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Identifying the Underlying Factors of Emotional Behavior in Iran's Capital Market[1]

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ABSTRACT

Due to the prominence of the capital market as a financing source for the country's industries and the problems of emotional behavior in investment, the key aim of this study is to recognize the underlying factors, causes, and challenges of emotional behavior and to identify management strategies for emotional behavior in Iran's capital market. The statistical population of the present study consists of professors, experts, and specialists in the field of managing emotional behavior and investing in the capital market, as well as real shareholders with experience, who were selected by purposive sampling and with maximum diversity until reaching theoretical saturation of 12 people. In this study, it was tried to analyze the data achieved from the interview by using Clarke and Braun's six-stage thematic analysis qualitative research method and by using open, central, and selective coding. Regarding the attained results, 16 main themes were identified for the underlying factors of emotional behavior and 8 main themes were identified for the causes of emotional behavior. The studied sample achieved results analysis indicate that 6 main strategies have been identified for managing emotional behavior, which are: awareness, independence of action, market orientation, insurance tools, problem-solving and correct decision-making, and emotion control.

1. This article is an excerpt from a doctoral dissertation.

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1. Introduction

Financial markets, essential for funding economic activities, have a complex structure influenced by various factors like macroeconomic conditions, socio-political elements, cultural norms, and legal frameworks. These complexities make understanding their structure and function challenging. According to Keynes, the stock exchange's primary role is to channel investments into the most profitable companies, prompting competition among investment seekers (Pandey et al., 2023). This competition can redirect funds from unproductive to productive markets. Financial markets significantly affect macroeconomic variables like investment, production, employment, consumption, exports, imports, and overall price levels, highlighting their crucial role in economic development and growth (Dadgar et al., 2023). Behavioral economics and finance build on cognitive psychology insights and conventional economic theories to better understand economic behaviors (Hosseini et al., 2024). Behavioral finance offers a new perspective in financial markets by addressing issues within the traditional paradigm using findings from cognitive psychology (Kakaei et al., 2021). Unlike traditional financial theories, which assume rational decision-making and suggest that stock prices reflect intrinsic value and future cash flows, behavioral economics considers human limitations and deviations from rationality. The efficient-market hypothesis posits that investors act rationally by processing all available information to maximize expected utility, but behavioral finance challenges this assumption by highlighting real-world deviations from rational behavior (Hemati et al., 2023). Evidence suggests that investors often rely on mental perceptions and emotional factors, rather than quantitative methods, to determine stock values. Judgments in the stock market are influenced by psychological and emotional conditions, shaped by cognitive limitations. Behavioral finance, a rapidly expanding field, examines how emotions, personality, culture, and judgments impact investor decision-making. It indicates that some price changes in securities occur without a fundamental basis, driven by investors'

emotional behaviors (Hassas Yeganeh et al, 2019). The interaction between emotional traders and rational arbitrageurs influences price formation. Stocks with more emotional traders and fewer rational traders tend to exhibit higher price volatility (Duxbury et al., 2020). Behavioral finance asserts two main assumptions: first, investors' decisions are influenced by their emotions, leading to beliefs about future cash flows and risks not grounded in facts. Second, arbitrage is both risky and costly, which means rational investors may not strongly challenge arbitrageurs in correcting prices to their fundamental levels (Hosseini et al., 2024). For example, developing countries like Iran experience significant instability in their financial and stock markets, creating uncertainty for investors. The considerable fluctuations in the Iranian stock market, notably in 2020, highlighted these challenges. That year, unfavorable macroeconomic conditions coupled with optimistic government projections about the stock market's future prompted a wide range of individuals to invest without seeking expert advice (Wang et al., 2022). This led to the Tehran Stock Exchange's main index increasing tenfold by August 2020 from its level at the start of 2019, with most shares being priced above their intrinsic values. However, this surge was unsustainable, and the market eventually corrected itself by about 40% from its peak (He et al., 2020). Behavioral finance focuses on understanding the psychological influences on investors and market participants (Aghababaei & Khademi, 2019). It suggests that decision-making is not solely based on rational and quantitative analyses but is also significantly affected by psychological factors and market expectations. This field combines elements of economics, psychology, and decision sciences. The study of behavioral finance aims to explore emotional behaviors within the capital markets and the reasons behind them (Nayebmohseni et al., 2022). By doing so, it seeks to identify strategies for managing such behaviors. This study specifically aims to analyze the causes, challenges, and management strategies related to emotional behavior in Iran's capital market. The paper you mentioned aims to address the gap in understanding and managing the emotional behavior of individual shareholders in the Iranian capital market. By employing a six-

step thematic analysis, the research seeks to identify key factors influencing shareholder emotions and propose strategies for managing these behaviors effectively. This approach could provide a more structured framework for understanding emotional dynamics in investment decisions, potentially leading to better management practices in the capital market.

The article is structured into five sections. The second section covers the theoretical foundations and a review of the research literature, highlighting the research gap. The third section outlines the research methodology and its implementation steps. The fourth section presents the research findings. Finally, the fifth section discusses the conclusions and future research suggestions.

