Role of Emotions in Stock Investment Decisions: A Critical Review of the Literature

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Abstract

Purpose: The objective of this study was to use a critical review to examine how emotions arising from different factors, namely, weather, temperature, and number of religious days, influenced investor behavior, especially behaviors that might prevent investors from achieving higher returns.

Methodology: Relevant research studies focused on the study objectives were selected from databases that included EBSCO, Web of Science, and Scopus through the PRIMA method. The results of these studies were meticulously analyzed and evaluated.

Findings: The review of these studies indicated a mixed effect of emotions on investor behavior that was reflected in stock market movements. External factors such as weather and temperature also affected retail investors' emotions. 'Fear' emotion impacted investor decision-making and caused a herding effect. Investors strive for a positive rather than a negative mood when making investment decisions.

Practical Implications: This research provided a comprehensive overview of the studies conducted on emotions arising for different reasons and their relationship to investor behavior, including the dimensions examined and the models employed. The findings can also assist future scholars in locating unexplored gaps in this area.

Originality: While numerous researchers have delved into this relation, a comprehensive analysis of various impacts achieved through this review was lacking. The use of the PRISMA model ensured the credibility of this review. We also provided unexplored areas for future research.

Keywords: behavioral biases, overconfidence, decision-making, investor behavior, emotions, weather, temperature, religious days

JEL Classification Codes: G4, G11, G40, G41

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ecently, researchers, investors, and fund managers have become disillusioned with traditional theories due to their inability to explain stock market movements, which are predicated on the idea that rational investors minimize risk and maximize returns. They are intrigued by the interplay of psychological and behavioral factors that affect investment performance. The advent of behavioral finance has filled this knowledge gap. This field of study combines traditional theories with insights from psychology and sociology and sheds light on the irrationality of human behavior and the inefficiency of financial markets (Mangala & Sharma, 2014). When faced with time constraints and incomplete information, investors usually rely on behavioral heuristics, quicker

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and easier shortcut techniques, or intuitive decision-making. However, behavioral biases arise when these heuristics are applied inappropriately (Tversky & Kahneman, 1974) and adversely impact investor behavior in stock markets, leading to suboptimal outcomes (Baker et al., 2017; Bulipopova et al., 2014; Dangi & Kohli, 2018; Mangala & Sharma, 2014; Singh et al., 2016). These outcomes have far-reaching negative effects on the financial world.

Behavioral biases are one of the dimensions of irrational behavior (Ghosh, 2017; Isidore & Christie, 2019; Isidore & Christie, 2018; Raut & Das, 2015; Rieger et al., 2022). Emotions and cognitive factors impair sound financial discipline and decision-making processes, as identified in the study of Bhanot et al. (2020). Kleinginna Jr. and Kleinginna (1981) contemplated that emotions are affective experiences that generate cognitive processes and activate physiological responses. This leads to behaviors that may sometimes be less expressive or goal-oriented and encourage collective irrational investment decisions. Emotions can also be considered a predictor of behavioral biases, and emotions also play a role in encouraging collective irrational investment decisions (Goodell et al., 2023). The external factors affecting emotions, namely, weather and temperature, influence all investors, leading to collective emotions that cause stock market volatility. Investor behavior is reflected in their trading decisions, and the volatility of the financial markets is an indirect manifestation of these behaviors.

