

# Technological Evolution, Service Innovation, and Intraday Trading Adoption in Nepal's Stock Market: A Behavioral Approach

Rasik KC<sup>1</sup>, Dipendra Karki<sup>2\*</sup>, Niranjan Devkota<sup>3</sup>

<sup>1</sup>Research Management Cell, Quest International College, Pokhara University, Nepal

<sup>2</sup>Tribhuvan University, Faculty of Management, Nepal Commerce Campus, Kathmandu, Nepal

<sup>3</sup>Tribhuvan University, Kathmandu Model College, Kathmandu, Nepal

dipendra.karki@ncc.edu.np (Corresponding author)

Received date: Aug 27, 2024, revision date: Sept. 30, 2024, Accepted: Oct. 25, 2024

## ABSTRACT

Intraday trading, a global stock market strategy, involves buying and selling securities within a day to profit from short-term price movements. This study explores how technological evolution and service innovation influence investor behavior in adopting intraday trading in Nepal's stock market. Utilizing survey data from 226 respondents in Kathmandu Valley, the study employs Structural Equation Modeling (SEM) to analyze behavioral biases, including heuristics, prospect theory, market conditions, and herding effects. The findings reveal that herding behavior significantly impacts trading decisions, as investors heavily rely on external information from peers and social media rather than fundamental analysis. Unlike developed markets where heuristics and prospect behaviors dominate, these factors exhibit minimal influence in Nepal, reflecting a unique market environment shaped by limited financial literacy and regulatory inefficiencies. Additionally, the study identifies major structural challenges, such as technological limitations in the Trading Management System (TMS), inadequate brokerage support, and lack of investor awareness, which hinder effective trading participation. The results indicate that 80.09% of traders prefer intraday transactions, while 61.06% express interest in broker-provided facilities. Despite the growing appeal of intraday trading, inefficiencies and regulatory gaps persist as major challenges. The study recommends enhancing financial literacy, improving NEPSE's technological infrastructure, and implementing regulatory reforms to facilitate a more efficient and transparent trading environment. Future research should explore demographic variations in trading behavior, compare Nepal's market with similar economies, and assess the impact of digital financial innovations on intraday trading adoption.

**Keywords:** Behavioral biases, Investing decision, Intraday trading, Market efficiency, Stock market

## 1. Introduction

Intraday trading, also known as day trading, involves the buying and selling of securities within the same trading day, aiming for short-term profits (Baralis et al., 2017; Ryu, 2012). Historically, stock trading was formalized in 1867 with the invention of the first ticker tape, marking the beginning of structured financial markets. However, in its early stages, stock trading faced considerable entry barriers and was not widely accessible to the general public. The landscape of intraday trading changed significantly with the introduction of electronic communications networks (ECNs) in 1969, which provided a platform for faster and more efficient trading (Tulchinsky, 2020). By the late 1990s, the rise of the internet revolutionized global financial markets, enabling ordinary investors to participate in intraday trading, a practice once limited to institutional traders (Chung et al., 2009).

Before the internet, day trading in Japan was virtually nonexistent, with only a small number of market participants. However, the introduction of online trading in 1999 led to a surge in the number of intraday traders, making Japan's market one of the largest in the world after the United States (Fackler, 2006). In contrast, China imposed restrictions on intraday trading through its T+1 rule, implemented by the China Securities Regulatory Commission (CSRC), which mandates a one-day holding period for stocks. Similarly, Taiwan's stock market has exhibited intraday price reversals, where prices sharply increase within 15 minutes before reversing over the next 30 minutes, prompting high trader responsiveness (Wang et al., 2009).

The Securities Exchange Act of 1983 in Nepal established the Nepal Stock Exchange (NEPSE) in 1994, which facilitated the formalization of stock trading. Despite the growing popularity of stock market participation, intraday trading has not yet been fully implemented. The introduction of the Trading Management System (TMS) facilitated online transactions, yet Nepalese traders remain restricted from engaging in same-day trading. Both the Securities Board of Nepal (SEBON) and NEPSE have initiated research on intraday trading, but conclusive findings have yet to be published. Ryu (2012) highlighted the inherent risks associated with intraday trading, noting that individual traders often experience substantial financial losses. The primary beneficiaries of excessive intraday trading tend to be market intermediaries, such as brokerage firms, who profit from transaction fees. Given these challenges, policymakers should prioritize enhancing market liquidity and reducing information asymmetry to attract investors, ensuring the long-run equilibrium of capital markets with economic development (Hsieh et al., 2020; Karki, 2018). Additionally, research on strategic order trading and price determination mechanisms during trading hours can offer deeper insights into market behavior.

Nepal's stock market is small compared to other emerging financial markets due to its developing economy. Although empirical studies have examined the behavior of stock prices, trading volumes, and volatility in day trading contexts, comprehensive research on intraday trading in Nepal is still lacking. Several critical questions remain unanswered: What are the prospects of intraday trading in Nepal? What factors influence Nepalese traders' decision-making? What challenges hinder the adoption of intraday trading on NEPSE? What managerial strategies can be employed to facilitate smoother trading operations? This study aims to bridge these knowledge gaps by examining the potential of intraday trading in Nepal, assessing its opportunities, and identifying the obstacles that must be addressed for its successful implementation. By exploring these factors, this research will provide valuable insights into the future of Nepal's stock market and contribute to the development of effective regulatory frameworks for intraday trading.

The rest of this study is structured as follows: The materials and methods in Section 2 introduce relevant earlier theories and empirical research, providing context for the investigation and explaining the research methodology, including the empirical technique. In Section 3, this study presents its findings and examines their consequences. Section 4 discusses the results, and Section 5 presents the conclusion.

## **2. Materials and Methods**

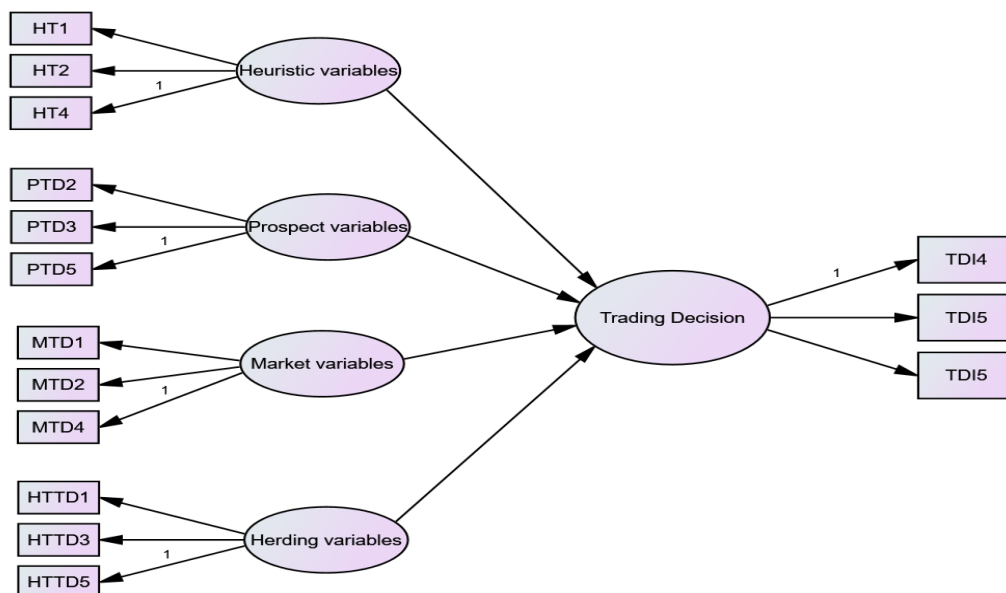
This study investigates investors' attitudes and factors influencing their willingness to participate in intraday trading activity. An in-depth analysis of existing theories and literature was performed to create the groundwork for this research, which covers numerous aspects of intraday trading, investor behaviour, market dynamics, and related variables.

