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The Effect of Herding Behavior on Investment Decision: Moderating Effect of Over-Confidence

Taimoor Ali Shah [1] Naveed [2] Ibrar Hussain [3]

Abstract: *The main objective of the present study is to investigate the relationship between herding behavior (HB) and investor investment decision (ID). A questionnaire adapted from past research was used to gather data from 400 SME investors in Khyber Pakhtunkhwa, Pakistan. The researcher manually collected data using a random sample approach, developing a cross-sectional survey questionnaire for the study. Using SPSS V-24, regression analysis showed that herding behaviour affects SME investor investment decisions, confirming the study's hypotheses and providing insight into Pakistani SME investors' investment decisions. The reliability statistics showed that all the variables are reliable. Herding behavior, overconfidence, and investment decisions are positively and significantly correlated. The regression model shows that herding behaviour affects investors' investing investment decisions. HB and ID are moderated by overconfidence. Moreover, this type of study is carried out utilizing cross-sectional data. This information can only reveal the full impact that an indicator variable has on a certain model variable at a given moment. Hence, it is recommended that longitudinal research be carried out instead in order to get more significant insights from the participants.*

Key Words: Herding Behavior, Investment Decision, Anchoring Heuristics, Overconfidence, Small and Medium Enterprises

Introduction

Investment decisions are based on evaluating two or more business options in anticipation of potential gains (Virigineni & Bhaskara, 2017). The main objective for any investor is to realize anticipated profits. In order to make wise investment decisions, having investment knowledge is essential. However, investors often do not make perfectly rational choices due to bounded rationality. According to Bakar (2017), optimal and rational decision-making relies on financial knowledge; the more financial knowledge one has, the more rational decisions one can make. Nevertheless, the emotions and biases of investors frequently lead to irrational decisions. The more biased an investor's behavior is, the more irrational their decisions are likely to be. As a result, intuition was included in the research questionnaire to assess the degree of irrational behavior in decision-making. The tendency of investors to rely on instinct and intuition and to believe that their investment decisions are correct even without rational reasons is an indicator of how investment decisions are made (Ghani et al., 2022).

Making investment decisions involves evaluating potential investments and selecting the best option based on factors like risk, return, liquidity, and diversification (Mishra et al., 2023). Risk and reward must be balanced in investment decisions. Finding high-return investments while controlling risk is key. This complicated procedure relies on the investor's goals and risk tolerance. Before investing, consult a financial advisor or do your study (Gavrilakis et al., 2023). Herd behaviour, also known as herd mentality or herd instinct, is a person's inclination to co-ordinate with their social group rather than make their own judgements (Gong et al., 2023). When unsure or ignorant, people mimic others (Ahmad et al., 2022). Investors who herd may make foolish business judgements. They frequently take financial advice from

[1] PhD Scholar, Department of Management Sciences, Qurtuba University of Science & Information Technology, Peshawar, Khyber Pakhtunkhwa, Pakistan.
[2] Professor/Dean, Faculty of Management Sciences, City University, Peshawar, Khyber Pakhtunkhwa, Pakistan.
[3] PhD Scholar, Department of Management Sciences, Qurtuba University of Science & Information Technology, Peshawar, Khyber Pakhtunkhwa, Pakistan.

- **Corresponding Author:** Taimoor Ali Shah (taimooralishah569@gmail.com)
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other investors. Investors may postpone decisions during market herding to follow the crowd. Market oddities, price bubbles, and rumours increase herding behaviour. Herding is group imitation-induced convergence (Suresh, 2024; Liu, 2023).

Anchoring heuristics are shortcuts individuals employ to make rapid judgements, which frequently lead to cognitive bias due to less analysis (Ayaa et al., 2022). These mental shortcuts are employed when time, information, or capability are restricted.

