

## **The Moderating Role of Financial Literacy between Herding Behavior and Investment Decisions in Nepalese Mutual Funds**

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### **Abstract**

**Background:** The aim of this research was to examine and explain how financial literacy influences the effect of herding behavior on the investment decisions made by Nepalese mutual fund investors. Financial literacy can play a crucial moderating role in reducing the predominance and negative effects of herding behaviors among Nepalese mutual fund investors.

**Methods:** Data were collected from 386 participants engaged with NEPSE and mutual funds using a convenient sampling method. An explanatory research design with quantitative approach was used. The statistical analysis used both regression models and Structural Equation Modeling (SEM) in R Software to assess the direct, indirect, and interaction effects of herding behavior and financial literacy on investment decision-making.

**Results:** The research found a significant positive link between herding behavior and investor decision-making, a bold positive link between financial literacy and decision-making, and that financial literacy moderated the influence of herding behavior on mutual fund investment decisions.

**Conclusion:** The study concluded that investors, financial advisors, and policymakers should develop better investment strategies and regulations as per the insights gained from this research in order to mitigate the unfavorable effects of investors' herding behaviors. The study

recommends the initiation of training programs, workshops, and seminars to reduce herding behavior by improving the financial knowledge of investors,

**Novelty/Value:** This research fills in the research gap and adds to the existing literature on these important constructs and offers empirical evidence regarding their impacts within the financial markets of Nepal. It is found that focused financial education initiatives can enable Nepalese investors to bridge the knowledge gap, reduce herd behavior, and make rational mutual fund investment decisions.

**Keywords:** Financial literacy, Herding bias, Moderation, Investment Decision, Mutual Fund.

## **Introduction**

[Bandura \(1977\)](#) in his Social Learning Theory (SLT) explains that people learn behaviors by observing and copying others in their social environment. Learning includes attention, retention, reproduction, and motivation. Social Learning Theory explains that our thoughts, environment, and actions get affected by each other. In Nepal, this theory helps explain herd behavior among mutual fund investors who, because of limited financial knowledge and information, usually follow others' investment decisions without thorough analysis of their own. [Gupta et al. \(2025\)](#) find financial literacy playing a crucial role in moderating SLT driven herding behavior. Higher financial literacy strengthens investors' ability to make independent and thoughtful decisions, reducing herd mentality. Public pressure and cultural respect for elders further intensify this tendency, causing investors to align their decisions with the group, usually at the expense of rational decision-making ([Bhandari & Subedi, 2024](#); [Risal & Khatiwada, 2019](#); [Chhetri & Bhat, 2025](#)).

Investment decision-making is a judicious process that involves stages like problem identification, information gathering, choice consideration, decision-making, and evaluation, impacted by personal needs, organizational context, and environmental needs. Behavioral finance factors like heuristics and herding behavior also influence investment decisions by affecting how investors perceive risk and behave accordingly ([Almansour et al., 2023](#); [Ahmed & Noreen, 2021](#)). Investment decision-making is generally classified into rational and irrational forms. Rational investors depend on logical analysis and factual information, whereas irrational investors are largely shaped by behavioral biases ([Khurshid et al., 2021](#)). The investment process needs systematic evaluation of alternative opportunities and risk factors to enhance financial results ([Gao et al., 2021](#)). The field of behavioral finance describes the impact of emotional responses, overconfidence, and herding behavior on investor behavior significantly ([Rasool & Ullah, 2020](#)). The foundational research by [Lusardi & Mitchell \(2015\)](#) revealed that financial literacy is crucial in making sound investment and retirement planning decisions. Their work found that financial and numerical literacy help investors handle complex financial situations, leading to better economic outcomes.

Herding behavior is widespread in the mutual fund sector also, especially among individual investors who are more susceptible to psychological biases than corporate managers ([Dhakal & Lamsal, 2023](#); [Colline & Hermawan, 2025](#)). This bias usually results in impulsive actions like panic selling, affected by media, peer pressure, and the assumption that following the

crowd is safer. Groupthink also hinders independent thinking, especially among insecure investors who depend on others' views under different market conditions [Ghatak & Sam, \(2025\)](#). Financial literacy is the capability to manage finances, make rational investment choices, enable investors to understand different financial instruments, appraise risks, and link decisions with ultimate goals. It includes gaining financial knowledge and skills to evaluate investment opportunities and enhance decision-making power [\(Negara & Rahyuda, 2025; Dabade & Sowmya, 2025\)](#).

The mutual fund industry in Nepal commenced after the Securities Board of Nepal (SEBON) launched the Mutual Fund Directives in 2010. Then after, the first mutual fund was established by the Nepal Industrial Development Corporation (NIDC) [\(Bajracharya & Aithal, 2024\)](#). Since then, the mutual fund, and the capital market, have shown slow but consistent development, playing a crucial role in financial intermediation and assisting in the country's economic development [\(Dangol & Manandhar, 2020\)](#). At the same time, psychological biases like herding create enormous challenges, resulting in poor investment behaviors in the selection of funds with excessively high fees, excessive trading activities, and incorrect market timing, which jointly reduce investment returns [\(Zhang, 2023\)](#). Financial literacy is identified as a critical moderating variable to lessen the adverse effects of biases like herding, thereby enhancing independent and rational investment choices [\(Rana, 2025\)](#). A deep understanding of herding behavior is necessary, as it encourages investors to draft realistic investment objectives, promotes sound financial management, and boosts resilience against conspiracy. Cognitive biases are important habits that impact the way investors make investment decisions [\(Metawa et al., 2018\)](#). Thus, it is essential to examine the relationship between financial literacy and behavioral biases to find the extent to which financial literacy can reduce the ill-effects of these biases among Nepalese investors [\(Raut, 2020\)](#). This research aims to identify the prevalence of illogical investment behavior within Nepal's mutual fund sector, quantify the related cognitive biases, and inquire the moderating role of financial literacy on investors' vulnerability to these biases while making investment decisions.

The investment psychology of Nepalese mutual fund investors is affected by psychological biases, mental abilities, and market environment. Thus, identifying and managing these biases is essential for investors to make intelligent decisions consistent with their financial goals [\(Bajracharya & Aithal, 2024\)](#). This research attempts to address the gap in behavioral finance studies in Nepal, which have largely concentrated on stock market investors and developed economies, by pinpointing particularly on mutual fund investors. This research contributes to better understanding and management of investment psychology in Nepal's socio-economic context by exploring the degree of illogical behavior and the moderating effect of financial literacy [\(Amgain et al., 2025; Dahal & Uprety, 2025\)](#). Accordingly, this research seeks to address the following research questions:

- (i) Does herding behavior affect the mutual fund investment decisions?
- (ii) What is the influence of financial literacy on mutual fund investment decisions?
- (iii) Does financial literacy moderate the relationship between investors' herding behavior and their investment decisions?

The paper is divided into seven segments. The introduction segment is followed by a brief review of relevant literatures on behavioral biases, financial literacy and mutual funds in Nepal, along with research model development. The third segment includes methodological aspects and the fourth segment deals with analysis of results and the last three segments concludes the paper.

