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Herding Behaviour and Investor Psychology: Evidence from the Pakistan Stock Exchange

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ABSTRACT

The study investigates the psychological factors that influence herding behaviours (HB) among investors in Pakistan. The data were gathered from 400 respondents using a questionnaire and analysed using Structural Equation Modelling (SEM). The study findings show that herding behaviour significantly positively influences information (i.e., in the securities/stock market), national culture, market sentiments, and positive experiences. At the same time, it has a significant and negative relationship with overconfidence. The model explains 55% of the variation in the behaviour and has a Q^2 value of 0.270, which strengthens the findings. The behavioural finance understanding advances this research, particularly in developing countries, by shedding light on the psychological and cultural dynamics that influence investor behaviour. The findings provide practical recommendations for investors to avoid herding by conducting independent research, adopting calculated risks, and enhancing their understanding of diverse markets and cultural contexts. Future studies are encouraged to investigate additional psychological dimensions and different investor types to enrich this research area further.

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INTRODUCTION

Traditional finance assumes that investors' rationality is enough to attempt to increase their profits. However, behavioural finance acknowledges that various biases and emotions influence investor's decisions (Kahneman & Tversky, 1979). Thus, decisions majorly represent uncertainties and risks (Barberis, 2003). It focuses on the need for further human psychological research segments in all financial analyses, as individual behaviour measurably is an impulse in the movement of prices. Investors frequently exchange enthusiastic efforts. Traditional finance holds beliefs about rationality, convexity, and continuity in finance, which emphasises financial models, logic, and calculation. However, behavioural finance emerged after (Kahneman & Tversky, 1979) proposed the prospect and criticised the expected utility theory by challenging these beliefs. Herding is a key term in behavioural finance, and several studies are available on this topic (Almansour et al., 2023; Patwarani & Husodo, 2023). Linking this theoretical framework with empirical analysis in Pakistan offers valuable insights into the broader implications of herding. The article explores herding in the emerging Asian stock market, the Pakistan Stock Exchange, where experienced Investor movements significantly impact novice investors (Z. Ahmed et al., 2019; Ayoub & Balawi, 2022; Zheng et al., 2017).

It is a complex phenomenon with significant implications for market efficiency, volatility, and financial stability. The growing international recognition of Pakistan's stock market came from its inclusion in Morgan Stanley Capital International's (MSCI) benchmark index of the emerging market list in May 2016 (Nauman, 2016). Such achievement highlights the dual nature of the PSX, where volatility and growth coexist, making it a compelling case for exploring the dynamic of HB. Technically, the reduction in transparency and increase in HB cause anomalies in information within financial markets, where investors base their judgments on group actions. Generally, it is a typical behaviour in developing nations. Since the Pakistan stock market is marked by asymmetric information and a lack of institutional structures, it offers an ideal context for researching HB (Mand et al., 2018; Rehan & Alvi, 2021).

Earlier studies discovered a positive impact of investors HB on stock markets in Pakistan (Hussain & Shah, 2015; Ishtiaq & Abdullah, 2015; I. R. Malik & Shah, 2017). The study of (Najmudin et al., 2017) found no significant impact on the herd because of constant stock returns and low risk in the Malaysian stock market. As Wei (2005), research indicates that herding is a popular strategy investors use to influence investment decisions in developing markets, in which there is less transparency and more information variations. This study aims to manage market volatility and address the underlying factors contributing to herd mentality. The study aims to identify the influence of information, national

culture, market sentiment, experience, and overconfidence on investors' herding behaviour in Pakistan.

Firstly, Research has found a positive connection between information regarding investments (such as the securities and stock market(and investor herding (Chia et al. (2018) , (Nair & Yermal, 2017). Investors often follow the behaviour of other investors when information is scarce or unclear. As a result, different information sources can have several levels of influence on investing decision-making. As a result, it is generally accepted that information significantly influences investors' HB on the Pakistan Stock Exchange (PSX). Secondly, Several studies (Adielyani & Mawardi, 2020; Bakar & Yi, 2016; Donkor et al., 2016) have found a direct connection between investing in HB and overconfidence. When making judgments presents no significant obstacles, investors may become overconfident and follow peers' decisions.