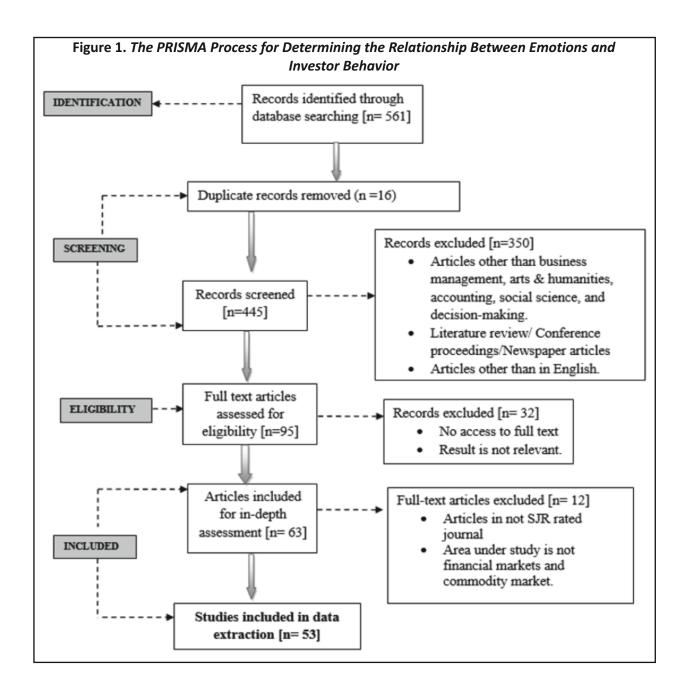
Investors' debilitating emotions, such as anger, disappointment, greed, or despair, prevent them from acting sensibly. They make costly mistakes when they respond hastily to changes in their environment or uncertainty in stock trading. It is essential to know the effect of these emotions on investors' irrational decisions (Shanmugsundaram & Balakrishnan, 2011; Siddiqui, 2008). A few review studies have been conducted in the field of behavioral finance that have focused on emotions and stock trading (Das, 2022; Goodell et al., 2023; Manzoor et al., 2023), but few have examined the relationships between the factors that affect these emotions, namely, weather and climate, religious days, and investor behavior. Therefore, this study reviews the studies that explicate the role of emotions, the causes of emotions, and the subsequent effects on stock market movements. The research gaps identified by the paper can be explored in future studies in behavioral finance. Understanding the impact of many investor emotions on investment decisions would help financial advisors, and individuals construct the best possible investment portfolios that reduce risk and optimize returns. This review summarizes the current evidence base on the type of emotions, their determinants, and their effect on investment biases. The findings can be used to address market risk with efficacy and overcome the emotional impact on portfolio performance.

Methodology

Description of the Selection Process

This study employed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method to identify and select relevant literature for the study. The data extraction process involved four stages: (a) identification, (b) screening, (c) eligibility, and (d) inclusion (Moher, 2009). The time frame for this research was from 2000 to 2022.

A combination of keywords such as emotions, investor behavior, emotional intelligence, behavioral biases, and moods was used. Five hundred sixty-one records were identified, 16 duplicate articles were eliminated, and 445 were selected for screening. Articles that did not fall into decision-making and social science categories, as well as newspaper articles and those not in English, were excluded. Ninety-five articles were chosen for full-text screening. A total of 63 publications were analyzed further after excluding those that did not have full-text access. Articles with an SJR rating below quartile four and studies unrelated to financial or commodity markets were excluded, as depicted in Figure 1. Finally, 53 journal articles were critically reviewed.



Analysis and Results

The selected articles for review were published in 40 journals. The Journal of Behavioral and Experimental Finance published the greatest number of articles, as shown in Table 1. Most of the studies were conducted in the USA, followed by the UK. For the first decade, from 2000–2010, approximately nine articles were published that explored the relationship between emotions and investor behavior. During the years 2011–2022, interest in exploring relationships increased, resulting in the publication of 42 articles.

