Emotional Stability and Psychological Well Being of Investors: Role of Stock Market Swings

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Abstract: This research aimed to examine and validate the elements influencing investors' emotional steadiness and psychological wellbeing during stock market fluctuations. It took into account the variables that affect investor's emotional steadiness and psychological health, and then utilized confirmatory factor analysis to authenticate these determinants. The author has incorporated past research on behavioral finance to develop society's comprehension of emotions, psychological well-being, and investment behavior. The report suggests that policymakers and financial firms should pay greater attention to these aspects when devising promotional strategies. This research can help investors understand the changes in price so they can make a wise decision when investing in the stock market.

1 INTRODUCTION

Price fluctuation is defined as the variation in price levels from one period to the next or the variation between a stock's daily starting and closing prices. Share prices fluctuate on the stock market every second, and these variations are generated by supply and demand for a certain share, similar to other market product price fluctuations. Several prior studies show that the stock market has a direct impact on human psyche. Stock market movements have an impact on people's behaviour, health, and personal lives. It can produce a variety of issues such as anxiety, panic disorder, or severe depression, as well as unhealthy habits like as smoking and drinking alcohol. In certain cases, an investor who consistently loses money may resort to illicit actions. Individuals all throughout the world are affected by stock market swings, whether they are in India or another foreign nation. Stock price fluctuations have an almost direct impact on investors' physical health, with sharp price drops increasing hospitalizations within the next two days. The effect is especially strong for situations associated with mental health, such as anxiety, implying that concern about the future, as well as current, consumption shocks, influence an investor's immediate perception of well-being Another research, done in the United States in 2008, looked at how a stock market crash affected life satisfaction, mental discomfort, and elderly health habits. According to the data, a market collapse had a detrimental influence on hospitalisations, child reported medical condition, sick days from school, and emotional issues. Psychology has also been used to better understand the decisions of traders. Early in the 1970s, Kahneman and Tversky (1979) reexamined how attitudes, emotions, and behavioral biases generally affected the choices made by investors. One of the most recent advancements includes the application of psychology to explore how emotions and sentiments influence the utility function choice and perception of the environment as a whole. According to this new development, affect rather than logical calculation now controls behavior. Decision-making must take into account feelings and sentiments, Thaler (1993) further establishes that psychological factors influence asset prices. Damasio (1994) demonstrated the very next year how individuals who have lost the use of the emotional part of their brains may find it extremely difficult to make decisions. Furthermore, Forgas (1995) demonstrates that the calculations necessary to make investment decisions are frequently intricate, abstract, and risky. These characteristics are thought to lead people to make decisions based more on emotion than reason. Financial crises have also been explained in terms of emotions (Tuckett and Taffler, 2008).

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1.1 Stock Market Fluctuations

For decades, stock markets have been the hub of economies. Any instability or crisis that occurs in these markets affects the economy either generally or partially (Demir, 2019). The value of stocks and debentures in the stock market may vary over time, which can be seen by the differences in their values between one period and the next or the gap between a stock's opening and closing prices on a single day. The price of stocks, just like any other commodity, is determined by supply and demand. Prices increase when the number of available shares is insufficient to fulfill investor demand; they decline whenever few investors are interested in purchasing stocks. Futher (Al-Rimawi and Kaddumi, 2021) in their research tried to explore the determinants of stock market volatility, the findings of their study revealed that foreign investments, interest rates, economic growth rate and inflation are the major macroeconomic factors influencing stock prices.

1.2 Emotions and Investors

The majority of decisions individuals make in various facets of their lives are influenced by feelings, many psychology experts now believe that feelings & emotions are, for good or worse, the primary force behind the majority of important life decisions. Emotion is a person's reaction to an external stimulation that influences their judgment and conduct and contains both physical and psychological components (Aren and Hamamci, 2020). In the context of finance, Standard finance theories presume that investors in stock markets typically act "rationally." The rational behavior hypothesis states that investors' decision-making entails gathering relevant details from business financial statements and other sources and objectively evaluating them using time-tested investing techniques and models. However, over the past few decades, it has been repeatedly demonstrated that human "emotions" are just as crucial as reasoning in making educated investing decisions (Saxena and Yadav, 2017).