They may speed up and improve decision-making, but misuse can lead to biases and mistakes (Manzoor et al., 2024; Afriany et al., 2023). Having excessive confidence is connected to knowing one's knowledge and ability limits (Wang et al., 2022). Overconfidence in financial decisions raises loss risk (Chwolka et al., 2022). Overconfidence is a cognitive bias that overestimates talents, knowledge, and judgements, according to Adielyani (2020). People often overestimate their talents and the possibility of danger.

Due to overconfidence, people may make incorrect decisions, take unnecessary risks, and underestimate issues. This attitude may also lead to overlooking opportunities for growth and improvement (Manzoor et al., 2023; Ahmad et al., 2022). This issue has been discussed extensively in theoretical literature. Multiple studies have been conducted on these phenomena to determine a likely explanation for market volatility and financial crises. All of this research has revealed irrationality and errors in market traders' decision-making and judgments. Behavioral elements have been identified as responsible for the additional irregular volatility in financial markets (Reynolds, Altmann, & Allen, 2021). These behavioral components are connected to human psychology, which old finance theories and models excluded. Behavioral finance focuses on human psychology, including behavioral biases (Hirshleifer, 2015). Behavioral finance explores how cognitive biases, emotions, and heuristics influence stock market investment decisions (Ma et al., 2023; Hirshleifer, 2015).

Behavioural finance examines how investors' biases and irrationality impact investing choices. Owing to cognitive biases, investors may make biased judgements owing to the inability to effectively foresee market movements (Stanovich & West, 2008). Behavioural finance examines non-rational investment choices by integrating psychological, cognitive, and behavioural variables with classical economics and finance (Khan et al., 2022). This method suggests infinite trading leverage and that emotional elements strongly impact financial choices, challenging the idea that investors are always rational. The psychological decision-making process that begins with asset selection determines investment choices. The growing subject of behavioural finance emphasises basic and technological research. Investors now have a larger influence on individual investment choices. This area relies on the behavioural hypothesis, which implies investors make predictable investing decisions. Recent commercial and academic research has examined how emotions and biases impact investor behaviour. Researchers attribute irrational investing choices to heuristics, cognitive illusions, framing effects, and herd mentality (Reynolds, Altmann, & Allen, 2021).

Traditional finance relies on mean-variance portfolio theory, investor rationality, and market efficiency (Tseng, 2006). These concepts are useful when choosing different investments and analyzing the relationship between risk and return. Regarding the wisdom of investors and market efficiency, Chhapra et al. (2021) claimed that investors make sensible choices in their daily lives. When a corporation releases information, it is accessible to all investors. According to CAPM, the expected earnings on investments could differ based on the level of risk connected to assets (Mandala et al., 2023). The concept of investors' rationality in the financial market serves as a foundation for these financial transactions. When making decisions, they consider all available information. Because all available information is reflected in the pricing of securities, the markets are seen as efficient (Oprean, 2014).

In prior research, Oprean (2014) examined the efficiency of financial markets and the rationality of investors. The assessment of financial markets and investors is based on conventional ideas and models in finance. Within the context of conventional financial models and theories, the Efficient Market Hypothesis commands the greatest amount of attention and discussion. These theories rest on investor rationality and efficient markets (Assaf et al., 2021). Therefore, the Capital Asset Pricing Model (CAPM) states that the expected return on investment (ROI) varies with the risk level (Parveen, 2020). The financial markets and the rationality of investors are the basis of all financial transactions. They consider all relevant data while

making a call. When asset prices account for all relevant information, we say markets are efficient (Oprean, 2014).

Prior research has concentrated on herding behaviour in established markets, with implications for investors and management literature. Despite the potential for novel investment approaches and improved market efficiency, little study has been conducted into the underlying reasons and effect of herding behaviour on investment choices. Recent studies in Pakistan have looked into the impact of herding behaviour on the stock market (Hussain, 2023), behavioural determinants influencing investment decisions (Ahmed et al., 2022), and the impact of COVID-19 on investor behaviour and sentiments (Parveen, 2020) Pakistani investors generally lack financial knowledge (Awais et al. 2023). This study examines herding behaviour and investing decisions, finding critical aspects to shed light on its effects on financial markets and help investors avoid losses.