## **Literature Reviews and Hypothesis**

### **Herding Behavior and Investment Decisions**

Herding behavior is usually positively associated with fluctuations in the market. It suggests that investors are more likely to follow the herd during times of market uncertainty and risk. This behavior is commonly observed among individual mutual fund investors, and is affected by psychological factors rather than purely rational investment strategies (Gothe & Mishra, 2023). It is seen that during times of panic, investors often abandon their own investment decisions and choose to follow crowd, thinking that these individuals have better information regarding market trends (Gao et al., 2021). In Kathmandu valley, herding behavior is prevalent, with investors often choosing to imitate the investment decisions of peers and the prevailing market trends rather than performing their own independent analyses. This tendency can exaggerate market fluctuations and potentially skew funds valuations (Dhakal & Lamsal, 2023).

According to Kengatharan and Navaneethakrishnan, (2014), a study was conducted to explore the influence of herd behavior on the investment decisions of individual investors. The research revealed no correlation between herd behavior and investment decisions. This conclusion was drawn from a sample of over four hundred individual investors. Despite the contradicting findings among researchers, herding is likely to have a considerable effect on investment choices (Metawa et al., 2018). Herding behavior in investment decision-making, grounded in social learning theory occurs when investors mimic others rather than rely entirely on their own analysis. Information cascades suggest this compliance lowers perceived risk but can cause market inefficiencies like uncertainty and bubbles (Shah et al., 2024). Therefore, the following hypothesis is proposed in Nepalese context:

***H1:** Herding behavior has a significant relationship with investment decision-making.*

### **Financial Literacy and Investment Decisions**

Financial literacy involves a profound understanding in managing personal finances, which includes aspects like budgeting, saving, portfolio management and handling debt, among others. Investors need a deep knowledge of a diverse range of financial concepts and information to make rational, low-risk, and effective decisions (Worthington, 2006; Rajan & Ashwini, 2025). Financial literacy enables investors to analyze market trends, interpret economic indicators, and comprehend financial news effectively, which is crucial for making well thought-out investment decisions (Kanagasabai & Aggarwal, 2020). Financially literate investors are better equipped to manage their assets properly (Chavali & Raj, 2016). By fostering a stable mindset toward investment decisions, financial literacy not only empowers investors but also instills the confidence needed to make informed and rational decisions (Raut, 2020). According to Idris et al., (2013), financial literacy significantly enhances accurate

forecast, investment decisions, and resource management. Initial research by [Lusardi & Mitchell \(2015\)](#) posits that financial literacy is crucial for sound investment and retirement planning. It helps investors handle difficult financial situation resulting in better economic outcomes. Drawing from these studies, the proposed hypothesis is as follows:

***H2:** There is a significant relationship between financial literacy and investment decision-making.*

### **The Moderating Role of Financial Literacy**

Research has demonstrated the moderating effect of financial literacy on the relationship between behavioral biases and investment decisions ([Adil et al., 2022](#)). After enhancing financial literacy, investors show less irrational behavior ([Fernandes et al., 2014](#)). The relationship between financial literacy and behavioral biases has been researched, showing that financial literacy negatively correlates with herd behavior and positively correlates with mental accounting, overconfidence, and loss aversion ([Barker et al., 2019](#)). Financial literacy plays an important role in enabling investors to make sound investment decisions like when they rely on financial information to guide their saving, investing, and borrowing practices ([Idris et al., 2013](#)).

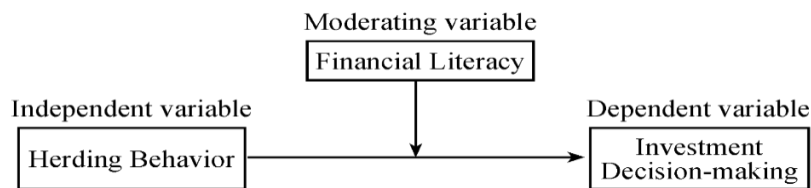
It serves a crucial function in improving both investment and financial decision-making processes. An exploration of behavioral biases along with financial literacy is, therefore, essential to understand the true behaviors of investors and how financial literacy contributes to their decision-making processes ([Nguyen & Rozsa, 2019](#)). Financial literacy also plays a significant role in moderating herding behaviors and investment decision-making. Investors who possess higher financial literacy are more likely to evaluate risk rationally, even in the face of herding tendencies, which helps minimize impulsive decision-making ([Rana, 2025](#)). Financial literacy moderates the impact of herding on investment decisions, with higher financial literacy weakening the behavior to herd. This was found by [Sulhia et al. \(2022\)](#) who showed that financially literate investors make more rational decisions rather than just following others. Drawing from these studies, the proposed hypothesis is as follows:

***H3:** Financial literacy moderates the relationship between herding behavior and investment decision-making.*

### **Conceptual Framework**

The conceptual framework, grounded in behavioral finance theories and social leaning theories, examines the direct effect of herding behavior on investment decisions and the moderating role of financial literacy. Financial literacy influences this relationship by helping investors make more informed and independent choices ([Rana, 2025](#)). The following figure illustrates this framework.

**Figure 1** *Conceptual framework*



*Source:* Authors' own work

## Methodology

This research paper investigated the moderating role of financial literacy on behavioral biases like herding behavior of Nepalese mutual fund investors and their decision-making using an explanatory research design with quantitative approach. The reasons for using an explanatory research design include supporting theories in behavioral finance, measuring the moderating effect of financial literacy, and generating reliable evidence to guide future research and practical efforts in investor education. (Sattar et al., 2020). Cochran's approach (Cochran, 1977) was used to find the sample size that adequately represent the population, comprising of entire mutual fund investors in Nepal. Individuals participating in various financial sectors (including the stock market, mutual funds, etc.), are identified as respondents in this study. Data was collected using convenient sampling technique so that data could be gathered from a large pool of easily available respondents through standardized questionnaires (Etikan, et al., 2015). A total of 400 hundred questionnaires were distributed (to ensure consistency with Cochran sample value) to various financial institutions, resulting in 386 acceptable responses that were analyzed, (96% response rate), far more than the minimum 30% response rate essential for research (Bougie & Sekaran, 2019). The remaining incomplete submissions were disregarded. A sample size based on 10:1 respondent-to-item ratio ensures a reliable correlation, regression, mediations and moderation analysis (Hair et al., 2021). A sample size of 386 is well above 150 respondents ( $10 \times 15$ ), ensuring enough data for reliable analysis. The questionnaire of this research consists of 15 items. To ensure adequate respect for participants, enhance the credibility and trustworthiness of the research, and protect both the participants and the researchers from ethical issues, a robust ethical guideline was obeyed, like informing the respondents about research purpose and procedure, taking their consent for willing participation, and maintaining their data privacy by using anonymity.