Thirdly, there is a positive correlation between HB and market sentiment. Kabir and Shakur (2018) argued that as a form of security, investors often follow other investors' decisions during market anxiety caused by fear, worry, and nervousness, which amplifies herd behaviour. Fourthly, previous research found that HB and experience are significantly associated. Demirer and Zhang (2018) suggest an adverse connection between experience and HB. Experienced investors follow the herd by depending on their research instead of the other Investors. Lastly, Research by Munkh-Ulzii et al. (2018) indicates a favourable association between investor herd behaviour and country culture. Variations in investors' national cultural orientations can cause discrepancies in herd behaviour mood within stock markets. For example, investors tend to follow the investment decisions of others in nations where certain cultural aspects, such as power distance, are valued.

Many researchers have examined the rationality of investor behaviour and systematic herding by looking into empirical literature on financial HB (Bekiros et al., 2017; Chen et al., 2020). However, studies of the Dhaka, Indian, Tehran, and NY stock exchanges did not find evidence of HB (Ahsan & Sarkar, 2013; Bekiros et al., 2017). Few studies exist on HB in Pakistan (Z. Ahmed et al., 2019), but a study (S. U. Malik & Elahi, 2015) found evidence of HB during market fluctuations. From Pakistan's perspective, Recent studies on HB in Pakistan focusing on SEM investors in Khyber Pakhtunkhwa and comparing sentiment in Pakistan and China (Sheikh et al., 2023) highlight essential trends but leave significant gaps. Most studies rely on Cross-sectional data, limiting the Understanding of dynamic HB with psychological factors (Shah & Hussain, 2024). The role of external factors like news sentiment remains underexplored (S. M. Ahmed et al., 2024), while reverse HB is a phenomenon that needs further investigation. A recent study on firm-level herding reveals its impact on financial performance but lacks

a broader market analysis. Asim et al. (2024) examine HB using UK machine learning. It is crucial to investigate the impact of HB on emerging markets.

This paper aims to collect primary data from investors on their views of HB. The limited research underscores the importance of this study, which seeks to bridge the gap by analysing primary data on investors' perceptions of HB in Pakistan. However, the research may still be valuable for investors looking to consider HBs and organisations seeking to estimate upcoming stock-market fluctuations. Technically, behavioural finance has been used to study investor's behaviour in developed country stock markets, but it has received limited attention in developing countries. This highlights the necessity of this study in bridging the knowledge gap and offering new perspectives on behavioural finance in emerging markets. Thus, this study aims to fill this gap and increase recognition of the effects of HBs and concepts of behavioural finance for researchers.

LITERATURE REVIEW

Behavioural finance is a well-known philosophy that addresses individual irrational financial decisions based on emotions, which can impact financial markets. This approach, grounded in behavioural economics and psychology, emphasises the significant role of psychological and emotional factors in the decision-making processes of investors (Chaudhary, 2013). In other words, the theory provides insight into herd behaviour and the emotional aspect of investing, which can help explain the fluctuations in securities markets Birău (2012). Unfortunately, many investors impulsively fall into this category by overlooking fundamental and technical analysis of securities exchanges and instead emotionally following market trends.

Prospect theory challenges the assumption of rational investor behaviour, indicating that psychological factors impact decision-making under uncertainty. It proposes that investors' choices are based on decision weights that differ from desired probabilities, opposing the expected utility theory. Instead, individuals evaluate expected utility relative to a reference point, and the theory demonstrates that people are loss-averse, which leads to a risk-averse design. Appraisal of certainty and probability can influence PT. It asserts that people are more affected by changes in wealth and welfare than final states. Additionally, the pain of loss is greater than the pain of gain from investment (Kahneman & Tversky, 1979). The outlook of an information cascade, commonly used in sociology and behavioural economics, clarifies the phenomena of investors clustering together due to insufficient knowledge. Investors evaluate their peers' behaviour, adopt these behaviours as a model for their self-approach, and frequently disregard the results of their independent study. This pattern of

behaviour is observable in a wide range of contexts, including politics, financial markets, and business dealings. The intense herding significantly impacts market efficiency (Palmer (2022), (Bikhchandani & Sharma, 2001).

The better-than-average effect Theory, described by Alicke and Govorun (2005), is a social tendency in which people believe that their skills and abilities are superior to those of others. According to Stavrova et al. (2016), individuals, in a significant proportion, rank themselves consistently better than others in several traits, parameters, talents, and abilities. Investors who express this overconfidence frequently ignore crucial information or opposing opinions because they believe they are more knowledgeable about stock market data than they are, which leads to less-than-ideal investment choices. Furthermore, despite their prior successes, overconfident investors who overly justify their profitable investments may be more likely to make the same mistakes again.