Objectives

1. To investigate the alliance between Herd Behavior and Investment Decision.
2. To examine the moderating effect of Over-Confidence on the relationship between Herd Behavior and anchoring Heuristics.

Literature Review

Background of variables

Herd behaviour

Herd behavior—also called a mob or herd mentality—occurs when people copy a bigger group. People do this when they let their peers' activities affect them instead of critically assessing the circumstance. According to Choi (2021), investors' inclination to follow the herd rather than make educated decisions may result in market inefficiencies, financial crises, and price instability. Herding behavior is influenced mostly by size and volatility, with other factors such as return and trading volume activity also playing a role (Kharabsheh & Al-Gharaibeh, 2022; Komalasari et al., 2022). "It can be difficult to differentiate between "spurious" and "true" actions when examining herd behavior (Nath, Pradeep, & Kumar, 2023; Rahayu, 2021).

Investment Decision

When using their financial resources to accomplish certain goals or produce returns, people, companies, or other organizations make investment choices. An investor's goals, risk tolerance, and time horizon should all be considered while evaluating a wide range of investment options, including stocks, bonds, mutual funds, real estate, and commodities. This is required to make these judgments. Investment choices are influenced by many elements, including knowledge, interest, technology, perception, and financial literacy (Suresh, 2024; Suriyanti et al., 2024). However, behavioural factors, including overreaction, overexcitement, and demography, may also affect judgements (Shanmugasundaram, 2010). Decision-making requires resources for future benefits (Aburub et al., 2024; Busru et al., 2022). Psychological factors such as herding and overconfidence may influence investment decisions (Vuković & Pivac, 2023; Wang & Nuangjamnong, 2022).

Overconfidence

Overconfidence is a biased belief in a person's abilities, expertise, or judgment. Many people amplify their talents or beliefs, which may lead to dangerous evaluations or behaviours. Cognitive activities, social relationships, and professional decisions might show overconfidence. A cognitive bias called overconfidence may cause people to overstate their talents, expertise, or correctness in evaluations (Al Maghrabi, 2024; Olawole-Scott & Yon, 2023; Neal et al., 2022). Overconfidence strongly impacts investor behaviour and market results in financial decision-making (Wang & Nuangjamnong, 2022; Abideen et al., 2023). Research found that investors often experience this phenomenon, which may affect investing strategies and results (Newall & Weiss-Cohen, 2022; Han, Hirshleifer, & Walden, 2022). Research indicates that overconfident investors with more knowledge or competence trade more often and have larger portfolio turnover (Gervais & Odean, 2001).

Theory and Hypotheses Development

Herd Behavior and Investment Decision

Widyari, Putri, & Sari (2024) define herding behaviour as investors following the activities and financial choices of others. The phenomenon of herding behaviour is common in finance. Lack of research leads investors to make decisions based on others' actions (Bender et al., 2022; Luo & Salterio, 2022). Blindly following the crowd without considering market fundamentals might result in herd mentality and speculative bubbles (Ayoub & Balawi, 2022; Padmavathy, 2024; Yii et al., 2024). It is commonly known that financial choices include herd behaviour. Vasileiou (2022) suggests this behaviour may enhance market volatility and inefficiency. According to Hasnain & Subhan (2022), Pakistani investors' decision-making was influenced by following the herd and being overconfident.