2. Literature Review

In psychology, emotion is often defined as a complex state that triggers physical and psychological changes, influencing thoughts and behaviors. Excitability is linked to various psychological aspects like temperament, personality, mood, and motivation. David Myers describes human emotion as encompassing physiological arousal, behavioral expression, and conscious experience (Bahaghighat & Esmaeil, 2021). A widely accepted definition in research views emotions as multi-component processes, coordinating psychological subsystems. These include emotional and cognitive processes as well as motivational elements that manifest in facial expressions and physiological responses. Different emotion theories emphasize different functions of emotions and highlight several key roles, which are discussed in Figure (1) (Izard, 2009).

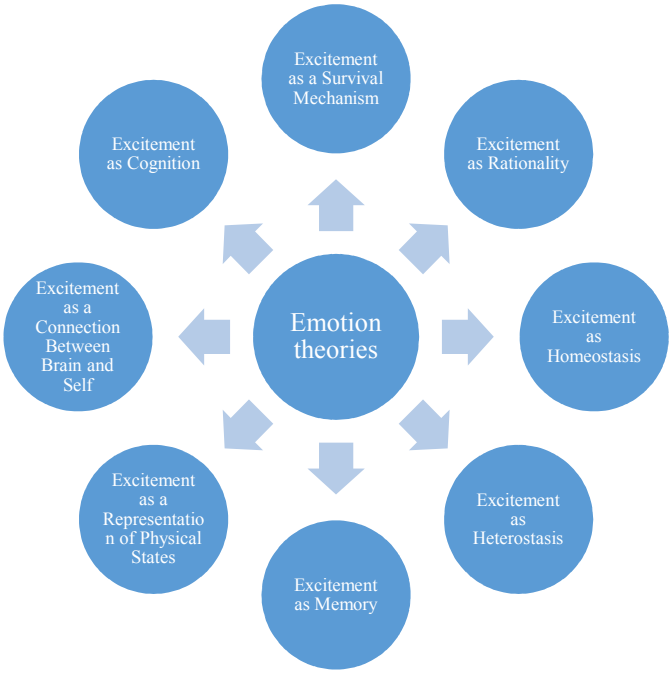

Fig. 1. Key roles of emotion theory

Emotion assessment is complex, with each type characterized by specific evaluation patterns. According to Lazarus, cognition is essential for emotion, as a cognitive evaluation process is necessary for emotion to emerge (Khosravani et al., 2021). The main theories of emotion fall into three categories (Komalasari et al., 2022):

- Physiological Theories: These suggest that bodily responses are the primary drivers of emotions. Changes in heart rate, breathing, and other physiological activities are seen as causing emotional experiences.
- Neurological Theories: These focus on brain activity as the source of emotions. Emotions are thought to result from neural processes and activation of certain brain regions.
- Cognitive Theories: These posit that thoughts and mental states are key to emotional development. According to these theories, emotions arise from how we interpret and evaluate different situations

The James-Lange theory is a prominent physiological theory of emotion, proposed by psychologist William James and physiologist Carl Lange (Cannon, 1987). According to this theory, emotions are the result of physiological reactions in the body. When you encounter an external stimulus, your body responds physically first—such as increased heart rate or trembling—and then you interpret these reactions, which leads to the experience of an emotion. For example, if you stumble upon a wild animal in a forest, your body's trembling and racing heart are interpreted as fear. Essentially, the theory posits that you feel afraid because your body trembles, not the other way around (Salami et al., 2021). In contrast, the Schachter-Singer theory, an example of a cognitive theory of emotion, suggests that physiological arousal occurs initially, but the emotion that follows depends on a cognitive interpretation of the situation (Gabunia, 2023). According to this theory, after experiencing physiological arousal, a person identifies the cause of this arousal, and the result of this cognitive appraisal determines the emotion experienced. For instance, seeing the wild animal causes physiological reactions; you then identify the situation as dangerous and label your experience as fear. This theory emphasizes the role of cognition in naming and experiencing emotions (Maulida & Sari, 2023). The Schachter-Singer theory, also known as the Two-Factor Theory of Emotion, incorporates elements from both the James-Lange and Cannon-Bard theories. Like the James-Lange theory, it emphasizes the role of physiological responses in forming emotions, but it also integrates cognitive interpretation, similar to the Cannon-Bard theory, suggesting that emotions are shaped by both physiological arousal and cognitive appraisal of the situation (Dror, 2017).

