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Effect of Behavioral Biases on Investment Decision Making in Nepalese Stock Market with the Mediating Role of Investors' Sentiment

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Abstract

The current study explores the impact of behavioral biases such as market factors, herding behavior and awareness factors on investors' decision-making on the Nepal Stock Exchange and also investigates the mediating role of investors' sentiment in the relationship among the variables. To comprehend investor sentiment (IS) and how individual investors make decisions, this study introduced an innovative conceptual framework incorporating herding behavior, market dynamics, and awareness factors. A quantitative methodology was used to conduct the investigation, specifically employing a survey research design. This study made use of primary data that was collected by means of a structured questionnaire and gatherd data from 408 individual investors. The convenience sample method was used, while structural equation modeling was used as a statistical tool to test hypothesis. It was determined how the market factor, herd behavior, and awareness affect investors' sentiment and decision-making by using structural equation modeling. The result showed that the most notable factors that affect investors' sentiment were herding factors. Similarly, in the absence of a moderating variable, investors' sentiment is affected by all variables, including market factors, herding behavior, and awareness factors which have a significant impact on investors decision-making in the Nepal Stock Exchange. This study aims to assist individual investors in Nepal by guiding their investment choices and preventing sentiment-driven errors. It emphasizes the importance of understanding fellow investors' sentiment and suggests that awareness programs can enhance market understanding. Previous research has typically examined only a few factors at a time. This current study explores how various factors affecting investor sentiment—like market factors, herding behavior, and awareness—impact investment decision-making among individual investors in Nepal. Importantly, these factors have never been studied together in the context of how Nepalese individual investors make decisions about their investments..

Key Words: *investor sentiment, market factors, herding behavior, awareness factors, investors decision making*

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Introduction

The stock market plays a crucial role in the economic development of any country. In Nepal, the stock market has been growing rapidly in recent years, and it has become an essential source of financing for businesses. However, the stock market is highly volatile, and investors' sentiments can have a significant impact on investment decision-making.

Investors' sentiments refer to investors' overall feelings about the market, which can be influenced by various factors, such as market trends, news, rumors, and other investors' behavior. These sentiments can influence investors' decision-making, leading to buying or selling stocks.

Hu et al. (2021) explained the direct and indirect methods used to measure investors sentiments. The direct method considers the surveying investor's perception towards future market trends, whereas the indirect method considers the advance decline line, the arms index, new high-new low index, the close-end fund discount, and consumer confidence index. Similarly, Pan (2020) argues that excessive investor optimism can drive stock prices above their fundamental values, leading to bubbles, and suggests that policymakers should be aware of the potential impact of investor sentiment on market stability and take measures to prevent the formation of bubbles.

Baker and Wurgler (2006) analyze the relationship between investor sentiment and the cross-section of stock returns using a comprehensive dataset of various measures of investor sentiment. They found that high sentiment predicts low future returns for a variety of portfolios, with the strongest impact on small, young, high-volatility, unprofitable, non-dividend paying stocks, and difficult-to-value industries. They suggest that investor sentiment is an important factor to consider when explaining the cross-sectional variation in stock returns, and that it has implications for both asset pricing and market efficiency.

P.H and Uchil (2020) argue that market effect and herding are the most significant factors affecting investor sentiment, while the internet has the lowest influence among awareness sources. However, investor sentiment depends on the size of the firm, value of the stock, high volatility of stocks, it has a significant impact on stock returns, with high sentiment stocks outperforming low sentiment stocks. Similarly, Poshakwale and Mandal (2014) explored the presence of herd behavior in India's emerging stock market and revealed a strong tendency for herding among investors in the Indian market, which remains significant even after considering market volatility and direction. Herding is observed to be persistent in both bullish and bearish market conditions, with a higher occurrence during bear markets.

Chung et al. (2012) found that investor sentiment is a significant predictor of stock returns when the market is relatively inefficient and when there is a high level of information asymmetry. The authors suggest that their findings provide insights into the conditions under which investor sentiment can be used as a useful tool for understanding the cross-section of stock returns. They also suggest that their study contributes to the literature on the impact of market efficiency and information asymmetry on asset pricing.Niyoyita Mahina et al. (2017) showed a significant and favorable relationship between over-optimism bias and stock market investing in Rwanda. The survey also found that most investors had a variety of behavioral biases when investing in the stock market. However, Bajracharya (2021) revealed that the prospect behavioral factor had a negative correlation with investment performance, while herding, market variables, and heuristics (including overconfidence and anchoring bias) showed a positive correlation. According to Dhakal and Lamsal (2023), the most significant impact on investment decision-making was attributed to representativeness bias, followed by herding and anchoring biases. These findings clearly illustrate that cognitive biases can greatly influence the investment choices made by Nepalese investors and potentially result in unfavorable consequences.

Sapkota (2022) found that investment decisions are highly influenced by herding, loss aversion, overconfidence, and risk orientation. The study's main finding is that behavioral finance is a significant factor in students' stock investment decisions.