These results suggest more studies and measures to limit herd mentality's influence on investing choices. Research on how herd mentality influences SMEs' investment choices is inconsistent. According to Lekaldero (2022), SMEs in Bomet County, Kenya, suffer from following the crowd when making investment choices. According to Bai & Harith (2023), investors may exhibit herding behaviour towards stock market-listed SMEs to level the playing field. Biswas (2022) and Kumar (2022) detected herding in Chinese SMEs. Mutual funds' herding boosted small and mid-cap growth. Research indicates SMEs possess inferior investment efficiency owing to insufficient cash and experience in investment management (Huang, 2022; Martinez-Cillero et al., 2023; Guizani & Ajmi, 2022). They zeroed in on two distinct categories of investors: the uninitiated (non-private placement) and the savvy (private placement). To examine the data, the researchers relied on the method proposed by Christie and Huang. According to research, investors who lack enough information act rationally when the consumer, industrial, trade, and services sectors of the market decrease. Consequently, we came up with these theories.

H1: There is a significant relationship between herd behaviors and investment decisions.

The Moderating Role of Over-Confidence

Investment choices in financial markets are impacted by psychological qualities such as herd behaviour and overconfidence. Herd behaviour is when investors follow their peers without market analysis (Smith et al., 2023). Conversely, overconfidence involves excessive risk-taking owing to overestimating abilities and expertise (Lee & Wang, 2024). A recent study has examined how overconfidence moderates herd behaviour's influence on investment. Smith et al. (2023) found that overconfident investors herd, which significantly affects market dynamics under uncertainty. Lee and Wang (2024) found that overconfidence makes investors follow the herd in unstable markets with insufficient information. Supporting this approach, Jian et al. (2023) identify overconfidence as a facilitator rather than a predictor of herd behaviour. According to their research, risk tolerance and market experience impact investment decisions, but overconfidence may trigger herding. More research is needed to understand how cognitive biases, personality traits, and overconfidence impact herd behaviour (Shahani & Ahmed, 2022; Kumar & Prince, 2023). A recent study indicates that overconfidence moderates the link between herd behaviour and investing choices, but more research is needed to comprehend the precise processes and ramifications for various investor types and market situations. Addressing these gaps might improve understanding of financial market behaviour and methods to mitigate systemic risks and irrational exuberance.

H2: Overconfidence moderates the relationship between herding behavior and investment decision.