Table 1. Relationship Between Emotions and Investor Behavior

Authors	Year	Respondents in the Study	Types of Data	Data Analysis	Findings
Hirshleifer & Shumway	2003	-	Secondary data	Regression, chi-square test	Sunlight affects mood. People tend to evaluate prospects more optimistically when they are in a good mood than when they are in a bad one.
Dowling & Lucey	2008	-	Secondary data	Trimmed least squares regressions	The seasonal fluctuation in mood between the winter and spring lunar phases affects the Irish equities market.
Cao & Wei	2005	-	Secondary data	Regression analysis	The temperature has a negative correlation with the stock markets. The temperature effect is more than the sunshine or the length of the night.
Edmans et al.	2007	-	Secondary data	Regression	The stock market reflected a strong negative reaction to losses by the national soccer team. Other sports also had an effect but with a different intensity than soccer. The loss effect was 13 times more than the win effect.
Dowling & Lucey	2008	-	Secondary data	GARCH	Low temperature has a positive relation with stock market return. Wind speed has a relation to the volatility of the stock market.
Yoon & Kang	2009	-	Secondary data	Linear Auto regression with the GJR-GARCH	During the pre-crisis period, the stock returns were higher with extremely cold weather. However, in the post-crisis period, this effect is not seen as foreign players in the market are not affected by local weather.
Kaplanski & Levy	2010	-	Secondary data	Regressions analysis	The days after aviation disasters, investors tend to hold on to the funds kept aside for risky investments. Aviation disasters through media cause anxiety and fear, leading to a bad mood, which reduces the demand for risky assets.
Bollen et al.	2011	-		Granger Causality, time series, and uzzy neural networ	Calm mood has a causality relationship with the DJIA (Dow Jones Index Average) but has a k 2 to 6-day lag.
Kuhnen & Knutson	2011	28 E	Experimental desigi	n Regression	The feedback effects of making investors take risks when there is a positive effect and risk-averse in case of negative effect can lead to bubbles and crashes if this forms a chain of events.
Strahilevitz et al.	2011	-	Secondary data	Ratio analysis	Emotions like disappointment and regret had more effect than positive emotions like rejoicing and elation.
Summers & Duxbury	2012	131	Experimental design	Proportions of winning and losing, covariance	A disposition impact is not caused just by a loss or gain; when an individual is offered options, emotion is triggered, giving rise to a sense of responsibility, leading to regret and celebration, depending on whether the individual wins or loses.
Gambetti &	2012	214	Questionnaire	Linear	The anxiety trait investors had a likeness to

Giusberti				regressions	risk aversion and selective attentional bias, and they wanted to reduce the loss and preferred traditional financial instruments.
Brahmana et al.	2012	-	Secondary data	Regression	The Monday returns are linked to the temperature level.
Teng & Liu	2013	-	Secondary data	Regression	The returns for the preholiday are higher than those of the other days since the festive occasion adds optimism, which is reflected in the trading activities.
Keef & Roush	2002	-	Secondary data	Regression	A weak relation exists if the temperature is moderate; with extreme temperature, the effect of the temperature also increases.
Abbes & Abdelhédi-Zouch	2015	-	Secondary data	Regression	After Haji Pilgrimage, the investors are in a positive mood, and this results in an increase in market returns as they are optimistic.
Lepori	2015	-	Secondary data	Regression	A positive mood makes investors behave cautiously and risk-averse; this is retaining good emotional states. The effect of mood on the market is more when there are more inexperienced investors.
Cao & Han	2015	-	Secondary data	Pearson Correlation	The returns of the stock market have a negative cross-correlation with humidity and temperature but a positive correlation with sunshine duration.
Lahav et al.	2016	170	Experimental design	Regression	Immediate mood also affects impulsive behavior. If the investor feels a negative mood before the holiday, he/she will indulge in impulsive behavior to return to a positive mood as the holiday approaches.
Harding & He	2016	198	Experimental design	Regression	A change in an investor's mood affects investors' risk aversion more in males than females. The negative mood (more risk averse as their mood is negative) causes this effect significantly more than the positive mood.
Bergsma & Jiang	2016	-	Secondary data	Regression	Both the aggregate country portfolio and individual showed an abnormal return due to the mood of optimism surrounding the new year. The new year effect was more visible in the market, which had lessor institutional investors.
Gavriilidis et al.	2020	-	Secondary data	Regression	Herding is present during Ramadan and is higher during Ramadan days.
El-Chaarani	2016	197 and 46	Experimental design	Regression	When emotional and mental intelligence are combined, portfolio performance improves.
Hadi	2017	160	Questionnaire	Regression	The investors with higher emotional intelligence were better decision-makers than those less emotionally intelligent.
Wasiuzzaman	2018	-	Secondary data	OLS models,	The effect of Ramadan month is more on volatility

