

## Cognitive and Emotional Biases in Investment Decisions: An Analysis of Muslim Investor Behavior in the Sharia Stock Market

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### ARTICLE INFO

### ABSTRACT

#### Keywords:

Dinner; Event;  
Keywords; Venue;  
Satisfaction;

**Background:** This study investigates the influence of cognitive and emotional biases on investment decisions in the Indonesian Sharia stock market.

**Method:** Using a mixed-method approach with a sequential explanatory strategy, quantitative data were analyzed with Structural Equation Modeling-Partial Least Squares (SEM-PLS), followed by qualitative insights through interviews, observations, and documentation.

**Results:** The findings reveal that emotional bias indirectly affects investment decisions through investor behavior, while cognitive bias also shows a significant influence. Investor behavior plays a crucial mediating role, reflecting how biases are translated into real investment actions. Sharia-based investors tend to be more cautious and guided by religious values, which function as a filter in decision-making, yet they remain vulnerable to emotional factors such as overreaction and herd behavior. Institutional investors appear more systematic in managing biases compared to individual investors, who are more easily influenced by emotions. The study highlights the importance of behavioral factors in shaping investment decisions in Sharia markets, suggesting that financial literacy, investor education, and long-term strategies are essential to minimize the negative effects of cognitive and emotional biases.

**Conclusion:** These findings contribute to understanding investor psychology in Islamic finance and provide insights for regulators and practitioners to strengthen market stability.

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## INTRODUCTION

The capital market plays a crucial role in Indonesia's economic development, serving as a platform that connects parties with surplus funds to invest with those in need of capital as a source of financing (Purusottama et al., 2025). In general, the capital market can be understood as a platform where capital is traded between investors and issuers. The growth of the Islamic economic system in Indonesia, which has exhibited positive development, has led to the emergence of the Islamic capital market (Hasan, 2025). The starting milestone of the Islamic capital market was marked on July 3, 1997, with the launch

of the Islamic Mutual Fund by Danareksa Investment Management. Subsequently, the Indonesia Stock Exchange (IDX) introduced the Jakarta Islamic Index (JII) to provide alternative investments for investors seeking to invest in accordance with sharia principles.

The Indonesia Stock Exchange (IDX) continues to make various efforts to facilitate Muslim investors in trading shares in compliance with sharia principles. One strategic measure taken is the provision of a category of sharia-compliant shares that meet Islamic criteria. Currently, the IDX has several sharia indices, including the Indonesia Sharia Stock Index (ISSI), Jakarta Islamic Index (JII), Jakarta Islamic Index 70 (JII70), IDX Sharia Growth, and IDX-MES BUMN17. The number of Sharia stock investors in Indonesia continues to grow each year. This positive trend is reflected in the increase in trading volume and market capitalization of sharia stocks in the 2019–2024 period, as illustrated in the chart of sharia stock developments.

Investors in the Islamic capital market are required to understand the boundaries and rules of Islamic investment, both in terms of objectives, targets, processes, and implications (Jalari et al., 2023). Not all forms of investment are permissible in Islam; thus, adequate knowledge is key to avoiding practices that contradict Sharia principles (Priyono et al., 2025). The prevalence of fraudulent investment cases in Indonesia, such as the phenomenon of “bogus investments” that have harmed many parties, further underscores the importance of this understanding. Sound knowledge of Islamic investment principles will help investors minimize the risk of financial and moral losses. In the era of globalization, the market offers various investment opportunities, but these opportunities also create space for criminal exploitation (Abideen et al., 2023). Investment offers through websites or applications often exploit public vulnerabilities, with promises of high and unrealistic returns, while requesting upfront capital deposits. Some offers are even deliberately designed to exploit the ignorance of prospective investors (Pradhan, 2021).

The COVID-19 pandemic accelerated the shift of activities into the online realm, including in the field of investment. The increased use of online platforms for communication, work, and investment brought both convenience and risks (Taufik & Rusmana, 2023). One of the greatest risks was the rise in cases of “bogus investment services” exploiting the pandemic situation to reap illegal profits. Investment fraud can be defined as any form of deception related to stocks, bonds, commodities, limited partnerships, property, or other types of investments, built on misleading promises and coercing the target to invest (Yandra & Wijayanti, 2022). Illegal investments continue to emerge and claim victims, driven by the lure of instant profits that make people less cautious. The losses caused threaten all segments of society interested in investing. Alongside the development of financial technology (fintech), illegal online investment crimes have become increasingly diverse in their methods (Hardana et al., 2024).

Various bogus investment cases have been uncovered in North Sumatra in recent years. In 2021, hundreds of residents of Deli Serdang became victims of fraud by Yayasan Sari Asih Nusantara. In 2022, the fraudulent investment case involving the Binomo platform implicated a public figure from Medan, Indra Kesuma alias Indra Kenz, with 118 victims and losses reaching IDR 72.1 billion, including residents of Medan City. In 2024, residents of Serdang Bedagai suffered losses of IDR 2.2 billion due to a rice milling investment scam. Another case involved offers of gold and cooking oil projects with promises of high profits, resulting in losses of IDR 51 million. Still in the same year, losses of IDR 3.1 billion befell 38 individuals, mostly women from various backgrounds in Medan City, due to a gold investment scam. The Financial Services Authority (OJK) identified various illegal investment schemes, including unlicensed money investment, unlicensed online trading with multi-level marketing schemes, money game-based investment offers, unlicensed investment training, crypto asset investments with unreasonable returns, as well as unlicensed commodity futures or forex trading.