### ***Theories on Intraday Trading***

The study employed five foundational theories to gain deeper insights into stock investment and to

evaluate traders' decision-making in intraday stock trading in Nepal. These include the Rational Expectations Theory (Sargent, 1961), which explores market predictability based on rational forecasting; the Greater Fool Theory (Bogan, 2016; Liu et al., 2017), highlighting speculative trading driven by expectations of resale to others at higher prices; Behavioral Finance Theory (Hammond, 2015), which examines psychological influences on financial decisions; Modern Portfolio Theory (Markowitz, 1952), emphasizing risk-return optimization through diversification; and the Efficient Market Hypothesis (Fama, 1970; Mathur, 2020), which suggests that asset prices reflect all available information, leaving no room for consistent outperformance. Moreover, the theory of an efficient market hypothesis shows that the market always works efficiently and trades with fair value, making it impossible for the trader to buy stocks with an overvalued always trades with fair value, which makes it essentially impossible for the trader to buy stocks with an overvalued or an overvalued rate (Mathur, 2020; Pant et al., 2022; Chhetri & Karki, 2023). Likewise, modern portfolio theory is a risk-averse trader's technique for constructing diversified portfolios that optimize returns while avoiding unacceptable levels of risk (Markowitz, 1952). After reviewing various theories, the study found that behavioral finance theory appears to be the best fit for this study. It assists with reasonable defects and provides a plethora of lucrative opportunities for knowledgeable traders who use behavioral concepts to determine which low-cost equities frequently beat the market.

Atif-Sattar et al. (2020) show that the key contribution of the research was to look at how behavioural factors influence trading decision-making in uncertain settings. Likewise, in their study, Cao et al. (2021) tried to figure out how behavioural aspects affect individual traders' trading decisions and outcomes. Moreover, Lai's (2019) study reveals that behavioural finance has been used in the financial industry psychologically, focusing on herding and disposition effects. Likewise, the study of Asad et al. (2017) showed learning more about the psychological factors that impact individual traders' trading decisions in a developing country. Kengatharan and Kengatharan (2014) identified four behavioral factors that impact individual traders' trading decisions: herding, heuristics, prospect, and market.



**Figure 1: Conceptual Framework**

*Source:* Adopted and modified from Kengatharan and Kengatharan (2014)

Figure 1 illustrates the study framework opted for by the authors, which was adopted and modified by

Kengatharan & Kengatharan (2014). Prospects, Heuristics, Herding, and Markets are the four exogenous factors listed, whereas trading decision is the dependent variable.

## ***Hypotheses Formulation***

### ***Heuristic Variables and Trading Decisions of Individual Traders***

Heuristics, which are fundamental components of decision-making relying on norms of thumb (Cheng et al., 2016), enable humans to reach conclusions more rapidly than if they were to evaluate the information logically. Furthermore, traders utilize heuristic biases to reduce mental effort and mitigate the risk of loss in uncertain circumstances, including adjustment, overconfidence, availability, and anchoring. However, this approach occasionally results in erroneous judgments, which may contribute to market inefficiency (Abarbanell & Bernard, 2015).

*H1: The heuristic variable significantly influences the trading decisions of individual traders.*

### ***Prospect Variables and Trading Decisions of Individual Traders.***

Escalation circumstances feature some of the most critical and challenging decisions made in trading. In many circumstances, the difficulty in selecting whether or not to spend further resources on a lost strategy leads to a rising commitment process (Whyte, 1993). Prospect theory is a method of analyzing unpredictable outcomes and risks that can be employed in various disciplines of economics with finance, insurance, and industry organizations. Each sector has its own set of risks and adjustments that ultimately translate from workplace dynamics to stock market behavior (Bhattarai et al., 2024; Lubis, 2024). Prospect theory is one of the key factors influencing individual decisions (Benartzi & Thaler, 2007). The prospect variables that influence trading decisions include regret aversion, loss aversion, and mental accounting.

*H2: Prospect variable has a significant effect on the trading decisions of individual traders.*

### ***Market Variable and Trading Decisions of Individual Traders***

Trading behaviour is influenced by various market variables, including price fluctuations, political and social news, trend forecasts, information from others, and the significance of individual equities (Karki et al., 2023; Waweru, 2008). Traders should pay special attention to stock information and be reminded that to make reasonable judgments, they must examine market information (Epstein & Freedman, 1994). Customer preference, market information, price fluctuations, historical stock trends, underlying stock fundamentals, overreaction to price fluctuations, and customer preference all impact trading decisions.

*H3: Market variables significantly influence the trading decisions of individual traders.*

### ***Herding Variable and Trading Decisions of Individual Traders***

Herding is characterized by individuals imitating the actions of others despite possessing private information that would indicate an alternative course of action (Banerjee, 1992). Herding is like repeating

previous actions, whether sensible or illogical. The study of Fernández et al. (2011) reveals that traders rely on incorrect information because they are more likely to accept the ideas and decisions of others. When gathering information and assessing financial concerns, herding impacts individual traders; thus, the herding behavior may be based on the trading decisions of other traders. Likewise, traders' sentiments toward different publicly traded corporations are impacted by the information at their disposal. (Gurung et al., 2024; Dahal et al., 2020; Karki, 2017; Khelda, 2011).

*H4: Herding variable significantly influences the trading decisions of individual traders.*

### *Trading Decisions of Individual Traders*

Trading decisions are impacted by different factors such as herding, the market, heuristics, and prospect factors, where individual traders evaluate the rewards of spending in the present scenario against the benefits of investing unused funds to experience faster growth in the future. If the individual postpones trading, the trader will choose a portfolio that maximizes long-term benefits (Karki & Dahal, 2024; Lin, 2015).

### **Empirical Framework**

The structural equation model (SEM) can handle various created variables and invisible latent variables, making it a powerful statistical tool for predicting relationships between different types of variables (Tarka, 2018). The current work uses the SEM measurement model as proposed by Donaldson (1999), which is specified as follows:

The structural part of the model:

$$H = \alpha + \beta\eta + \Gamma\xi + \zeta \dots\dots\dots (i)$$

The endogenous and exogenous variables' latent variables are linked to observable variables via measurement equations. These equations are described as:

$$x = \Lambda x \xi + \delta \dots\dots\dots (ii)$$

$$y = \Lambda y \eta + \varepsilon \dots\dots\dots (iii)$$

Where, x = input variables;  $\Lambda x$  = Change in variables;  $\eta$  = latent variables;  $\xi$  = latent variables (observed responses); y = outcome variables;  $\Lambda y$  = Observed response variables;  $\varepsilon$  and  $\delta$  = errors. The vectors  $\varepsilon$  and  $\delta$  represent errors in measurement with respect to y and x, respectively.

The matrix of regression coefficients for the endogenous variables ( $\eta_i$ ) is denoted by  $\beta$ ,  $\gamma$  is a random vector residual, and  $I - \beta$  is not singular. The structural model parameter  $\beta$  is a matrix that has zeros on the diagonal and is used to represent the regressions among the endogenous variables ( $\eta_i$ ). When errors only affect the y-variables, the simplified version of the structural model can be shown using equations (1) through (3) as follows:

$$y = \Lambda y (I - \beta)^{-1} (\Gamma\xi + \zeta) + \varepsilon \dots\dots\dots (iv)$$

### ***Operationalizing Variables***

The variables utilized in the study had already been identified and established. The variables listed below may not be the only ones utilized in the study; required variables are chosen based on the investigation's aims. Table 1 provides a detailed breakdown of the observed parameters that SEM confirmed.