Fama (1970) explains that financial markets are efficient and all available information is already reflected in market prices. According to this theory, it is impossible for investors to consistently beat the market through superior analysis or by predicting future events. As a result, investors should focus on diversification and passive investing strategies such as index funds. However, Yildirim (2017) argues that psychological biases and emotions of investors can impact their investment decisions and suggest that investors may not always act rationally and may be prone to making decisions based on emotions such as fear, greed, and overconfidence. According to Chaudhary (2013), the causes that contributed to the development of behavioral finance include anchoring, overconfidence, herd behavior, over and underreaction, and loss aversion. These factors impact investors during the process of making decisions. Investment professionals can gain valuable insights from behavioral finance, which in turn provides a structure for assessing active investment strategies for investors.

Empirical data is required in Nepal to comprehend how investor sentiment affects stock market investment decisions. There is a study gap addressing the influences of market factors, awareness factors, and herding behavior in investors' investment decision-

making in Nepal because few studies have been conducted there, with an emphasis mostly on developed countries. Few studies have also looked at how investors' sentiment influences the relationship between market factors, awareness factors, and herding behavior and investors' decision making. The goal of the current study is to fill these knowledge gaps by examining how investor sentiments mediate the relationship between investors' investment decisions made on the Nepal Stock Exchange and market, awareness, and herding variables. The study aimed at addressing the following questions:

- What is the impact of market factors on investors' decision making in the Nepal Stock Exchange?
- What is the impact of awareness factors on investors' decision making in the Nepal Stock Exchange?
- What is the impact of herding factors on investors' decision making in the Nepal Stock Exchange?
- How investors' sentiment plays a mediating role in the relationship between the market, awareness and herding factors, and investment decision making.

The purpose of this research is to examine the impact of market factors, herding behavior, and awareness factors on investment decision-makingin Nepal Stock Exchange and to evaluate the mediating role of investors' sentiment in the relationship between market, awareness, and herding factors and investment decision making.

Investment decision-making is influenced by different factors; therefore, this study examines several independent variables that play a vital role for changing investors' sentiments, and influencing the investment decision-making. Choi and Yoon (2020) suggest that herding behavior is more frequent during periods of market decline, while adverse herding behavior is observed when trading volume and market volatility are low. Additionally, the study highlights that herding behavior is observed across both low and high quantiles of the KOSPI and KOSDAQ stock markets, which indicates that investors have a tendency to follow the herd during extreme market conditions. The analysis emphasizes that investor sentiment plays a critical role in determining herding behavior in the Korean stock market, highlighting the importance of recognizing the influence of investor sentiment on investment decision making. Thus, the hypothesis impact of herding behavior on investors' decision making is formed as:

H1: Herding behavior has a significant impact on investing decisions on the Nepal Stock Exchange.

Bhattacharjee and Singh (2017) suggest that equity awareness is influenced by various

demographic, socioeconomic, and psychological factors, and that financial awareness plays a crucial role in achieving financial well-being. By promoting equity awareness, investors can make informed financial decisions, gain a better understanding of their rights and responsibilities, and effectively manage investment risks. Thus, the hypothesis that trust awareness of investors towards the financial market affects investment decision-making is formed as follows:

H2: Awareness factor has a significant impact on investing decisions in Nepal Stock Exchange.

Blanchard et al. (1991) argue that investor sentiment, such as media coverage, social interactions, and past returns is a psychological factor that drives asset prices away from their fundamental values. The model suggests that sentiment can explain why stock prices exhibit momentum, why value stocks tend to outperform growth stocks, and why bubbles and crashes occur in financial markets. The article concludes by highlighting the importance of investor sentiment in understanding market behavior and designing investment strategies. Thus, the hypothesis that trust market factors and investors' sentiments affects investment decision-making is formed as follows:

H3: Market factor has a significant impact on investing decisions in Nepal Stock Exchange.
H4: Investors' sentiment mediates the relationship between market factors, herding behavior, and awareness factors and investors decision making. Exchange.

This study intends to address this research gap by examining how investors' feelings influence investment choices with on the Nepal Stock Exchange. It pinpoints market, awareness, and herding factors affecting these sentiments and explores how these sentiments shape the connection between these factors and investment decisions. The findings serve as valuable insights for investors, decision-makers, and market regulators, shedding light on how investor sentiment impacts investment choices and its implications for the stock market. Understanding this connection aids in crafting profitable investment strategies and enhancing market effectiveness.

Review of Literature

This section primarily focuses on reviewing the literature regarding individual sentiment and the factors that affect investment decision-making. Koesoemasari et al. (2022) aim to identify profitable investment strategies in emerging markets by considering sentiment investors and employing behavior bias-based portfolio methods. The study analyzed a sample of 114 companies traded daily on the IDX over three years using weekly data. Contrarian strategies were found to be more profitable than

momentum strategies. Investors benefit from optimistic conditions, and the benefits are even greater during pessimistic conditions. The research emphasizes the influence of investor sentiment on investment decisions, even when behavior-bias methods are utilized. Therefore, forming a portfolio based on biased behavior is recommended for facilitating investment decision-making.