2 PSYCHOLOGICAL WELL BEING

In recent decades, both the scientific and general literatures have shown a strong interest in the idea of well-being. The term "psychological well-being" refers to both intra- and inter-individual levels of beneficial functioning, such as “interpersonal connectivity” and “self-referential attitudes” such as self-mastery and personal development (Burns, 2017). Consequently, Hasnain et al. (2014) defined psychological well-being as a mental state devoid of mental diseases. From the standpoint of positive psychology, this may include a person's capability to live a good life and create a balance amid living activities and efforts to acquire psychological resilience. Psychological well-being is crucial in terms of how we operate and adapt, as well as whether or not our lives are fulfilling and productive. Psychological well-being is how people assess their life, these judgments, according to (Diener and Suh, 1997) might take the shape of cognitions or feelings.

3 RELATIONSHIP BETWEEN EMOTIONAL STABILITY AND PSYCHOLOGICAL WELL BEING

(Frijter et al., 2014) conducted a study that looked into the influence of stock market movements on the subjective well-being and health of Australians and found that stock market improvements yielded a substantial yet moderate increase in life satisfaction and mental health. In the similar context (Sarwar et al., 2016) investigated investors of the London Stock Exchange and determined that there was no strong association between gender and investment decisions, yet found a significant correlation between monthly salary level and investment and concluded that psychological factors have a more significant influence than economic factors. Further Gayar et al. (2021) investigated the effects of investor sentiments and herding on the volatility of the stock market in Egypt and found that investor sentiment indicators have a direct and indirect influence on stock market volatility, mediated by herding behavior. In the similar Context (Naseem et al., 2021) in their research examined the investor’s psychology and stock market behavior amid covid-19 pandemic, as generally the psychological attitude of investor’s both favorable and unfavorable with regards to the stock market can alter the way economy is perceived, they particularly employed principal component analysis to identify the same, the overall findings revealed that psychology of investor’s was found to be adversely linked to the stock market, fear and anxiety and pessimism cause companies to draw out their investments from the share market, resulting in lower share market returns. Based on the reviews done following objectives were formulated:

4 OBJECTIVES

1. Analyze and confirm the factors that contribute to psychological well-being.
2. Analyze and confirm the factors that contribute to emotional stability.

5 RESEARCH METHODOLOGY

The investigation was exploratory in character. The population of the study targeted investors from Gwalior region. An individual investor was chosen as the sampling element and data was collected from 200 respondents through a non-probability sampling technique.

Tools Used of Data Analysis. The exploratory Factor Analysis was employed to investigate the various elements influencing Emotional stability and Psychological Well-being, while Confirmatory Factor Analysis was utilized to corroborate the factors affecting both variables.

6 RESULTS AND DISCUSSIONS

a) Reliability Analysis
The Cronbach alpha value for all variables being greater than or almost equal to 0.7 shows that the questionnaire was highly reliable and can be used for further investigations.

b) Sample Adequacy
The KMO Measure of Sampling Adequacy values for individuals' emotional stability and psychological well- being were 0.832 and 0.812, suggesting that the sample size was adequate for conducting exploratory factor analysis.

c) Description of factors Emotional Stability

1. Overconfidence: This determinant came out as the most crucial determinant accounting for 37.281 % of variances in the research.
2. Optimism: This determinant emerged as the second most influential factor, accounting for 10.971 percent of total variances.
3. Self-Image: The third most significant factor in explaining a total variance of 9.285 is Self-Image.

d) Describing Factors of Psychological Well-Being

1. Healthy & Energetic: This emerged as most important factor in explaining 30.800 percent of the total variance.
2. Anxiety: This attribute has been identified as the second most significant determinant, accounting for 18.994 percent of the total variance.
3. Stressed: This attribute has been identified as the third most important determinant explaining total variance of 9.468 percent.
4. Depressed: Depression has been identified as the fourth most influential factor in explaining 6.787% of the total variance.

e) Confirmation of Factors
e.1) Emotional Stability: Confirmatory factor analysis was used on both variables of the study to confirm the factors that emerged from EFA.

Emotional Stability was measured using a 12 items instrument. Further Exploratory Factor Analysis resulted into three factors for Emotional Stability, these factors were further confirmed using CFA which resulted in 6 model out of which 6th model was found to have good fit.