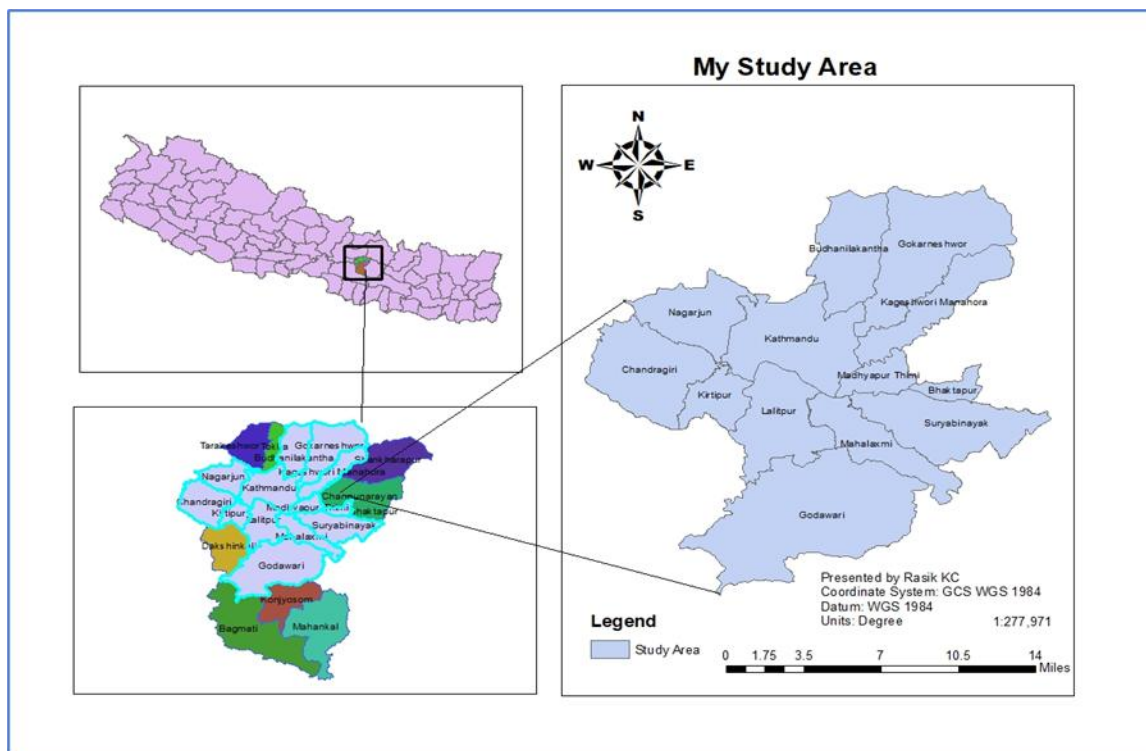
**Table 1:** Observed Variable and its Elements

Construct	Observed Variable	Notation	Description
Heuristic	Skill and knowledge	HTD1	Outperforming the market can be facilitated by having stock market knowledge and skills.
	Experience	HTD2	Previous experiences are used to select the next stock for trading
	Overconfidence	HTD4	Feel confident in evaluating current securities prices
Prospect	Risk Aversion	PTD2	Following a past loss, it becomes more risk-sensitive.
	Regret Aversion	PTD3	It is advisable to refrain from selling securities during periods of declining prices and to sell them at a high price.
	Framing	PTD5	Would prefer to invest in equities than hold cash in a bank account.
Herding	Other traders' choice	HTTD1	The stock type is chosen by other traders.
	Other traders buying and selling stock	HTTD3	The stock purchases and sales of other traders.
	Information from friends and colleagues	HTTD5	Information from friends and colleagues is highly reliable
Market	Price changes	MTD1	Overreaction to stock price movements.
	Customer preference	MTD2	Examine the preferences of the company's customers.
	Fundamentals of underlying stock	MTD4	Examine the basic stock market fundamentals.
Trading Decision	Negative Influence	TDI4	Upon hearing the word "stocks," the phrase "possible loss" instantly sprang to mind.
	Price history	TDI5	Frequency of stock price change
	Company performance	TDI6	Reports on the performance and earnings of listed businesses

*Note: Following Confirmatory and Explanatory Factor Analysis, the following factors were eliminated: HTD3, HTD5, PTD1, PTD4, HTTD2, HTTD4, MTD3, MTD5, TDI1, TDI2, and TDI3. Their values are still below 0.5.*

### ***Study Area and Population***

The Kathmandu Valley is comprised of three districts: Kathmandu, Lalitpur, and Bhaktapur, with a combined area of 220 square miles (570 km<sup>2</sup>). The research location was selected from three districts in the Kathmandu Valley in Province 3, which is one of Nepal's 77 districts. The Kathmandu Valley is situated at latitudes 27°32"13" and 27°49"10" north and longitudes 85°11"31" and 85°31"38" east. Kathmandu is Nepal's most populous district, with a population of 25,17,023. The Kathmandu Valley in Nepal has been chosen as the research location (see Figure 2) to learn more about how stock traders are participating in stock trading and want intraday trading. Various broker offices and their networks in the valley can provide accurate information and knowledgeable traders, which will be beneficial to our study. According to CDS and Clearing House, the total number of DMAT accounts till December 2021 is 46,86,672 in Nepal. According to stock brokers, till December 2021, the total number of active traders and traders is 9,25,670 all over Nepal.



**Figure 2:** Study Area

*Source: GIS ArcMap 10.2*

### ***Sampling Technique, Sample Size Determination, Data Collection and Analysis***

The study used a non-probability sample approach because the researcher could not determine the exact number of active traders in Kathmandu Valley. Furthermore, the convenience sampling approach was used for this study since it examines traders involved in stock trading and their desire for intraday trading. The sample size for the study was  $(266.78+13.34) = 280.12$  (approximately 280). However, only 226 relevant data points were gathered due to a greater non-response rate. This study's main instrument was a structured questionnaire. Primary data was collected via a questionnaire survey stored in the Kobo toolbox. The data was analyzed using descriptive and inferential methods, including structural equation modelling based on many latent constructs in the inferential approach and various charts, tables, and

figures in the descriptive approach. Data was analyzed using KOBO Toolbox, Microsoft Excel, SPSS, and AMOS.

### 3. Results and Analysis

This study used a systematic questionnaire to assess the acquired data from the investors' perspective. To investigate the data thoroughly, a variety of analytical tools were used. These tools included descriptive and inferential statistics and tabular and graphical representations, such as exploratory and confirmatory factor analyses with SPSS and structural equation modelling (SEM).

#### *Descriptive Analysis*

##### *Socio-Demographic Characteristics*

The study reveals that most were male, mostly unmarried, and hadn't taken any training related to the stock market. The findings of this study support the fact that males were more likely than females to engage in stock market trading- particularly in stock handling, which necessitates better skills where the inexperienced and unskilled traders were trading on the NEPSE and losing money because they hadn't participated in any kind of stock market training. Moreover, the results also indicate that most Nepalese youth were interested in stock trading, and traders with a bachelor's degree were more interested in stock trading in the Nepal stock market. Aside from stock market participation decisions, education was viewed as a crucial factor in determining risk-taking behaviour among traders. In addition, people participating in stock trading in the Kathmandu Valley were involved in their trade and jobs, indicating that the stock trading sector is fraught with risk. Lastly, this study also concludes that traders in the Kathmandu Valley utilize their savings to invest in stocks and earn between 30,000 and 50,000, indicating that average-earning residents in the Kathmandu Valley are highly involved in the stock market (see Table 2).