Zulfikar (2022) studied a bibliometric analysis of the impact of the COVID-19 outbreak on stock market performance. They use a bibliometric approach to analyze a collection of articles published in various academic journals, and identify key themes and trends in the literature. They found that the COVID-19 pandemic has had a significant impact on stock market performance, with many articles focusing on the impact of the pandemic on stock prices, volatility, and trading activity. The author also identifies several factors that have influenced the stock market's response to the pandemic, including government policy, economic fundamentals, and investor sentiment. The author suggests that their study provides a comprehensive overview of the literature on the impact of the COVID-19 outbreak on stock market performance and highlights the need for further research in this area.

Parveen et al. (2020) argue that representative heuristics and the overconfidence of investors affect investment decision. Due to the differences in cultural values, financial literacy, education level, and infrastructure of the financial markets of developed and developing countries, the study made in a developed country may not be generalized in developing countries. Therefore, it is necessary to identify the impact of behavioral heuristics and biases on the decision-making of investors on the Pakistan Stock Exchange. To find out the behavioral heuristics and biases and their impact on the decision-making of investor trading, this article uses both market-level data and individual-level data. This article describes the overconfident investor overestimating their abilities and only depending on their skill and knowledge using past information and reference prices at the time of trading on the Pakistan Stock Exchange.

Rupande et al. (2019) investigate the relationship between investor sentiment and stock return volatility on the Johannesburg Stock Exchange (JSE). Using data from the JSE, they found that investor sentiment has a significant impact on stock return volatility, with high levels of sentiment leading to higher volatility. The effect of sentiment on volatility is stronger during periods of high market uncertainty and when there is a high level of information asymmetry.

Metawa et al. (2019) investigate the role of behavioral factors such as emotion, overconfidence, overreaction, underreaction, and herd behavior as mediators in this

relationship. A total of 384 local, Egyptian, and foreign institutional and individual investors participated in a structured questionnaire survey conducted for data collection. The study utilizes partial multiple regression analysis to assess the influence of investors' demographic characteristics on investment decisions, considering the mediation of behavioral factors. The findings indicate that herd behavior, overconfidence, overreaction, underreaction, and investor sentiment significantly impact investment decisions. Furthermore, age, gender, and educational attainment demonstrate positive and significant effects on investment choices.

Rai et al. (2019) explain the financial knowledge, behavior, attitudes, and level of financial literacy of working women in Delhi, India, and find that financial behavior and attitude contribute more significantly to working women's financial literacy than financial knowledge.

Oehler et al. (2018) explore the relationship between personality traits and investment decisions. The authors review the existing literature on the topic and provide evidence that certain personality traits, such as extraversion and neuroticism, can affect investment behavior. They conducted an experiment to test their hypothesis and found that participants with high levels of extraversion were more likely to invest in risky assets, while those with high levels of neuroticism were more risk-averse. The article highlights the importance of considering personality traits when making investment decisions and suggests that further research is needed to explore the relationship between other personality traits and investment behavior.

Medhioub and Chaffai (2018) argue that herding behavior, which occurs when investors follow the actions of others rather than making independent decisions, can have a significant impact on the performance of Gulf Islamic stock markets. The article presents an empirical analysis of herding behavior in four Gulf Islamic stock markets using data from 2007 to 2016. They found evidence of herding behavior among investors in all four markets, suggesting that investors are influenced by the actions of their peers rather than making independent decisions based on market fundamentals.

Oehler et al. (2018) examine how personality traits, specifically extraversion and neuroticism, influence investment decisions. They conducted an experiment in which participants were asked to make investment decisions in different scenarios, and their personality traits were measured using a standardized personality test. The results of the study showed that individuals with high levels of extraversion tended to make riskier investment decisions, while those with high levels of neuroticism tended to make less risky decisions.

Xie and Wang (2017) study the influence of online investor sentiment on the asset price movement in the stock market. They explain two methods of evaluating online investor sentiment. The first method detects the number and contents of posts on the internet platform and the second method uses the search intensity index provided by various search engines, such as Google and Baidu. When the investor is optimistic about the financial market, the market index is relatively high and vice versa. This article shows that there is a co-integration relationship between investor sentiment and the movement of asset prices in the financial market.

According to Ghelichi et al. (2016) psychological factors have a substantial impact on decision-making. Paying attention to mental health issues can improve decision-making. The underdevelopment of capital markets in emerging economies is attributed in part to cultural issues and a lack of knowledge regarding behavioral factors and capital markets. They investigate how psychological variables, including beliefs, confidence, feelings of regret and remorse, and snake bites, affect investors' financial decisions in Tehran, the capital of Iran. Investors received 384 questionnaires in all, and structural equation modeling was used to analyze the data. According to the research, feelings of regret and snake bites have an adverse effect on investment decision-making, whereas beliefs and confidence have a beneficial influence.

Bakar & Yi (2016) examined the impact of psychological factors on investor decision-making in the Malaysian stock market. A questionnaire was given to 200 investors aged 18-60 in the Klang Valley and Pahang areas. Findings indicate that overconfidence, conservatism, and availability bias significantly affect decision-making, while herding behavior does not. Gender also plays a role in psychological factors. The research raises investor awareness to improve investment rationality and market efficiency.