Final Model of Emotional Stability. Model 6 gave an excellent match as indicated by the results of the first-order confirmatory test. The $\chi2$ statistic was 4.650 (degrees of freedom = 712, p 0.001), and the $\chi2$/df ratio was 0.664 which was below 2.0, a sign of a good fit. The Goodness of Fit Index Table 1: Reliability Analysis

Table 1: Reliability Analysis.

S. No.	Variable Name	Cronbach's Alpha	No. of Items
1.	Emotional Stability	.847	12
2.	Psychological well being	.828	15

(AGFI) was .974. The Comparative Fit Index (CFI) was 1.000, and the Tucker-Lewis coefficient (TLI) was 1.018, both exceeding 0.9. The Root Mean Square Error of Approximation (RMSEA) was 0.000, which is lower than 0.05, indicating a very good fit. Thus, the values from the table analysis demonstrate that Model 6 is a good fit.

Table 2: CFA Table for Emotional stability

Criteria Obtained	χ^2	P	Df		Absolute fit measures			Incremental fit measures			Parsimony fit measures	
				χ^2/df	GFI	AGFI	RMSEA	NFI	CFI	TLI	PNFI	PCFI
	4.650	.703	11	.664	.993	.974	≤0.05 .000	≥0.9 .989	≥0.9 1.000	≥0.9 1.018	.330	1.000
Note: χ^2= Chi square; df= degree of freedom; GFI = Goodness of fit index; RMSEA= Root mean square error of approximation; NFI = Normated fit index; CFI = Comparative fit index; TLI= Tucker-Lewis Index ; PNFI= Parsimony Normated Fit Index ; PCFI= Parsimony Comparative Fit Index.												

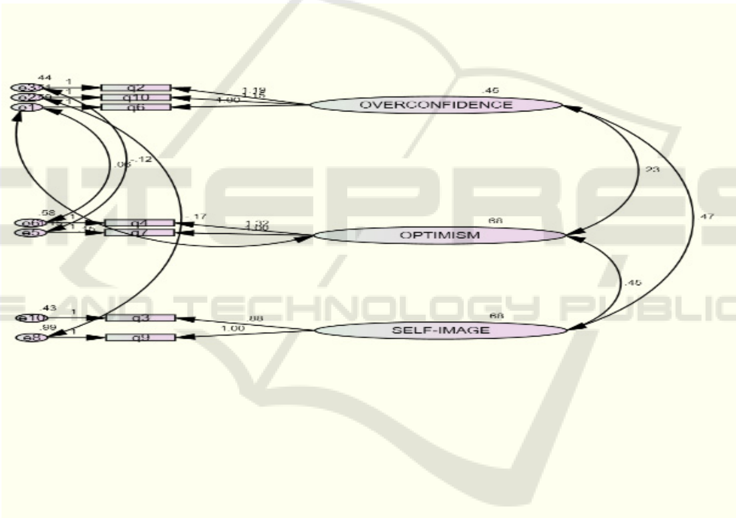

Figure:1.

e.2) Confirmation of Factors of Psychological Well Being: The 14-item test was created to assess psychological well-being. Exploratory Factor Analysis was used to investigate the elements influencing psychological well-being, yielding four factors. Further CFA was used to confirmed these factors, Statistical testing resulted in 8 models out of which 8th model was found to have good fit.

Final Model of Psychological Wellbeing. The results of the eighth order confirmatory test, which consists of multiple components, is illustrated in the figure and table below. The χ2/df ratio was 1.123 which is lower than 2.0, implying a strong fit. The χ2 statistic was 11.230 with 712 degrees of freedom and a p value of 0.001. The Goodness of Fit Index (GFI) was 0.986 and the Adjusted Goodness of Fit Index (AGFI) was 0.951, while the Tucker-Lewis coefficient (TLI) was 0.991 and the Comparative Fit Index (CFI) was 0.997. All of these values exceed 0.9, which is considered an acceptable result. The Root Mean Square Error of Approximation (RMSEA) was 0.025, less than 0.05, indicating a good fit. Therefore, we may conclude that the eighth model has a satisfactory fit.

Table 3: CFA table for Psychological-Wellbeing.