**Table 2:** Socio-demographic Characteristics

Variable	In Number	In Percentage
<b>Sex</b>		
Male	148	65.49
Female	78	34.51
<b>Age</b>		
Below 20	6	2.65
20-28	84	37.17
28-36	109	48.23
36-44	17	7.5
44-52	5	2.21
52-60	4	1.77
Above 60	1	0.44

Variable	In Number	In Percentage
<b>Education Level</b>		
Secondary	3	1.32
Higher Secondary	19	8.41
Bachelor's Level	117	51.77
Master's and above	4	1.77
<b>Profession</b>		
Private Service	73	32.3
Student	60	26.55
Government Employee	30	13.27
Business	20	8.85
Housewife	18	7.96
investor	12	5.31
Other	9	3.98
<b>Marital Status</b>		
Married	107	47.35
Unmarried	119	52.65
<b>Nature of employment</b>		
Full Time	155	68.58
Part-Time	17	7.52
Unemployed	52	23.01
Retired	2	0.88
<b>Manage to support trading</b>		
Saving	162	71.68
Family Income	58	25.66
Loan from Bank	6	2.65
<b>Income Per Month</b>		
30 thousand-50 thousand	89	39.38
10 thousand-20 thousand	56	24.78
20 thousand-30 thousand	43	19.03
50 thousand-70 thousand	18	7.96

Variable	In Number	In Percentage
50 thousand-70 thousand	7	3.1
Above one lakh	13	5.75

Taken Training for Trading		
Yes	146	64.6
No	80	35.4

### *General Understanding of Traders*

A questionnaire was used to examine the present state of stock market traders' general expertise. The result shows that 65.62 percent have been trading for two to five years, and just 0.88 percent have been trading for fifteen years and have already traded their stock 51-100 times, which covers 44.25% of traders in the Nepalese stock market, whereas only 1.33% of respondents have traded more than 1000 times in their life which demonstrates the presence fresh traders in Kathmandu's Nepalese Market. Likewise, the majority (101) of respondents have traded only 5-10 times during a year, and only 8 respondents traded above 100 times in the last years, and they contribute only 1-2 hours per day (47.35%) to surf in stock market whereas only 7 out of 226 respondents participate full-time in the stock market, with the highest time contribution of 4 hours. The Nepalese stock market opens only for 4 hours, from 11 a.m. to 3 p.m. It demonstrates that traders place a lower focus on the stock market and usually trade less since they are not solely concerned with trading.

Likewise, the result also revealed that 94 of the 226 respondents use 1 lakh to 5 lakhs of their money for trading, while the minimal respondents (7) use more than 10 lakhs to trade stocks. It demonstrates that the Nepalese stock market has a large number of minor players. Similarly, 92.04 percent of respondents want to sell when profit is high, and only 1.77 percent want to sell under other circumstances and agree that they buy the stock when the price is falling (86.73%). This indicates that people wish to sell shares based on the current scenario when the price begins to increase in the average position. Respondents were also asked whether they needed preparation before starting trading. It was revealed that 88.94% of respondents accept the lots of preparation required before starting stock trading, and only 11.06% of respondents oppose this fact, which indicates that they are well prepared for stock trading in the context of the Nepalese stock market. Similarly, traders were asked to analyze the stock market's status and design a strategy to cope with it through a questionnaire. The majority of 226 respondents (216) agree that studying the stock market and developing a plan to cope with it is vital.

### *Application of Prospect Theory*

The results on intraday trading adoption indicate that 209 respondents are aware of the current trading system, 130 are aware of the share delivery date, 155 are aware of the payment date, 183 are aware of the purchase order, and 166 are aware of the sale order where the respondents are asked to choose more than one option. Thus, it shows that all respondents know the current Nepalese stock trading system and understand the trading mechanism. Likewise, 100 respondents out of 226 want to retain stock for immediate sale, 68 want a short period, and 58 want to hold stock for a long period. This indicates that

most traders want their stock to be available for buy and sale immediately, while only a few prefer to hold for a long period. The traders living in the Kathmandu Valley desire to trade as quickly as possible. Moreover, the researcher attempted to ask traders if they wished to profit from such fluctuations. The results indicated that 91.59 percent of respondents desire to earn a profit. In comparison, 8.41 percent are uninterested in making such a profit and want to trade their stock without owning the stock (75.22% of respondents), preferring the immediate transactions of their stock. It shows that traders residing in Kathmandu Valley want to trade without transferring stock in the DEMAT account and want an immediate transaction system in the stock market.

Moreover, the researchers aim to discover traders prepared to purchase and sell shares on the same day. The study revealed that 80.09 percent of respondents prefer same-day transactions, while 19.91 percent do not. Likewise, 75.22 percent of respondents want to create a second account, while the remaining 24.78 percent do not want to create a separate account. It concludes that traders in the Kathmandu Valley require an individual account. The researchers also assessed traders' willingness to square off and found that 58.85 percent of respondents wanted to square the stock, and others opposed this fact. Likewise, 61.06 percent of respondents are willing to take broker-provided facilities, whereas 38.94 percent are unwilling to accept broker-provided facilities. This indicates that brokers are providing satisfactory facilities to traders. Leverage is effectively a loan issued by the broker to a trader, where some brokers may restrict the amount of leverage utilized by rookie traders at first (Heimer & Simsek, 2019; Bhandari et al., 2021). The result indicates that 226 respondents, 204 and 196 respondents, are willing to accept the leverage and loan facilities provided by the broker.

### *Impact of Behavioral Factors on Trading Decisions*

The behavioural factors have been analyzed to examine their impact on investors' trading decisions. Five variables assess the significant aspects of stock trading: heuristic behaviour, prospect factors, herding behaviour, market factors, and trading decisions. These factors are evaluated on a five-point scale: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1).

Heuristics includes explanatory variables such as skill and knowledge, experience, and overconfidence. The result indicates that most people believe that their skills and knowledge of the stock market can help them to outperform in the stock market, where their previous experience helps them select the following stock and agree on the fact that they feel overconfident in the stock price in future. The average of the Likert Scale is above 4.01 for skill and knowledge, experience, and overconfidence, reflecting that there is a response of agreement from traders regarding heuristic variables in trading decisions. Similar research conducted by Shah et al. (2018) explores the association between heuristic biases in trading decisions and perceived market efficiency and finds that biases significantly unfavorably influence trading choices made by individual traders actively trading on the Pakistan stock market.

Risk aversion, regret aversion, and narrow framing are the explanatory variables under the construct prospect in the study of intraday trading in the Nepalese stock market. The result indicates that most people agree that after a prior loss, there is more risk in averse, although traders analyze the connection between the stocks; thus, most traders agree that they invest their money in the stock market rather than keeping it in the bank. The average of the Likert Scale is above 4.05 for risk aversion, regret aversion, and framing, reflecting a response to traders' agreement regarding prospect variables in trading decisions. Similar research conducted by Ding (2004) shows that traders confident in price change seek greater risk. When the information is from inside an organization, the trader feels confident and seeks high risk.

Likewise, herding includes explanatory variables such as other investors choices, other investors' buying and selling stock, and information from friends and colleagues. According to the survey, traders concur

that they choose their stocks based on what others choose, what traders often trade, and that they rely on information about stocks offered by their friends and coworkers. The average of the Likert Scale is above 3.6, reflecting a moderate level of response from traders regarding the Herding variable in trading decisions. Dutta et al. (2020) revealed that herding and panic are really the outcome of profound guilt on the part of the trading, which causes them to panic and herd. Despite this, traders make trading choices using heuristics.

The market contains explanatory variables such as price changes, customer preference, and fundamentals of the underlying stock. The outcome suggests that traders agree on evaluating customer preference before trading stocks and consider a company's fundamentals before trading but overreact when prices fluctuate. The average Likert Scale is above 3.6, reflecting a moderate level of response from traders regarding market variables in trading decisions. A similar study (Kengatharan & Kengatharan, 2014) revealed that the market variable shows a moderate response to individual traders' decision-making.

Similarly, the trading decision contains explanatory variables such as negative influence, price history, and company performance. The study's findings show that traders typically keep an eye on stock prices as they fluctuate frequently, evaluate the performance and profitability of listed companies, and then make trading decisions. However, they also acknowledge that poor trading decisions result in constant losses for traders in the stock market. The Likert Scale average is above 3.93 for Negative Influence, Price history, and Company performance, reflecting a moderate level of response from traders.