Investment decisions are processes undertaken by investors, whether individuals or companies, in determining investment choices based on the resources they possess, including capital and available information (Hossain & Siddiqua, 2022). The primary goal of investors in investing is to obtain an expected return or an increase in asset value in the future. To achieve this goal, investors must make investment decisions that may be influenced by rational as well as irrational behavior. Rational investors generally conduct in-depth fundamental analysis and act cautiously in every step, whereas irrational investors tend to be reactive and sensitive to the information they receive. In traditional finance theory, the assumption of rational behavior is embedded in investor characteristics as described in the Efficient Market Hypothesis (EMH). According to Fama, an efficient market allows stock prices to quickly and

fully reflect all available information. This information forms the basis of fundamental analysis, which ultimately can influence the intrinsic value and price of stocks.

Fama also emphasized that in an efficient market, security prices reflect the fair value of all relevant information. Therefore, in theory, investors cannot consistently obtain abnormal returns or beat the market, as any actions taken will quickly be known and responded to by other investors. The only way to achieve higher returns is to invest in assets with greater risk. EMH categorizes markets into three forms: weak, semi-strong, and strong, each with different levels of information absorption. Weak-form markets only reflect past information, semi-strong-form markets reflect all public information, and strong-form markets reflect all information, both public and private. In a fully efficient market, the phenomenon of abnormal returns will not occur. Altin confirmed that the Indonesian capital market still falls into the weak-form category.

When all investors behave rationally, the capital market will be in a strong-form efficient condition, where prices reflect all available information and their movements are heavily influenced by the speed of information dissemination. However, not all investors act rationally due to various considerations that influence their investment decisions, including psychological factors that also impact the process (Reddy et al., 2025). These psychological factors are explained in Behavioral Finance theory, which views investment decision-making from a psychological perspective and challenges the assumptions of traditional finance theory. This concept, rooted in the studies of Tversky and Kahneman, demonstrates that investors frequently employ heuristics and are susceptible to cognitive biases. Through Prospect Theory, Kahneman and Tversky asserted that psychological factors, rather than rationality, more influence investment decisions, where perceptions of the probability of an event may be distorted. From a behavioral finance perspective, Shefrin posits that psychological biases can hinder rational decision-making, leading to flawed investment choices, which aligns with the view of Quaicoe and Eleke Aboagye, who emphasize the importance of exploring investor behavioral biases. In financial markets, limited knowledge and skills cause many investors to rely on intuition and subjective emotions, ultimately leading to trading errors, speculative behavior, purchasing stocks without intrinsic value analysis, following peers' buying trends, making decisions based on historical data, as well as holding on to losing investments while selling profitable ones.

Biases in investment decision-making are influenced by two main factors: cognitive and emotional. The cognitive factor relates to the way of thinking, knowing, and remembering, where cognitive bias is defined as a mental error caused by imperfect information processing, particularly in market conditions where information is difficult to analyze and tends to be asymmetric, such as information related to corporate actions, industry news, financial performance, macroeconomic conditions, and analyst recommendations (Khan et al., 2025). Cognitive biases can lead to distorted perceptions and irrational understanding, which are divided into belief perseverance the tendency to maintain a belief despite contradictory evidence and processing errors, namely mistakes in managing or processing information. Belief perseverance includes conservatism bias, hindsight bias, representative bias, confirmation bias, and overreaction, while processing errors include anchoring & adjustment bias, mental accounting bias, availability bias, and the disposition effect (Chishti et al., 2025). On the other hand, emotional biases are distortions more influenced by feelings and spontaneity than by facts, which include loss aversion bias, regret aversion bias, overconfidence, and herding. The greater the influence of information, experience, and psychological conditions on investors, the greater the potential for biases to emerge, thus reducing the quality of investment decisions if not properly managed.

Several previous studies have identified the presence of biases in the financial and investment decision-making process that are irrational in nature. Rahman and Putri, as well as Alfred, found that biased behavior influences investor decisions in North Sumatra, although it does not always appear in every investment decision. This is consistent with the findings of studies, which show variations in the influence of bias on investment decisions. However, the majority of these studies focus more on the direct effect of bias on investment decisions without examining the possible existence of a mediating variable that could explain this relationship more comprehensively. This study addresses this gap by proposing investor behavior as an intervening variable linking bias to investment decisions.

Investor behavior reflects rationality in decision-making, characterized by the ability to consider various alternatives, evaluate information objectively, and choose the best option based on thorough analysis. Based on the Theory of Planned Behavior (TPB), investment decisions are influenced by

individual attitudes, subjective norms, and perceived behavioral control. In the context of the Islamic capital market, Muslim investor behavior is an interesting topic but remains relatively underexplored, particularly in Indonesia. The principles of Islamic investment emphasize the prohibition of *riba*, *maysir*, and *gharar*, as well as the upholding of justice and benefits for both worldly and afterlife purposes. Thus, the behavior of Muslim investors in the Islamic capital market is guided not only by financial profit considerations but also by adherence to sharia values (Rehman et al., 2025).