NjeriWamae (2013) examined behavioral factors influencing individual investors' decisions at the Nairobi Stock Exchange. He found that herding, risk aversion, prospecting, and anchoring had an impact on investment decision-making. Recommendations include providing investors with relevant market information, making well-informed investment choices, considering the influence of prospecting on decision-making, and providing timely and accurate information to address anchoring effects.

Mian and Sankaraguruswamy (2012) conducted a study to examine the impact of investor sentiment on the stock market's reaction to positive and negative earnings news. Their findings suggest that high sentiment exacerbates the market's overreaction to positive earnings news and underreaction to negative earnings news. The study

provides insights into how investor sentiment affects asset prices and has implications for both individual investors and corporate managers.

Yu and Yuan (2011) argue that investor sentiment can have a significant impact on this relationship and present a model that incorporates sentiment into the framework. Using empirical data, the authors show that the model provides a better explanation of the relationship between risk and return than traditional models that do not take sentiment into account. They also analyze the implications of their findings for portfolio management and investment strategy, suggesting that investors should be aware of the impact of sentiment on the mean-variance relationship and adjust their portfolios accordingly.

Investors' sentiments have been extensively studied in developed countries, and researchers have found that investors' sentiments can have a significant impact on investment decision-making. However, limited research has been conducted on the Nepalese stock market context. Therefore, there is a need for empirical evidence on the impact of investors' sentiments on stock market investment decision-making in Nepal. Despite the significant importance of investors' sentiments in influencing investment decision-making in the stock market, limited empirical studies have been conducted to investigate the impact of investors' sentiments on stock market investment decision-making in Nepal. Most of the existing studies have focused on developed countries, and there is a lack of empirical evidence on the Nepalese stock market. Therefore, there is a research gap in the literature regarding the impact of investors' sentiments on stock market investment decision-making in the context of Nepal. Moreover, while some studies have investigated the factors that influence investors' sentiments, few studies have explored how these factors mediate the relationship between investors' sentiments and investment decision-making. The mediating role of investors' sentiments is crucial to understanding the underlying mechanism through which market factors, awareness factors, and herding factors influence investment decision-making.

Therefore, the present study aims to fill these research gaps by investigating the impact of investors' sentiments on stock market investment decision-making in the Nepal Stock Exchange and how market factors, awareness factors, and herding factors mediate this relationship. The findings of this study will contribute to the existing literature and provide insights for investors, regulators, and policymakers to make informed decisions.

Conceptual Framework

The conceptual framework used in this study was constrained to only suggest the typical relationship between investors' sentiment (IS) and decision-making (DM) in the future. Statistical models were used to evaluate the psychological aspects that

influenced investors' sentiment and their components that could have had an impact on the investor's decision-making. The technique that was employed to examine the hypothesis was structural equation modeling. It was the most effective method for understanding theoretical ideas in various branches of statistical analysis. The numerous relationships between the variables and their correlation were derived using structural models.

Independent Variable **Mediating Variable** **Dependent Variable**

Methodology

The study aimed to investigate how behavioral variables, including market factors, herding behavior, and awareness factors, influence investment decision making (DM), with the mediating role of investors' sentiment. The study used a quantitative methodology for testing hypotheses and exploring the causal connections among variables and a survey-based strategy to gather data through structured questionnaires. A sample of 450 respondents from SudurPashim Province was selected by using the convenience sampling method and distributing questionnaires. Reichardt and Gollob (1999) explain that a convenience sample was chosen at random from a hypothetical infinite population. However, out of the 450 questionnaires distributed, only 408 investor responses were received giving a response rate of 91 percent. The primary focus was on gathering original data directly from the investors to effectively address the research objectives. The questionnaires were distributed electronically using Google Docs and social media platforms, and the responses were collected using a five-point Likert scale. The study employed statistical models, such as structural equation modeling, to test hypotheses and analyze the relationships and correlations between variables. The data analysis was conducted using AMOS 22 and SPSS 26 software.

The following multiple regression model was used to ascertain the impact of market factors (MF), herding behavior (HB), and awareness factors (AF) on Investor's decision-making (DM).

$DM= \alpha+\beta_1 MF+ \beta_2 HB+\beta_3 AF+\varepsilon_i$ ……..... (1)

Similarly, to examine the impact of mediating variable Investors' sentiment (IS) on Investor's decision making (DM), following regression model was expressed.

$DM= \alpha+\beta_1 IS+\varepsilon_i$

Results and Discussion

The conceptual framework of this study focuses on determining how MF, HB, and AF affect DM. In order to identify the psychological elements that affect IS and its components, which in turn may have an impact on investor decision-making, the framework is evaluated using statistical models. Structural equation modeling, a technique that is ideal for developing theoretical understanding in a variety of statistical and analytic domains, is used to test the hypothesis.

