond differently to gains and losses and that the psychological impact of a loss is often greater than the satisfaction associated with an equivalent gain. This asymmetry is commonly described as loss aversion. Prospect theory is relevant to the present study because investors may respond disproportionately to potential losses, become reluctant to realise losses, or prefer avoiding losses even when an alternative investment offers a favourable expected return. The theory also recognises that decision-makers may display risk aversion in the domain of gains and greater willingness to accept risk in the domain of losses. Accordingly, loss aversion provides a theoretical basis for examining how investors' perceptions of potential losses influence their investment decisions. The heuristics-and-biases approach explains that individuals often use simplified mental strategies when making judgements under uncertainty. Tversky and Kahneman (1974) identified representativeness, availability and anchoring as important heuristics that can lead to systematic deviations from probability-based judgement. Heuristics can reduce the cognitive effort required to process complex information, but they may also cause individuals to rely on incomplete or unrepresentative information. The approach provides a direct theoretical foundation for anchoring and availability bias in the present study. Anchoring occurs when a judgement is influenced by an initial reference value, while availability occurs when people assess likelihood or importance based on how easily examples or information come to mind. Overconfidence and herding are also relevant behavioural mechanisms: overconfidence concerns excessive confidence in one's own judgement, whereas herding concerns the tendency to follow the actions or opinions of others. Behavioural finance integrates insights from psychology with financial economics to explain observed investor behaviour that may not be fully accounted for by conventional rational-choice assumptions. Barberis and Thaler (2003) describe behavioural finance as an approach that considers how psychological factors affect financial decisions and market outcomes. It does not imply that all investors are irrational; rather, it recognises that decisions can be affected by cognitive limitations, emotions, social influence and the way information is presented. This perspective is appropriate for the present research because individual investors may interpret the same market information differently. Personal confidence, reference prices, recent news, perceived market consensus and sensitivity to losses can shape how investors select, hold or sell securities. The behavioural finance perspective therefore supports the examination of multiple biases together within one explanatory framework. Overconfidence bias refers to an individual's tendency to overestimate the accuracy of personal knowledge, judgement or predictive ability. In investment settings, overconfident investors may believe that they can identify profitable securities or forecast market movements more accurately than they actually can. Such confidence can increase reliance on personal judgement and reduce attention to contrary information. Dean (1998) examined the trading behaviour of individual investors and showed that overconfidence can contribute to excessive trading, with implications for investor performance. Barber and Odean (2001) also reported that individual investors' trading activity can be associated with overconfidence and can reduce net investment performance. These findings suggest that confidence may encourage investment activity, but excessive confidence may also weaken the quality of investment evaluation. In the present study, overconfidence is conceptualised as investors' perceived superiority in investment knowledge, confidence in assessing stock performance, belief in their ability to identify profitable opportunities, and reliance on personal judgement. The study tests whether this bias is associated with investment decision-making behaviour among individual investors in Madhesh Province. Herding bias refers to the tendency to imitate or follow the investment actions of other market participants. Investors may follow others because they believe that other participants possess better information, because they feel more comfortable acting with a group, or because market consensus appears to reduce uncertainty. Herding may be especially influential when investors face incomplete information or rapidly changing market conditions. Bikhchandani et al. (1992) explained how informational cascades can develop when individuals observe the actions of others and follow those actions, even when their own information may point in another direction. In financial markets, herding can contribute to correlated trading and may amplify market movements. However, following other investors is not necessarily irrational in every situation; it may sometimes reflect the use of social information. The research concern is whether such influence becomes excessive and displaces independent evaluation. For this study, herding bias concerns the extent to which investors consider other investors' decisions, imitate successful investors, feel more confident in securities attracting broad buying interest, and respond to the buying and selling activities of other market participants. Anchoring bias occurs when individuals rely excessively on an initial value or reference point when making subsequent judgements. In stock market decisions, investors may anchor their assessment to a stock's purchase price, previous market price, historical high or an earlier personal valuation. New information may not receive sufficient weight when the investor remains attached to the original reference point. Tversky and Kahneman (1974) identified anchoring and adjustment as a heuristic through which initial values influence numerical estimates and judgements. In an investment context, anchoring may affect an investor's assessment of whether a stock is undervalued or

