



## Examining Financial Attitudes of Retail Investors and its impact on Investing Activities: A Case of Pakistan Stock Exchange (PSX)

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### ABSTRACT

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The fundamental objective of the research is to analyze the investing behaviors of retail investors. The behavior of retail investors in Pakistan, one of the emerging countries after COVID-19, is used as a case study to analyze the factors that determine investing behavior. In academic research, the association between financial attitude and behavior is well-established. Yet, assessments of financial attitude and behavior continue to vary greatly and are often comprised of a series of questions rather than statements. Individual investors on the PSX were considered a population for the purpose of this study. The researcher collected data from respondents using a non-probability sample (convenience sample) using a questionnaire survey method. The researcher analyzed the data by using SPSS. According to the results of the study, there is a statistically significant relationship between the financial attitude constructs optimism, financial security and deliberative thinking on the trading behavior of investors. The conclusions of this research are significant for academics and policymakers in developing countries.

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## 1. Introduction

The stock market, like the global economy, is susceptible to unpredictability and volatility. The financial markets are characterized by substantial fluctuations in anticipated results, resulting in a high level of volatility (Khan, Hassan, & Islam, 2023). Several factors, such as emotions, personal attributes, and market orientation, have the potential to impact the investment decisions made by retail investors, particularly in developing nations like Pakistan. To make informed decisions about their financial affairs, investors require a well-rounded combination of analytical evaluation and intuitive comprehension. Utilising investment instruments is crucial for ensuring that investors make decisions that are rational and based on solid analysis, as opposed to being solely influenced by their emotions. Even though investors have been effective in achieving their financial objectives, they are still susceptible to the inherent unpredictability, risk, and dynamic nature of the market. Regardless of an investor's capacity to achieve financial goals, the stock market continues to present challenges in terms of effectively managing investments, as evidenced by this comment. Despite the fact that the stock market continues to present challenges for successfully managing investments, this is the case.

The current body of literature pertaining to this subject matter has predominantly centred on assessing the impact of organisational factors on the financial decision-making process. A study wherein many factors were considered, including business dividends, financial information, and corporate image, alongside other relevant variables. Nevertheless, there has been a noticeable deficiency in the examination of financial attitudes and their influence on financial conduct. However, it is important to acknowledge that the significance of these aspects should not be overlooked. There has been a discernible dearth of scholarly attention given to the

examination of the impact of financial attitudes on the behaviours exhibited by retail investors operating within the distinct context of Pakistan. The observed lack of concentration has been noteworthy. Despite the findings of Tabassum et al. (2021), which emphasise the significant influence of an individual's financial attitude on their financial aspirations.

Conducting a thorough investigation of the degree to which traders' financial attitudes impact trading activity on the Pakistan Stock Market is of paramount significance. These attitudes can be described by traits such as a positive outlook, a perception of economic stability, and intentional cognitive processes. The correlation between psychological traits and investment choices can have substantial implications, not only for individual investors but also for the broader financial environment. The positive financial mindset has the potential to shape investors' perception of investing opportunities in a more favourable light, hence potentially encouraging them to assume higher-risk positions in pursuit of greater returns. Optimism might additionally foster a positive perception of investing opportunities among investors. Conversely, the idea of financial stability may prompt investors to adopt a more cautious approach, focusing on stability and prioritising the preservation of capital over potentially higher returns. This phenomenon might manifest when investors have the belief that the financial system is characterised by stability. The importance of deliberative thinking, distinguished by a comprehensive and analytical approach to decision-making, may have a crucial role in mitigating the influence of optimism and financial security on trading conduct. The reason for this is that deliberative thinking is distinguished by a methodical and analytical manner of engaging in the process of making decisions. This has the ability to facilitate the development of an investment strategy that is characterised by enhanced information and equitable treatment of all stakeholders.

The main aim of this research is to examine the correlation between financial attitudes and trading conduct among retail investors in the Pakistani Stock Market. The objective will be achieved by addressing the gap in the current corpus of scholarly literature pertaining to the subject matter. The objective of this study is to offer significant insights to individual investors, financial institutions, and policymakers by examining the impact of optimism, financial security, and deliberate thought on investment decisions. This analysis aims to enhance the decision-making process in investment activities. To enhance the effectiveness of investor education initiatives and the enforcement of investor-friendly policies, it is imperative to get a comprehensive comprehension of the influence of financial attitudes on trading behaviour within the Pakistani environment. Consequently, this will facilitate the establishment of a resilient and knowledgeable investor community, capable of effectively navigating market changes and uncertainties.