Respondents Profile

The profile of the respondents provides information about their personal attributes, including gender, age group, educational background, income, and occupation. This indicates that demographic factors are commonly utilized to gain insights into investors' characteristics. Demographic traits are essential in comprehending investors' decision making.

Table 1 Respondents Profile

Variable	Indicator	Frequency	Percentage
Gender	Male	311	76.2
	Female	97	23.8
Age	18-25	74	18.1
	26-35	150	36.8
	36-45	90	22.1
	46-55	79	19.4
	Above 55	15	3.7
Marital Status	Single	155	38
	Married	253	62
Education	SLC/SEE	29	7.1
	Intermediate	78	19.1
	Bachelor	126	30.9
	Master	165	40.4
	MPhil/Ph.D.	10	2.5
Annual Income	Up to 3 lakhs	85	20.8
	Above 3 lakhs to 6 lakhs	106	26.0

	Above 6 lakhs to 9 lakhs	103	25.2
	Above 9 lakhs to 12 lakhs	75	18.4
	Above 12 lakhs	39	9.6
Investment Experience	Under 1 year	62	15.2
	1 - 3 years	124	30.4
	3 - 5 years	48	11.8
	5 - 10 years	121	29.7
	Above 10 years	53	13.0

Source: SPSS Output

Table 1 shows a summary of the demographic characteristics of the participants. Out of the 408 individuals surveyed, the majority, accounting for 76.2 percent, are male, while the remaining 23.8 percent are female. Similarly, the majority of respondents, comprising 38.8 percent, fall within the 26-35 age range. The age groups of 18-26 years, 36-45 years, 46-55 and above 55 years constitute 18.10 percent, 22.10 percent, 19.40 percent, and 3.70 percent of the respondents, respectively. The majority of respondents, -62 percent-are married, while the remaining 38 percent are single. In terms of educational qualification, the majority of respondents, which amounts to 40.40 percent, have a master degree, and only a few, 2.5 percent have MPhil or PhD degree. Regarding annual income, the largest portion of respondents, accounting for 26 percent, earn between NRs. 300,000 and 600,000. Additionally, 25.2 percent have an annual income above NRs. 600,000 to 900,000, while 20.8 percent earn up to NRs. 300,000 and 18.4 percent of respondents earns above NRs. 900,000 to 12,00,000. Similarly, the majority of respondents, (30.4 percent) have investment experience of 1-3 years, while only 13 percent have investment experience of 10 years or more. The respondents having investment experience of under 1 year, 3- 5 years and 5-10 years are 15.2 percent, 11.80 percent, and 29.70 percent respectively.

Reliability and Validity

The reliability statistics indicate the internal consistency of a set of items. Cronbach's Alpha is a measure of reliability that assesses how closely related the items in a scale or test are to each other. Table 2 shows that the Cronbach's Alpha value of 0.774 suggests a moderate level of internal consistency among the 33 items. Cronbach's Alpha Based on Standardized Items is another measure of reliability that takes into account the standardization of the items. With a value of 0.792, it indicates a slightly higher level of internal consistency compared to the regular Cronbach's Alpha. Gliem and Gliem (2003) explain that the acceptance threshold of the total scale and/or subscale is 0.70.

In both cases, the values are above the commonly accepted threshold of 0.7, which suggests that the items in the scale or test are reasonably consistent with each other.

Table 2 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.774	.792	33

Source: SPSS Output

Results of Structural Equation Model

To check whether the measurement model is appropriate for the structural model, following fundamentals of measurement model should be within the threshold.

Table 3: Model fit summary of the impact of market factor, herding behavior and awareness factors on decision making

Indices	**Calculated Value**	**Acceptable threshold level**
CMIN	253.746	-
CMIN/ DF	2.063	Around 2 to 2.5(Hair et al., 2012)
RMR	0.062	Smaller, the better 0 indicates perfect fit
GFI	0.937	≥ .90 (L. T. Hu &Bentler, 1999)
AGFI	0.912	≥ 0.90(L. T. Hu &Bentler, 1999)
PGFI	0.674	Typically, lower than other indexes and sensitive to model size
TLI rho 2	0.941	≥ .95 can be 0>TLI>1 for acceptance
CFI	0.972	≥ 0.95 for acceptance
RMSEA	0.051	< 0.06 to 0.08 (Rigdon, 1996)

Source: Data Analysis

Table 3 shows the fit indices for the structural model analysis, which range from fair to good. To simplify the model's complexity, the RMSEA, a parsimonious index, can be used. The RMSEA is calculated by dividing the discrepancy by the degrees of freedom, and the resulting value of .051 indicates a good fit that meets the acceptable standard. The RMR value of 0.062 indicates that the model does not perfectly fit the data, as there is some level of discrepancy between the observed data and the model's predicted values. However, the value is relatively small, indicating a reasonably good fit. GFI value of 0.937 indicates that the model's fit is relatively good, as it explains