& Al-Musehel				ARMA-GARCH model	than on the returns. On the positive side, volatility is associated with the mood due to the festival.
Munusamy	2018	-	Secondary data	GARCH	The average returns for the month of Ramadan were more than those for non-Ramadan days.
Richards et al.	2018	-	Secondary data	Trading Gain indicator/loss indicator	Emotions are identified as one of the causes of the disposition effect, and investors with emotion regulation strategies are less prone to this bias.
Economou et al.	2018	-	Secondary data	CSAD	The study found that fear indicators have an impact on the herding effect.
lqbal et al.	2019	12	Semi structured interviews	Text analysis	Emotions have a role in financial decision-making. Experienced investors have overconfidence.
Shantha	2019	-	Secondary data	CSSD and CSAD model, regression	Extreme market movements are accompanied by an increase in herding behavior.
Kaplanski & Levy	2019	772	Experimental design	Multivariate regression	The investor usually had more satisfaction with not losing than gaining a profit. However, this changes if the friend loses more than the investor, as the investor is happy as his/her friend has lost more than him/her.
Filiz et al.	2019	181	Experimental design	Mann–Whitney <i>U</i> test	The participants showed a tendency to herding, which was influenced by the mood of the participants.
Shahzad	2019	-	Secondary data	Regressions analysis	Investors are more ready to trade when the temperature is low rather than high.
Apergis et al.	2019	1005	Secondary data	Correlation	Happiness influences investors and makes them take risks more than they normally do.
Jiang et al.	2019	-	Secondary data	GARCH model	The effects of weather became less apparent among the foreign participants because of qualified foreign institutional investors.
Saurabh & Dey	2020	-	Secondary data	Artificial neural networks, Granger causality	Anger, fear, and happiness are the most important factors affecting the stock market. The index return to happy mood has a bidirectional causality relation.
Rudiawarni et al.	2020	60	Experimental Design	Regression	Overreaction to bad news led to undervaluation in the stock market. Investors valued bad news more than good news. Therefore, their reactions were stronger.
Hasso et al.	2020	-	Secondary data	Regression analysis	During the terrorist attack, investors reduced their trading frequency. The market expectations theory fails to explain that the investors decrease their propensity for short sales.
Gavriilidis et al.	2020		Secondary data	Regression analysis	No visible proof existed of a significant relationship between international herding and mood proxies.

Aren & Hamamci	2020	247	Questionnaire	Correlation analysis	Personality traits, neuroticism and openness, as well as two emotions, fear and sadness, are identified as predictors of risk aversion.
Bazley et al.	2021	-	Secondary data	Regression	Subjective well-being and transitory happiness influence individual financial choices.
Kathiravan et al.	2021	-	Secondary data	OLS regression test	The temperature affects the stock markets. The HANG SENG index and wind speed are inversely correlated.
Lahav & Meer	2022	18	Experimental design	Regression	The bubbles created when positive or negative moods were larger than those formed in normal moods. The positive mood induced traders to rely more on recent price trends.
Parmitasari et al.	2022	456	Questionnaire	Structural equation modeling	Emotions are one of the significant contributors to the formation of the illusion of control, making young investors act recklessly. The overconfidence bias influences investment decisions.
Luo et al.	2023	470, 385, 761 and 1,000 in various phases	Experimental design	ANOVA	If the hope is reduced, investors' tendency to hold on to losing stocks will be reduced.
Jin et al.	2023	-	Secondary data	Disposition effect formula	Investors sold the gaining stocks due to pandemic shocks. Selling loss-making assets only if there is a shortage of basic consumption. The investors are able to be less dispositioned if they have a portfolio above the average return of the portfolio in the market.
Bird et al.	2023	-	Secondary data	Regression analysis	Researchers found that emotions affected the stock market. Positive emotions from good news give a bull market, and negative emotions from bad news lead to a bear market. Positive emotions, optimism, and joy have more effect on the market than other positive emotions, and negative emotions, stress, and gloom, have an impact on the stock market.
Vishnani et al.	2024	Total 600 in a time- lagged study	Questionnaire	Structural equation modeling	Researchers found that people with a positive attitude toward MFs are likelier to want to invest in them. This makes sense because our feelings (attitude) can influence our desires (wanting to invest). People feel worried or anxious; they tend to focus more on being careful with their money. This might happen because they are afraid of not reaching their financial goals. Feeling regret about not achieving these goals can push them to take action to prevent future mistakes and work harder to reach their goals.