### *Challenges in Stock Trading*

Respondents are asked whether the traders face challenges during stock trading. The result indicates that 76.55% face the challenge in the Nepalese stock market, whereas only 23.45% said they hadn't encountered any difficulties during stock trading. The significant challenges the stock traders face in the Nepalese stock market are the lack of broker support (67.7%) and the TMS crash during trading (61.5%). Other sub-challenges are lack of stock trading awareness (43.81%), internet connection (43.36%), lack of sound online trading system (36.73%), and lack of financial institution support (22.57%) (see Table 3). The study (Koirala & Bajracharya, 2002) found that the challenges in the stock market are politico-economic situation, legal provision, and FI dominance.

**Table 3:** Major Challenges Face by Stock Traders

Factors	No. of Respondents	Percentage (%)
Lack of broker support	153	67.7
TMS Crash	139	61.5
Lack of stock trading awareness	99	43.81
Internet connection	98	43.36
Lack of good online trading system	83	36.73
Lack of financial institution support	51	22.57

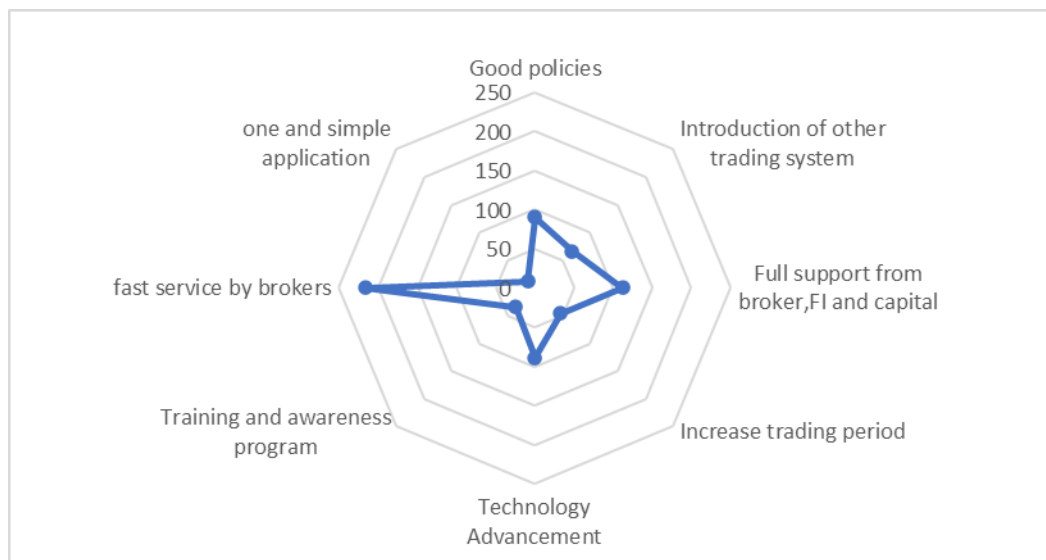
*Source:* Survey

Moreover, respondents were asked from where these challenges arise, and the result indicates that they came from technical factors (116) and political factors (131); likewise, 103 respondents think that challenges arise from economic factors, and 60 respondents out of 226 confirmed that the challenges

have arisen from social aspects. Moreover, 157 respondents chose that broker, 118 said NEPSE, 105 respondents said the trader themselves, 83 respondents agreed with financial institutions, whereas only 8 respondents said that others, like politics and the finance minister, were responsible for the cause of the problems.

### Managerial Solution

Respondents were asked whether managing challenges helps to run the share market smoothly. The result revealed that 164 respondents agreed that the challenges and barriers of the stock market are manageable, whereas only 9 respondents disagreed. Likewise, this study also proposes how the market would work smoothly and revealed that majority (30) of respondents suggest motivating traders, growth of capital market (30), smooth operation of stock market (25), reliable and transparent system (20), efficiency in stock and predictability increase (15), attract people in stock market (15), easy trading system (15) and fair rule and regulation (14) are main aspects that need to be considered for smooth market operation in stock market.



**Figure 3:** Recommendation to Improve the Trading System

*Source:* Field Survey

Likewise, the result discovered that the majority (95%) of respondents suggested increasing the speed of brokers, good full support from brokers, financial institutions, and capital (50%), making good policies (40%), technology advancement (40%), introducing new trading system like intraday trading, delivery market, etc. (30%), increasing the trading days and hours (20%), provide training and awareness program to new traders (15%), and need of one and simple application (50%) (see Figure 3).

Thus, NEPSE and SEBON should make a good policy that helps reduce insider trading in the market. SEBON should closely watch the brokers. The slow service by the broker is demotivating the traders. Brokers hold the shares and money for a long time. To solve the broker problem, SEBON should provide a license to FI for brokerage. A similar study conducted by Koirala and Bajracharya (2002) found that the solutions to challenges are good corporate governance, transparency, and disclosure of information.

## ***Inferential Analysis***

This study applies Explanatory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), measurement modeling, path analysis, mediation analysis, and hypothesis testing to validate constructs and examine relationships, offering robust insights into intraday trading adoption.

### ***Descriptive Summary Statistics***

The mean, standard deviation, skewness, and kurtosis summarize the data. The respondents' mean and standard deviation exhibit substantial dispersion, falling between 3.57 and 4.10 and 0.53 and 0.87, respectively. Skewness is a measure of distribution symmetry, whereas kurtosis is a measure of the peak or flatness of a distribution (Allua & Thompson, 2009) and ranges from -1 to +1, insisting on the data's negative skewness. Similarly, kurtosis ranges from -4 to +4, showing that the distribution is not too peaked.

### ***Exploratory Factor Analysis (EFA) and Common Method Bias***

Before reviewing the data, KMO and Bartlett's tests were performed to determine its applicability. The KMO value in our analysis is 0.703, which meets the 0.70 minimal criterion (Iskamto et al., 2020). Similarly, the data is significant since the value of Bartlett's Test is 0.000, which is less than 0.05, suggesting that it is significant. This indicates that there are no data dependability and validity issues, and the data is significant for the analysis. Moreover, Harman's single factor test is used to determine if the study suffers from common method bias; the result indicates 23.61%, which is less than 50% (Aguirre-Urreta & Hu, 2019), indicating that the study is free of common method bias.

### ***Measurement Model (Validity of Data) and Confirmatory Factor Analysis (CFA)***

To test convergence validity, the data must meet the conditions  $CR > 0.70$  and  $AVE > 0.50$ , while  $AVE > MSE$  and the square root of  $AVE > correlation$  are required for discriminant validity (see Tables 4 and 5). Thus, the results show that both convergence and discriminant validity are confirmed, implying that the dataset is credible.

**Table 4: Reliability and Validity**

Construct	Indicators	Factor Loading	Cronbach's Alpha	CR	AVE	MSV
Heuristic	HTD1	0.899	0.938	0.833	0.624	0.018
	HTD2	0.910				
	HTD4	0.863				
Prospect	PTD2	0.972	0.984	0.938	0.835	0.013
	PTD3	0.967				
	PTD5	0.965				

Herding	HTTD1	0.903	0.957	0.984	0.953	0.003
	HTTD3	0.961				
	HTTD5	0.912				
Market	MTD1	0.787	0.831	0.959	0.886	0.045
	MTD2	0.730				
	MTD4	0.779				
Trading Decision	TDI4	0.848	0.910	0.913	0.778	0.045
	TDI5	0.892				
	TDI6	0.831				

Confirmatory factor analysis (CFA) examines if a collection of components influences answers in the expected way (Pett et al., 2011). The fitness indices CMN/DF, RMR, RMSEA, GFI, IFT, TLI, and CFI are used to assess if the model fit is excellent. From the study CMIN/DF (2.257<5), RMR (0.023<0.08), RMSEA (0.075<0.08), GFI (0.908>0.80), TLI (0.961>0.90) and CFI (0.970>0.90) respectively, which shows that the study has excellent model fit.