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

overvalued and may influence the decision to buy, hold or sell. The persistence of an initial valuation can delay the revision of investment decisions even when market fundamentals change. The present study measures anchoring through investors' reliance on previous prices, historical highest prices, initial assessments and difficulty revising an earlier valuation after receiving new information. Research on behavioural finance in Nepal has expanded in recent years. Poudel et al. (2024) examined behavioural biases and investment decisions among Nepalese investors using responses from 338 participants. Their study reported significant positive relationships for overconfidence, disposition effect and risk aversion, whereas herding did not show a significant effect. The authors also reported a moderating role of financial literacy for selected relationships. These results indicate that behavioural influences may differ by analysis and that financial literacy can be relevant to understanding investor decision-making. Gurung et al. (2024) investigated overconfidence, representativeness, anchoring, regret aversion and herding among Nepalese investors using 379 observations and linear regression. Their findings indicated significant effects for overconfidence, anchoring and regret aversion, while representativeness had little influence and herding was not statistically significant. The results demonstrate that not all behavioural biases necessarily have the same explanatory importance in the Nepalese market. Thapa (2024) examined cognitive biases in the Nepalese stock market, focusing on herding, overconfidence, anchoring and the disposition effect. Using a quantitative explanatory design and structural equation modelling, the study reported positive influences of these behavioural factors on investment decisions. The findings provide further evidence that cognitive and social influences may be relevant to investment decisions in Nepal. Aryal et al. (2024) studied behavioural biases and investor performance in the Nepalese stock market using a sample of 124 active traders. Their results indicated that loss aversion and overconfidence significantly affected investor performance, whereas anchoring, availability and representativeness did not show significant effects. Because the dependent variable was investor performance rather than investment decision-making behaviour, the findings should be interpreted as related evidence rather than a direct test of the present study's outcome. Khatiwada et al. (2026) examined behavioural biases among 385 individual investors in NEPSE and considered the roles of risk tolerance and financial literacy. Their findings indicated significant effects of overconfidence, risk aversion, representativeness and anchoring, while herding and disposition bias were not significant. The study also reported that risk tolerance and financial literacy did not have the proposed mediating or moderating effects in its model. This recent evidence reinforces the importance of testing individual behavioural dimensions rather than assuming uniform effects. Duwal et al. (2026) examined overconfidence, herding and disposition effect among 235 Nepalese investors and investigated financial literacy as a moderator. The study reported significant relationships between the three behavioural factors and investment decision-making, while financial literacy did not moderate the relationships. The different findings across Nepalese studies suggest that results may vary according to sample composition, analysis selection, measurement and analytical method. Research conducted by Rahman and co-authors provides additional context for understanding the financial-information environment in which investment decisions are made in Nepal. Rahman et al. (2026b) examined the adoption of artificial-intelligence tools in investment practices among Nepalese commercial banks, highlighting the growing role of data analytics, portfolio assessment, risk evaluation and market forecasting in institutional investment decisions. Although the study focuses on banks rather than individual investors, it demonstrates that access to analytical tools and the interpretation of market information are increasingly important features of contemporary investment decision-making. Rahman and Shrestha (2026a) examined fintech and financial inclusion in emerging economies and reported that digital financial services can improve access to formal financial services. This stream of work is relevant because the availability and accessibility of financial information may shape how individual investors form judgements and evaluate investment alternatives. Rahman (2024a) investigated the role of artificial intelligence in financial literacy across mobile banking applications and physical branches. The study draws attention to the potential of technology-enabled financial education to improve users' understanding of financial services. Financial literacy is relevant to behavioural finance because investors' ability to interpret information, assess risk and recognise cognitive shortcuts may influence the extent to which behavioural biases affect their decisions. Similarly, Rahman (2023a) examined digital finance and financial inclusion in Madhesh Province, reporting that access, usage and quality of digital banking were associated with digital financial inclusion. This regional evidence provides useful contextual insight into the financial-service and information-access environment in the same province considered by the present study. Rahman (2023d) also discussed the use of artificial intelligence in banking, including its potential applications in investment optimisation, fraud detection and market forecasting. Other contributions by Rahman address financial risk and the evaluation of financial information. Rahman (2023b) examined the relationship between capital adequacy, credit risk and banking hedging in Nepal, showing the importance of risk-related considerations in financial institutions. Rahman (2023c) analysed working-capital ratios and profitability in automobile companies, while Rahman (2024c) considered the relationship between working-capital management and firm profitability across economic cycles. Rahman (2024b) discussed the application of artificial intelligence to working-capital management, particularly forecasting, cash-flow processes and risk management. In addition, Rahman (2025) examined the financial-performance implications of working-capital decisions in Nepalese manufacturing firms. These studies are not direct tests of overconfidence, herding, anchoring, loss aversion or availability bias; rather, they provide adjacent evidence on financial risk, analytical information, technology and financial decision contexts. Their relevance to the present study is therefore contextual and should not be interpreted as evidence that any particular behavioural bias has a statistically significant effect on individual investors. The