Among the studies examining the relationship between emotions and investor behavior, 34 used secondary data analysis. Using primary data, nine studies utilized an experimental research design to investigate the relationship between emotions and investor behavior. Five studies collected primary data through the survey method, and one study employed semi-structured interviews. The number of respondents for the experimental research design approach ranged from 18 to 1,000 in one study. Another researcher also included a manipulation research design approach in an experimental study, and the number of respondents was 60 (Rudiawarni et al., 2020). The lowest and maximum numbers of respondents were 85 and 456, respectively, when the self-administered online questionnaire was used. Multiple researchers have mainly used regressions on secondary data.

Findings

Many studies have proven that emotions affect investment and financial decisions, which proves the fallibility of rational decisions (Bazley et al., 2021; Brahmana et al., 2012; Gambetti & Giusberti, 2012; Harding & He, 2016; Kuhnen & Knutson, 2011; Lahav et al., 2016; Strahilevitz et al., 2011). Thirty-eight articles discussed how an investor's attitude can affect their financial decisions, making them less likely to be rational (Table 1). Sixteen articles were analyzed using secondary data from actual transactions that occurred at some point in the past. Emotionally driven investors tend to affect small, capitalized equities more than the main indices (Dowling & Lucey, 2008).

The investor's mood is affected by weather, number of religious days, and sunlight, which in turn affect investment decisions. Exposure to sunlight in colder climates makes people feel happier and makes investors more hopeful about the stock market, which increases stock prices (Gavriilidis et al., 2020; Hirshleifer & Shumway, 2003). Additionally, the presence of overseas investors influences how the weather affects stock market trading; more international trade would mitigate the negative impact because foreign investors are unaffected by local weather (Jiang et al., 2019; Yoon & Kang, 2009). Additionally, a longer duration of sunlight has been found to positively correlate with stock market returns (Cao & Han, 2015). Cloudy days cause investors to be dull and depressed, and eventually, stock prices decrease due to lower demand in the market (Hirshleifer & Shumway, 2003). However, Keef and Roush (2002) found that cloudy weather does not affect stock market returns. The temperature of the day affects investors and the stock market (Brahmana et al., 2012; Cao & Wei, 2005; Kathiravan et al., 2021). Extreme weather, such as very hot or cold temperatures, results in low stock market returns, making investors uncomfortable and giving rise to a bad mood (Keef & Roush, 2002). Weather impacts stock market volatility more than returns (Shahzad, 2019).

There were also studies on the effect of starting the cultural calendar year on investor mood; positive mood and the happiness of the cultural atmosphere were reflected in the stock market's abnormal positive returns (Bergsma & Jiang, 2016). As reflected in social mood, emotions, anger, fear, and happiness can also affect the stock market (Saurabh & Dey, 2020). When the overall mood is happy, a bidirectional causal relationship with the index return has been found (Saurabh & Dey, 2020). Storms or wind speeds, seasonal affective disorders, and precipitation contribute to the volatility of the stock market (Dowling & Lucey, 2008). Five of the 38 papers found that religious activities affect the mood of the investor. The positive feelings acquired during the Haji pilgrimage led to optimism, which is mirrored in the market with favorable returns (Abbes & Abdelhédi-Zouch, 2015). Investors in Muslim nations see strong market returns during the holy days of Ramadan (Gavriilidis et al., 2020; Munusamy, 2018; Wasiuzzaman & Al-Musehel, 2018). The market was found to be more volatile in some countries since the final 10 days of Ramadan are marked by intense worship and a desire among investors to be less materialistic (Wasiuzzaman & Al-Musehel, 2018).