93.7% of the variation in the observed data. The GFI ranges from 0 to 1, where a value closer to 1 indicates a better fit. Therefore, a GFI value of 0.937 suggeststhat the model explains most of the variance in the observed data, but there is still some level of discrepancy between the observed data and the model's predicted values. AGFI value of 0.912 indicates that the model's fit is relatively good after adjusting for the model's complexity. The AGFI ranges from 0 to 1, where a value closer to 1 indicates a better fit. Therefore, a value of 0.912 suggests that the model explains a substantial proportion of the variance in the observed data, considering the model's complexity. On the other hand, the PGFI value of 0.674 indicates that the model's fit is relatively poor after accounting for the model's complexity. The PGFI ranges from 0 to 1, where a value closer to 1 indicates a better fit. Therefore, a value of 0.674 suggests that the model may be too complex and may need to be simplified or modified to improve the model's fit. TLI rho 2 value of 0.941 indicates that the model's fit is relatively good. The TLI rho 2 ranges from 0 to 1, where a value closer to 1 indicates a better fit. Therefore, a value of 0.941 suggests that the model explains a substantial proportion of the variance in the observed data. Similarly, CFI value of 0.972 also indicates that the model's fit is relatively good. The CFI ranges from 0 to 1, where a value closer to 1 indicates a better fit. Therefore, a value of 0.972 suggests that the model explains a substantial proportion of the variance in the observed data and fits the data better than a null model.