## **2. Literature Review**

According to Mishra, Mohanty, and Krishnankutty (2016), financial attitude, which encompasses their mental state, opinions, and judgements on financial matters, has a significant impact on whether or not they achieve success or failure in their financial endeavours. Recognizing the vital role of psychological factors in shaping financial behaviors, scholars have emphasized the need for extensive research in this area (Strömbäck, Lind, Skagerlund, Västfjäll, & Tinghög, 2017). Understanding stock market involvement and the factors influencing individuals' choices to participate or abstain from stock market activities has been a subject of significant interest among researchers. Previous studies have explored various factors impacting stock market participation, such as age, education level, social capital, income, IQ level, investing expertise, confidence, herding behavior, and heuristics in the stock market (Rizvi & Abrar, 2015). In recent years, there has been a remarkable increase in the number of individuals engaging in financial markets. Thus, it becomes crucial to investigate both individual and collective reasons why people choose to avoid participating in the stock market. Additionally, understanding the elements influencing stock market involvement has become essential. The level of investment achieved through stock market participation is affected by various psychological elements, including attitudes, goals, and psychological biases of investors. Contrary to previous assumptions, variations in risk aversion and financial position do not fully explain investors' investment decisions (Vigg Kushwah & Mathur, 2019).

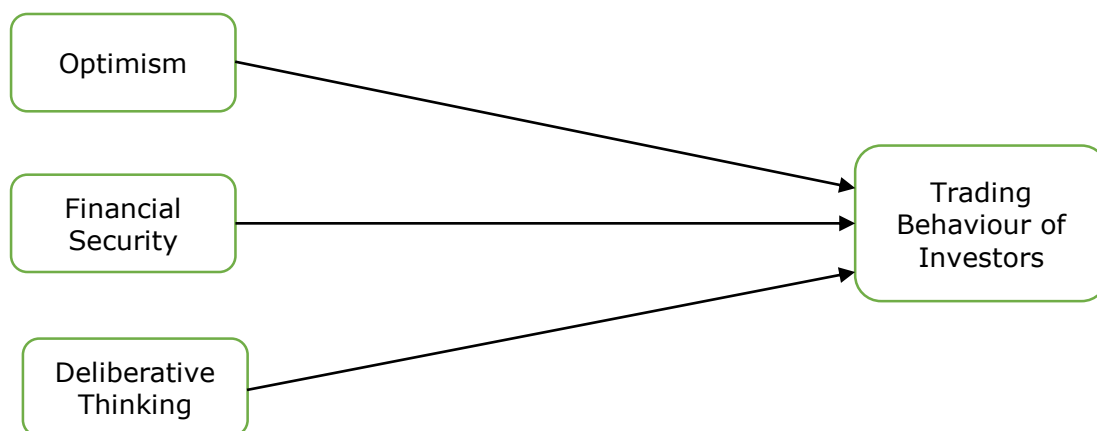
Furthermore, cognitive aptitude, such as financial literacy and intelligence quotient, plays a significant role in stock market engagement. Individuals with higher financial self-efficacy and positive financial attitudes tend to manage their finances more effectively (Keswani, Dhingra, &

Wadhwa, 2019). Financial literacy is associated with responsible financial behavior, leading to more prudent financial decisions (Kushwah & Mathur, 2019). Individual characteristics like age, gender, wealth, risk tolerance, and education level also influence participation in the stock market. Other factors, such as the predisposition to gamble, experiencing negative wealth shocks, religious beliefs, and exposure to corporate misconduct, have been found to impact increased engagement in the stock market. Moreover, an individual's comfort with risk significantly affects their investment decisions (Nadeem et al., 2020). Exploring perceptions of risk provides valuable insights into the intriguing behavior of the stock market. A literature review conducted by Sood and Sharma (2022) highlights the influence of cognitive biases on stock market involvement, emphasizing the occurrence of irrational behaviors stemming from these biases. Additionally, post-COVID studies evaluate the potential implications of financial uncertainty on stock market participation, investigating how declining financial literacy and dependent financial inconsistencies contribute to biases and subsequent involvement.