Within the TPB framework, intention serves as a bridge linking cognitive and emotional biases to Sharia investment decisions. Muslim investors with a positive attitude toward sharia investment tend to have a strong intention to invest, even when experiencing biases such as overconfidence or regret aversion. Subjective norms, such as support from the community or religious leaders, can strengthen this intention, while perceived behavioral control can either increase or decrease risk-taking tendencies depending on the type of bias experienced. This study offers novelty by proposing Muslim investor behavior as a mediating variable that explains the influence of bias on investment decisions. In addition to making a theoretical contribution to the literature on Islamic financial behavior, this study is also expected to provide practical implications for investment strategies that take psychological factors into account. The selection of North Sumatra as the research location is based on the high number of illegal investment cases in the region, indicating investor vulnerability to irrational investment offers, while also highlighting the urgency of examining the role of cognitive and emotional biases in investment decisions.

This study aims to examine the effect of cognitive bias and emotional bias on Sharia stock investment decisions by including investor behavior as a mediating variable. The research questions posed are: (1) Does cognitive bias affect sharia stock investment decisions through investor behavior? and (2) Does emotional bias affect sharia stock investment decisions through investor behavior? This study employs the Theory of Planned Behavior framework to explain how attitudes, subjective norms, and perceived behavioral control can mediate the influence of bias on investment decisions in the Islamic capital market. The contribution of this research lies in adding the perspective of investor behavior as an intervening mechanism that has been little studied in the Islamic financial behavior literature, particularly in Indonesia. The findings are expected not only to enrich theory regarding the relationship between cognitive bias, emotional bias, and investment decisions but also to provide practical recommendations for investors, capital market authorities, and Islamic financial service providers in developing more effective investment strategies based on sharia principles. Thus, this research seeks to bridge the knowledge gap while offering strategic implications for managing investment behavior in the sharia stock market.

## METHOD

. This study employs a mixed methods research design, combining both quantitative and qualitative approaches to obtain more comprehensive, valid, reliable, and objective findings (Ghanad, 2023). Specifically, it adopts a sequential explanatory strategy, where quantitative data is first collected and analyzed to address the research questions, followed by qualitative data collection to provide deeper insights and explanations based on the quantitative results (Kotronoulas et al., 2023). The quantitative phase examines causal relationships between variables, with cognitive bias and emotional bias as independent variables, and investor behavior and investment decisions as dependent variables. The subsequent qualitative phase uses a descriptive approach to explore real-world events, phenomena, and investor experiences that occurred during the study period. This sequential integration enables the explanation of statistical findings through a contextual understanding. The research will be conducted in North Sumatra from October 1, 2024, to March 31, 2025, ensuring sufficient time for both phases to be implemented effectively.

### Quantitative Method

The population in this study includes all objects or subjects that possess certain characteristics following the research objectives, not only in terms of the number of individuals but also the inherent traits and attributes they possess. Based on data from the Financial Services Authority (OJK) of North Sumatra, as of September 2024, there were 4,333 sharia investors, reflecting a growing interest in Indonesia's sharia capital market. The sample is defined as a portion of the population that represents its characteristics, so that the findings from the sample can be generalized. The sample size was determined using the Slovin formula with a 95% confidence level and a 5% margin of error, resulting in

366 respondents from the total population. The sampling technique used was purposive sampling, with specific criteria relevant to the research objectives (Hossan et al., 2023). The research data consists of primary data collected through questionnaires and interviews with the Head of the Indonesia Stock Exchange, North Sumatra Region, the Branch Manager of Phintraco Sekuritas Indonesia, as well as investors holding sharia stocks. Additionally, secondary data were obtained from relevant documentation, including investor data and other supporting information pertinent to the research analysis.

### Quantitative Data Collection Technique

The quantitative data for this study were gathered through a field survey using questionnaires distributed to Sharia stock investors in North Sumatra. A questionnaire is a method of data collection in which respondents are presented with a set of written questions or statements to answer, to obtain information aligned with the research objectives and examine the relationships between variables (Pradhan, 2021). This study employed a closed-ended questionnaire format, enabling respondents to choose from predefined answer options. The instrument consisted of 38 prepared items, with each question offering five answer choices weighted with different scores. The questionnaire was distributed online via Google Forms by directly sharing the link with respondents through personal chats and WhatsApp groups, allowing participants to complete the survey at their convenience.

To ensure the instrument's accuracy and reliability, a preliminary trial was conducted before it was administered to the actual sample. This trial involved 30 Sharia stock investors who were part of the same population but excluded from the final research sample. The trial process aimed to assess the validity and reliability of the questionnaire items, ensuring that the instrument effectively measured the intended variables. Additionally, the questionnaire contained a demographic section to collect participants' background information such as name, age, education, income, and gender which was then used to create a comprehensive respondent profile for further analysis.

### Quantitative Data Analysis Technique

This study employed the Structural Equation Modeling–Partial Least Squares (SEM–PLS) approach using the SmartPLS software to analyze the relationships among cognitive bias, emotional bias, investor behavior, and the decision to invest in Sharia stocks. SEM–PLS was chosen because it is suitable for analyzing complex models involving mediation, does not require strict assumptions of normality, and can be effectively applied to medium sample sizes. The data analysis was conducted in two main stages:

#### Measurement Model (Outer Model) Evaluation

The outer model evaluation was performed to assess the validity and reliability of the measurement instruments. The following criteria were applied:

1. **Convergent Validity:** Evaluated using the outer loadings of each indicator and the Average Variance Extracted (AVE). An indicator is considered valid if its loading value is greater than 0.70, and the AVE for each construct exceeds 0.50.
2. **Discriminant Validity:** Assessed through the Fornell–Larcker criterion and cross-loadings to ensure that each construct is empirically distinct from the others.
3. **Construct Reliability:** Measured using Cronbach's Alpha (CA) and Composite Reliability (CR). Values above 0.70 indicate acceptable reliability.