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

reviewed literature establishes a strong theoretical basis for examining behavioural biases in investment decisions. Prospect theory explains the role of loss aversion, while the heuristics-and-biases approach explains how anchoring and availability can influence judgements under uncertainty. Research on overconfidence and herding further demonstrates that investors' self-assessments and social environments may shape investment choices. Related work by Rahman and co-authors adds contextual evidence on financial literacy, digital-finance access, technology-enabled investment analysis and financial risk in Nepal (Rahman, 2023a, 2023b, 2023d; Rahman, 2024a, 2024b, 2024c; Rahman, 2025; Rahman and Shrestha, 2026a; Rahman et al., 2026b). These studies broaden the understanding of the financial and informational setting but do not directly test the five behavioural-bias relationships proposed in this article.Nepalese studies have already examined several behavioural factors among NEPSE investors. Their results, however, are not fully consistent. For example, overconfidence and anchoring are significant in several studies, while the evidence concerning herding differs. Loss aversion and related risk-aversion measures have also produced different results depending on the study's analysis definition and dependent variable. Rahman's related studies address digital financial inclusion, financial literacy, banking risk, artificial intelligence and financial management, but the identified publications do not provide a direct empirical test of all five behavioural biases among individual share investors in Madhesh Province. This distinction reinforces the need for the present geographically focused investigation. The present study is positioned as a geographically focused examination of individual investors in Madhesh Province. The reviewed studies generally examine Nepalese investors at a national, city-based or otherwise broader level; the evidence identified for this review does not establish a dedicated empirical assessment of the five selected biases among individual investors across Madhesh Province. The study therefore addresses a provincial-context gap by examining overconfidence, herding, anchoring, loss aversion and availability bias together in one multiple-regression framework. The study also contributes through its consistent operationalization of five behavioural analysis s and a common investment decision-making measure. Its proposed analysis will allow comparison of the relative statistical associations of the five biases. Since the survey data planned for the present analytical exercise is simulated rather than collected from field respondents, any resulting coefficients and conclusions must be presented as simulated analytical results and cannot be generalized as empirical evidence about actual investors in Madhesh Province.

➢ *Hypothesis Development*

- H1: Overconfidence bias has a significant influence on investment decision-making behaviour among individual investors in Madhesh Province.
- H2: Herding bias has a significant influence on investment decision-making behaviour among individual investors in Madhesh Province.
- H3: Anchoring bias has a significant influence on investment decision-making behaviour among individual investors in Madhesh Province.
- H4: Loss aversion bias has a significant influence on investment decision-making behaviour among individual investors in Madhesh Province.
- H5: Availability bias has a significant influence on investment decision-making behaviour among individual investors in Madhesh Province.

III. RESEARCH METHODOLOGY

This study adopts a quantitative approach and a cross-sectional explanatory research design to examine the relationships between five behavioural biases overconfidence, herding, anchoring, loss aversion, and availability bias and investment decision-making behaviour among individual investors in Madhesh Province, Nepal. A cross sectional design is appropriate because data are collected from respondents at one point in time, while the explanatory design enables the study to estimate the direction and magnitude of the relationships among the selected variables. The unit of analysis is the individual investor. The study examines self-reported investment attitudes and decision-making practices; it does not assess the actual performance of securities or portfolios. The study is conducted in Madhesh Province, Nepal, which comprises eight districts: Saptari, Siraha, Dhanusha, Mahottari, Sarlahi, Rautahat, Bara, and Parsa. The target population consists of individual investors who invest in shares listed on the Nepal Stock Exchange (NEPSE) and reside in these districts. The proposed sample size is 400 respondents. This target is guided by Cochran's (1977) formula for estimating a sample size for a large population, which yields approximately 384 respondents at a 95% confidence level, a 5% margin of error, and an assumed population proportion of 0.50. The target is rounded up to 400 to allow for incomplete or unusable questionnaires. Purposive sampling will be used because a complete sampling frame of individual NEPSE investors across the province may not be available. To ensure coverage of all eight districts, the study proposes a quota of 50 respondents per district. This allocation is intended to provide geographic coverage and does not imply that investor populations are equal across districts. As purposive sampling is non-probability sampling, the probability-based margin of sampling error cannot be claimed for the final sample, and findings should be generalized cautiously. Eligible respondents must have personally invested in NEPSE-listed shares and have at least six months of investment experience. Individuals who do not meet these criteria or who do not provide informed consent will be excluded. Primary data will be collected using a structured questionnaire administered in person or electronically, depending on respondent accessibility. Before completing the questionnaire, participants will be informed of the study's academic purpose, voluntary participation, approximate completion time, and confidentiality protections. No unnecessary identifying or sensitive financial information such as trading-account numbers, bank-account details, or passwords will be collected. Only responses genuinely obtained from eligible

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

participants may be reported as primary-survey data; any simulated observations must be clearly identified as simulated and must not be represented as actual respondents' answers. The questionnaire comprises three sections: Section A collects demographic and investment-profile information; Section B measures the five behavioural-bias analysis; and Section C measures investment decision-making behaviour. The behavioural analysis s and the dependent variable will be measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores indicate greater agreement with the item statements. The instrument contains 20 items for the five independent variables (four items per analysis) and five items for the dependent variable, for a total of 25 Likert-scale items.