An event that instigates an investor to have emotions such as happiness, anger, or fear leads to a positive or negative mood that affects investors' decisions (Kuhnen & Knutson, 2011). Unconsciously incorporating these

emotions into decisions can result in behavioral biases (Parmitasari et al., 2022; Richards et al., 2018; Summers & Duxbury, 2012), and biases can affect investors, leading to incorrect financial decisions (Bailey et al., 2011; Kartini & Nahda, 2021). Eight out of the 38 studies that researched the effects of mood on investor behavior used an experimental research design approach. It was discovered that the investor was in a negative mood when he/she was expected to be in a positive mood, such as preholidays, festivals, etc. Investors indulge in impulsive behavior to put themselves in a positive mood (Lahav et al., 2016; Teng & Liu, 2013). These actions can result in poor decisions; a bad mood makes investors risk averse, which significantly impacts the stock market compared to when an investor is in a good mood (Harding & He, 2016; Kuhnen & Knutson, 2011).

Nevertheless, Lahav and Meer (2022) found conflicting results that positive moods keep investors in the same state of mind; hence, they take up less risk. Different moods create different mindsets; a positive mood makes investors make decisions relying on recent news, leading to higher asset pricing, but a negative mood makes investors more cautious and hesitant to enter the market, which can lead to a bear market (Bird et al., 2023; Lahav & Meer, 2022). Contrary to this result, another researcher found that a positive mood makes investors cautious and risk-averse in maintaining a good mood (Lepori, 2015). Contrary to many other studies, Filiz et al. (2019) found that a neutral mood causes investors to exhibit herding behavior.

Nine out of the 53 studies explored the effect of emotion on behavioral bias. Emotions are identified as one of the prominent reasons for behavioral biases (Parmitasari et al., 2022; Richards et al., 2018; Summers & Duxbury, 2012) because investors experience varied emotions during everyday life, which is reflected in stock market trading (Iqbal et al., 2019). A sense of responsibility leads to feelings of regret or elation depending on the loss or gain attained through the investment, and these emotions lead to a disposition effect (Summers & Duxbury, 2012). As an emotion, hope instills investors to hold on to losing stock and thus gives rise to a disposition effect (Luo et al., 2023). However, if their average return is more than the median return of the market, then they have less regret and can easily reduce the effects of the disposition effect (Jin et al., 2023). Uncertainties in the stock market encourage investors to follow the crowd, leading to herding behavior and the creation of bubbles. Nevertheless, herding behavior is less evident after a market crash once investors learn from their mistakes (Shantha, 2019). The fear indicator also impacts decision-making and causes a herding effect (Economou et al., 2018). Regret aversion can also make investors cautious against behavior that leads to the fulfillment of their financial goals (Vishnani et al., 2024).

Twelve of the 53 studies discuss the relationship between emotions and investors' trading behavior. The emotions or reactions of an event that deeply affects the emotions of investors are reflected in the stock market, such as the national soccer team losing a game, which is reflected in the movements of the national stock market (Edmans et al., 2007). The trading frequency decreased when there was a terrorist attack, both domestically and internationally. However, the impact was more significant within the country than outside (Hasso et al., 2020).

Individuals perceive and experience emotions differently, making them susceptible to varying biases. For instance, anger-trait investors tend to make risky investment choices and exhibit decision-making biases. Conversely, anxiety-trait investors are more risk-averse and prone to selective attentional bias (Gambetti & Giusberti, 2012). Happiness increases individuals' risk-taking (Apergis et al., 2019). The effect of negative emotion is greater than the effect of positive emotion (Edmans et al., 2007; Rudiawarni et al., 2020; Strahilevitz et al., 2011).

Three of the 53 articles explored the effect of emotional intelligence on investor behavior. Emotional intelligence (EI) is the ability to reflectively regulate emotions to promote emotional growth (Mayer et al., 2004). Moreover, individuals with greater emotional intelligence (EI) possess increased courage and confidence, prompting them to invest in riskier assets (El-Chaarani, 2016; Hadi, 2017).