## Data Analysis Strategies

The statistical analysis combined both regression models and Structural Equation Modeling (SEM) using R Software to examine direct, indirect, and interaction effects between herding bias, financial literacy, and investment decision-making. Regression was used to measure the strength and direction of relationships among variables, while SEM provided a complete framework for testing both the measurement model (validating constructs and indicators) and the structural model (assessing hypothesized relationships). Moderation analysis, performed within the SEM framework, create an interaction term ( $HB \times FL$ ) to clearly test whether and how the impact of herding bias on investment decisions changes at various levels of financial

literacy (Murhadi et al., 2024; Dahal & Uprety, 2025). In this study, pilot testing was not conducted because the questionnaire items were taken from well-established sources. Thus, it was assumed that there were no ambiguities or issues and the questionnaire would accurately measure the intended constructs without further preliminary testing (Saris & Gallhofer, 2014). Further, the reliability of constructs of HB, FL, and ID were measured by Cronbach Alpha and were greater than threshold 0.7. The Cronbach Alpha of HB, FL, and ID were 0.735, 0.838, and 0.707 respectively. It implies that there is internal consistency among the constructs.

### **Measure**

This research questionnaire includes fifteen questions aimed at assessing herding behavior and financial literacy. The questionnaire employs a 5-point Likert scale format, ranging from one (strongly agree) to five (strongly disagree). It is divided into four sections. Section A deals with demographic variables like age, gender, qualification, occupation and income. Section B contains four questions/items focused on herding behavior, treated as independent variables and adapted from (Kengatharan & Kengatharan, 2014). Section C presents five questions/items related to investment decisions, considered as dependent variable, as per (Waweru et al., 2008). Finally, the last section D comprises six questions/items addressing financial literacy, identified as the moderating variable, as adapted from Rooij et al. (2011).

### **Demographic Profile of Respondents**

**Table 1.**

*Demography Profile of Respondents*

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	152	39.40%
	Female	234	60.60%
Age Group	18–25 years	54	14.00%
	26–35 years	87	22.50%
	36–45 years	163	42.20%
	Above 45 years	82	21.20%
Education Level	Bachelor's Degree	45	11.70%
	Master's Degree	143	37.00%
	M.Phil./Ph.D.	198	51.30%
Occupation	Private Sector Employee	152	39.40%
	Government Employee	119	30.80%
	Self-Employed	115	29.80%
Monthly Income	Less than NPR 25,000	111	28.80%
	NPR 25,001 – 50,000	72	18.60%

	NPR 50,001 – 75,000	58	15.00%
	Above NPR 75,000	145	37.60%
Marital Status	Married	223	57.80%
	Unmarried	141	36.50%
	Divorced/Widowed	22	5.70%

**Source:** Authors' field work report

The demographic profile of 386 respondents shows a varied sample across gender, age, education, occupation, income, and marital status, helping in understanding investors' financial behaviors. Females shows a majority (60.6%), with major participants aged 36–45 years (42.2%), followed by 26–35 years (22.5%). More than half hold M.Phil. or Ph.D. degrees (51.3%), with private sector employees being the largest occupational group (39.4%). Income differs, with 37.6% earning above NPR 75,000 monthly and 28.8% under NPR 25,000. Majority of respondents are married (57.8%). This diversity helps researchers get important information about investment decisions for different types of investors.

## **Results and Analysis**

### **Multicollinearity Analysis**

**Table 2**

*VIF Analysis*

<b>Items</b>	<b>VIF</b>
<b>HB</b>	
HB1	1.26
HB2	1.71
HB3	1.81
HB4	1.24
<b>FL</b>	
FL1	1.47
FL2	1.87
FL3	1.71
FL4	2.14
FL5	2.68
FL6	2.60
<b>ID</b>	
ID1	1.83
ID2	1.83
ID3	1.20
ID4	1.30
ID5	1.13

**Source:** Authors' own work

According to [Hair et al. \(2021\)](#) , VIF values below 3.3 are normally considered acceptable in PLS-SEM, that ensures each indicator distinctively contributes to the construct without undue overlap. The results presented in Table 2 indicate the Variance Inflation Factor (VIF) values for all observed indicators related with the latent constructs: Herding Behavior (HB), Financial Literacy (FL), and Investment Decision (ID). The VIF values for HB range from 1.24 to 1.81, that indicates low multicollinearity among its items. Similarly, FL items showed VIF values between 1.47 and 2.68, with FL5 and FL6 nearing the upper limit but still remaining within an acceptable limit. Lastly, the VIF values for ID indicators range from 1.13 to 1.83, which further validates the absence of multicollinearity issues in the model. Hence, the multicollinearity assumption is met in this measurement model, and it supported the reliability of following structural path estimations.

### **Validity Analysis**

#### **HTMT Test of Validity**

**Table 3**

*HTMT Analysis*

LVs	LVs		
	HB	FL	ID
HB			
FL	0.795		
ID	0.610	0.801	

**Notes:** HB = Herding Behavior, FL= Financial Literacy, ID = Investment Decisions, LVs = Latent Variables

**Source:** Authors' own work

Table 3 presents the results of the Heterotrait-Monotrait (HTMT) ratio of correlations, which is used to assess discriminant validity among the latent constructs: Herding Behavior (HB), Financial Literacy (FL), and Investment Decision (ID). According to [Henseler et al.\(2015\)](#) HTMT values below the conservative threshold of 0.85 or the more liberal threshold of 0.90 indicate sufficient discriminant validity.

In this model, the HTMT values range from 0.610 to 0.801 as shown in Table 3. Specifically, the HTMT value between HB and FL is 0.795, between HB and ID is 0.610, and between FL and ID is 0.801. All values fall below the conservative threshold of 0.85, suggesting that each construct is empirically different from the others. These results assure the presence of discriminant validity, indicating that the constructs measure conceptually different events.

#### Fornell Larker Criterion Test

**Table 4**

*Fornell Larker Criterion Test*

LVs	HB	FL	ID
HB	0.747	.	.
FL	0.625	0.741	.
ID	0.432	0.639	0.682

Note: FL Criteria table reports square root of AVE on the diagonal and construct correlations on the lower triangle.

**Source:** Authors' own work

Table 4 presents the Fornell–Larcker Criterion test results used to assess discriminant validity among the latent constructs: Herding Behavior (HB), Financial Literacy (FL), and Investment Decision (ID). According to the Fornell–Larcker criterion, discriminant validity is established when the square root of the Average Variance Extracted (AVE) for each construct (represented on the diagonal) is greater than the correlations shared between that construct and other constructs represented in the lower triangle of the matrix (Fornell & Larcker, 1981).

In this case, the square root of AVE values for HB, FL, and ID are 0.747, 0.741, and 0.682, respectively as reported in Table 4. These values are all higher than their corresponding inter-construct correlations, e.g., HB and FL (0.625), FL and ID (0.639), and HB and ID (0.432). Therefore, each construct shares more variance with its own indicators than with any other construct in the model, giving evidence of discriminant validity. This finding supports the peculiarity of the constructs and adds reliability to the measurement model.