Conceptual Framework

Figure 1

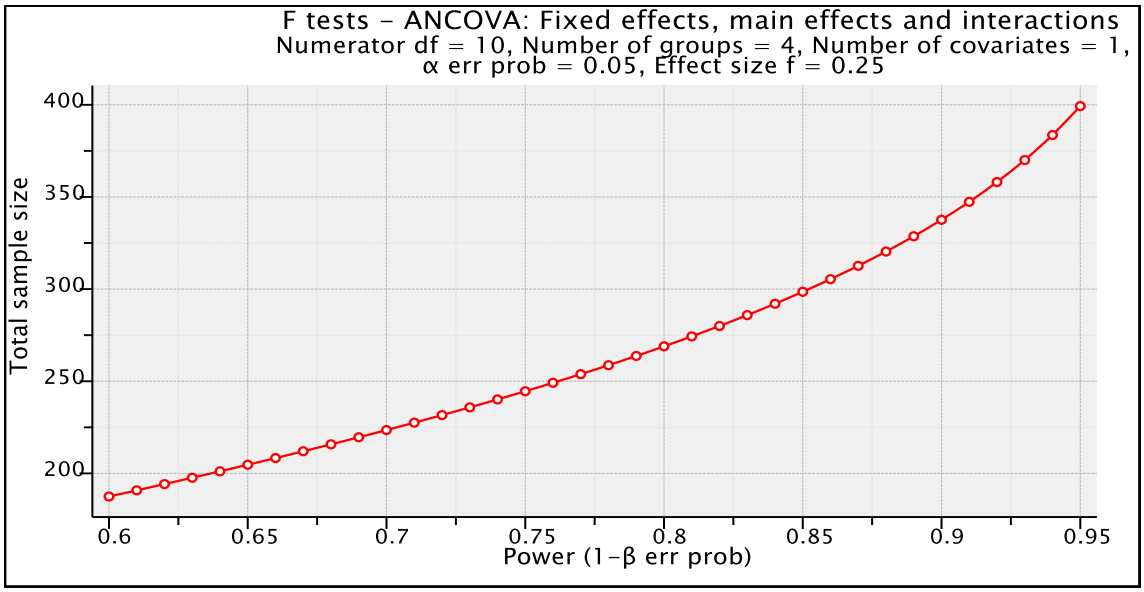
Conceptual framework

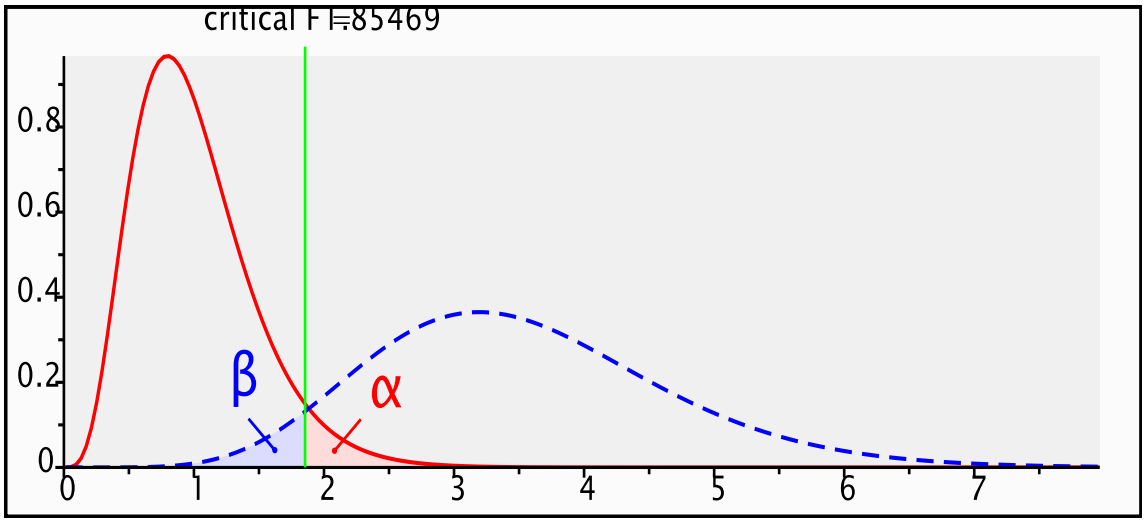
Methodology

Population

The study's target population consisted of SMEs that operated in KP, Pakistan. The sector is selected due to an effort to reduce risk; investors regularly fund innovative, small-sized enterprises. The sample size calculated through G-Power is 400. Researchers use this particular software for sampling Determination when the population is unknown. Further, this study used the Simple Random Sampling technique to collect data from SMEs working in Khyber Pakhtunkhwa. Primary data for this study was gathered from responders who worked by SMEs in Pakistan's KP.

Scale Measurements





Data for the current research were gathered using a modified questionnaire that included 5-point Likert scales that were created specifically for the purpose.

Table 1

S. No	Variable Name	Items	Source
1	Herd Behavior	5	(Kengatharan, 2014)
2	Investment Decision	8	(Khan et al., 2017)
3	Over-Confidence	5	(Khan et al., 2017)

Data Collection and Technique

The current research study collected cross-sectional data from SMEs in KP, Pakistan. The scholar was visited at their places of employment and requested to answer questionnaires for quantitative data collection in their regular working unit; the study is classified as a field study (Brennan et al., 2002). The process of acquiring, quantifying, and evaluating exact information for research using a standard, established procedure is known as data collection (Quantitative). The researcher can evaluate their hypotheses by using the information gathered. The participants in this survey-based quantitative study were given a questionnaire to complete in their understanding of their regular work contexts. The study variables' associations were examined using SPSS-Process Macro (V.24), along with demographic data, the KMO and BTS test, descriptive statistics, a correlation matrix, reliability and validity, and regression analysis to provide insight into the recommended study relationship between the variables.