Investors can obtain information from a comprehensive source, including publicly accessible data, online platforms, and verbal conversations. When information is conveyed verbally, investors are more likely to join the herd, according to Nair and Yermal (2017); this suggests that verbal communication promotes HB. However, social media and websites have emerged as the best and most convenient channels for investors to get market data (Joseph & Ibrahim, 2015). Kenyan investors suggest that information from the media may be adverse to HB. (Chia et al. (2018)) found a sufficient positive link between information and HB among Malaysian investors using SEM.

Investors often follow the herd despite having uncertain information or transparent knowledge. S Saeedi and Chahardeh (2013) brought this tendency to light, who researched the Tehran stock market through LOGIT analysis. Herding and information uncertainty correlate positively; Fernández et al. (2011) noticed that herding increases for scenarios where there is a lack of investment information. When information is asymmetric, investors may be unwilling to make decisions and prefer to follow the path of others, which can lead to herd mentality (Komalasari, 2016; Setyowati et al., 2018)

H1: Information has a Significant effect on Herding Behaviour.

Overconfidence represents a high level of assurance that can lead to poor decision-making, biased inaccuracy of data and capabilities, and eventually increase a person's propensity for taking risks. Studies reveal that over-confidence significantly impacts financial decisions. Younger investors are more impacted because overconfidence, herd mentality, and risk tolerance are strongly correlated. However, some research suggests that overconfidence has little effect on herd behaviour and that its impact may diminish with experience. Therefore, more research is needed to determine the connection between herd

behaviour and overconfidence (Adielyani & Mawardi, 2020; Mushinada, 2020). Several studies (Adielyani & Mawardi, 2020; Bakar & Yi, 2016; Donkor et al., 2016) have found a direct connection between investing in HB and overconfidence. When making judgments presents no significant obstacles, investors may become overconfident and follow the peers' decisions. As such, one could anticipate a positive correlation between investor HB and overconfidence.

H2: Overconfidence has a Significant effect on Herding Behaviour.

The study of Market sentiment measures that feelings, attitudes, and cognitive biases influence investors' estimates of future stock prices. Studies have indicated that market sentiment can trigger investors' HB, and the VIX index frequently measures a strong connection between herding and market sentiment. While market sentiment tends to avoid herding in Europe, it has a strong positive link with traditional stock returns in Pakistan. When the VIX is high, investors usually gather, indicating concerns about how the economy moves. Market sentiments are a significant stimulant for herding tendencies since fear and panic are crucial in driving HB (Aharon (2021); Choi et al. (2020); Tauseef (2020); Chia et al. (2018) , (Choi et al., 2020; Tauseef, 2020). Most study results (Economou et al. (2018); Chia et al. (2018); Kabir and Shakur (2018)) (Economou et al., 2018; Kabir & Shakur, 2018) show that investor herd behaviour and market sentiment are positively correlated. As a form of security, investors often follow other investors' decisions during market anxiety caused by fear, worry, and nervousness, which amplifies herd behaviour.

H3: Market sentiment has a significant effect on herd behaviour.

The connection between experience and HB in the stock market has been the subject of multiple research. Research by (Greiner, 2013; Nguyen & Schuessler, 2012) revealed an adverse connection between herding tendencies and experience. (Prosad, 2014) however, it was found that herding propensity is present in both highly experienced and novice investors. Furthermore, it was seen by Touny (2016), Gul and Khan (2019), and R Risal and Khatiwada (2019) that impulsive decision-making, decision accuracy, mood, and conformity are among the characteristics that significantly influence HB. On the other hand, novice investors are more likely to show herd mentality (Sabir et al., 2020); herding has a noticeable and favourable correlation with prior investment experience. Further research (Demirer & Zhang, 2018; Shusha & Touny, 2016) suggests an adverse connection between experience and HB. Experienced investors follow the herd by depending on their research instead of the other Investors.

H4: Experience has a significant effect on Herding Behaviour.

Within the economy, national culture has a significant influence on HB. Research using Hofstede's model of cultural dimensions was conducted by Blasco et al.

(2017). Chia et al. (2018) and Lobão and Maio (2021) have strongly affected cultural characteristics like individualism, power distance, masculinity and the tendency to herd. According to Zhan (2013), HB is more prevalent in countries with lower individualism, and Munkh-Ulzii et al. (2018) found a positive influence of NC on HB in the Asian stock market. Research by Chia et al. (2018) and Munkh-Ulzii et al. (2018) indicate a favourable association between investor herd behaviour and country culture. Variations in investors' national cultural orientations can cause discrepancies in herd behaviour mood within stock markets. For example, investors tend to follow the investment decisions of others in nations where certain cultural aspects, such as power distance, are valued.