#### Reliability and convergent Validity Test

**Table 5**

*Reliability and Convergent Validity*

LVs	Cronbach's alpha	rho C	AVE	rho A
HB	0.735	0.834	0.558	0.74
FL	0.838	0.879	0.549	0.849
ID	0.707	0.811	0.466	0.724

Note: Alpha, rho C, and rho A should exceed 0.7 while AVE should exceed 0.5

**Source:** Authors' own work

Table 5 presents reliability and convergent validity for Herding Behavior (HB), Financial Literacy (FL), and Investment Decision (ID). Reliability measures like Cronbach's alpha ( $\alpha$ ), composite reliability ( $\rho C$ ), and Dijkstra-Henseler's rho A ( $\rho A$ ), all are over the 0.70 threshold for HB ( $\alpha = 0.735$ ,  $\rho C = 0.834$ ,  $\rho A = 0.740$ ) and FL ( $\alpha = 0.838$ ,  $\rho C = 0.879$ ,  $\rho A = 0.849$ ), indicating favorable reliability. Their AVE values (HB = 0.558, FL = 0.549) ensure convergent validity. ID shows adequate reliability ( $\alpha = 0.707$ ,  $\rho C = 0.811$ ,  $\rho A = 0.724$ ), although its AVE (0.466) is slightly below 0.50. According to Hair et al. (2021), this can be acceptable if

composite reliability is strong and the study is exploratory. Hence, the constructs show adequate reliability and acceptable convergent validity, that represents the measurement model's strength.

**Cross Loadings Test**

**Table 6**

*Cross Loadings Test*

LVs	HB	FL	ID
<b>HB</b>			
HB1	<b>0.658</b>	0.383	0.279
HB2	<b>0.800</b>	0.505	0.341
HB3	<b>0.798</b>	0.487	0.283
HB4	<b>0.723</b>	0.477	0.368
<b>FL</b>			
FL1	0.448	<b>0.693</b>	0.513
FL2	0.424	<b>0.806</b>	0.605
FL3	0.489	<b>0.734</b>	0.486
FL4	0.514	<b>0.771</b>	0.414
FL5	0.461	<b>0.725</b>	0.360
FL6	0.469	<b>0.710</b>	0.381
<b>ID</b>			
ID1	0.305	0.366	<b>0.750</b>
ID2	0.291	0.345	<b>0.757</b>
ID3	0.285	0.303	<b>0.597</b>
ID4	0.231	0.562	<b>0.739</b>
ID5	0.399	0.578	<b>0.539</b>

**Source:** Authors' own work

Table 6 shows cross-loadings analysis to examine discriminant validity among Herding Behavior (HB), Financial Literacy (FL), and Investment Decision (ID). According to [Hair et al. \(2021\)](#), an item should load highest on its own construct for validity. The results validate this, with HB2 loading 0.800 on HB, higher than on FL (0.505) and ID (0.341); FL2 loading 0.806 on FL, exceeding HB (0.424) and ID (0.605); and ID2 loading 0.757 on ID, above HB (0.291) and FL (0.345). Though some moderate cross-loadings, each item's primary loading is highest on its own construct, indicating discriminant validity and supporting the measurement model's validity.

## Model Test

Table 7

<i>Model Test</i>	
Criteria	ID
AIC	-416.492
BIC	-400.669

**Source:** Authors' own work

Table 7 shows the Akaike Information Criterion (AIC) at -416.492 and the Bayesian Information Criterion (BIC) at -400.669 for the structural model. As per [Hair et al., \(2021\)](#), lower values denote a better balance between model fit and complexity. Therefore, these values indicate that the model is both robust and efficient, well-capable in forecasting investment decisions. Moreover, it can serve as a yardstick for future model comparisons that involves moderating effects.

## R-Square Test

Table 8

<i>R-Square</i>	
R <sup>2</sup>	0.666
AdjR <sup>2</sup>	0.664
HB	0.229
FL	0.694
HB×FL	0.256

**Source:** Authors' own work

The R<sup>2</sup> value in Table 8 for the independent construct Investment Decision (ID) is 0.666. It means 66.6% of the variance in ID is explained by Herding Behavior (HB), Financial Literacy (FL), and their interaction (HB×FL). The adjusted R<sup>2</sup> value is shows how well the model fits the data while considering the number of factors used. The value 0.664 means the model is reliable. As per [Hair et al. \(2021\)](#), R<sup>2</sup> values of 0.75, 0.50, and 0.25 represent substantial, moderate, and poor explanatory power respectively. Thus, a R<sup>2</sup> of 0.666 reflects a moderately high level and indicates a well-fitting model. The R<sup>2</sup> values for HB (0.229), FL (0.694), and HB×FL (0.256) supports the interaction's role in explaining variance. In short, the R<sup>2</sup> and adjusted R<sup>2</sup> verify the model's meaningful predictive power and its effectiveness.

## F-Square Test

The F<sup>2</sup> value measures the effect size of an exogenous construct on an endogenous construct in PLS-SEM. It shows the contribution of an independent variable to the R<sup>2</sup> by contrasting the model with and without that variable included ([Hair et al., 2021](#)). As per the guidelines, F<sup>2</sup> values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively. Thus, 0.586 shows a large effect size, showing that the HB×FL interaction term has a strong influence on Investment Decision (ID). This indicates that the moderation effect boosts the model's power at explaining things and suggests the interaction term should be included in behavioral finance studies.

### **Loading Bootstrapped**

Table 9's bootstrapped loadings justify the reliability and significance of each indicator for the latent variables in the PLS-SEM model. For Herding Behavior (HB), all four indicators have strong, statistically crucial loadings with t-values between 11.73 and 30.40, and 95% confidence intervals excluding zero. HB2 and HB3 are more reliable, giving loadings above 0.79 with narrow confidence intervals.