According to the findings of a study conducted by Ikeda, Inoue, and Sugitani (2021), individuals with a pessimistic outlook tend to work longer hours and save more money. It is plausible that their more pessimistic co-workers may exercise greater caution in managing their finances. Additionally, experts have established a connection between optimism and overall financial well-being. In fact, previous studies have demonstrated that individuals experiencing depression exhibit a higher tendency towards pessimism compared to those who are not affected by depression. A deliberate approach to thinking represents a highly systematic strategy for problem-solving and establishing effective strategies. In connection with this, research on cognitive biases has been extensively conducted. According to several studies, individuals who are more inclined to make quick judgments tend to rely heavily on their intuition rather than logical reasoning. Conversely, skilled traders adopt a more cautious thinking style and, consequently, rely less on heuristics when making decisions. Instinctive actions, in contrast to conscious thinking, can hinder an individual's risk-adjusted performance, even if the person is financially knowledgeable. This is because instinctual actions are driven by emotions rather than rational thought processes. Additionally, our literature review revealed that there is limited research addressing the role of financial security as a predictor of financial behavior, which we consider to be an interesting and noteworthy finding. However, in earlier research, the relationship between an individual's financial well-being and their financial behavior, particularly concerning their level of financial security, has been investigated (Sabri, Mokhtar, Ho, Anthony, & Wijekoon, 2020).

In conclusion, the impact of financial attitudes, including optimism, financial security, and deliberative thinking, on investors' trading behavior in the Pakistani Stock Market underscores the significance of psychological factors in shaping financial decisions. Understanding these psychological determinants can provide valuable insights for investors, policymakers, and financial institutions to foster informed and prudent investment practices.

**Figure 1: Conceptual framework of Study**



### 3. Methodology

The study employed a quantitative approach to establish a relationship between independent and dependent variables. The research questions were formulated based on the study objective, followed by the development of hypotheses and a conceptual framework. The target population consisted of both individual investors actively trading on the Pakistan Stock

Exchange (PSX) and institutional investors. However, institutional investors were excluded from the study for the time being, focusing solely on individual investors. The selected cities for data collection were Islamabad, Rawalpindi, Lahore, and Karachi, where the majority of the targeted populace resided. Although the study was conducted in Pakistan, its findings may have relevance to investors in stock markets of various other developing countries.

Data collection involved a primary survey conducted on individual investors who had made stock or securities purchases on the PSX since the beginning of the COVID-19 pandemic. The global pandemic led to an increase in the number of retail investors in Pakistani markets, especially the country's young population, who took advantage of market downturns during lockdowns. Additionally, historically low interest rates offered by financial institutions attracted new investors to the stock market. A total of 300 surveys were directly sent to individual PSX traders to collect data for cross-sectional analysis. Out of the 315 returned questionnaires, 300 fully completed surveys were selected for analysis, resulting in a response rate of 78%, which was considered adequate.

The sampling technique employed in the study was non-probability sampling, specifically using the convenient sampling method. The researcher used a wide range of methods for data analysis, conducting quantitative investigations using SPSS 21 software. The sample size of 300 surveys was determined based on item-to-rate theory and previous research conducted in diverse contexts on related topics, ensuring that the sample size met all statistical criteria.

## 4. Results and Data Analysis

### 4.1. Reliability analysis

The construct reliability is shown in Table 1. Each variable's value is more than 0.70, as shown by the outcome. The findings indicated that all Cronbach's Alpha values ranged from 0.765 to 0.806, indicating that the data is reliable for future investigation.

**Table 1: Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
<b>Optimism</b>	26.6927	14.976	0.590	0.789
<b>Financial Security</b>	26.8698	13.534	0.680	0.772
<b>Deliberative Thinking</b>	26.5279	13.565	0.735	0.765
<b>Trading Activities</b>	26.9320	14.614	0.467	0.806

### 4.2. Regression analysis

The effectiveness of the regression model is analyzed and shown in Table 2's "Model Summary." The result of R, which represents the multiple correlation coefficient, is 0.677, which indicates that there is a moderately positive connection between the independent variables (Optimism, Financial Security, and Deliberative Thinking), and the dependent variable (TA). With an R Square value of 0.428, it can be deduced that the model's independent variables are responsible for explaining about 42.8% of the total variation in the dependent variable.

**Table 2: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.677 <sup>a</sup>	0.428	0.419	.79755

The value of 0.419 for Adjusted R Square is a measure of model fit that is more dependable than the original R Square value since it adjusts the original R Square value for the number of independent variables. The estimate has a standard error of 0.79755, which provides an idea of how accurate the model is by indicating the average error that exists between the values that were observed and those that were predicted.

Moving on to Table 3, we can see that the results of the ANOVA show that the regression model is significant in a general sense. The amount of variation in the dependent variable that can be attributed to the independent variables is represented by the regression sum of squares statistic (64,838). The model has a total of three degrees of freedom (df), and the value of Mean Square (16.210) may be calculated by dividing the Regression Sum of Squares by the total number of degrees of freedom. The F statistic, which has a value of 25.483, is a measurement of the ratio between the variation that is explained and the variance that is not explained. The fact that the model is statistically significant at a very high degree of confidence is shown by the significance level (Sig.) of .000a that is linked with it.