H5: National Culture Has a Significant Effect on Herding Behaviour.

METHODOLOGY

Research design presents the structure for the collection and analysis of data. This study is based on the quantitative research method as it can measure behaviour and attitudes in numbers and generalise results from a sample. A questionnaire will be distributed to the targeted respondents to examine the effect of independent variables on dependent variables. This method effectively gathers data from large numbers of investors by employing random sampling. It is the sampling technique used during the data collection process. With this method, every sample in the target population has an equal chance of becoming identified. According to Saunders et al. (2019), it is a simple, efficient approach that maintains high accuracy. This approach is also suitable for sample sizes that are more significant than one hundred. The descriptive and correlational research types are appropriate for quantitative studies because of the study design. Researchers usually choose descriptive research as a proper strategy for revealing the behavioural patterns of the targeted population. Correlational research is a non-experimental study that attempts to explain the statistical connection among variables (Stangor & Walinga, 2014).

The research aims to examine the impact of behavioural variables on individual investors. The study focuses on investors who participate in trading securities on the Pakistan stock exchange and assumes the presence of herd behaviour among them. Therefore, this group is considered as the target population for the study. The research will collect primary data through a self-administered online survey from investors who trade on the Pakistan Stock Exchange. The aim is to determine the presence of HB on the exchange by surveying individuals involved with the Pakistan securities market.

The research describes the order and flow of elements inside a specific framework through a structured set of behaviours. The main objective is to select the appropriate component for data collection. In particular, the framework of reference for this study is the Pakistan Stock Exchange. Simple random sampling is employed as the method for selecting participants, and each investor has an equal chance of being chosen. This technique ensures that the sample is representative of the broader investor population, minimising bias and allowing for more generalizable results. The reason for selecting this sampling is that it can accurately capture a wide range of investor behaviours, making the findings more reliable and applicable to the overall markets.

During research, primary data gathering is frequently chosen over secondary data collection because it offers more accuracy and allows researchers to improve their data collection to meet particular study needs. Investor data can be collected through a questionnaire to research herd mentality on Pakistan's stock exchange. With 277,579 investors, the targeted group is enormous; however, a sample size of 400 is sufficient for collecting reliable results with a 95% confidence level.

RESULTS AND DISCUSSION

The SEM technique was used to determine the data. The measurement model is used to analyse the data validity and reliability, while the structural model is used to analyse the connection among variables. Exogenous factors, like IVs, are included in the outer model, whereas endogenous variables, such as mediating and dependent variables, are included in the inner model.

Source: Authors Estimation

Figure 1 illustrates the measurement model, which depicts the fundamental Path Model of the research before estimating the beta value and factor loadings. The connections between the IVs and DV are visibly displayed, and the model is reflective, as evidenced by the arrows pointing from the constructs to their respective indicators.

Source: Authors Estimation

Figure 2 explains the structural model. The reflective path model was developed using Smart-PLS and depicts the connection between latent variables and their reflective items. All reflective items measure the same construct as the latent variable and, as such, should demonstrate internal consistency and positive correlation. The model utilises indicator factor loading and beta values to assess the connection between IVs and DV. The diagram illustrates a direct association between these variables.