Criteria Obtained	χ^2	P	Df	Absolute fit measures				Incremental fit measures			Parsimony fit measures	
				χ^2/df	GFI	AGFI	RMSEA	NFI	CFI	TLI	PNFI	PCFI
Criteria				$1<\chi^2/df<3$			≤ 0.05	≥ 0.9	≥ 0.9	≥ 0.9		
Obtained	11.230	.340	10	1.123	.986	.951	.025	.973	.997	.991	.347	.356
Note: χ^2= Chi square; df= degree of freedom; GFI = Goodness of fit index; RMSEA= Root mean square error of approximation; NFI = Normated fit index; CFI = Comparative fit index; TLI= Tucker-Lewis Index ; PNFI= Parsimony Normated Fit Index ; PCFI= Parsimony Comparative Fit Index												

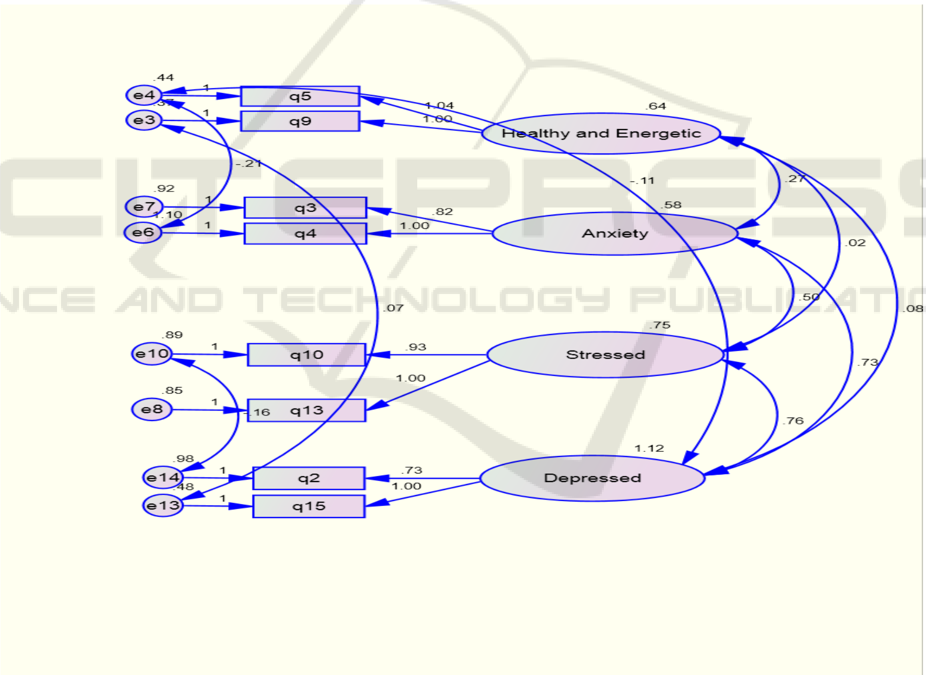

Figure:2.

7 CONCLUSION

The primary objective of this research was to explore and confirm the determinants of "Emotional Stability" and "Psychological Wellbeing" of individuals. Initially reliability was checked using the Cronbach alpha value, further Exploratory Factor Analysis was applied wherein, three components emerged for emotional stability namely overconfidence, optimism, and self-image, and four factors emerged for psychological wellbeing which are healthy and energetic, anxiety, stressed, and depressed. Further CFA was used on both variables to corroborate the components that emerged from EFA. Confirmatory factor analysis revealed six models for emotional stability. Models 1–5 did not meet the specifications, but the last model did. For psychological wellbeing 8 CFA models were constructed with 1 to 7 models failing to meet requirements and the 8th model proving to be a good fit. As per 2012 WHO research report states that a person's capacity to make daily judgements and choices depends largely on their mental health. The capacity to control one's thoughts, feelings, behavior, and relationships with others is ultimately what determines one's mental health and well-being.

Investors should analyze market and economic indicators before making any decisions because they have an impact on how well shares perform on the market. Instead of focusing on just one environmental factor, investors should evaluate all of them. To reduce risks and increase returns, investors should also diversify their holdings by building a portfolio of investments. This research may help other researchers gain a deeper understanding of the variables that affect psychological health and emotional stability. Behavioral finance may explain complex difficulties that traditional finance theory and classic economic theory are unable to explain by integrating finance theory and practice

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