**Table 9**

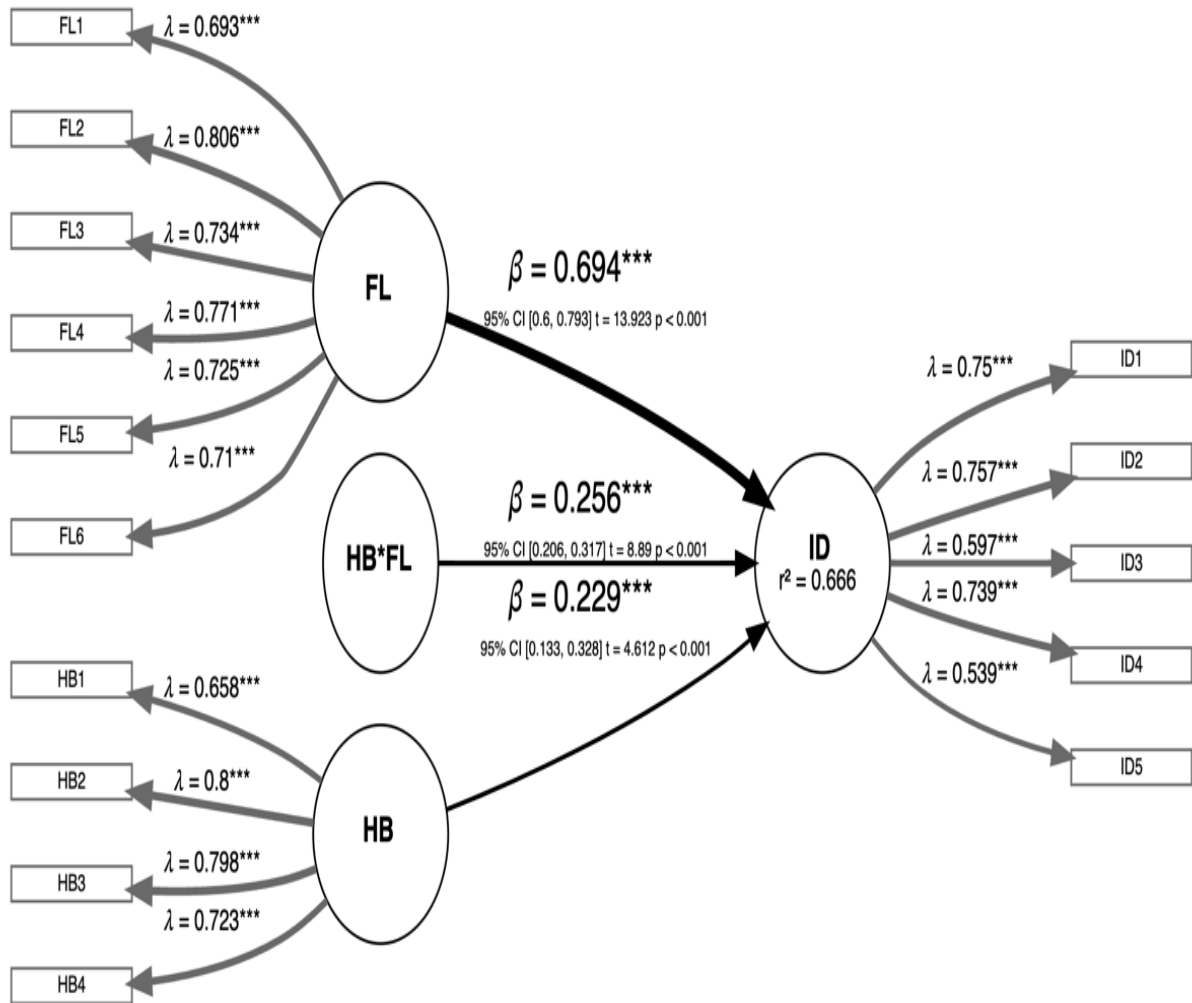
*Factor Loading Bootstrapped*

LVs		Original Est.	Mean	SD	t-stat.	2.50% CI	97.50 CI
HB1	-> HB	0.658	0.652	0.056	11.731	0.531	0.749
HB2	-> HB	0.8	0.799	0.026	30.399	0.743	0.847
HB3	-> HB	0.798	0.794	0.031	26.116	0.727	0.845
HB4	-> HB	0.723	0.722	0.043	16.693	0.628	0.797
FL1	-> FL	0.693	0.692	0.043	16.151	0.601	0.768
FL2	-> FL	0.806	0.806	0.022	36.307	0.759	0.847
FL3	-> FL	0.734	0.734	0.029	25.536	0.671	0.786
FL4	-> FL	0.771	0.769	0.031	24.708	0.702	0.824
FL5	-> FL	0.725	0.722	0.045	16.063	0.623	0.799
FL6	-> FL	0.71	0.706	0.047	15.06	0.603	0.787
ID1	-> ID	0.75	0.749	0.028	26.679	0.687	0.796
ID2	-> ID	0.757	0.755	0.03	25.274	0.689	0.807
ID3	-> ID	0.597	0.594	0.05	11.943	0.488	0.682
ID4	-> ID	0.739	0.739	0.027	27.668	0.682	0.787
ID5	-> ID	0.539	0.537	0.052	10.308	0.424	0.627
HB×F intxn	-> HB×FL	2.19	2.135	0.178	12.285	1.719	2.396

**Source:** Authors' own work

Table 9 shows that all Financial Literacy (FL) indicators have strong loadings (0.693–0.806), high t-values (above 15.06), and narrow confidence intervals, and FL2 and FL4 being the strongest. For Investment Decision (ID), all five indicators are significant, although ID3 (0.597) and ID5 (0.539) are below the 0.70 threshold but are statistically impactful. The interaction term HB×FL has a strong loading (2.19) and t-value (12.285), that indicates a meaningful moderation effect.

**Figure 2** Path model with moderation



**Source:** Authors' own work

### Total Path Analysis

**Table 10**

*Total Path Model*

LVs		Original Est.	Mean	SD	t-stat	2.50% CI	97.50% CI
HB	-> ID	0.229	0.229	0.05	4.612	0.133	0.328
FL	-> ID	0.694	0.694	0.05	13.923	0.6	0.793
HB×FL	-> ID	0.256	0.257	0.029	8.89	0.206	0.317

**Source:** Authors' own work

Table 10 and 11 exhibit strong support for the hypothesized direct and moderation effects in the structural model. Herding Behavior (HB) positively impacts Investment Decision (ID) with an estimate of  $\beta$  of 0.229 ( $t = 4.612$ ,  $p < .001$ ) and a confidence interval excluding zero. Financial Literacy (FL) has stronger effect on ID ( $\beta = 0.694$ ,  $t = 13.923$ ), stressing that higher financial literacy results in better investment decisions. The interaction term  $HB \times FL$  is also

significant ( $\beta = 0.256$ ,  $t = 8.89$ ), suggesting that financial literacy not only influences investment decisions directly but also strengthens the positive impact of herding behavior on investors' investment behavior. This matches with prior research highlighting financial literacy as a vital moderator in decision-making processes (Lusardi & Mitchell, 2014).

### Hypothesis Analysis

Table 11.