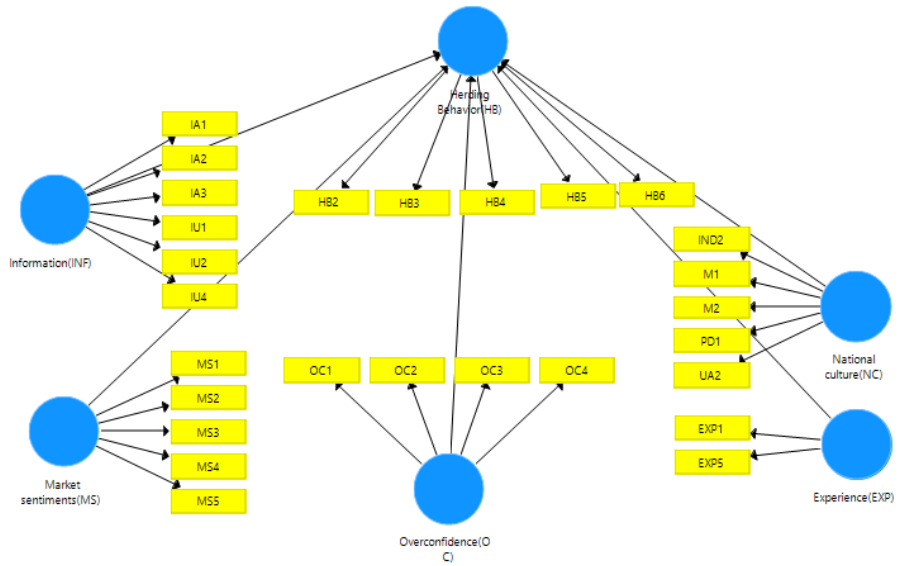

Figure 1: *Path Model of Research*

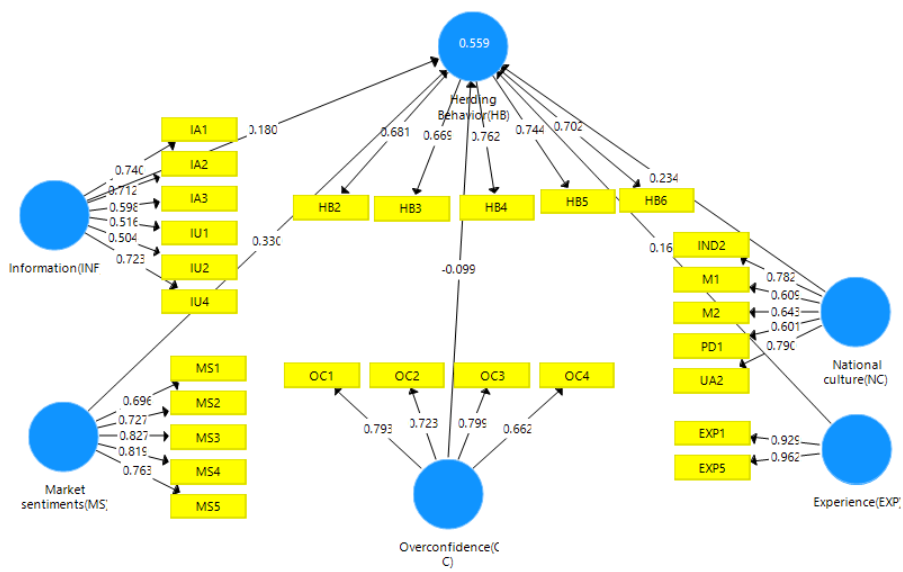

Figure 2: *Path Model Results with Algorithm*

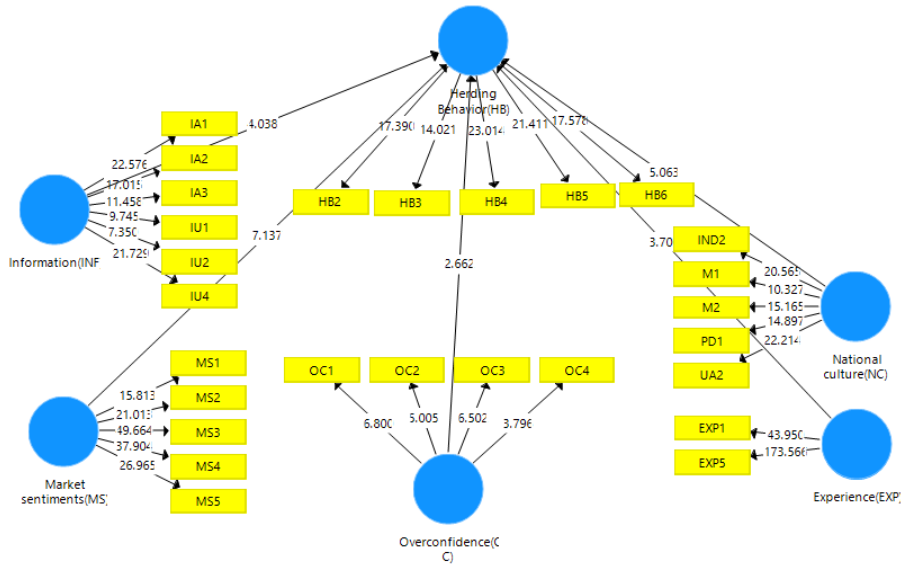

Figure 3: *Path Model Results with Bootstrapping*

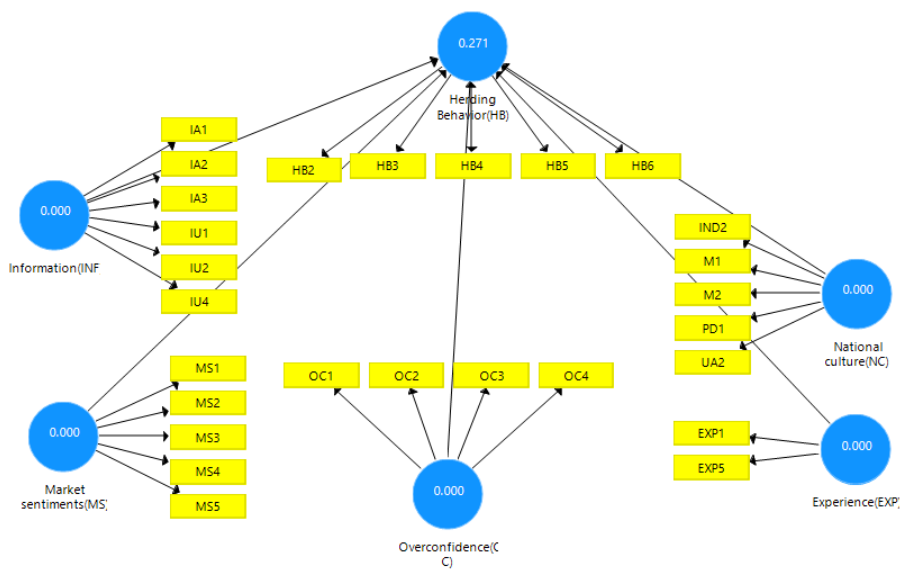

Figure 4: *Path Model Results with Blindfolding*

Source: Authors Estimation

Cronbach's Alpha and Composite Reliability measure internal consistency in reflective models. A value of 0.7 or greater for Cronbach's Alpha is typically considered appropriate, with 0.8 or higher being more ideal (Nunnally, 1978). In the presented Table 1, Cronbach's Alpha values range from 0.738 to 0.840, and composite reliability values range from 0.801 to 0.887, indicating good data reliability for further analysis (Nunnally, 1978).

Table 1.
Constructs Reliability and Validity

Variables	Cronbach's Alpha	CR	(AVE)
EXP	0.885	0.944	0.894
HB	0.757	0.837	0.508
INF	0.706	0.802	0.409
MS	0.826	0.878	0.590
NC	0.720	0.818	0.476
OC	0.755	0.833	0.557

Note: EXP=Experience; HB=Herding Behaviour; INF=Information; MS=Market Sentiment; NC=National Culture; OC=Over Confidence

Source: Authors Estimation

All indicators have factor loading values above 0.50. However, AVE values for constructs EXP, HB, INF, and INF are insufficient. Seventeen indicators should be eliminated per the recommended cut value. The AVE threshold is 0.5, but 0.4 is acceptable. F Fornell and Larcker (1981) suggest that convergent validity is still adequate if AVE is less than 0.5 but CR is above 0.6.

Indicator Reliability

Hair et al. (2011) suggest that for evaluating the reliability of indicators or items, a factor loading of 0.7 or higher is desirable, as shown in Table 2, while a value greater than 0.5 is considered acceptable. However, it is recommended to eliminate items with a factor loading that is less than 0.50 from the construct.