#### Structural Model (Inner Model) Evaluation

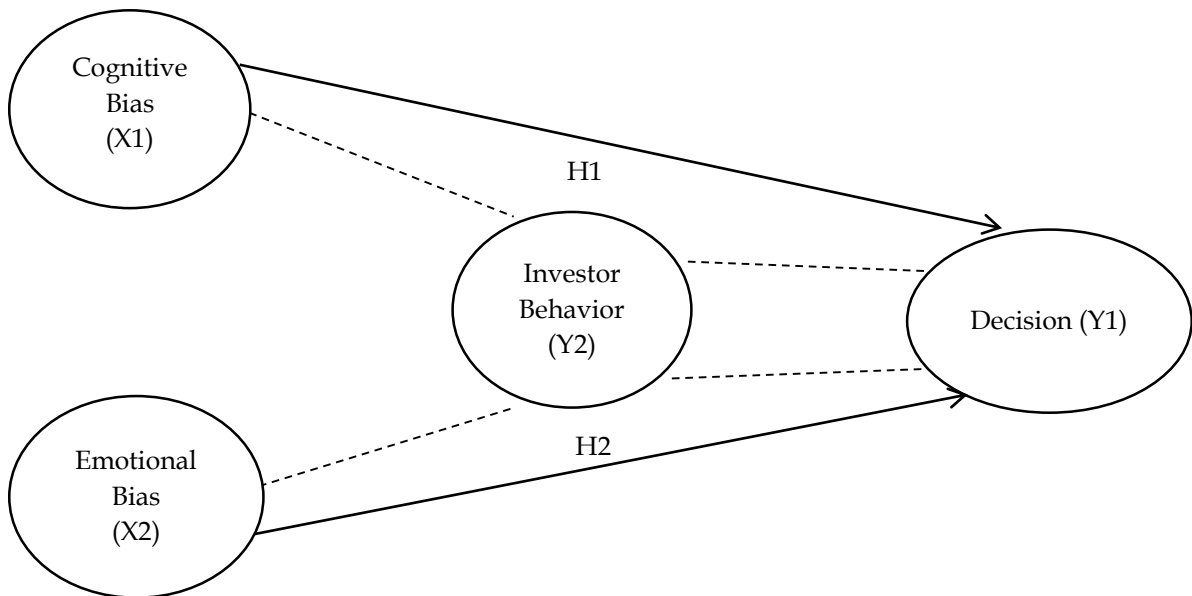
The inner model evaluation aimed to examine the hypothesized relationships between variables. The assessment involved the following:

1. **Path Coefficients:** To determine the strength and direction of the relationships among variables.
2. **Coefficient of Determination ( $R^2$ ):** To measure the proportion of variance in the endogenous variables explained by the exogenous variables.
3. **Effect Size ( $f^2$ ):** To assess the impact of each exogenous variable on the endogenous variable.

4. Predictive Relevance ( $Q^2$ ): Obtained using the blindfolding procedure to evaluate the predictive accuracy of the model.

### Hypothesis Testing

The hypotheses were tested using the bootstrapping technique with 5,000 resamples to estimate the significance of path coefficients. Hypotheses were accepted if the p-value was less than 0.05, indicating a statistically significant relationship at the 5% level.



The hypotheses tested were:

- H1: Cognitive bias (X1) has a significant positive effect on the decision to invest in Sharia stocks (Y1) through investor behavior (Y2).
- H2: Emotional bias (X2) has a significant positive effect on the decision to invest in Sharia stocks (Y1) through investor behavior (Y2).

The mediation effects were also examined using the bootstrapping method to determine whether investor behavior significantly mediates the relationships between cognitive bias and investment decision, as well as between emotional bias and investment decision.

### Qualitative Method

This study employed a qualitative research method, which is used to describe and analyze phenomena, events, beliefs, attitudes, and social activities at both individual and group levels (Lim, 2025). Qualitative research seeks to explore and understand the meaning individuals or groups attribute to human or social issues (Cheong et al., 2023). Often referred to as naturalistic research, it is conducted in a natural setting where the researcher serves as the main instrument, data collection is carried out through triangulation, analysis is inductive, and the emphasis is placed on meaning rather than generalization. In this study, the qualitative approach was applied to understand social phenomena in their natural context, particularly related to perspectives on behavior. The research subjects were selected purposively, with criteria including: understanding of the Sharia capital market in North Sumatra, knowledge of Sharia investment products and retail investor characteristics, and being an individual investor in Sharia stocks (Fernandes et al., 2025). Data collection was conducted from March 2024 through interviews, observations, and documentation, using purposive sampling to ensure participants met the specific characteristics relevant to the research objectives.