Results

Reliability Test

Table 2

Reliability statistics

S. No	Variables	Elements	References	Cronbach alpha
1	Herd behavior	5	(kangathran, 2014)	.882
2	Investment decision	8	(Khan et al., 2017)	.917
3	Overconfidence	5	(Khan et al., 2017)	.824

Before getting on to a larger-scale analysis, Table 2 above demonstrates that EFA was conducted using a smaller sample size of research participants to evaluate reliability. A scale's ability to reliably produce comparable results when confirmed several times is known as reliability analysis. To determine whether the research scale is dependable enough to move forward with the primary study findings and hypothesis testing, 400 samples and variables were measured. Using SPSS 24, the internal reliability (Alpha) score, ranging from 0 to 1, was examined. Table 1 displays the Alpha values for herding behavior (HB), investment decision (ID), and overconfidence (OC). According to Nunnally and Bernstein (1994), alpha values more than "0.7" are considered more reliable, whereas values less than 0.7 are considered less reliable. Thus, in this study, alpha values of all variables greater than .7 clearly show that all items are reliable.

Table 3

	Values of KMO	BTS
Herding Behavior	.849	572.267 (p = .000)
Investment Decision	.871	1119.382 (p = .000)
Overconfidence	.704	455.840 (p = .000)

The current study's sample is appropriate because the KMO values of all the study variables are more than .50. Likewise, the BTS values for all constructs (HB, ID, and OC are significant, suggesting that the alternative hypothesis is accepted.

Table 4

Exploratory factor analysis

Scale items	F1	F2	F3
	HB	ID	OC
HB1	.709		
HB2	.890		
HB3	.742		
HB4	.854		

Scale items	F1	F2	F3
	HB	ID	OC
HB5	.901		
ID1		.843	
ID2		.921	
ID3		.683	
ID4		.724	
ID5		.759	
ID6		.882	
ID7		.793	
ID8		.844	
OC1			.931
OC2			.735
OC3			.698
OC4			.775
OC5			.887

Table 5

Regression analysis

Summary of Coefficient						
Model		Unstd Coeff		STD Coeff	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.862	.139		6.200	.000
	HB	.795	.040	.785	19.839	.000

a. Dependent Variable: ID

The regression coefficients for the study variables are displayed in Table 5. It is shown that herding behaviour HB has a significant correlation with the dependent variable investment decision of the investor's ID (t = 19.83, p =.000). Additionally, herding behaviour HB has positively influenced investor decision because of standard coefficient .785.

Table 6

Moderation analysis

	Moderation
Coeffi	.2405
s.e	.0569
T	4.2293
P	.000

In Table 6 above, the moderating impact of overconfidence with respect to investment decisions was carried through Table 5. While it supports overconfidence significantly moderates the relationship between herding behaviour and investment decisions (p < .000). H2: OC significantly moderates the association among HB and ID.

Table 7

Hypotheses testing description

S.No	Descriptions	p. Values	Decision
1	H1: there is a significant relationship between Herding Behavior and Investment Decisions.	.000 < .05	Accepted
2	H2: Overconfidence moderates the relationship between Herding Behavior and Investment Decisions.	.000 < .05	Accepted

Discussion, Conclusions, and Recommendations

Discussion

This research investigated the impact of herding behaviour on investor investment decisions (ID) in Khyber Pakhtunkhwa small and medium enterprises, with a focus on the moderating role of overconfidence. As part of the study research, data about small and medium-sized enterprises in Pakistan was gathered from investors and KP small and medium-sized enterprises. Data was gathered from regular users using a modified questionnaire that was taken from (Christensen et al., 2022) using a random sample approach. The findings demonstrated a positive and significant association between herding behavior and investor investment decisions.