Table 2.
Factor Loadings

Items	EXP	HB	IA	IND	IU	M	MS	OC	PD	UA
EXP1	0.929									
EXP5	0.962									
HB2		0.681								
HB3		0.669								
HB4		0.762								
HB5		0.744								
HB6		0.702								
IA1			0.740							
IA2			0.712							
IA3			0.598							
IND2				0.782						
IU1					0.516					
IU2					0.504					
IU4					0.723					
M1						0.609				
M2						0.643				
MS1							0.696			
MS2							0.727			
MS3							0.827			
MS4							0.819			
MS5							0.763			
OC1								0.793		
OC2								0.723		
OC3								0.799		
OC4								0.662		
PD1									0.601	
UA2										0.790

Source: Authors Estimation

According to the results, there are several indicators whose outer loading is below 0.50, which suggests that they should be removed. However, the table above displays the indicators with values exceeding 0.5 that cannot be eliminated from the constructs. Some indicators have been eliminated to enhance the reliability and AVE values.

Table 3.
Fornel-Larker criteria

Variables	EXP	HB	INF	MS	NC	OC
EXP	0.946					
HB	0.502	0.713				
INF	0.446	0.570	0.640			
MS	0.400	0.645	0.569	0.768		
NC	0.500	0.622	0.537	0.606	0.690	
OC	-0.068	-0.147	-0.022	-0.043	-0.083	0.746

Source: Authors Estimation

Referring to Table 3, the diagonal values represent the square root of AVE, which should be greater than the correlation values with other variables. The Fornell-Larcker Criteria test indicates discriminant validity when the square root of AVE is more significant than its indicator's variance than the other construct's variance. As a result, the items are stable with the construct.