**Table 3**

	<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	<b>Regression</b>	64.838	3	16.210	25.483	.000 <sup>a</sup>
	<b>Residual</b>	220.085	346	.636		
	<b>Total</b>	284.923	495			

Dependent Variable: TA

**Table 4: Coefficients**

	<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
		<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
1	<b>(Constant)</b>	2.326	.263		8.849	.000
	<b>Optimism</b>	.097	.080	.075	1.212	.026
	<b>Financial Security</b>	.217	.079	.209	2.733	.007
	<b>Deliberative Thinking</b>	.445	.076	.401	5.827	.000

Dependent Variable: TA

In conclusion, the coefficients of the model's independent variables are shown in Table 4 below. Standardized coefficients (Beta) offer a measure of the relative relevance of each independent variable in predicting the dependent variable (TA). Unstandardized coefficients display the real value of the regression coefficients, but standardized coefficients reveal the actual value of the regression coefficients. In this model, the coefficient for the constant term is 2.326. The relative values of the coefficients for optimism, financial security, and deliberate thinking are 0.097, 0.217, and 0.445. Based on the standardized coefficients, it can be observed that Deliberative Thinking exhibits the highest impact on the dependent variable (Beta = 0.401), followed by Financial Security (Beta = 0.209) and Optimism (Beta = 0.075). The t-values are utilized to assess the significance of each coefficient. The findings indicate that all three independent variables display statistical significance at different levels of confidence. Specifically, Optimism has a significance value of .026, Financial Security has a significance value of .007, and Deliberative Thinking has a significance value of 0.

The regression model's comprehensive findings suggest that Optimism, Financial Security, and Deliberative Thinking significantly influence the modeled variable, TA. The primary determinant of TA is deliberate thinking, which is closely followed by financial security and optimism. The findings suggest that personal financial attitudes play a crucial role in shaping financial behavior. This underscores the importance of careful consideration and financial stability when making decisions.

## 5. Conclusion

The study aimed to examine the influence of financial attitude, specifically encompassing optimism, financial security, and deliberative thinking, on the trading behavior of retail investors involved in the Pakistani Stock Market. The findings of the investigation indicated that the group of retail investors studied exhibited all three dimensions of financial attitude. Amidst the unprecedented circumstances of the COVID-19 pandemic, the role of deliberative thinking has become increasingly significant in shaping investors' trading behavior. Retail investors who demonstrated a proclivity for formulating comprehensive strategies and methodically evaluating obstacles experienced an increase in their frequency of trading activities. The COVID-19

epidemic's external catastrophe appeared to stimulate heightened trading activity among investors who relied on deliberate cognitive processes to navigate uncertainties. The importance of deliberative thinking in financial decision-making has been recognized in prior scholarly investigations (Haslem, 2014).

Financial security was identified as another significant characteristic that had a positive influence on the trading behavior of individual investors. Investors who experienced satisfaction with their current financial status and possessed confidence in the stability of their financial prospects demonstrated a higher propensity to participate in stock trading activities amidst difficult periods in the financial market, such as the occurrence of the COVID-19 pandemic. The motivation behind the trading decisions of these investors was influenced by the guarantee of having adequate financial resources for retirement. Previous research has explored the relationship between financial security and financial behavior, with a particular emphasis on its impact on overall well-being (Strömbäck, Skagerlund, Västfjäll, & Tinghög, 2020).

Furthermore, it is worth noting that optimism has a substantial influence on the trading behavior exhibited by retail investors. Investors who maintained an optimistic perspective regarding the future and anticipated favorable results, despite challenging market conditions, demonstrated a greater inclination to persist in trading activities, even when confronted with substantial setbacks. Nevertheless, it is imperative to acknowledge that investors who exhibit excessive confidence or indifference may be susceptible to exaggerated responses or inadequate responses to market conditions, which could result in unfavorable consequences.

In summary, this research provides insights into the influence of financial attitude, specifically deliberative thinking, financial security, and optimism, on the trading behavior of retail investors in the Pakistani Stock Market. The results indicate that psychological factors play a significant role in shaping investors' decision-making processes. Investors who demonstrate intentional cognitive processes are inclined to engage in higher levels of trading activity during periods of external crises, whereas individuals who possess a perception of financial stability are more prone to engage in trading activities. Despite the challenging market conditions, optimistic investors persist in participating in trading activities. However, it is prudent to exercise caution due to the possibility of excessive reactions. The comprehension and management of market dynamics during periods of turbulence can be enhanced for both investors and policymakers by gaining an understanding of the significance of financial attitude.

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