### Qualitative Data Collection Technique

According to Arikunto, data collection techniques refer to the various methods researchers can use to obtain data, which are abstract in nature yet demonstrable in practice. In this study, the researcher

engaged directly with the research setting to ensure the validity of the data, employing three primary techniques: observation, interviews, and documentation (O'Connor & Joffe, 2020). Observation, as described by Nasution in Sugiyono, is the systematic recording of observable phenomena, serving as a foundational aspect of scientific inquiry. This study employed non-participant observation, where the researcher remained separate from the participants' daily activities and focused solely on observing without involvement. The aim was to capture detailed behavioral data such as body movements, facial expressions, and verbal responses without interpreting underlying meanings. The interview method followed Esterberg's definition, involving in-depth exchanges of information through direct interaction. The researcher employed a semi-structured interview approach, guided by predetermined questions that allowed for open discussion, thereby enabling the collection of rich and relevant data. Interviews were conducted in three stages: preparation (defining objectives, identifying information needs, selecting and contacting participants, and drafting questions), execution (establishing rapport, posing questions systematically, and recording responses), and reporting (organizing interview themes, summarizing findings, and documenting participant identities) (Köhler, 2024).

The documentation method, as explained by Berg, was used to collect and examine written records, images, and other relevant artifacts to provide supplementary evidence for the study. This method ensures that the researcher acquires complete and verifiable data rather than relying on estimations. The main research instrument was an interview guide designed to ensure that all data aligned with the research objectives and addressed the problem statements comprehensively. This guide outlined the key topics to be explored but allowed flexibility for additional questions to arise during observation and interviews. Semi-structured and open-ended questions were employed to encourage participants to share detailed responses while still keeping the discussion focused. This combination of observation, semi-structured interviews, and documentation ensured that the data collected was both in-depth and reliable, offering a comprehensive understanding of the research phenomena.

### Qualitative Data Analysis

Qualitative data analysis is the process of systematically searching for and organizing data obtained from interviews, field notes, and documentation by categorizing, breaking it into units, synthesizing, arranging it into patterns, selecting the most important elements to study, and drawing conclusions that are easy to understand for both the researcher and others. Referring to Miles and Huberman, this process involves four key stages: data collection, data reduction, data display, and conclusion drawing/verification. In this study, data were collected through interviews, direct observation, and documentation, with documentation serving to support and validate the interview findings. Data reduction involved summarizing, identifying the main points, focusing on significant aspects, identifying themes and patterns, and eliminating irrelevant information requiring the researcher to have broad and deep insight to carry out this sensitive thinking process effectively. The reduced data were categorized and coded using numbers or letters to indicate their classification and patterns. Data display was then carried out through clear, detailed, and comprehensive narratives, as well as diagrams or charts to illustrate relationships between categories, making field findings easier to interpret. Finally, conclusions were drawn and verified to ensure credibility, supported by valid and consistent evidence that was cross-checked by revisiting the field if necessary.

### Data Validity Test

In this study, data validity was determined using the credibility criterion, following the approach outlined by Creswell. To ensure the relevance and trustworthiness of the research findings, the researcher applied two main strategies: persistent observation and triangulation. Persistent observation involved conducting careful and continuous observations to record events with certainty and in a systematic manner, much like re-checking an exam or paper to identify possible errors. This method allowed the researcher to verify the accuracy of the collected data, identify relevant characteristics or elements within the research context, and provide accurate, systematic descriptions of observed phenomena. Triangulation, on the other hand, was implemented as a multi-method approach to both data collection and analysis, based on the idea that a phenomenon can be better understood and verified when approached from multiple perspectives, thus increasing the reliability of findings. Specifically, the researcher applied three types of triangulation: (1) data source triangulation, which involved comparing and cross-checking the credibility of information obtained from multiple interviews conducted at

different times with various sources; (2) theory triangulation, which involved applying multiple theoretical perspectives to ensure the collected data could be thoroughly analyzed during the discussion phase; and (3) method triangulation, which entailed verifying research findings through different data collection techniques or by comparing results obtained from the same technique across different sources. By comparing information from different respondents and identifying similarities, differences, and unique points, the researcher aimed to enhance trustworthiness and minimize subjectivity, ultimately drawing conclusions that capture the true meaning of the collected data.

## RESULTS AND DISCUSSION

In this analysis, both the magnitude of direct and indirect effect coefficients are examined. Mediation testing is conducted to explore more deeply whether the mediating variable successfully mediates the influence of the independent variable on the dependent variable. This explanation can be found in the output of the Indirect Effect, where if the P-value is less than 0.05, it indicates that the independent variable affects the dependent variable through the mediating variable. Path analysis results from the Indirect Effect output demonstrate that when the P-value is below 0.05, mediation occurs in the relationship between variables (Sofyani, 2013). This confirms the role of the mediator in strengthening or channeling the effect from the independent to the dependent variable.

The analysis of direct, indirect, and total effects is carried out to determine the overall coefficient values, which ultimately reveal whether the mediating variable has a significant role. Direct effects describe the influence of the independent variable on the dependent variable without involving the mediator, while indirect effects show how the mediator contributes to the relationship. Total effects, therefore, are the sum of direct and indirect effects, providing a comprehensive view of the relationship between variables. By comparing these values in the Indirect Effects and Total Effects outputs, researchers can identify the strength and significance of mediation. This approach helps to clarify whether the mediator variable plays a pivotal role or whether the relationship is predominantly direct. The results of this testing can be seen in the following output tables.