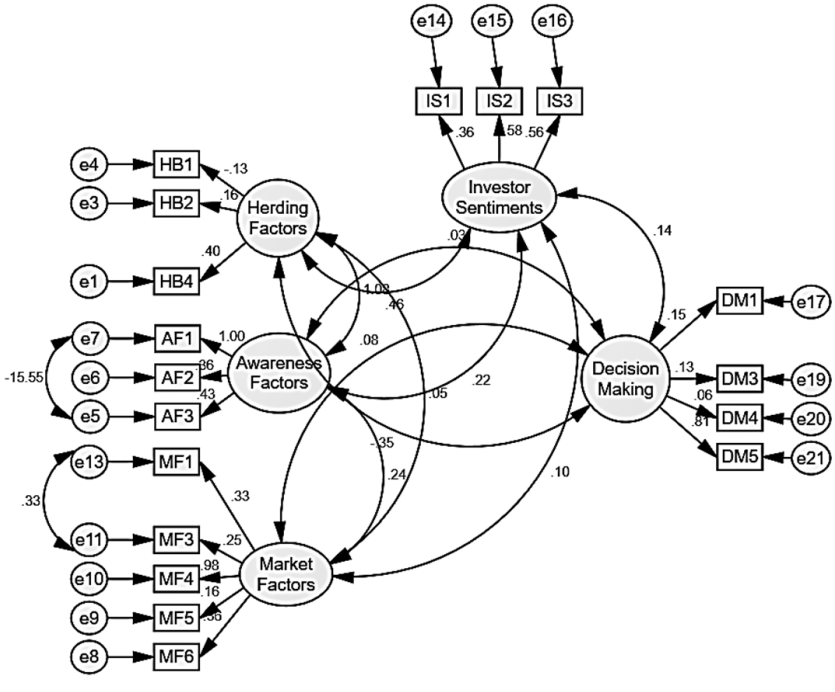

Figure 2: Confirmatory Factor Analysis

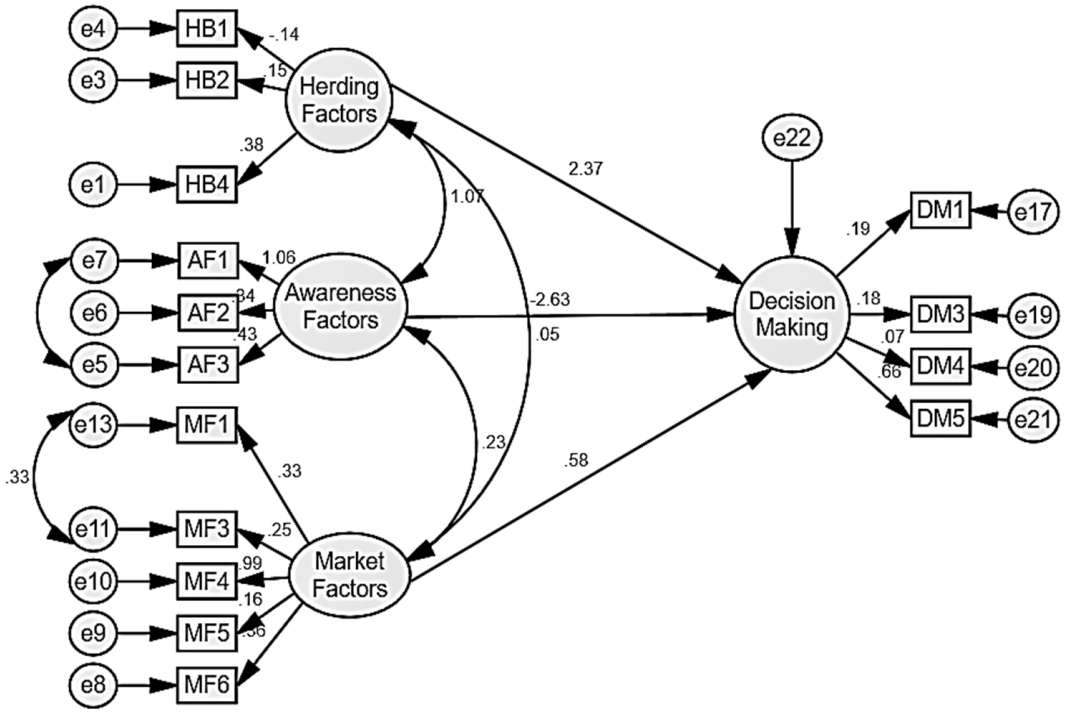

Figure 3: Path Analysis without presence of moderation variable

Table 4: Summary of the estimates for hypothesis testing
Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
F5	<---	F1	2.158	1.012	2.132	.008	
F5	<---	F2	-2.82	4.453	-2.082	.003	
F5	<---	F3	3.204	1.620	1.978	.002	
HB4	<---	F1	1.000				
HB2	<---	F1	.452	.122	3.704	***	
HB1	<---	F1	-.374	.109	-3.443	***	
AF3	<---	F2	1.000				
AF2	<---	F2	.916	.301	3.040	.002	
AF1	<---	F2	3.018	.666	4.533	***	
MF6	<---	F3	1.000				

MF5	<---	F3	.556	.188	2.959	.003
MF4	<---	F3	3.007	.731	4.116	***
MF3	<---	F3	.798	.188	4.256	***
MF1	<---	F3	.968	.188	5.160	***
DM1	<---	F5	1.000			
DM3	<---	F5	.896	.497	1.803	.071
DM4	<---	F5	.356	.401	.888	.375
DM5	<---	F5	3.168	2.376	1.333	.182

Source: Data Analysis

Note: F1, Herding factor; F2, Awareness factors; F3, Market factors; F5, Decision making

The analysis of the structural relationships involves examining the results of measuring the latent variables and testing the hypothesis. Figure 2 shows herd behavior, market factors, and awareness factors as the exogenous variables that impact the dependent variable, which is decision making. The model also includes 14 error variables linked to the independent latent variables. The study developed a conceptual framework that demonstrates how herding, awareness, and market factors influence decision making. Table 2 shows that p-value herding factors, awareness factors and market factors are less than level of significance 5 percent, so it is significant. It means null hypothesis is rejected and accept the alternative hypothesis. It means that herding behavior, market factors and awareness factors have significant impact on investors decision making. Estimate value of herding is 1.158, which indicates that herding factor has a large positive relationship with decision making. However, the awareness factors have a negative relationship with decision making, since its estimate is –1.282. Similarly, the estimate of market factor is 0.304, which indicates that market factors have positive relationship with decision making,

Table 5: Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
F5	.725
DM5	.439
DM4	.005

DM3	.031
DM1	.037
MF1	.109
MF3	.062
MF4	.986
MF5	.025
MF6	.126
AF1	1.122
AF2	.117
AF3	.187
HB1	.018
HB2	.022
HB4	.143

Table 5 shows that F5 estimate i.e., R square is .725 which indicates the 72.5 percentage of investors decision making is influenced by independent variables herding, awareness and market factors and remaining 27.5 is influenced by other factors.

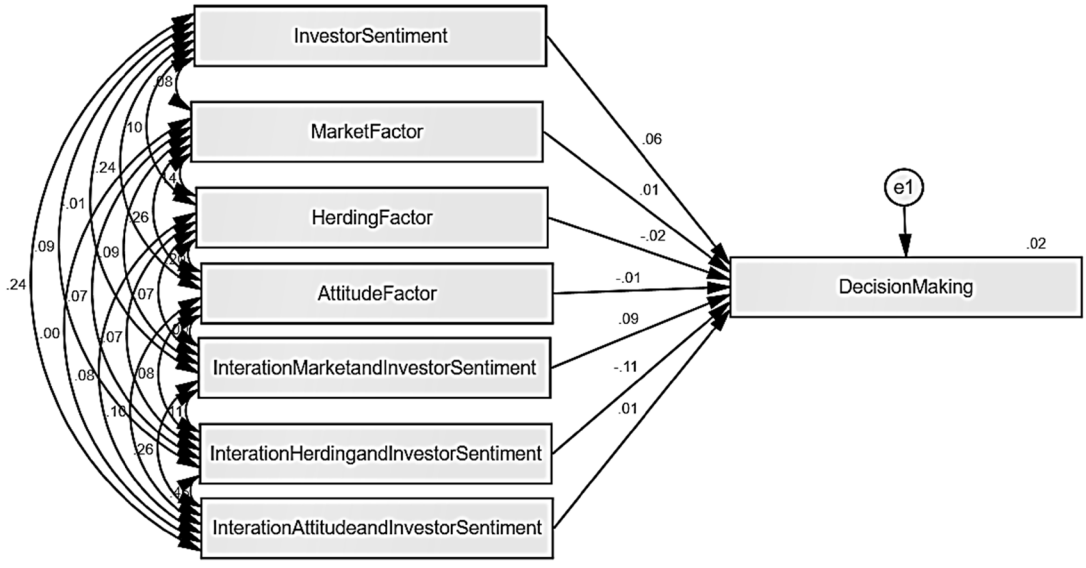

Figure 4 Moderation effect of Investors sentiments

Table 6: Regression weights of a model for the moderating role of investors sentiment on decision making