#### Hypothesis Analysis

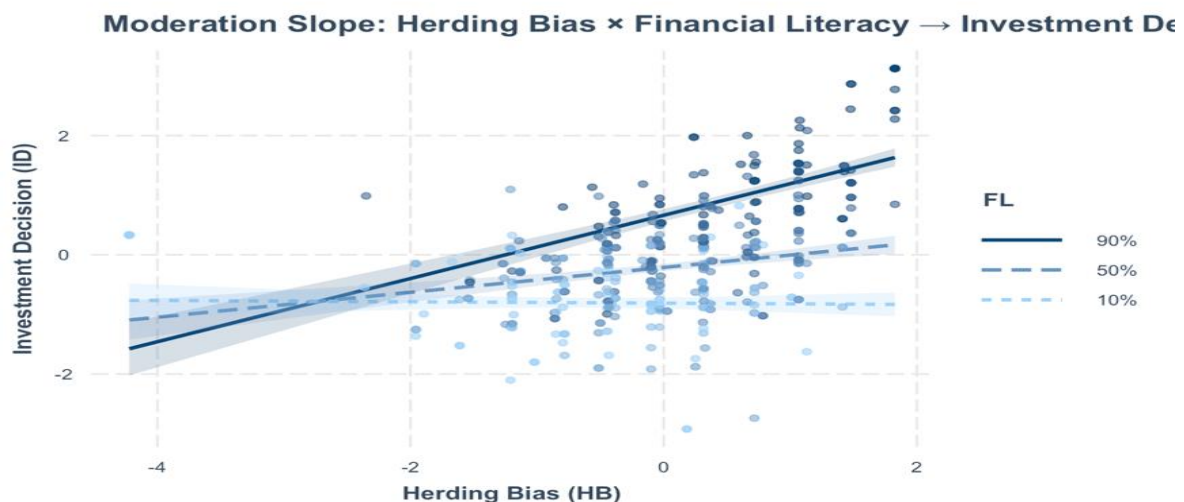
Hypothesis	Path Relationship	Hypothesis Statement	$\beta$	t-value	p-value	Result
H1	HB $\rightarrow$ ID	Herding Behavior has a positive effect on Investment Decision.	0.229	4.612	< .001	Supported
H2	FL $\rightarrow$ ID	Financial Literacy has a positive effect on Investment Decision.	0.694	13.923	< .001	Supported
H3	HB $\times$ FL $\rightarrow$ ID	Financial Literacy positively moderates the effect of Herding Behavior and Investment Decision.	0.256	8.890	< .001	Supported

**Source:** Authors' own work

### Slope Analysis of Moderation

Figure 2

#### Simple Slope Analysis



**Source:** Authors' own work

Figure 2's slope plot shows how Financial Literacy (FL) affects the association between Herding Behavior (HB) and Investment Decision (ID). The graph depicts three FL levels: low (10%), moderate (50%), and high (90%). At high FL (dark blue line), there is a strong positive HB-ID relationship, while moderate FL shows a weaker positive slope, and low FL (dotted line) shows little to no relationship. This shows that financial literacy strengthens the positive impact of herding behavior on investment decisions. It means financially literate individuals are more likely to convert herding behavior into actual investments. This defends the theory

that thinking skills and knowledge influence how an investor makes decisions in behavioral finance.

### **Discussion**

The result shows that herd behavior has the most significant effect on investment decisions ( $\beta = 0.229$ ,  $t$ -value = 4.612 and  $p < 0.001$ ). It means that herd behavior has a strong influence on how investors choose to invest, with a positive connection shown by the coefficient ( $\beta = 0.229$ ). The high  $t$ -value (4.612) and very small  $p$ -value ( $p < 0.001$ ) mean this result is significantly reliable. In other words, investors usually follow what others are doing. It affects market movements and motivates many others to invest in the same way. Previous studies also support the result (Khurshid et al., 2021; Rasool & Ullah, 2020; Sattar et al., 2020; Colline & Hermawan, 2025; Rajan & Ashwini, 2025). However, Ghatak & Sam, (2025) argue that investors in the Indian stock market mostly make independent and rational decisions. Herding behavior, or following the crowd, happens only in special cases or very active trading times. So, most of the time, investors are not influenced by others' actions.

The research shows that financial literacy has a positive and significant effect on investment decision-making ( $\beta = 0.694$ ,  $t$ -value = 13.923 and  $p < 0.001$ ), aligning with the findings of (Adil et al., 2022; Rasool & Ullah, 2020; Ben, 2025; Anggraeni & Putra, 2025). It means having more knowledge about finance helps investors make smarter investment decisions, resulting in potentially better financial outcomes. Positive and significant effects show this relationship is both beneficial and statistically meaningful. The study found investors who understand financial concepts, like budgeting, saving, and investment portfolios are more equipped to make better and more rational choices when deciding where and how to invest their money. Rooij et al. (2011) assert that a good investment decision is directly dependent on financial literacy because low financially literate investors usually rely on their peers, brokers, analysts and others for their investment decision and hence are more likely to make irrational decisions. Sharma (2025) and Dabade and Sowmya (2025), in their research, however, find somewhat opposite results. They find that financial literacy is not just only factor that affects investment decisions, other things like attitudes, behaviors, personal skills, and economic conditions also affect equally how investors decide to invest. Thus, financial literacy is crucial but just one part of a bigger picture impacting investment decisions.

The results for the effect of the interaction term (HB $\times$ FL) on the investment decision indicates financial literacy positively moderates the effect of herding behavior and investment decision ( $\beta = 0.256$ ,  $t$ -value = 8.890 and  $p < 0.001$ ), which is consistent with the findings of Gupta et al. (2025) and Amgain et al. (2025), where they also found positive and significant moderating effect. Financial literacy significantly influences how herding behavior impacts investment decisions, with a positive beta ( $\beta = 0.256$ ) and robust statistical significance ( $p < 0.001$ ). Higher financial literacy causes investors to avoid blindly following the peer pressure and instead make decisions based on mutual fund performance records, fees structure, and personal investment goals. Investors with higher financial knowledge depend more on basic analysis than on what others do. Financial literacy helps accurately assess risks and rewards, resulting in improved investment results. It also increases confidence and skill level, enabling investors to make their

own smart decisions rather than just mimicking others. Financial literacy can, thus, weaken or change the effect of herding behavior, inspiring people to make more independent and rational investment decisions. However, As per the findings of various researchers( e.g., [Salsabila & Neliana, 2025](#); [Dahal & Uprety, 2025](#); [Negara & Rahyuda, 2025](#)), the moderating impact of financial literacy is ambiguous, weak and inconsistent. This is true particularly in emerging markets like Nepal, where financial knowledge among investors is inherently low. In these situations, emotional intelligence may play a more important role than financial literacy in lowering herding behavior of investors. Emotional intelligence is the ability to identify and control one's own emotions and understand others. It can, therefore, help investors make more thoughtful decisions and resist the social pressure. Hence, nurturing emotional intelligence could be a vital way-out to mitigate emotional biases and encourage better investment practices in Nepalese evolving mutual fund markets.

### **Limitations and Recommendations for Future Researches**

The authors notice that there are some constraints within this study. For example, data is sourced from a limited pool, which could lead to potential bias in the empirical evidence shown. For future research, it is advised that data collection should encompass a broader gamut of investors from various metropolitans across Nepal. Additionally, a broader questionnaire combining additional behavioral biases can be developed, along with more detailed instructions to help respondents in completing the questionnaires. This research uses survey questionnaires and suffers from limitations like limited response options, non-response bias, survey tiredness, and hesitation to answer sensitive questions, reducing result generalizability and data consistency ([Bougie & Sekaran, 2019](#)). Future researchers are advised to use methods like observational methods, structured interviews, focus groups, and mixed qualitative-quantitative approaches that can deal with these issues and yield more valid and complete results. Convenience sampling chooses easily available participants, resulting in bias and limited generalizability. Thus, Probability sampling is advised for future research as it uses random selection to reduce biases and produce more accurate and general results. It improves representation by giving all population members an equal chance of selection ([Etikan, et al., 2015](#)). Employing qualitative research methods could provide a more detailed understanding of results and investor behavior. Longitudinal research can provide a more lucid view of how investors' long-term investment behavior is impacted by their psychological biases. Further, the latent variables in this study examined only a limited number of factors/items. There could be additional items that influence observed bias, moderator and investment decision-making. Future research should incorporate additional variable like emotional intelligence as a moderating factor along with financial literacy to better nullify the ill-impacts of herding behaviors of investors.