➢ *Conceptual Framework*

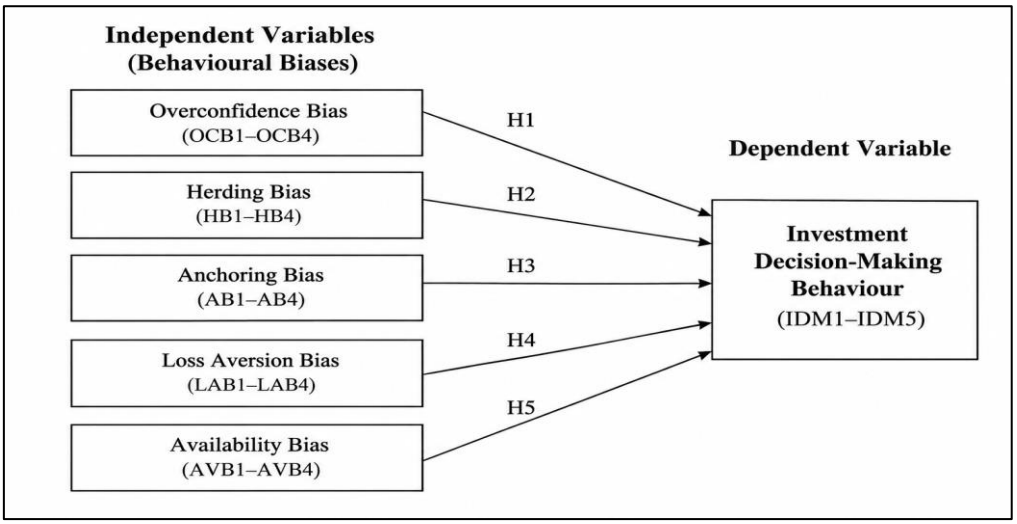


Fig 1 Conceptual Framework

The conceptual framework shows the relationship between five behavioural biases and investment decision-making behaviour among individual investors in Madhesh Province. Overconfidence, herding, anchoring, loss aversion, and availability bias are considered independent variables, while investment decision-making behaviour is the dependent variable. The study examines the influence of each behavioural bias on investment decisions through five hypotheses (H1–H5).

➢ *Operational Definitions of Variables*

Overconfidence bias: Investors' tendency to overestimate their investment knowledge, judgement, or ability to predict market movements. Herding bias: Investors' tendency to follow or imitate other investors' decisions rather than relying primarily on independent evaluation. Anchoring bias: Investors' excessive reliance on an initial reference point, such as a previous share price or purchase price, when making subsequent investment judgements. Loss aversion bias: Investors' tendency to perceive and weigh potential losses more strongly than equivalent gains. Availability bias: Investors' tendency to rely disproportionately on recent, memorable, or readily accessible information when evaluating investment decisions. Investment decision-making behaviour: Investors' self-reported process of evaluating investment information, considering alternatives and risk, and making decisions to buy, hold, or sell securities.

➢ *Demographic and Investment Profile*

Section A will record gender, age group, educational qualification, occupation, monthly income, district, investment experience, transaction frequency, primary source of investment information, and approximate portfolio-value category. These variables will be used to describe the sample and, where justified by the research objectives, to support exploratory comparisons.

➢ *Model Specification and Data Analysis*

Composite scores for each analysis will be calculated as the mean of its questionnaire items, provided that the pre-established item-completion rule is met. Multiple linear regression will be used to estimate the relationships between the five behavioural biases and investment decision-making behaviour. The proposed model is specified as follows:

$$IDM = \beta_0 + \beta_1 OCB + \beta_2 HB + \beta_3 AB + \beta_4 LAB + \beta_5 AVB + \varepsilon$$

Where IDM represents investment decision-making behaviour; OCB represents overconfidence bias; HB represents herding bias; AB represents anchoring bias; LAB represents loss aversion bias; AVB represents availability bias; β_0 is the intercept; β_1 to β_5 are the regression coefficients; and ε is the error term. The analysis will include descriptive statistics to summaries respondent characteristics and analysis scores, reliability assessment (such as Cronbach's alpha) to examine internal consistency, and correlation analysis to explore the associations among variables. Multiple regression will be used to test H1–H5. The coefficient of determination (R^2) will indicate the proportion of variance in investment decision-making behaviour explained by the predictors, and the overall F-test will assess whether the predictors jointly explain a statistically significant amount of variance. Regression coefficients, their direction, confidence intervals, and p-values will be

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

examined. Statistical significance will be evaluated at the 5% level ($p < .05$). Before interpreting the regression results, relevant assumptions including linearity, independence of errors, homoscedasticity, multicollinearity, and residual normality for inference will be assessed.

IV. DATA ANALYSIS AND RESULTS

The survey data used in this section consists of 400 researcher-analysis records and the records were allocated equally across the eight districts, with 50 records assigned to each district of Madhesh Province. The five behavioural-bias analysis were measured using four Likert-scale items each, while investment decision-making behaviour was measured using five items. Responses were coded from 1 (Strongly Disagree) to 5 (Strongly Agree). Each analysis score was calculated as the arithmetic mean of its respective items.

- *Respondent Profile*

The following frequency distribution summarizes the gender categories in the 400 as per survey data. It presents the format used to report respondent characteristics.

Table 1 Distribution by Gender

Category	Frequency	Percentage (%)
Female	141	35.2
Male	251	62.7
Other / Prefer not to say	8	2.0

Source: Primary Data

Among the 400 records, 251 (62.7%) were categorized as male, 141 (35.2%) as female, and 8 (2.0%) as other or prefer not to say. The male category accounts for the largest share of the records.