Regression Weights: (Group number 1-Default model)

		Estimate	S.E.	C.R.	P	Label
DecisionMaking	<--- InvestorSentiment	.045	.038	1.193	.233	
DecisionMaking	<--- MarketFactor	.009	.042	.203	.839	
DecisionMaking	<--- HerdingFactor	-.018	.041	-.439	.661	
DecisionMaking	<--- AttitudeFactor	-.008	.038	-.223	.823	
DecisionMaking	<--- InterationMarketandInvestorSentiment	.039	.023	1.700	.089	
DecisionMaking	<--- InterationHerdingandInvestorSentiment	-.052	.025	-2.029	.042	
DecisionMaking	<--- InterationAttitudeandInvestorSentiment	.005	.026	.212	.832	

Standardized Regression Weights: (Group number 1 - Default model)

		Estimate
DecisionMaking	<--- InvestorSentiment	.062
DecisionMaking	<--- MarketFactor	.010
DecisionMaking	<--- HerdingFactor	-.022
DecisionMaking	<--- AttitudeFactor	-.012
DecisionMaking	<--- InterationMarketandInvestorSentiment	.087
DecisionMaking	<--- InterationHerdingandInvestorSentiment	-.113
DecisionMaking	<--- InterationAttitudeandInvestorSentiment	.012

Table 6 shows that p-value of interaction between market factors and attitude (awareness) factors and investors sentiment are .089 and .832 which is higher than level of significance (0.05) 5 percent. Therefore, interaction between these two factors and investors sentiments is insignificant i.e., fail to reject null hypothesis. The interaction between herding factor and investor sentiments is only significant, since its p-value is .042 which is less than the level of significance. It means that investors sentiment moderates the relationship between herding behavior and investors decision making.

The standard error (S.E) of the estimate interaction between herding and investor sentiment is 0.025. This indicates the amount of variability or uncertainty in the estimate. A smaller S.E suggests more precise estimates. The critical ratio (C.R) of -2.029 indicates the significance of the relationship between the variables. In this case, the C.R is negative and greater than 1.96 (critical value for $p < .05$, two-tailed test), indicating that the negative relationship between herding and investor sentiment is statistically significant. The negative sign of the C.R indicates that the relationship between herding and sentiment is going in the opposite direction.

Discussion

The results indicate that investors' decision-making is notably influenced by market features, awareness elements, and the tendency to follow others. Statistical analysis examined how market dynamics interact with investor attitudes and how investor

attitudes interact with herding behavior. The relationship between market factors and attitude factors had a p-value of.089, whereas the interaction between investor sentiment and herding behavior had a p-value of.042, which is less than the significance threshold. This shows that the relationship between herding behavior and investors' choices is moderated by investor sentiment. Without taking into account the existence of a mediating variable, the study discovered that market variables, awareness factors, and herding tendency had a considerable impact on investors' decision-making. Additionally, the research showed a statistically significant interaction between the herding component and investor sentiments (p-value =.042), showing that investor sentiment modifies the relationship between herding behavior and investors' decision-making.

Conclusion

Behavioral finance holds growing significance, especially within the stock market, as it investigates how real events, responses, and anticipations mould market conduct. In Nepal, a research project pinpointed crucial elements affecting the stock market, aiding portfolio managers in recognizing predispositions. This study investigated how market elements, herding tendencies, and awareness factors affect investor choices, specifically emphasizing how investor sentiment (IS) mediates within the stock market. The study concludes that market factors, awareness factors, and herding behavior have a significant impact on investors decision-making without the presence of a mediating variable. The interaction between the herding factor and investor sentiments is statistically significant (p-value = .042), indicating that investor sentiment moderates the relationship between herding behavior and investors' decision-making. The complexity of financial instruments and limited knowledge hinder informed investment choices among Nepalese investors. This study examines the factors influencing investment decision-making, focusing on the mediating role of sentiment in the relationship between herding behavior, awareness factors, market factors, and decision-making. It identifies herd behavior, market factors, and awareness factors as significant influences on investors' decision-making sentiment. The study concludes that investor sentiment (IS) mediates the interaction between herding behavior and decision-making, shaping investors' choices. This study aims to examine cognitive biases among stock market investors and develop effective investment strategies that consider these biases. It contributes to the existing knowledge on behavioral finance and investment behavior in Nepal, providing valuable insights for practitioners, academics, and policymakers. The study highlights the significant impact of herding factors on investor sentiment (IS), influencing investment decisions and suggesting the importance of reliable information sources. It expands understanding of variables affecting IS and investor behavior, contrasting with previous studies that primarily focused on investment decision-making factors.

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