### **Conclusion and Implication**

The research concentrated on a group of 386 individual investors. By employing R Software, the researchers evaluated and analyzed the proposed hypothesis. The assessment of the hypothesis revealed a positive relationship between financial literacy and investment decisions,

implying that investors' understanding of financial information effectively directs them towards wise investment choices. This study also found that herding behavior had a significant and positive influence on investment decisions. Moreover, it was found that financial literacy serves a moderating role in this study, suggesting that individuals with higher financial knowledge are less vulnerable to the impact of behavioral biases on their investment choices. The study also showed that higher financial knowledge helps investors make better decisions, particularly in Nepal's multifaceted socioeconomic context. It underscores the need for targeted financial education and awareness programs to increase participation in mutual funds. Policymakers in Nepal can stimulate rational investment by developing targeted financial literacy programs for all demographic groups, focusing on basic investment theories like risk-return management, investment portfolio management, criteria for mutual fund schemes selection, etc. Working together with financial institutions and community organizations can help extend these efforts. They should make rules to keep things clear, protect investors from wrong or confusing information, and promote honest financial advice. These steps can help build trust, reduce irrational investing behaviors, and support the sustainable growth of the Nepalese mutual fund industry, ultimately benefiting investors, advisors, and the economy as a whole.

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**Transparency Statement:** We confirm that this study has been conducted with honesty and in full adherence to ethical guidelines.

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**Conflict of Interest:** The authors declare there is no conflicts of interest.

**Authors' Contributions:** The authors conducted all research activities i.e., concept, data collecting, drafting and final review of manuscript.

## References

- Adil, M., Singh, Y., & Ansari, M. S. (2022). How financial literacy moderate the association between behavior biases and investment decisions. *Asian Journal of Accounting Research*, 7(1), 17–30. <https://doi.org/https://doi.org/10.1108/AJAR-09-2020-0086>
- Ahmed, Z., & Noreen, U. (2021). Role of Behavioral Determinants for Investment Decision Making. *Asia-Pacific Social Science Review*, 21(2). <https://doi.org/10.59588/2350-8329.1367>
- Almansour, B.Y., Elkrghli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics & Finance*, 11(2). <https://doi.org/10.1080/23322039.2023.2239032>
- Amgain, P.N., Khatriwada, S.K., & Dhungana, B. R. (2025). The Impact of Behavioral Biases on Investment Decisions among Nepalese Investors. *Dristikon A Multidisciplinary Journal*, 15(1), 138–154. <https://doi.org/10.3126/dristikon.v15i1.77134>
- Anggraeni, F., & Putra, A. (2025). The Impact of Financial Literacy, Financial Behavior, and FinTech Adoption on Investment Decisions Among University Students. *Majalah Ilmiah Bijak*, 22(1), 174–190. <https://doi.org/doi.org/10.31334/bijak.v21i1.4642>
- Bajracharya, R. B., & Aithal, P. (2024). Emerging Market of Nepalese Mutual Fund in Nepal: A Systematic Review. *International Journal of Atharva (IJA)*, 2(1), 1–10. <https://doi.org/https://doi.org/10.3126/ija.v2i1.62818>
- 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/https://doi.org/10.1108/MF-01-2018-0003>
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J.: Prentice Hall. <https://archive.org/details/sociallearningth0000band>
- Ben, C. (2025). EVALUATING THE IMPACT OF FINANCIAL LITERACY ON INVESTMENT DECISIONS AMONG YOUNG ADULTS IN DEVELOPING ECONOMIES. *Journal of the International Academy for Case Studies*, 31(2), 1–3.
- Bhandari, D.R., & Subedi, D. P. (2024). Determinants of Investment Decisions of Mutual Fund in Nepal. *Researcher CAB: A Journal for Research and Development*, 3(1), 76–95. <https://doi.org/https://doi.org/10.3126/rcab.v3i1.68423>
- Bougie, R., & Sekaran, U. (2019). *Research Methods for Business: A Skill Building Approach* (8th ed.). WILEY.
- Chavali, K., & Mohanraj, M. P. (2016). Impact of Demographic Variables and Risk Tolerance on Investment Decisions: An Empirical Analysis. *International Journal of Economics and Financial Issues*, 6(1), 169–175.
- Chhetri, N.K. & Bhat, S. (2025). Awareness of Mutual Funds Among Nepalese Investors. *Kshitiz Management Review*, 1(1), 90–103. <https://doi.org/10.3126/kmr.v1i1.78259>
- Cochran, W.G. (1977). *Sampling techniques* (3rd ed.). New York, NY: Wiley. [https://archive.org/details/samplingtechniqu0000coch\\_t4x6](https://archive.org/details/samplingtechniqu0000coch_t4x6)
- Colline, F., & Hermawan, B. (2025). Herding Behavior in Young Investors: A Bibliometric Analysis. *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, 22, 1061–1070. <https://doi.org/10.37394/23207.2025.22.87>