H1 Herding behavior HB significantly influences investors' investing decisions, as shown by regression study. This finding aligns with the past findings (Wang & Nuangjamnong, 2022) that herd behaviours of employees significantly affect investment decisions. The study on the effects of anchoring and representative heuristics, as well as other behavioral biases, on investment decisions has been confirmed by (Rahayu, Rohman, & Harto, 2021; Adielyani, & Mawardi, 2020; Qasim et al., 2019; Agrawal, Singhal, & Swarup, 2016; Almansour, Elkrghli, & Almansour, 2023). Furthermore, a study conducted by (Wijaya et al., 2023), a past study of heuristic and herd biases, strongly affects the decision of the investor.

H2 The finding of this investigation shows that overconfidence positively moderates the association between HB and ID of investors. This result, supported by prior studies of (Adil, Singh, & Ansari, 2022), revealed that financial literacy strengthens the relationship between herd behaviour and decisions. Ranaweera & Kawshala (2022) conducted a study on risk attitude that also moderates the relationship between HB and investment investor decisions.

Conclusion

The intention of this study is to evaluate the link between herding behaviour (HB) and investment decisions (ID) in small and medium-sized businesses located in the province of KP in both Pakistan. The province of KP in Pakistan is home to more than 2,500 small and medium-sized enterprises (SMEs). We gathered 400 respondents from a variety of firms to take part in the survey-style study in order to bring about the intended outcomes of the current research. This was accomplished via the use of a simple random selection technique. The research demonstrated a beneficial relationship between the independent variable herding behavior and the investment decision-making of the KP investors. SPSS version 24 proved the validity and reliability of the construct. Overconfidence was used to evaluate the moderating impact on herding behavior and investment decision. Hayes's (2017) technique to evaluate the study, model 1, was examined. Ultimately, the study's results demonstrate that investor herding behavior influences KP investors' investment decisions positively and remarkably. The finding of the current study presented that herding behaviour is a significant and positive relationship with investor's investment decisions. This finding aligns with the past study by (Bender et al., 2022; and Luo & Salterio, 2022) that herding behavior significantly influence the decision process. Furthermore, overconfidence moderates the relationship between herding behavior and investment decision.

Recommendations

The results of the current study promote the following actions in the context of making decisions in an investment context. The current study was conducted in the context of investment decisions made by SMEs in the Pakistani province of KP, where most small businesses are searching for creative methods to gain a competitive edge. According to the findings of the study, it is recommended that herding behaviour be included in the sustainable development plan of an organization. It is essential for investors to make their own judgments based on their own interests, talents, and efforts. They should avoid imitating the decisions of others since they may not make the right choices, which might result in the failure of their business. In light of the fact that herding behaviour is not a large factor in determining investment decisions, the government need to devise training programs that educate prospective investors on how to make appropriate decisions without being influenced by others or imitating what is happening to others. Anchoring biases and their important mediating role should be taken into consideration by investors in Khyber Pakhtunkhwa, Pakistan while making investment choices (Jian et al., 2023; Owusu & Laryea, 2023).

Implications

The particular chapter of the current study presents the managerial/practical and theoretical implications based on the research findings. The primary emphasis of this study was investors' investment decisions, which have been considered a new necessary component of organizational enhancement. Significant theoretical insights were obtained from this study, including those about herding behavior, overconfidence, anchoring heuristics, investment decision-making, and herding behavior theory and dual process theory, which provide fresh insights into investors' investment decisions in the management literature. The current study has the detailed implications mentioned below.