**Table 5:** Latent Construct Correlation

	MSV	MTD	HTD	PTD	HTTD	TDI
MTD	0.018	0.790				
HTD	0.013	0.115	0.914			
PTD	0.003	0.032	0.044	0.976		
HTTD	0.045	0.069	0.101	0.009	0.941	
TDI	0.045	0.133	0.109	0.053	0.212	0.882

*Source:* Field Survey

### ***Test of Hypothesis***

Hypotheses H1, H2, and H4 are all rejected, as indicated in Table 5, implying that there is no meaningful link. On the other hand, H3 is accepted, meaning that the variables in the respective hypothesis do not have a substantial relationship.

During the inferential stage of the study, SEM is used to analyze the regression, variable, and normalcy pattern. When latent variables and observable variables are compared, five factors are considered. The model's fitness requirements indicate that it is in good shape. The results show an X<sup>2</sup>/df (CMIN/DF) value of 2.257 (2.257<5). The results revealed that the p-value for a meaningful relationship between latent and observable variables is less than 0.10. Because the mean level of all hypotheses (p-value) is less than 0.10, the hypotheses in this study are widely accepted. As a result, all independent variables used in

this study have a significant impact on all contingent factor hypotheses, which are all rejected.

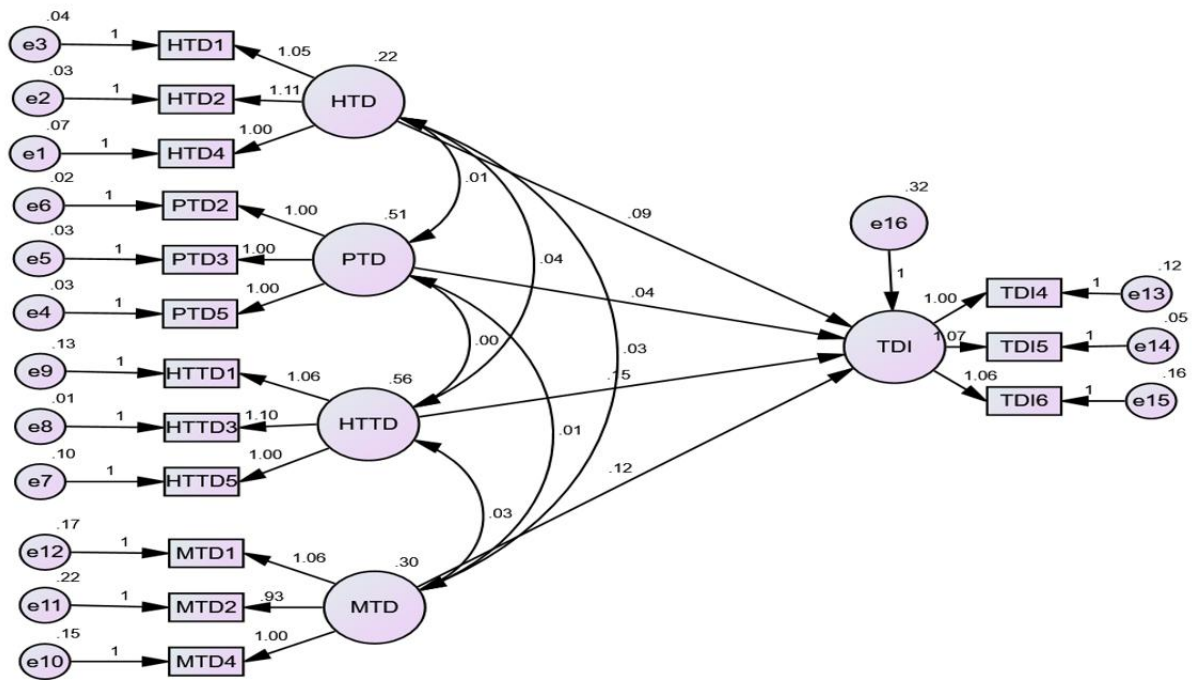


Figure 4: Structural Model

Source: SPSS AMOS

Table 6: Path Estimates for Structural Model

Hypothesis	Estimate	S.E.	C.R.	P	Significant
H1: - Heuristic Variable Trading Decision	0.093	0.087	1.064	0.287	Insignificant
H2: - Prospect Variable Trading Decision	0.036	0.055	0.657	0.511	Insignificant
H3: - Herding variable Trading Decision	0.153	0.053	2.874	0.004	Significant
H4: - Market Variable Trading Decision	0.116	0.079	1.473	0.141	Insignificant

#### 4. Discussions

The results emphasize herding behavior as the most prominent factor influencing trading decisions among Nepalese investors. This aligns with earlier research emphasizing the reliance on external opinions in markets with limited reliable information (Hilton, 2001; Ghimire & Karki, 2022; Dahal et al., 2024). In

the context of Nepal's stock market, characterized by its relatively small size, low liquidity, and limited access to verified financial data, traders often imitate others' actions—friends, family, or online communities—rather than employing analytical tools or fundamental analysis. This observation mirrors trends seen in other emerging markets, where inadequate financial literacy and weak regulatory oversight amplify herding tendencies (Bui et al., 2018; Phan et al., 2023; Khadka et al., 2024). Unlike in more developed markets, where heuristic factors such as overconfidence, loss aversion, or anchoring play a significant role in trading behavior (Ryu, 2012; Jan et al., 2022), these factors (H1, H2, H4) were found to be less influential in Nepal. This deviation can be attributed to the nascent stage of Nepal's stock market and the dominance of retail investors with limited exposure to professional trading practices. Similar findings were reported in studies of markets in countries like Bangladesh and Sri Lanka, where herding behavior was driven by a lack of transparency and inefficient trading systems (Rajeshwaran, 2020; Yasmin & Ferdaous, 2023).

Structural and operational challenges in Nepal's financial ecosystem further exacerbate the reliance on herding behavior. Issues such as frequent system crashes in the Trading Management System (TMS), inadequate broker support, and unreliable internet connectivity hinder traders' ability to make independent and informed decisions. These challenges resonate with findings from other emerging economies, such as Kenya, Vietnam, and Arab, where underdeveloped technological infrastructures have posed significant barriers to trading efficiency (Njuguna, 2016; Nga, 2024, Alsakka & Orabi, 2024). Nepal's financial regulatory framework also contributes to this scenario. While countries like India and Malaysia have implemented robust regulatory systems for intraday trading; including mechanisms like circuit breakers and real-time surveillance (Panda et al., 2017; Haniff & Pok, 2010); Nepal lacks similar provisions. The absence of regulations specifically addressing intraday trading creates an environment prone to speculative behavior and information asymmetry. For instance, SEBON, Nepal's securities regulator, has yet to introduce policies that mandate transparent financial disclosures or mechanisms to mitigate volatility during high-frequency trading sessions. This regulatory gap contrasts with the more structured approaches in similarly sized markets like Vietnam, where regulatory reforms have successfully improved trading efficiency and investor confidence (Njuguna, 2016; Shrestha et al., 2022).

The observed herding behavior also appears to be a coping mechanism for navigating uncertainties within the market. Consistent with the findings of Nguyen et al. (2023), reducing information asymmetry and fostering greater market liquidity could mitigate such tendencies. For Nepal, this would require a dual approach: enhancing the technological infrastructure to support seamless trading and introducing investor education programs to encourage informed decision-making.

## 5. Conclusion

This study explores how technological evolution and service innovation shape investor behavior in intraday trading adoption in Nepal's stock market. The findings highlight that herding behavior significantly influences trading decisions, as investors often rely on peers and social media rather than fundamental analysis. Unlike developed markets, where heuristic and prospect behaviors dominate, these factors play a lesser role in Nepal due to limited financial literacy and regulatory inefficiencies. Beyond behavioral tendencies, systemic challenges such as frequent Trading Management System (TMS) crashes, inadequate brokerage support, and weak internet infrastructure hinder market efficiency. Drawing from global insights (Fackler, 2006; Hudson et al., 2018), overcoming these barriers requires technological advancements, regulatory reforms, and enhanced financial literacy. Upgrading NEPSE's infrastructure, expanding AI-driven trading platforms, and improving brokerage services can enhance trading experiences. Regulatory improvements, including extended trading hours, stricter market transparency,

and better investor support, are essential for fostering a stable trading environment. Service innovation, such as algorithmic trading and fintech integration, can further optimize market participation. Future research should examine demographic variations in trading behavior and the role of digital financial innovations in enhancing intraday trading adoption. Addressing these behavioral, technological, and regulatory gaps will contribute to a more efficient and investor-friendly stock market in Nepal.