Table 4.
Heterotrait-Monotrait (HTMT)

Variables	EXP	HB	INF	MS	NC	OC
EXP						
HB	**0.595**					
INF	**0.537**	**0.758**				
MS	**0.456**	**0.806**	**0.739**			
NC	**0.629**	**0.827**	**0.734**	**0.768**		
OC	**0.077**	**0.177**	**0.114**	**0.085**	**0.125**	

Source: Authors Estimation

Table 4 shows the results of HTMT. The HTMT ratio is a discriminant validity measure, also called the correlation ratio. Kline (2011) suggests that a value of less than 0.85 indicates discriminant validity, and any value above this threshold suggests a lack of discriminant validity. In the current study, the HTMT ratio for the connection between HB and national culture value is 0.853, slightly higher than the recommended threshold. However, all other HTMT values in the study are less than 0.85, indicating the presence of discriminant validity among the constructs.

Table 5.
Collinearity Statistics (VIF)

Variables	HB
EXP	**1.423**
INF	**1.694**
MS	**1.827**
NC	**1.901**
OC	**1.009**

Source: Authors Estimation

The inner VIF values shown in Table 5 are generally recommended to display the VIF values for all independent variables with the dependent variable. To reduce the risk of data collinearity, The VIF values for EXP, INF, MS, NC, and OC are 1.423, 1.694, 1.827, 1.901, and 1.009, respectively. Since all of these values are less than 5, it can be concluded that there is no collinearity issue in the data.

Table 6.
Coefficient of Determination (R2 Value)

	R Square	R Square Adjusted
HB	0.559	0.553

Source: Authors Estimation

The coefficient of determination shown in Table 6, also known as R-square or goodness of fit, is a widely used measure of a model's accuracy. It quantifies the proportion of the variance in the endogenous variable explained by the exogenous variable(s) in the model. Specifically, the R-square reflects the square of the correlation between the endogenous variable and the exogenous variable(s) (Hair et al., 2014).

In the context of a structural model, R-square indicates the combined effect of all the independent variables on the dependent variable. A value of R-square closer to 1 suggests a higher degree of accuracy in the model. For instance, the R-square values in the table presented below indicate that the collective influence of the independent variables, namely, EXP, INF, NC, MS, and OC, account for 55.3% of the variation in the dependent variable (HB).

Table 7.
Results of F Square

	HB
EXP	0.044
INF	0.043
MS	0.136
NC	0.066
OC	0.022

Source: Authors Estimation

According to Hair et al. (2014), F2 measures the change in R2 when a specific independent variable is removed from the model to determine its substantive effect. Cohen (1977) categorises the f2 effect size as small (0.02), medium (0.15), or large (0.35) for exogenous constructs. In this study, Table 7 shows that the F2 values for the independent variables EXP, INF, NC, and OC range from 0.020 to 0.128. The results suggest that NC, INF, EXP, and MS have small effect sizes (>=0.02) on HB.

Table 8.
Direct Connection among Variables

	Beta-Coefficient	T Statistics	P Values	Results
EXP -> HB	0.166	3.467	**0.001**	**Accepted**
INF -> HB	0.180	4.372	**0.000**	**Accepted**
NC -> HB	0.234	5.286	**0.000**	**Accepted**
MS -> HB	0.330	7.891	**0.000**	**Accepted**
OC -> HB	-0.099	2.680	**0.008**	**Accepted**

Source: Authors Estimation

Table 8 displays the results of hypothesis testing regarding the relationships between external information, market sentiments, experience, over-confidence, national culture, and herdbehaviour in the Pakistan stock market. The study used Smart PLS software to calculate the path coefficients, beta coefficients, T-statistics, and p-values to determine the strength and significance of the associations among the variables. The beta coefficient, which ranges from +1 to -1, represents the strength of the association between the IVs and DV. Values closer to +1 indicate a strong positive association, whereas values closer to 0 indicate a weak association. The experience illustrates a significant positive relationship (beta coefficient of 0.166) with herd behaviour in the Pakistan stock exchange, contradicting the literature. Furthermore, national culture and information, with beta coefficients of 0.234 and 0.180, respectively, have small

but significant positive effects on herd behaviour. The alternative hypotheses for experience, information, and national culture are accepted as the p-values for these variables are 0.00, which is less than 0.05.