Table 2 Distribution by Age Group

Category	Frequency	Percentage (%)
18–25	66	16.5
26–35	157	39.2
36–45	94	23.5
46–55	54	13.5
Above 55	29	7.2

Source: Primary Data

The table shows that the largest proportion of respondents (39.2%) belonged to the 26–35 age group, followed by 23.5% in the 36–45 age group. Respondents aged 18–25 accounted for 16.5%, while 13.5% were aged 46–55. Only 7.2% were above 55 years. This indicates that most respondents were relatively young and within the active working-age population.

Table 3 Distribution by Education

Category	Frequency	Percentage (%)
Bachelor's	183	45.8
Higher secondary	74	18.5
Master's or above	112	28.0
Secondary or below	31	7.8

Source: Primary Data

The table indicates that the largest proportion of respondents (45.8%) held a bachelor's degree, followed by 28.0% with a master's degree or above. Similarly, 18.5% had higher secondary education, while 7.8% had secondary education or below. This suggests that most respondents possessed a bachelor's degree or higher educational qualification.

Table 4 Distribution by District

Category	Frequency	Percentage (%)
Bara	50	12.5
Dhanusha	50	12.5
Mahottari	50	12.5
Parsa	50	12.5
Rautahat	50	12.5
Saptari	50	12.5
Sarlahi	50	12.5
Siraha	50	12.5

Source: Primary Data

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

The table shows an equal distribution of respondents across all eight districts of Madhesh Province. Each district contributed 50 respondents, representing 12.5% of the total sample. This equal representation ensures balanced geographical coverage of the study area and allows the study to consider responses from all eight districts.

Table 5 Distribution by Investment Experience

Category	Frequency	Percentage (%)
1–3 years	154	38.5
3–5 years	98	24.5
6 months–1 year	60	15.0
Above 5 years	88	22.0

Source: Primary Data

The table indicates that the largest proportion of records (38.5%) falls within the 1–3 years of investment experience category, followed by 24.5% with 3–5 years of experience. Those with more than five years of experience account for 22.0%, while 15.0% have 6 months–1 year of experience. This suggests that the largest group in the survey data has between one and three years of investment experience.

- *Descriptive Statistics*

Table 6 Descriptive Statistics

Analysis	N	Mean	Std. deviation	Minimum	Maximum
OCB	400	3.197	0.790	1.00	5.00
HB	400	3.148	0.837	1.00	5.00
AB	400	3.144	0.785	1.25	5.00
LAB	400	3.160	0.811	1.00	5.00
AVB	400	3.208	0.743	1.50	5.00
IDM	400	3.333	0.721	1.40	5.00

Source: Primary Data

Table 6 Presents descriptive statistics for the six-study analysis based on 400 observations. The mean scores range from 3.144 to 3.333, indicating moderately positive scores across the analysis. IDM recorded the highest mean (3.333), followed by AVB (3.208), whereas AB had the lowest mean (3.144). Standard deviations range from 0.721 to 0.837, indicating moderate variation in scores.

- *Reliability Analysis*

Cronbach's alpha was calculated separately for each analysis. These coefficients describe internal consistency within the analysis of survey data.

Table 7 Reliability Analysis

Analysis	Items	Cronbach's alpha
OCB	4	0.740
HB	4	0.784
AB	4	0.730
LAB	4	0.751
AVB	4	0.702
IDM	5	0.766

Source: Primary Data

Cronbach's alpha coefficients range from 0.702 to 0.784. HB records the highest coefficient (0.784), followed by IDM (0.766), while AVB has the lowest (0.702). All coefficients exceed the commonly used 0.70 threshold, indicating acceptable internal consistency within collected survey data.

- *Pearson Correlation Analysis*

Pearson correlation coefficients indicate the direction and strength of pairwise linear associations among the analysis scores. The matrix is based on the survey data and does not establish relationships in the population of investors in Madhesh Province.

Table 8 Correlation Analysis

Variable	OCB	HB	AB	LAB	AVB	IDM
OCB	1.000	0.184	0.148	0.090	0.106	0.230
HB	0.184	1.000	0.124	0.069	0.215	0.202
AB	0.148	0.124	1.000	0.074	0.152	0.262

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

LAB	0.090	0.069	0.074	1.000	0.174	0.205
AVB	0.106	0.215	0.152	0.174	1.000	0.339
IDM	0.230	0.202	0.262	0.205	0.339	1.000

Source: Primary Data

The Pearson correlation matrix shows positive associations among all six analysis. Coefficients range from 0.069 to 0.339, indicating weak to moderate positive relationships. The strongest association is between AVB and IDM (r = 0.339), followed by AB and IDM (r = 0.262) and OCB and IDM (r = 0.230). The weakest relationship is between HB and LAB (r = 0.069). Statistical significance cannot be determined from the matrix because p-values are not reported.