Theoretical implications

First, this study shows an immediate relationship between investor investment decisions and herding behavior and a second indirect relationship through the mediating role of the anchoring heuristic, based on the theories of herding behavior and dual process. It provides insight into earlier research that established herding behavior's positive, important, and crucial role in encouraging an investor's positive and significant investment concerning SMEs KP. Investors who prioritize short-term profits above long-term sustainability may exhibit herd behavior, which might result in higher market volatility and worse investment returns in the future (Goa et al., 2024; Nosita & Amrulloh, 2023). Herding behavior's influence on investing decisions may be worsened by overconfidence, which might result in more risk-taking and eventual losses (Jia et al., 2023; Jian et al., 2023; Rooh, & Hussain, 2022). Particularly when herding behavior is present, anchoring heuristics may still substantially impact investment decisions, resulting in less-than-ideal judgments and eventual damages (Cartiff, 2023; Michael, 2023; Dimitriadou, 2024). Most primary data focuses on individual answers to ascertain the impact of behavioral heuristics and biases on investment decisions. According to a prior behavioral finance research study, secondary stock market data provides an additional viewpoint on investors' trading habits (Muktadir-Al-Mukit, 2022; Khare, & Kapoor, 2024; Hussain et al., 2023).

Due to their absence of resources and knowledge, investors in small and medium-sized firms (SMEs) may continue to be subject to herd mentality and overconfidence, which might lead to future losses and worse investment returns (Benayad & Aasri, 2023; Alperovych, Calcagno, & Lentz, 2023). When investors prioritize short-term profits above long-term sustainability, herding behavior may result in increasing market inefficiencies and worse investment returns in the future (Marupanthorn et al., 2023; Weixiang, Qamruzzaman, Rui, & Kler, 2022; Vuković & Pivac, 2023). A false sense of security may be created for investors by overconfidence, which can lead them to disregard diversification strategies and potential hazards.

Managerial implications

To minimize the influence of herd mentality on investment decisions and enhance investment returns, investment companies should inform investors about its risks and promote critical thinking (Suresh, 2024; Mulyadi Widyastuti & Zulkifli, 2023). Financial advisers can enhance investment outcomes by managing investor overconfidence through helpful criticism and self-reflection by knowing the moderating influence of overconfidence (Mevold, 2023; Capponi, Olafsson, & Zariphopoulou, 2022) organisations can improve investment outcomes by minimising anchoring heuristics by providing diverse perspectives and promoting impartial assessment (Sharifi, & Chadegani, 2024; Rao et al., 2024; Maheshwari, Samantaray, & Jena, 2023). In order to prevent herding and overconfidence in investment decisions, Gao et al. (2019) recommend that small and medium-sized enterprises (SMEs) make investor education and awareness a priority. These would lead to better benefits from investments. Critical thinking and educated decision-making should be encouraged inside businesses (Haidari, 2023; Mulyadi, Widyastuti, & Zulkifli, 2023).

Research Limitations

Additionally, the research collected information from investors, which may have resulted in the exclusion of the perspectives of other interested parties such as elected officials or financial advisers. A longitudinal strategy, collecting data over time and recording the views of all stakeholders to create a more comprehensive understanding of the connection, could have been helpful in the study. The study only

focused on a single population, which were small and medium-sized enterprises (SMEs). As a consequence, further studies should be conducted to target different populations across all geographic locations. This is because people show different behaviors in different environments. Additionally, research needs to be conducted on other factors that influence investment decision-making. It is also recommended that a research be conducted on the consequences of herding behavior on the development of small and medium-sized enterprises (SMEs).

Future Directions

Here are some ideas for further study on herding behavior and investment decision-making. To expand the body of research on investment decision-making, future researchers should consider the mediating roles of knowledge management, intrinsic motivation, and other psychological variables, as well as overconfidence. This study examined the relationship between herding behavior and investment decision-making. Furthermore, this study was quantitative and used a questionnaire to gather particular data; hence, to obtain more detailed information, future researchers might consider doing a qualitative study to capture the dynamic nature of herding behavior. Furthermore, as overconfidence facilitates the link between herding behavior and investor decision-making, future researchers should also evaluate it as a mediator. This study presented overconfidence as a moderated mediation that affects individual investment decisions. This study examined anchoring heuristics as a mediator; going forward, researchers should evaluate overconfidence as a moderator to see if it affects investors' decisions to invest in small and medium-sized enterprises.

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