**Table 1. Results of the Indirect Effect Test and Total Effect**

|   | <b>Original Sample (O)</b> | <b>T Statistics ( O/STDEV )</b> | <b>P Values</b> |
|---|----------------------------|---------------------------------|-----------------|
| Emotional bias (X2) -> investor behavior (Y2) -> investment decision (Y1) | 0.629                      | 17.575                          | 0.000           |
| Cognitive bias (X1) -> investor behavior (Y2) -> investment decision (Y1) | 0.426                      | 9.395                           | 0.000           |

### The Influence of Cognitive Bias on Sharia Stock Investment Decisions through Muslim Investor Behavior

Based on Table 1, the parameter coefficient of the influence of cognitive bias on Sharia stock investment decisions through Muslim investor behavior is 0.426. This value indicates that cognitive bias affects Sharia stock investment decisions when mediated by Muslim investor behavior. Furthermore, the T-statistic value obtained is 9.395, which is greater than the t-table value of 1.97, suggesting that the result is statistically significant. In other words, the hypothesis stating that cognitive bias affects Sharia stock investment decisions through Muslim investor behavior is supported. The findings reveal that cognitive bias does not have a direct influence on Sharia stock investment decisions but exerts a significant indirect effect through Muslim investor behavior. This implies that the cognitive bias experienced by investors does not immediately determine their final investment decisions; instead, it first shapes behavioral patterns that subsequently drive decision-making.

This outcome underscores the critical role of investor behavior as an intervening variable in the relationship between cognitive bias and investment decisions. Various forms of cognitive bias, such as anchoring and representativeness, shape thought processes and behavioral tendencies in investment activities. These tendencies are reflected in the behavior of Muslim investors, which then becomes the foundation for making Sharia-compliant stock choices. Within the framework of Behavioral Finance Theory, this strengthens the argument that cognitive biases influence decisions through behavior, rather than directly dictating outcomes. Investors do not automatically make deviant decisions solely due to cognitive bias; instead, the biases affect the way they process information, assess risks, and respond to market dynamics all of which are manifested in behavior.

From the perspective of the Theory of Planned Behavior (TPB), Muslim investor behavior mediating the influence of cognitive bias can be explained through the components of intention and perceived behavioral control. Cognitive biases shape investor perceptions and attitudes toward certain investment actions, which in turn build intentions to act (for example, purchasing specific stocks due to anchoring or confirmation bias). These intentions, when reinforced by the investor's perceived ability to control their decisions, translate into actual investment actions. Moreover, the behavior of Muslim investors is strongly shaped by Islamic values deeply embedded in their mindset and actions. Therefore, although cognitive bias influences their behavior, the final investment decisions are filtered through principles of prudence and Sharia compliance.

Consequently, this study provides new insight that interventions in managing cognitive bias should focus on shaping healthy investment behavior aligned with Sharia principles. Since behavior constitutes the primary channel through which bias affects decisions, educational initiatives and investor development programs for Muslim investors should emphasize strengthening positive behavior and controlling bias in the stages of thinking and acting, rather than merely targeting the final decision-making stage. These results further reinforce the theoretical stance that cognitive bias does not immediately alter decisions but operates through psychological and behavioral processes. The impact of bias emerges through the formation of thought patterns and investment habits, which eventually accumulate into observable behavior. Therefore, investment decisions represent the outcome of a series of cognitive processes mediated by behavior, shaped by investor experience, preferences, and perceptions. Within the TPB framework, Muslim investor behavior reflects intention, which itself is shaped by attitudes, subjective norms, and perceived behavioral control. Cognitive bias affects attitudes and risk perceptions, which then form behavioral intentions. TPB thus confirms that actual investment behavior is influenced by intentions shaped through these mediating processes, not merely by bias itself. The findings of this study are consistent with and supported by previous research.

The findings indicate that cognitive bias does not have a significant influence on investors' decision-making, particularly in the context of Sharia stock investments. Representatives from the Indonesian Stock Exchange confirmed that this research result reflects actual market conditions. Many investors have developed systematic frameworks and strategies, which help them avoid being easily swayed by cognitive distortions such as overconfidence, anchoring, or availability bias. Instead, investors often rely on financial data, historical records, and technical or fundamental analysis. As Mr. Pinthor from the Exchange explained, "Emotions tend to be stronger than non-emotional factors. Our investors are quick to react to news, sometimes even before verifying its truth. For example, when the media publishes positive or negative news, it can be used to pump or drop prices, and many retail investors immediately react without deeper analysis." This statement reinforces the view that emotions, rather than cognitive misjudgments, are more dominant in shaping investors' actual market behavior.

From the perspective of securities companies, the finding that cognitive bias has little impact on decision-making also aligns with their experiences in serving various types of investors. Their observations suggest that extreme market fluctuations tend to trigger impulsive actions among investors, primarily driven by emotions rather than distorted logic. Retail investors, in particular, often make decisions based on fear of loss or herd mentality, which are emotionally charged rather than cognitively biased behaviors. A representative from a securities firm highlighted this issue: "Most of them follow feelings more than rational analysis. Our society prefers instant results; they want quick profits without waiting long. That's why they tend to follow what they see on social media and react immediately." This supports the interpretation that emotional bias is a stronger determinant of irrational decisions compared to cognitive bias in today's market environment.

The interviews also reveal that even among individual investors, emotional bias tends to overshadow cognitive distortions. Ms. Dian Permata Sari, one of the research informants, emphasized the strong impact of emotional experiences, especially initial successes, in shaping investment patterns. She stated: "From our first investment experience if the first stock we buy gives us profit, then afterward we rely on feelings. Cognitive factors still influence, but maybe only a little." This highlights that emotions such as confidence gained from early wins or fear after losses are more powerful in driving investment behavior than purely cognitive distortions. Initial emotional reinforcement builds investor confidence, which then guides subsequent actions, often without in-depth rational analysis.