➢ *Multiple Linear Regression*

An ordinary least squares (OLS) regression was estimated with investment decision-making behaviour (IDM) as the dependent variable and OCB, HB, AB, LAB, and AVB as simultaneous predictors.

Table 9 Model Summary

Model Statistic	**Estimate**
R	0.461
R^2	0.212
Adjusted R^2	0.202
Standard Error of Estimate	0.644
F-statistic	21.212
Model significance (p)	8.499×10^{-19}
N	400

Source: Primary Data

Table 10 Regression Coefficients

Predictor	**B**	**SE**	**Std. β**	**t**	**p**	**VIF**	**95% CI for B**
Constant	0.982	0.236	—	4.161	3.90×10^{-5}	—	[0.518, 1.446]
OCB	0.135	0.042	0.148	3.222	0.00138	1.060	[0.053, 0.218]
HB	0.077	0.040	0.089	1.911	0.05667	1.085	[-0.002, 0.156]
AB	0.166	0.042	0.181	3.943	9.541×10^{-5}	1.050	[0.083, 0.249]
LAB	0.114	0.041	0.128	2.810	0.005209	1.039	[0.034, 0.194]
AVB	0.247	0.045	0.255	5.446	9.106×10^{-8}	1.095	[0.158, 0.337]

Source: Primary Data

The multiple linear regression analysis examines the relationship between OCB, HB, AB, LAB, and AVB and IDM. The model reports an R^2 of 0.212, indicating that the five predictors jointly account for 21.2% of the variation in IDM scores. The adjusted R^2 is 0.202. The F-statistic of 21.212 and model p-value below 0.001 indicate that the overall regression model is statistically significant within the analysis data. Among the predictors, AVB has the largest positive standardized coefficient (β = 0.255), followed by AB (β = 0.181), OCB (β = 0.148), and LAB (β = 0.128). These four predictors are statistically significant at the 5% level. HB (β = 0.089, p = 0.05667) is not statistically significant at the 5% level; its 95% confidence interval includes zero. VIF values range from 1.039 to 1.095, suggesting no apparent multicollinearity concern among the predictors.

➢ *Hypothesis Assessment*

Table 11 Hypothesis Assessment

Hypothesis	**Predictor**	**B**	**p-value**	**Results**
H1	OCB	0.135	0.00138	Supported
H2	HB	0.077	0.05667	Not Supported
H3	AB	0.166	0.00009541	Supported
H4	LAB	0.114	0.005209	Supported
H5	AVB	0.247	0.00000009106	Supported

Source: Primary Data

The results show that four hypotheses (H1, H3, H4, and H5) are supported, as their predictors have positive coefficients and p-values below 0.05. H2 is not supported because the p-value for HB (0.05667) exceeds 0.05. Thus, OCB, AB, LAB, and AVB are statistically significant positive predictors in this analysis whereas HB is not statistically significant at the 5% level.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

V. CONCLUSION

This study examines the relationships between five behavioural biases overconfidence, herding, anchoring, loss aversion, and availability bias and investment decision-making behaviour among individual investors in Madhesh Province, Nepal. Drawing on behavioural finance theory, the study applies a quantitative framework and multiple linear regression to assess the associations between these biases and investment decision-making behaviour. The regression model reports an R^2 of 0.212 and an adjusted R^2 of 0.202, indicating that the five predictors jointly account for 21.2% of the variation in investment decision-making behaviour within the analysis of survey data. The overall model is statistically significant ($F = 21.212$, $p < 0.001$). The results show positive and statistically significant coefficients for overconfidence bias ($B = 0.135$, $p = 0.001$), anchoring bias ($B = 0.166$, $p < 0.001$), loss aversion bias ($B = 0.114$, $p = 0.005$), and availability bias ($B = 0.247$, $p < 0.001$). These results indicate positive associations between these four biases and investment decision-making behaviour in the analysis of survey data. Availability bias has the largest standardized coefficient ($\beta = 0.255$), suggesting the strongest relative association among the five predictors. In contrast, herding bias ($B = 0.077$, $p = 0.057$) is not statistically significant at the 5% level, so the analysis does not provide sufficient evidence of an independent association between herding bias and investment decision-making behaviour. The results suggest that psychological factors may be relevant to investment decision-making and provide a basis for further examination of behavioural finance in Nepal.

REFERENCES

[1.] Ahmad, Z., Ibrahim, H., & Tuyon, J. (2017). Institutional investor behavioral biases: Syntheses of theory and evidence. *Management Research Review, 40*(5), 578–603. https://doi.org/10.1108/MRR-04-2016-0091

[2.] Almansour, B. Y., & Arabyat, Y. A. (2017). Investment decision making among Gulf investors: Behavioral finance perspective. *International Journal of Management Studies, 24*(1), 41–71.

[3.] Aryal, S., Shrestha, K., Pradhan, J., Prajapati, G., & Basnet, A. (2024). Impact of behavioral biases observed on investors' performance in the Nepalese stock market. *New Perspective: Journal of Business and Economics, 7*(1), 63–72.