## References

- Abarbanell, J. S., & Bernard, V. L. (2015). Tests of analysts' overreaction/underreaction to earnings information as an explanation for anomalous stock price behavior. *The Journal of Finance*, 47(3), 1-10.
- Aguirre-Urreta, M. I., & Hu, J. (2019). Detecting common method bias: Performance of the Harman's single-factor test. *Data Base for Advances in Information Systems*, 50(2), 45-70. <https://doi.org/10.1145/3330472.3330477>
- Allua, S., & Thompson, C. B. (2009). Inferential Statistics. *Air Medical Journal*, 28(4), 168-171. <https://doi.org/10.1016/j.amj.2009.04.013>
- Alsakka, K., & Orabi, A. (2024). Towards sustainable online education at schools: The determinants of teachers' intentions to adopt E-Learning. *Journal of Service, Innovation and Sustainable Development*, 4(1), 100-114. <https://doi.org/10.33168/SISD.2023.0109>
- Asad, H., Khan And, A., & Faiz, R. (2017). Behavioral biases across the stock market investors. *Pakistan Economic and Social Review*, 56(1), 185-209.
- Atif-Sattar, M., Toseef, M., & Fahad Sattar, M. (2020). Behavioral finance biases in investment decision making. *International Journal of Accounting, Finance and Risk Management*, 5(2), 1-69. <https://doi.org/10.11648/j.ijafm.20200502.11>
- Banerjee, A. V. (1992). A simple model of herd behavior. *JSTOR: The Quarterly Journal of Economics*, 107(3), 797-817.
- Baralis, E., Cagliero, L., Cerquitelli, T., Garza, P., & Pulvirenti, F. (2017). Discovering profitable stocks for intraday trading. *Information Sciences*, 405(1), 91-106. <https://doi.org/10.1016/j.ins.2017.04.013>
- Benartzi, S., & Thaler, R. H. (2007). Heuristics and biases in retirement savings behavior. *Journal of Economic Perspectives*, 21(3), 81-104. <https://doi.org/10.1257/jep.21.3.81>
- Bhandari, U., Jaisi, T., Devkota, N., Karki, D., Adhikari, D. B., Paudel, U. R., & Parajuli, S. (2021). Retail loan under interest rate fluctuation in Nepal: Costumers interest, challenges, and managerial solutions. *Journal of Asian Business Strategy*, 11(1), 46-54. <https://doi.org/10.18488/journal.1006.2021.111.46.54>
- Bhattarai, G., Budhathoki, P. B., Rai, B., & Karki, D. (2024). Detrimental impact of employees' job demand on their workplace incivility behaviour: Restorative role of self-efficacy. *International Journal of Management and Sustainability*, 13(1), 26-39. <https://doi.org/10.18488/11.v13i1.3593>
- Bogan, V. (2016). The greater fool theory : What is it ? *Hartfordfunds*, 1(1), 1-10.
- Bui, N. D., Nguyen, L. T. B., Nguyen, N. T. T., & Titman, G. F. (2018). Herding in frontier stock markets: evidence from the Vietnamese stock market. *Accounting and Finance*, 58(S1), 59-81.

<https://dx.doi.org/10.1111/acfi.12253>

Cao, M. M., Nguyen, N. T., & Tran, T. T. (2021). Behavioral factors on individual investors' decision making and investment performance: A survey from the Vietnam stock market. *Journal of Asian Finance, Economics and Business*, 8(3), 845–853. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0845>

Cheng, L., Hu, W., Jia, X., & Runco, M. A. (2016). The different role of cognitive inhibition in early versus late creative problem finding. *Psychology of Aesthetics, Creativity, and the Arts*, 10(1), 32–41. <https://doi.org/10.1037/aca0000036>

Chhetri, A. D., & Karki, D. (2023). Consumers' Attitude on Purchase Behavior of Green Products. *Pravaha*, 29(1), 111–122. <https://doi.org/10.3126/pravaha.v29i1.71411>

Chung, J. M., Choe, H., & Kho, B. C. (2009). The impact of day trading on volatility and liquidity. *Asia-Pacific Journal of Financial Studies*, 38(2), 237–275. <https://doi.org/10.1111/j.2041-6156.2009.tb00014.x>

Dahal, R. K., Bhattarai, G., & Karki, D. (2020). Management accounting practices on organizational performance mediated by rationalized managerial decisions. *International Research Journal of Management Science*, 5(1), 148-169. <https://doi.org/10.3126/irjms.v5i1.35870>

Dahal, R. K., Ghimire, B., Gurung, R., Karki, D., & Joshi, S. P. (2024). Management accounting's role in decision-making and efficacy. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2433165>

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

Ding, D. K., Charoenwong, C., & Seetoh, R. (2004). Prospect theory, analyst forecasts, and stock returns. *Journal of Multinational Financial Management*, 14(4-5), 425-442.

Donaldson, L. (1999). Performance-driven organizational change: The organizational portfolio. The contingency theory of organizations. *Organizational Behaviour*, 7, 333–365.

Dutta, A., Sinha, M., & Gahan, P. (2020). Perspective of the behaviour of retail investors: An analysis with Indian stock market data. *Advances in Intelligent Systems and Computing*, 990(1), 605–616. [https://doi.org/10.1007/978-981-13-8676-3\\_51](https://doi.org/10.1007/978-981-13-8676-3_51)

Epstein, J.M., & Freedman, M. (1994). Social disclosure and the individual investor. *Accounting, Auditing & Accountability Journal*, 7(1990), 38–59.

Fackler, M. (2006). In Japan, Day-Trading Like It's 1999. *New York Times*, 19–21.

Fama, E. F. (1970). Efficient capital market, a review of theory and empirical work. *Journal of Finance*, 25, 383–417.

Fernández, B., Garcia-Merino, T., Mayoral, R., Santos, V., & Vallelado, E. (2011). Herding, information uncertainty, and investors' cognitive profile. *Qualitative Research in Financial Markets*, 3(1), 7–33. <https://doi.org/10.1108/17554171111124595>

Ghimire, M., & Karki, D. (2022). Brand loyalty among mobile users. *NCC Journal*, 7(1), 1–14. <https://doi.org/10.3126/nccj.v7i1.58612>

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

Hammond, R. C. (2015). Behavioral finance : It's history and its future. *Selected Honors Theses, 1*(1), 44.

Haniff, M. N., & Pok, W. C. (2010). Intraday volatility and periodicity in the Malaysian stock returns. *Research in International Business and Finance, 24*(3), 329-343. <https://doi.org/10.1016/j.ribaf.2010.03.001>.

Heimer, R., & Simsek, A. (2019). Should retail investors' leverage be limited? *Journal of Financial Economics, 132*(3), 1–21. <https://doi.org/10.1016/j.jfineco.2018.10.017>

Hilton, D. J. (2001). The psychology of financial decision-making: Applications to trading, dealing, and investment analysis. *Journal of Psychology and Financial Markets, 2*(1), 37–53. [https://doi.org/10.1207/s15327760jpfm0201\\_4](https://doi.org/10.1207/s15327760jpfm0201_4)

Hsieh, T. Y., Fu, Y. F., & Ma, S. Y. (2020). Impacts of day trading on the intraday pattern of market quality. *International Journal of Services, Technology and Management, 26*(1), 20–37. <https://doi.org/10.1504/IJSTM.2020.105396>

Hudson, C., Young, J., Anong, S., Hudson, E., & Davis, E. (2018). Investment behavior: Factors that limit African Americans' investment behavior. *Journal of Financial Therapy, 9*(1) 3. <https://doi.org/10.4148/1944-9771.1127>

Iskamto, D., Ghazali, P. L., Aftanorhan, A., Jenita, Sukono, & Bon, A. T. (2020). Exploratory factor analysis (Efa) to measure entrepreneur satisfaction. *Proceedings of the International Conference on Industrial Engineering and Operations Management, 1*(1), 2585–2593.