Discussion

A review of the relationship between emotions and investor behavior reveals that research interest in exploring this relationship increased in the second decade. Researchers used secondary data from the first decade (2000–2010) to understand this relationship. However, in the second decade (2011–2022), researchers used secondary data, survey methods, and innovative experimental research designs to understand the change in the relationship between emotions and investor behavior and whether investors can control emotions. Researchers have employed quantitative research designs, possibly due to the intricate nature of emotions as abstract concepts that are challenging to comprehend precisely. The experimental research design approach is one of the emerging methods of research; in the study by Rudiawarni et al. (2020), cases and movies were manipulated to understand the effect of different emotions on portfolio performance.

We found that the disposition effect, overconfidence bias, and herding bias were the behavioral biases that researchers had studied extensively. The disposition effect and herding bias can be considered both cognitive and emotional biases, which are mainly influenced by emotions, and incorrect judgment in processing information leads to a loss of financial decisions. This review reveals that external factors such as sunlight, weather, and temperature can affect individuals' moods and emotions. Both positive and negative moods influence the stock market when investors allow their emotions to drive their choices, which can lead to irrational decisions.

Religious days also affect the stock market, creating excitement and a positive mood for individual investors. The New Year event created hope and a positive mood for the country, therefore affecting the country's stock market. Therefore, any event that stirs emotions among individuals in a nation can affect their financial decision-making, leading to a volatile stock market. Investors develop risk aversion or risk propensity to maintain a good attitude and turn a negative attitude around. However, a negative mood has more of an impact on the stock market than a positive mood.

Managerial/Policy Implications

The findings of this study have many practical implications for stock market participants, namely, investors, financial advisors, and policymakers. Financial specialists and investors need to understand how weather, emotional fluctuations, temperature, and religious holidays affect investment behavior. They must act by implementing systematic plans (auto-invest or formula plans) to control adverse impacts. Understanding how external factors affect feelings enables investors to exercise caution and make stock investment decisions with minimal emotional involvement. Furthermore, analysts and investors can identify the underlying events that trigger sudden underreactions or overreactions in the market, thereby taking measures to prevent losses or optimize the risk-reward ratio. Investors can harness the positive impact of emotional intelligence in regulating and managing their emotions and constructing more profitable investment portfolios. Additionally, investors should acquire or sell financial assets (stocks or mutual funds) in accordance with predetermined rules to mitigate the detrimental impact of emotions on their portfolios. Regulators or stock exchanges should conduct investor education programs to improve awareness of the negative consequences of behavioral biases on stock trading or portfolio performance.

Conclusion

Emotions play an important role as a predictor of biases and significantly influence investment decisions. Many emotions, such as fear, hope, and anxiety, have an impact on investors' decisions. External factors such as

temperature, weather, and religion can create specific emotions for investors, preventing them from making rational decisions. Investors who have greater emotional intelligence can make better investment decisions. By having greater emotional intelligence and rational decision-making skills, investors can strive to achieve their long-term investment goals while minimizing the negative impacts of emotional biases.

Limitations of the Study and the Way Forward

This study has several limitations. The search was restricted to English-language articles, which may have resulted in the exclusion of articles written in other languages. Additionally, the study was conducted using three databases and considered only articles published in journals with a minimum SJR of 4. Future studies may consider other databases and widen the scope of the study by including different types of emotions and cognitive errors in investor decision-making. The experimental method can be used to manipulate participants' emotions to understand their effects on investor behavior and how different emotions shape a person's behavioral biases. Further studies can focus on the effects of emotional intelligence on investor behavior and portfolio performance. Moreover, an understanding of the impact of the emotions experienced by traders during "Muhurat" trading sessions is needed. The scope of the research can be expanded to other areas, such as behavioral biases in corporate financing decisions, FinTech services, and retirement planning.

Authors' Contribution

In the collaborative effort to produce this paper, Annapurna R. played a pivotal role in conducting comprehensive database searches, critically analyzing the gathered data, and contributing significantly to the writing process. Savitha Basri, on the other hand, spearheaded the conceptualization of the paper, bringing forth innovative ideas and frameworks. Additionally, Dr. Savitha Basri actively participated in database searches, conducted thorough critical analyses and contributed substantially to the writing process.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript.

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