[4.] Bakar, S., & Yi, A. N. C. (2016). The impact of psychological factors on investors' decision making in Malaysian stock market: A case of Klang Valley and Pahang. *Procedia Economics and Finance, 35*, 319–328. https://doi.org/10.1016/S2212-5671(16)00040-X

[5.] Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics, 116*(1), 261–292. https://doi.org/10.1162/003355301556400

[6.] Barberis, N., & Thaler, R. (2003). A survey of behavioral finance. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the economics of finance* (Vol. 1B, pp. 1053–1128). Elsevier. https://doi.org/10.1016/S1574-0102(03)01027-6

[7.] Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom, and cultural change as informational cascades. *Journal of Political Economy, 100*(5), 992–1026. https://doi.org/10.1086/261849

[8.] Daniel, K., Hirshleifer, D., & Teoh, S. H. (2002). Investor psychology in capital markets: Evidence and policy implications. *Journal of Monetary Economics, 49*(1), 139–209. https://doi.org/10.1016/S0304-3932(01)00091-5

[9.] De Bondt, W. F. M., & Thaler, R. (1985). Does the stock market overreact? *The Journal of Finance, 40*(3), 793–805. https://doi.org/10.1111/j.1540-6261.1985.tb05004.x

[10.] Duwal, B. R., Damai, S., & Bhatta, S. (2026). Behavioral bias and investment decisions: A moderating role of financial literacy on individual investors of Nepal. *International Research Journal of MMC, 7*(1), 19–37. https://doi.org/10.3126/irjmmc.v7i1.90598

[11.] Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The Journal of Finance, 25*(2), 383–417. https://doi.org/10.2307/2325486

[12.] Gervais, S., & Odean, T. (2001). Learning to be overconfident. *The Review of Financial Studies, 14*(1), 1–27. https://doi.org/10.1093/rfs/14.1.1

[13.] Gurung, R., Dahal, R. K., Ghimire, B., & Koirala, N. (2024). Unraveling behavioral biases in decision making: A study of Nepalese investors. *Investment Management and Financial Innovations, 21*(1), 25–37. https://doi.org/10.21511/imfi.21(1).2024.03

[14.] Isidore, R. R., & Christie, P. (2018). Investment behavior of secondary equity investors: An examination of the relationship among the biases. *Indian Journal of Finance, 12*(9), 7–20. https://doi.org/10.17010/ijf/2018/v12i9/131556

[15.] Jain, J., Walia, N., & Gupta, S. (2020). Evaluation of behavioral biases affecting investment decision making of individual equity investors by fuzzy analytic hierarchy process. *Review of Behavioral Finance, 12*(3), 297–314. https://doi.org/10.1108/RBF-03-2019-0044

[16.] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–291. https://doi.org/10.2307/1914185

[17.] Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting, 6*(1), 1–23. https://doi.org/10.5296/ajfa.v6i1.4893

[18.] Khatiwada, A., Thapa, B. S., & Joshi, P. R. (2026). Behavioral biases and investment decision-making in emerging markets: A moderated mediation model of risk tolerance and financial literacy. *Journal of Innovation in Academia, 5*(1), 68–91. https://doi.org/10.32674/e32yab09

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

[19.] Kumar, S., & Goyal, N. (2016). Evidence on rationality and behavioural biases in investment decision making. *Qualitative Research in Financial Markets*, *8*(4), 270–287. https://doi.org/10.1108/QRFM-05-2016-0016

[20.] Kumari, A., Goyal, R., & Kumar, S. (2023). Analytical study of behavioral dimensions of retail investors towards investment decision making and performance in stock market. *Journal of Information and Optimization Sciences*, *44*(3), 417–425. https://doi.org/10.47974/JIOS-1358

[21.] Lama, P. B., Subedi, R., Niroula, A. K., Pant, G. D., & Khatri, S. (2025). Behavioral factors driving stock market investment decisions among individuals in Nepal. *Investment Management and Financial Innovations*, *22*(1), 122–133. https://doi.org/10.21511/imfi.22(1).2025.10

[22.] Mahmood, F., Arshad, R., Khan, S., Afzal, A., & Bashir, M. (2024). Impact of behavioral biases on investment decisions and the moderation effect of financial literacy: An evidence of Pakistan. *Acta Psychologica*, *247*, 104303. https://doi.org/10.1016/j.actpsy.2024.104303

[23.] Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, *7*(1), 77–91. https://doi.org/10.2307/2975974

[24.] Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2019). Impact of behavioral factors on investors' financial decisions: Case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*, *12*(1), 30–55. https://doi.org/10.1108/IMEFM-12-2017-0333

[25.] Nofsinger, J. R., & Sias, R. W. (1999). Herding and feedback trading by institutional and individual investors. *The Journal of Finance*, *54*(6), 2263–2295. https://doi.org/10.1111/0022-1082.00188

[26.] Odean, T. (1998). Volume, volatility, price, and profit when all traders are above average. *The Journal of Finance*, *53*(6), 1887–1934. https://doi.org/10.1111/0022-1082.00078