These insights suggest that while cognitive bias remains present, its impact is relatively minor compared to emotional influences. Emotional bias manifests more strongly in the form of overconfidence after success or panic during downturns, which often dominate investor decision-making processes. This pattern is consistent across both exchange and securities firm perspectives, as well as individual investors' experiences. The dominance of emotional responses shows that Sharia investors, like their conventional counterparts, are not immune to psychological pressures from market volatility. However, in practice, cognitive distortions such as anchoring or overconfidence are generally contained through improved literacy, access to credible financial information, and structured investment frameworks.

In conclusion, the findings underline that emotional bias plays a more critical role than cognitive bias in shaping Sharia stock investment decisions. Institutional perspectives, securities firms, and individual investors consistently highlighted the dominance of emotions such as fear, greed, or euphoria during market movements. Cognitive bias, though present, is minimized by systematic analysis, data-driven strategies, and educational initiatives provided by exchanges and securities companies. The evidence suggests that Sharia investors require not only analytical literacy but also emotional discipline to enhance rational decision-making. This demonstrates the importance of focusing on emotional management strategies when educating investors in Sharia-compliant markets.

### **The Influence of Emotional Bias on Sharia Stock Investment Decisions through Muslim Investor Behavior**

Based on Table 1, the parameter coefficient of the influence of emotional bias on Sharia stock investment decisions through Muslim investor behavior is 0.629. This value indicates that emotional bias significantly affects Sharia stock investment decisions when mediated by Muslim investor behavior. Furthermore, the T-statistic obtained is 17.575, which is much greater than the critical value of 1.97, confirming that the result is statistically significant. In other words, the hypothesis stating that emotional bias affects Sharia stock investment decisions through Muslim investor behavior is supported. These findings reveal that emotional bias exerts its influence not directly on the decision itself but indirectly through behavioral patterns formed by investors.

The results suggest that emotions such as fear, greed, hope, and regret do not immediately trigger investment decisions but first shape specific behavioral tendencies that later form the foundation for decision-making. For instance, fear may cause investors to postpone making decisions due to perceived risks, while greed or optimism may push them to act impulsively in the market. This highlights the mediating role of behavior in transforming emotional responses into actual investment choices. Within the framework of Behavioral Finance Theory, emotions are recognized as central drivers of financial decision-making. However, the present findings provide deeper insight by showing that emotions primarily operate through behavior, influencing how investors react to information, assess risks, and engage with the dynamics of the market.

From the perspective of the Theory of Planned Behavior (TPB), emotions play an important role in shaping attitudes and perceived behavioral control. Negative emotions such as fear or regret may create more cautious or even passive attitudes toward investment decisions, while positive emotions such as hope and optimism can strengthen intentions to act. Nevertheless, these emotions do not lead directly to decisions; instead, they are first manifested in behavioral patterns such as herding, overreaction, or loss aversion. These behaviors then serve as channels through which emotional bias ultimately affects actual investment decisions. Thus, the TPB framework supports the idea that emotional bias influences behavior, which in turn leads to decisions.

In the context of Muslim investors, behaviors influenced by emotional bias are filtered through Islamic values such as prudence (*ihtiyath*), honesty, and avoidance of excessive speculation. While emotions still shape their thought processes and actions, Sharia principles act as safeguards that regulate and moderate impulsive behavior. This indicates that although emotional bias significantly contributes to investment behavior, the final decision remains aligned with ethical and religious standards. Such values ensure that decision-making in Sharia markets reflects not only emotional and behavioral dynamics but also compliance with faith-based principles.

Therefore, these findings emphasize that the impact of emotional bias on investment decisions in the Sharia capital market is not direct but mediated through investor behavior. This highlights the importance of focusing on behavior as the primary mechanism through which emotions shape financial outcomes. To foster healthy and Sharia-compliant investment practices, interventions should target the development of sound behavioral patterns rather than attempting to suppress emotions directly. Investor education and training should thus emphasize behavioral control, risk awareness, and decision-making discipline to mitigate the negative effects of emotional bias. In conclusion, the study confirms a significant indirect effect of emotional bias on Sharia stock investment decisions through Muslim investor behavior. Behavior emerges as the key mechanism through which emotions influence decisions, consistent with both Behavioral Finance Theory and the Theory of Planned Behavior (TPB). These results are in line with previous studies that demonstrate the crucial role of emotions in shaping investment outcomes, particularly when mediated by behaviour.

In addition to the qualitative data, Sharia stock investment decisions influenced by emotional bias demonstrate a unique pattern compared to conventional investments. Sharia investors generally adopt a more cautious stance, as their considerations extend beyond financial risk to include compliance with ethical and religious principles. In practice, these investors not only assess potential profits but also evaluate the legitimacy of business activities, ensuring that they align with Islamic values. This selectivity often leads them to avoid speculation, excessive uncertainty (*gharar*), gambling-like transactions (*maysir*), and interest-based practices (*riba*). Nevertheless, interviews revealed that emotional bias still emerges during decision-making processes. Feelings of anxiety, fear of loss, or even euphoria during market rallies continue to influence behavior despite the presence of strong religious filters. As one informant stated: "Sharia investors can be considered wiser, more thoughtful. They are mostly long-term oriented, not short-term. From our data, the highest proportion of long-term investors is in Sharia stocks. So, emotions among Sharia investors are generally more controlled than among conventional investors." This illustrates that although Sharia values offer emotional restraint, emotional bias is not completely absent when investors face market pressures.