The findings show that market sentiments had the most significant and most noticeable impact on herd behaviour, with a beta coefficient of 0.330 and a significant positive connection as a p-value less than 0.05. The alternative hypothesis suggests that HB in the Pakistani stock market is significantly positively related to market sentiments. With a beta coefficient of -0.099 and a significant negative relationship as a p-value less than 0.05, overconfidence directly but weakly impacts herd behaviour. The results support the alternative hypothesis, indicating a weak but significant connection between overconfidence and Herd behaviour in the PSX.

Table 9.
Results of Q-Square

	S	SSE	Q^2 (=1-SSE/SSO)
HB	1855.00	1352.63	0.27

Source: Authors Estimation

Chin (2009) indicates that the Q^2 value, which gauges the model's predictive relevance, is determined using the Blindfolding function. It is preferable if the Q^2 value is more than 0. The structural model in this study has a Q^2 value of 0.27 for HB, as shown in Table 9, which is more than zero. The structural model is well-structured and has predictive relevance.

CONCLUSION AND RECOMMENDATIONS

Investment bubbles and unstable markets are frequently caused by herd behaviour among investors in the Pakistan Stock Exchange (PSX). Knowing what influences herd behaviour is crucial for encouraging rational investing choices and averting monetary losses. This study aims to identify these elements, including the impact of national culture on investor herding, market uncertainty, lack of information, fear of missing out (FOMO), and social and cultural norms. The study examines several ideas, such as the Better-than-average Effect, Information Cascade Theory, and Prospect Theory, that contribute evidence to the findings. These theories help understand investor biases, the connection between herd behaviour and overconfidence, and the link between new information and herd behaviour.

A survey was performed using a simple random sampling Technique with 400 respondents. Employing Smart PLS, the study analysed the data

and evaluated reliability using composite reliability and Cronbach's alpha parameters. According to the survey, information, experience, and national culture have a weak and direct impact on HB, whereas market sentiments have a strong and direct influence. It has been discovered that overconfidence and herding have a weak and not significant relationship. Considering all factors, this study improves our knowledge of herd behaviour among PSX investors, offering valuable knowledge to help investors make better investment decisions and helping regulators and policymakers create plans to support more stable and logical investment environments.

In Pakistan's stock market, information accessibility positively correlates with investors' HB (Saeedi & Chahardeh, 2013). Herd behaviour occurs when investors make the same investing decisions.Overconfidence does not substantially impact HB in Pakistan, possibly because of the Dunning-Kruger Effect (Gul & Khan, 2019; Shusha & Touny, 2016). A significant proportion of market participants are educated, middle-aged, and older persons who make judgments based on their analysis and Understanding rather than following others. Despite a few exceptions, overconfidence in the Pakistani stock market does not significantly impact herd behaviour. Market sentiment plays a crucial role in investment decisions and is significantly positively associated with herd behaviour in Pakistan's stock market (Aharon (2021); (Choi et al., 2020; Economou et al., 2018; Kabir & Shakur, 2018; Tauseef, 2020). Investor herding tends to be high when market sentiment is weak, as investors follow the crowd to play it safe.

Experience and national culture also influence HB among investors in the Pakistan Stock Exchange (PSX). Experience has a positive association with HB in Pakistan (Sabir et al., 2019) but a negative impact in Germany (Menkhoff et al., 2006). National culture, particularly in countries with high power distance and masculinity, also influences HB (Chia et al. (2018). Investors in Pakistan may exhibit herd behaviour to avoid investment disappointment due to cultural factors such as risk attitudes, innovation, exploration, teamwork, and reactions to disappointment (Lobão & Maio, 2021; Munkh-Ulzii et al., 2018).

The study found a positive and significant association between information, market sentiments, experience, and national culture with investor herding in the Pakistan Stock Exchange (PSX). Investors are advised to confirm and understand new information, conduct research, and not unthinkingly follow the market. Experienced investors should avoid timing the market. To reduce herding, investors should broaden their understanding of diverse cultures. Future studies should use different research techniques, including individual meetings and phone and mail surveys, and examine various types of investors and financial markets. More dimensions of culture should also be included as independent variables.

The study presented herein has some limitations worth noting. Firstly, it did not examine all psychological factors contributing to HB. Additionally, due to time constraints, the study only focused on individual investors of the Pakistan Stock Exchange. Furthermore, the study relied solely on primary data, which may not align with expectations comprehensively. Finally, the target audience for data collection was limited. Despite these limitations, the findings provide valuable insights into HBs and their impact on Pakistan.

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