[27.] Poudel, A., Bhusal, S., & Pathak, D. D. (2024). Behaviour bias and investment decision in Nepalese investors. *International Journal of Business and Management*, *19*(2), 85–105. https://doi.org/10.5539/ijbm.v19n2p85

[28.] Quang, L. T., Linh, N. D., Nguyen, D. V., & Khoa, D. D. (2023). Behavioral factors influencing individual investors' decision making in Vietnam market. *Journal of Eastern European and Central Asian Research*, *10*(2), 264–280. https://doi.org/10.15549/jeecar.v10i2.1032

[29.] Rahman, A., & Mishra, A. K. (2026). Financial development and economic growth nexus: Evidence from emerging economies. *Intellectual Journal of Academic Research*, 4(1), 61–69. https://doi.org/10.3126/ijar.v4i1.98343

[30.] Rahman, A. (2026). Sustainable economic growth through green finance: A conceptual and sectoral analysis of Nepal. *Madhesh Journal of Interdisciplinary Research*, 1(1), 77–86. https://doi.org/10.3126/mjir.v1i1.97095

[31.] Rahman, A., Shrestha, B., & Shrestha, S. (2026). Transforming traditional investment practices: Adoption of AI tools by banks in Nepal. *Pacific Business Review (International)*, 18(9), 1–11.

[32.] Rahman, A., & Shrestha, S. (2026). Financial inclusion through fintech: Evidence from emerging economies. Addaiyan Journal of Arts, *Humanities and Social Sciences*, 8(1), 11–19. https://doi.org/10.36099/ajahss.8.1.2

[33.] Rahman, A. (2025). Financial performance implications of working capital decisions in the Nepalese manufacturing sectors. *Addaiyan Journal of Arts, Humanities and Social Sciences*, 7(12), 32–46. https://doi.org/10.36099/ajahss.7.12.3

[34.] Rahman, A., & Mishra, S. (2026). Understanding the effects of price discrimination on digital market competition. *Journal of Economics and Management*, 5(1), https://doi.org/10.3126/jem.v5i1.86950

[35.] Rahman, A. (2025). Impact of artificial intelligence (AI) on financial management in cement manufacturing companies. *Academic Voices*: A Multidisciplinary Journal, 14(1).

[36.] Rahman, A. (2023). Impact of working capital ratios on profitability in selected four-wheeler automobile companies. *The Lumbini Journal of Business and Economics*, 11(1), 100–115. https://doi.org/10.3126/ljbe.v11i1.54320

[37.] Rahman, A., & Acharya, P. (2026). Artificial intelligence adoption and its influence on working capital management in emerging economies. *Addaiyan Journal of Arts, Humanities and Social Sciences*, 8(10), 27–37. https://doi.org/10.36099/ajahss8.10.3

[38.] Rasheed, M. H., Rafique, A., Zahid, T., & Akhtar, M. W. (2018). Factors influencing investor's decision making in Pakistan. *Review of Behavioral Finance*, *10*(1), 70–87. https://doi.org/10.1108/RBF-05-2016-0028

[39.] Sathya, N., & Gayathiri, R. (2024). Behavioral biases in investment decisions: An extensive literature review and pathways for future research. *Journal of Information and Organizational Sciences*, *48*(1). https://doi.org/10.31341/jios.48.1.6

[40.] Shah, B., & Butt, K. A. (2024). Heuristic biases and investment decision-making of stock market investors: A review paper. *Vision: The Journal of Business Perspective*. https://doi.org/10.1177/09722629231220985

[41.] Shefrin, H., & Statman, M. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *The Journal of Finance*, *40*(3), 777–790. https://doi.org/10.1111/j.1540-6261.1985.tb05002.x

[42.] Tan, L., Chiang, T. C., Mason, J. R., & Nelling, E. (2008). Herding behavior in Chinese stock markets: An examination of A and B shares. *Pacific-Basin Finance Journal*, *16*(1–2), 61–77. https://doi.org/10.1016/j.pacfin.2007.04.004

[43.] Talwar, S., Talwar, M., Tarjanne, V., & Dhir, A. (2021). Why retail investors traded equity during the pandemic? An application of artificial neural networks to examine behavioral biases. *Psychology &*

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/26nov1142

Marketing, *38*(11), 2142–2163. https://doi.org/10.1002/mar.21550

[44.] Thapa, B. K. (2024). Cognitive biases on investment decisions in the Nepalese stock market. *The Journal of Nepalese Business Studies*, *17*(1), 182–193. https://doi.org/10.3126/jnbs.v17i1.75316

[45.] Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*(2), 207–232. https://doi.org/10.1016/0010-0285(73)90033-9

[46.] Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*(4157), 1124–1131. https://doi.org/10.1126/science.185.4157.1124

[47.] Waweru, N. M., Munyoki, E., & Uliana, E. (2008). The effects of behavioural factors in investment decision-making: A survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, *1*(1), 24–41. https://doi.org/10.1504/IJBEM.2008.019243.