Another key finding concerns the different ways individual and institutional investors manage emotional bias in their investment decisions. Institutional investors generally employ structured and rigid analytical frameworks, while retail investors tend to be more vulnerable to emotional influences. Large transaction values push institutions to trade less frequently, often only two or three times per month, and each decision is supported by a comprehensive analysis of both fundamental and technical aspects. By contrast, individual investors, who typically manage smaller funds, are more active and may conduct transactions up to ten times per month. This high frequency makes them more prone to emotional reactions such as fear or greed in response to market volatility. According to Mr. Pintor, "Institutions are much more rigid in their calculations. They don't trade as frequently as retail investors. Institutions rely on complex analyses, so their decisions are less emotional compared to individuals who often buy and sell impulsively." These observations highlight a fundamental difference: institutions are better equipped to control emotions due to their analytical systems, while individuals are more susceptible to emotional decision-making.

The interviews also revealed strategies employed to reduce the impact of emotional bias on investment behavior. One significant approach is strengthening awareness of long-term investment goals, rather than being driven by short-term speculative motives. As Mr. Pintor emphasized, "From the start, in the Capital Market School, we always stress that investment is long-term, not short-term. There is no instant investment. If you want something instant, that's not the capital market. Successful investors, like Lo Kheng Hong, always rely on fundamental strategies, not technical ones." This educational effort aims to shape rational thinking among especially beginner investors, ensuring they understand that investment results require patience. By focusing on fundamental analysis such as

company performance and financial reports rather than short-term chart movements, investors can develop resilience against emotional swings. The success of legendary investors provides real-world evidence that this strategy is effective in building discipline and resisting emotional bias. Further strategies involve establishing clear decision-making frameworks before entering a transaction. This includes setting target prices for buying or selling, which helps prevent impulsive actions during periods of panic selling or market euphoria. Ms. Dian, a Sharia investor, explained: “The strategy is that before we even buy a stock, we must already have a number in mind. Whether in panic selling or euphoria, that number keeps us disciplined. As long as we stick to analysis, emotions can be managed.” This indicates that developing predetermined benchmarks and relying on systematic analysis allows investors to remain calm under fluctuating market conditions. Such preparation is essential to maintain clarity of thought and avoid decisions driven solely by fear or excitement. Ultimately, these practices highlight the importance of discipline and planning in reducing the influence of emotional bias in Sharia stock investments.

In summary, the findings show that emotional bias does affect Sharia stock investment decisions, but its impact is filtered through religious values and moderated by investor strategies. Sharia investors are generally more cautious and long-term oriented, yet they are not immune to emotional influences such as fear, greed, or euphoria. Institutional investors are better able to manage emotions due to structured analytical systems, while individuals remain more vulnerable because of their frequent trading habits. To mitigate emotional bias, both education and strategy play key roles: emphasizing long-term goals, relying on fundamental analysis, and setting clear investment benchmarks. These findings underscore the importance of combining religious values, analytical discipline, and behavioral awareness in creating rational and Sharia-compliant investment practices.

## CONCLUSION

The findings of this study conclude that cognitive bias does not directly influence Sharia stock investment decisions but rather operates through Muslim investor behavior as a mediating factor. This indicates that biases shape perceptions, intentions, and behavioral tendencies, which ultimately drive investment actions filtered by Sharia principles. The results highlight the central role of behavior in connecting cognitive processes with decision-making, consistent with Behavioral Finance Theory and the Theory of Planned Behavior. However, evidence from the stock exchange, securities firms, and individual investors suggests that emotional bias plays a stronger role than cognitive distortions in shaping actual investment practices. Emotional reactions such as fear, euphoria, or overconfidence after early gains tend to dominate decisions more than cognitive misjudgments like anchoring or availability bias. This demonstrates that although investors are influenced by cognitive processes, their final choices are more often driven by emotional responses to market fluctuations. Therefore, effective investor education should not only strengthen financial literacy and analytical skills but also focus on building emotional discipline. By combining rational frameworks with emotional control, Sharia investors can make more prudent, data-driven, and Sharia-compliant decisions.

The results of this study conclude that emotional bias significantly influences Sharia stock investment decisions, but the effect is indirect, operating through Muslim investor behavior as a mediating variable. Emotions such as fear, greed, optimism, and regret first shape behavioral patterns like herding, loss aversion, or overreaction which then form the basis for decision-making. Within the frameworks of Behavioral Finance Theory and the Theory of Planned Behavior, behavior emerges as the main channel that transforms emotional responses into actual investment choices. For Muslim investors, Sharia values such as prudence, honesty, and avoidance of speculation act as filters that moderate impulsive actions, ensuring that decisions remain aligned with ethical and religious standards. However, while institutional investors tend to manage emotions better through structured analysis, individual investors are more vulnerable due to frequent trading and short-term motives. Educational efforts stressing long-term orientation, reliance on fundamental analysis, and the establishment of clear benchmarks are therefore critical in mitigating emotional bias. These findings emphasize that emotions remain a powerful force in shaping investment behavior, and effective strategies to manage them are essential for fostering rational, disciplined, and Sharia-compliant investment practices.

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