- Dabade, H.A., & Sowmya, D. S. (2025). Financial Literacy and Its Impact on Investment Decisions Among GenZ Indians. *International Journal of Research Publication and Reviews*, 6(6), 9282–9290. <https://doi.org/10.5281/zenodo.15735340>
- Dahal, R. & Upreti, P. (2025). Impact of Financial Literacy and Cognitive Biases on Individual Investment Decisions in Nepalese Stock Market. *Journal of Business and Social Sciences Research*, 10(1), 29–47. <https://doi.org/10.3126/jbssr.v10i1.80280>
- Dangol, J., & Manandhar, R. (2020). Impact of Heuristics on Investment Decisions: The Moderating Role of Locus of Control. *Journal of Business and Social Sciences Research*, 5(1), 1–14. <https://doi.org/10.3126/jbssr.v5i1.30195>
- Dhakal, S., & Lamsal, R. (2023). Impact of Cognitive Biases on Investment Decisions of Investors in Nepal. *The Lumbini Journal of Business and Economics*, 11(1), 35–48. <https://doi.org/10.3126/ljbe.v11i1.54315>
- Etikan, I., Musa, S.A., & Alkassim, R. S. (2015). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fernandes, D., Lynch Jr, J.G., & Netemeyer, R. G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science*, 60(8), 1861–1883. <https://doi.org/https://www.jstor.org/stable/42919641>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/https://doi.org/10.2307/3151312>
- Gao, H., Shi, D., & Zhao, B. (2021). Does good luck make people overconfident? Evidence from a natural experiment in the stock market. *Journal of Corporate Finance*, 68. <https://doi.org/10.1016/j.jcorpfin.2021.101933>
- Ghatak, A., & Sam, S. A. (2025). IMPACT OF HERDING BEHAVIOR ON INVESTMENT DECISIONS OF RETAIL INVESTORS IN INDIA. *International Research Journal of Modernization in Engineering Technology and Science*, 7(2), 4305–4314.
- Gothe, R., & Mishra, J. (2023). Role of Herd Behavior on Investment Decision of Mutual Fund Investors in India - An Empirical Study. *Tuijin Jishu/Journal of Propulsion Technology*, 44(4), 3178–3185. <https://doi.org/https://doi.org/10.52783/tjjpt.v44.i4.1440>
- Gupta, N., Rana, R., & Tandon, D. (2025). Financial Literacy as a Moderator in Behavioral Biases and Investor Decisions. *Indian Journal of Finance*, 19(5), 79–94. <https://doi.org/10.17010/ijf/2025/v19i5/175045>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publication.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Idris, F. H., Krishnan, K. D., & Azmi, N. (2013). Relationship between financial literacy and financial distress among youths in Malayasia-An empirical study. *Malaysian Journal of Society and Space*, 9(4), 106–117. [https://journalarticle.ukm.my/6658/1/11oke.geografia-okt2013-faoziah\\_et\\_al-edam1.pdf](https://journalarticle.ukm.my/6658/1/11oke.geografia-okt2013-faoziah_et_al-edam1.pdf)

- Kanagasabai, B., & Aggarwal, V. (2020). The Mediating Role of Risk Tolerance in the Relationship between Financial Literacy and Investment Performance. *Colombo Business Journal International Journal of Theory and Practice*, 11(1), 83–104. <https://doi.org/10.4038/cbj.v11i1.58>
- Kengatharan, L., & Navaneethakrishnan, K. (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>
- Khurshid, S., Ahmed, A., & Irrum, L. (2021). An examination of behavioral factors affecting the retail investor's investment decision: The moderating role of Covid 19. *Journal of Islamic Countries Society of Statistical Sciences*, 7(1), 105–120.
- Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Lusardi, A., & Mitchell, O. S. (2015). Financial Literacy and Economic Outcomes: Evidence and Policy Implications. *The Journal of Retirement*, 3(1), 107–114. <https://doi.org/https://doi.org/10.3905/jor.2015.3.1.107>
- Metawa, N., Hassan, M.K., Metawa, S., & Safa, M. F. (2018). 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(5). <https://doi.org/10.1108/IMEFM-12-2017-0333>
- Murhadi, W.R., Frederica, D., & Marciano, D. (2024). The effect of financial literacy and demographic variable on behavioral biases. *Asian Economic and Financial Review*, 14(4), 312–325. <https://doi.org/10.55493/5002.v14i4.5037>
- Negara, H.S., & Rahyuda, H. (2025). Investing Through Bias: How Financial Literacy Moderates the Impact of Cognitive and Emotional Biases on Investment Choices. *Journal of Economics, Finance and Management Studies*, 8(7), 4833–4841. <https://doi.org/https://doi.org/10.47191/jefms/v8-i7-70>
- Nguyen, T. N., & Rozsa, Z. (2019). Financial Literacy and Financial Advice Seeking for Retirement Investment Choice. *Journal of Competitiveness*, 11(1), 70–83. <https://doi.org/10.7441/joc.2019.01.05>
- Rajan, S., & Ashwini, S. V. (2025). A study on impact of herd behavior influence on investment choices and decisions among GIG Economy Workers. *International Journal of Research Publication and Reviews*, 6(3), 180–184.
- Rana, B. (2025). Overconfidence, Investment Experience, and Herding Behavior: The Role of Financial Literacy in Nepal's Stock Market. *The Lumbini Journal of Business and Economics*, 13(1), 153–164. <https://doi.org/https://doi.org/10.3126/ljbe.v13i1.80269>
- Rasool, N., & Ullah, S. (2020). Financial literacy and behavioral biases of individual investors: empirical evidence of Pakistan stock exchange. *Journal of Economics, Finance and Administrative Science*, 25(50), 261–278. <https://doi.org/https://doi.org/10.1108/JEFAS-03-2019-0031>

- Raut, R.K. (2020). Past behavior, financial literacy and investment decision-making process of individual investors. *International Journal of Emerging Markets*, 15(6), 1243–1263. <https://doi.org/https://doi.org/10.1108/IJOEM-07-2018-0379>
- Risal, N., & Khatriwada, N. (2019). Herding Behavior in Nepali Stock Market: Empirical Evidences based on Investors from NEPSE. *NCC Journal*, 4(1), 131–140. <https://doi.org/10.3126/nccj.v4i1.24746>
- Rooij, M. V., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449–472. <https://doi.org/https://doi.org/10.1016/j.jfineco.2011.03.006>
- Salsabila, V.R., & Neliana, T. (2025). The Effect of Financial Literacy, Motivation, and Herding Effect on Investment Decisions with Emotional Intelligence as a Moderating Variable. *Indonesian Journal of Business Analytics (IJBA)*, 5(3), 2369–2382. <https://doi.org/https://doi.org/10.55927/ijba.v5i3.14633>
- Saris, W.E., & Gallhofer, I. N. (2014). *Design, Evaluation, and Analysis of Questionnaires for Survey Research* (2nd ed.). Wiley.
- Sattar, M.A., Toseef, M., & Sattar, M. F. (2020). Behavioral Finance Biases in Investment Decision Making. *International Journal of Accounting Finance and Risk Management*, 5(2), 69–75. <https://doi.org/10.11648/j.ijafrm.20200502.11>
- Shah, T.A., & Naveed, H. I. (2024). The Effect of Herding Behavior on Investment Decision: Moderating Effect of Over-Confidence. *Qlantic Journal of Social Sciences and Humanities*, 5(3), 132–146. <https://doi.org/https://doi.org/10.55737/qjssh.381051524>
- Sharma, B. M. (2025). Financial Literacy and its Impact on Investment Decision in Nepalese Share Market. *Journal of Janta Multiple Campus*, 4(1), 2025. <https://doi.org/10.3126/jjmc.v4i1.77992>
- Sulhia, B.A., Handajani, L., & Surasni, N. K. (2022). The Effect of Financial Literacy, Herding Behaviour and Overconfidence on Investment Decisions in the Millennial Generation. *Path of Science: International Electronic Scientific Journal*, 8(7), 1–10.
- Waweru, N.M., Munyoki, E., & Uliana, E. (2008). The effects of behavioral 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>
- Worthington, A. C. (2006). Predicting financial literacy in Australia. *Financial Service Review*, 15(1), 59–79.
- Zhang, X. (2023). The Role of Behavioral Bias in Investment Outcomes. *Highlights in Business Economics and Management*, 15, 99–104. <https://doi.org/10.54097/hbem.v15i.9323>