Jan, N., Jain, V., Li, Z., Sattar, J., Tongkachok, K. (2022). Post-COVID-19 investor psychology and individual investment decision: A moderating role of information availability. *Front Psychol, 13*:846088, 1-12. doi: <https://doi.org/10.3389/fpsyg.2022.846088>

Karki, D. (2017). Structural equation modeling of latent variables affecting stock prices: Evidence from Nepal. *Tribhuvan University Journal, 31*(1-2), 25-44. <https://doi.org/10.3126/tuj.v31i1-2.25329>

Karki, D. (2018). The dynamic relationship between tourism and economy: Evidence from Nepal. *Journal of Business and Management, 5*(1), 16–22. <https://doi.org/10.3126/jbm.v5i0.27384>

Karki, D., Bhattarai, G., Dahal, R. K., & Dhimi, K. (2023). Should income be diversified? A dynamic panel data analysis of Nepalese depository financial institutions. *Investment Management and Financial Innovations, 20*(3), 332–343. [http://dx.doi.org/10.21511/imfi.20\(3\).2023.28](http://dx.doi.org/10.21511/imfi.20(3).2023.28)

Karki, D., & Dahal, R. K. (2024). Service quality dimensions and investor satisfaction on online stock trading system in Nepal. *Journal of Service, Innovation and Sustainable Development, 5*(1), 63–81. <http://dx.doi.org/10.33168/SISD.2024.0106>

Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on Investors of Colombo stock exchange, Sri Lanka. *Asian Journal of Finance & Accounting, 6*(1), 1. <https://doi.org/10.5296/ajfa.v6i1.4893>

Khadka, P. B., Karki, D., Dahal, R. K., & Khanal, D. (2024). Mapping the landscape of green finance and banking performance research: A bibliometric analysis. *Journal of Service, Innovation and Sustainable Development, 5*(1), 176-193. <https://doi.org/10.33168/SISD.2024.0110>

Khelda, K. M. A. (2011). Factors Affect the Investment Decision *in. 9*(1), 319–324.

Koirala, P., & Bajracharya, P. (2002). Nepalese Capital Market : Issues and Challenges. 4–19.

Lai, C. P. (2019). Personality traits and stock investment of individuals. *Sustainability (Switzerland),*

11(19), 1-10. <https://doi.org/10.3390/su11195474>

Lin, T. C. W. (2015). Reasonable investor. *Boston University Law Review*, 1(1), 461–518.

Liu, Y., Wang, Q., Lee, B., & Groves, D. (2017). Greater fool theory: potential application to tourism. *International Journal of Business and Commerce*, 6(03), 7–17.

Lubis, F. R. A. (2024). The influence of organizational culture on the performance of the people's representative council with work stress as an intervening variable in Aceh Province. *Journal of Management Changes in the Digital Era*. 59-72. DOI: 10.33168/JMCDE.2024.0105

Lusardi, A. (2008). The role of financial literacy, information, and financial education programs. *National Bureau of Economic Research*, 13824(1), 1-44.

Markowitz, H. (1952). Portfolio selection. *Journal of Finance*, 7(1), 77–91.

Mathur, T. (2020). The theory behind a bubble burst. *SSRN Electronic Journal*, 1(1), 1–6. <https://doi.org/10.2139/ssrn.3629319>

Nga, N. T. T. (2024). Application of fintech financial technology in the stock market in Vietnam. *Business and Economic Research*, 14(4), 166. <https://doi.org/10.5296/ber.v14i4.22440>

Nguyen, H. M., Bakry, W., & Vuong, T. H. G. (2023). COVID-19 pandemic and herd behavior: Evidence from a frontier market. *J Behav Exp Finance*, 38: 100807. <https://doi.org/10.1016/j.jbef.2023.100807>

Njuguna, J. M. (2016). The changing market efficiency of the Nairobi securities exchange. *Banks and Bank Systems*, 11(2), 70-80. [http://dx.doi.org/10.21511/bbs.11\(2\).2016.07](http://dx.doi.org/10.21511/bbs.11(2).2016.07)

Panda, P., Chari, L. S., Inamdar, M., & Korivi, S. R. (2017). The significance of market-wide circuit breakers in Indian stock market. *Amity Journal of Finance*, 2(2), (1-13).

Pant, R., Ghimire, B., & Dahal, R. K. (2022). Determinants of mutual fund performance in Nepal. *Nepal Journal of Multidisciplinary Research*, 5(5), 1–16. <https://doi.org/10.3126/njmr.v5i5.51798>

Phan, H. M., Le, T. N. Q., Dam, V. D. H., Tran, M. S., Truong, T. H. L., & Le, Q. A. (2023). Herd behavior in Vietnam's stock market: impacts of COVID-19. *Cogent Economics & Finance*, 11(2). <https://doi.org/10.1080/23322039.2023.2266616>

Rajeshwaran, N. (2020). The impact of behavioural factors on investment decision making and performance of CSE investors in eastern province of Sri Lanka. *Sri Lanka Journal of Economic Research*, 8(1), 27-51. <http://doi.org/10.4038/sljer.v8i1.123>

Ryu, D. (2012). The profitability of day trading: An empirical study using high-quality data. *Investment Analysts Journal*, 75(1), 43–54. <https://doi.org/10.1080/10293523.2012.11082543>

Sargent, T. (1961). CC-8 : Macroeconomic analysis-II. *New Classical Macroeconomics*, 1(1), 1–7.

Shah, S. Z. A., Ahmad, M., & Mahmood, F. (2018). Heuristic biases in investment decision-making and perceived market efficiency: A survey at the Pakistan stock exchange. *Qualitative Research in Financial Markets*, 10(1), 85–110. <https://doi.org/10.1108/QRFM-04-2017-0033>

Shrestha, P., Karki, D., & Pandit, S. (2022). Operational optimization and cost efficiency in Nepalese Banks. *Journal of Development and Administrative Studies*, 30(1-2), 23–32. <https://doi.org/10.3126/jodas.v30i1-2.69525>

Tarka, P. (2018). An overview of structural equation modeling: Its beginnings, historical development,

usefulness and controversies in the social sciences. *Quality and Quantity*, 52(1), 313–354. <https://doi.org/10.1007/s11135-017-0469-8>

Tulchinsky, I. (2020). Intraday Trading. *A Quantitative Approach to Building Trading Strategies* 2(2), 217–222.

Wang, K.-Y., Peng, S.-C., & Huang, Y.-S. (2009). The intraday performance of contrarian strategies: Evidence from the Taiwan stock exchange. *Review of Pacific Basin Financial Markets and Policies*, 12(4), 655–674. <https://doi.org/10.1142/S0219091509001794>

Waweru, N. M. (2008). The effects of behavioural factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *Proceedings of the 8th International In Situ and On-Site Bioremediation Symposium*, 3(1), 1399.

Whyte, G. (1993). Escalating commitment in individual and group decision making: A prospect theory approach. *Organizational Behavior and Human Decision Processes*, 54(3), 430–455. <https://doi.org/10.1006/obhd.1993.1018>

Yasmin, F., & Ferdaous, J. (2023). Behavioral biases affecting investment decisions of capital market investors in Bangladesh: A behavioral finance approach. *Investment Management and Financial Innovations*, 20(2), 149-159. [http://dx.doi.org/10.21511/imfi.20\(2\).2023.13](http://dx.doi.org/10.21511/imfi.20(2).2023.13)