This means that similar physiological responses can lead to different emotions based on the context and cognitive interpretation. For example, an increased heart rate and sweating might be perceived as anxiety during a math test, while the same physical responses might be interpreted as love when with a romantic partner. This illustrates how emotions result from a

combination of external stimuli, physiological responses, and cognitive processes (Yasmin & Ferdaous, 2023). The theory emphasizes how emotions influence decision-making, a crucial process that involves selecting among various options. Our decisions, whether simple personal choices or complex economic strategies, have significant impacts on our lives and environments. In economic contexts, such as the stock market, decision-making is pivotal. Investors' choices, influenced by their emotions and cognitive evaluations, drive market movements and affect its overall efficiency (Lerner et al., 2015). While rational decision-making is often considered ideal, emotions play an inevitable role in shaping decisions, influencing outcomes across various domains (Shahabirad et al., 2022). People are generally advised to make decisions rationally, devoid of personal emotions, maintaining objectivity. However, the notion of a "rational man" is complex, and human decisions often diverge from traditional economic theories. Various factors, such as personality and perceptions of investment, play crucial roles in decision-making, leading to irrational behaviors influenced by both internal and external factors (Bouzguenda, 2018). Research in investor behavior reveals that rationality can be observed when traders manage portfolios effectively, buying low and selling high. Positive economics attempts to understand human actions based on how they actually behave, connecting closely with behavioral finance. Contrary to neoclassical theories, individuals do not fully act rationally due to preferences or cognitive errors (Sedliačiková et al., 2020). Non-rational influences like emotions, culture, personality, religion, and ideology significantly affect decision-making. Behavioral finance explores these influences, illustrating how emotional factors impact financial markets and guiding rational investor behavior. While some question the legitimacy of behavioral finance due to its psychological underpinnings, others who support classical finance remain skeptical of its separate status. Human decision-making involves a mix of rational processes and simplified cognitive mechanisms, like bounded rationality and heuristics, which are central to judgment and decision-

making studies (Dehghan Benaraki et al., 2021). Here's an overview of the two general categories of factors influencing the emotional behavior of real shareholders (Figure 2):

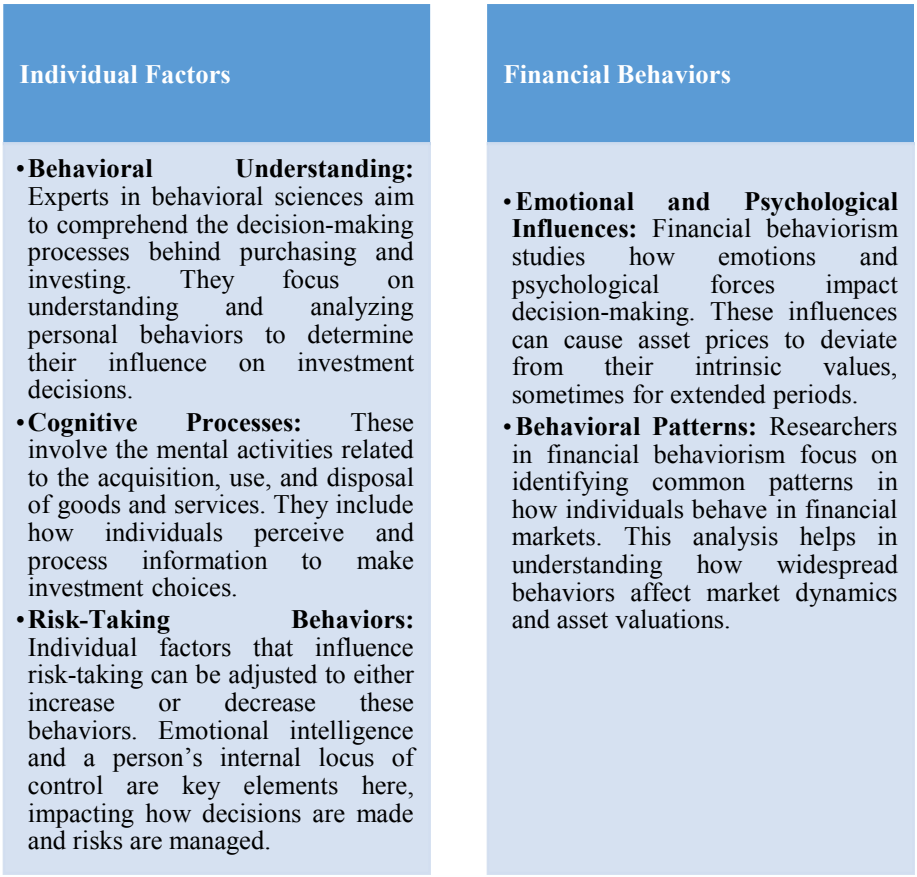

Fig. 2. Two general categories of factors influencing the emotional behavior (Bahrololoum & Mobarhan, 2020)

By considering both individual factors and financial behaviors, stakeholders can gain insights into the psychological and behavioral influences on shareholder decisions, which can help in formulating strategies for more effective decision-making (Sharma & Kumar, 2020). This article

examines the behavior of financial economics in the Iranian stock market in comparison with the factors affecting it, and a conceptual model is presented for it. Below, some of the most important research conducted in this field has been discussed. Padmavathy (2024) conducted a study to develop detailed models that accurately represent financial decision-making by considering psychological factors that lead to market anomalies. The findings indicate that behavioral data can help financial experts improve relationships with clients, enhance communication strategies, and boost competitiveness in a dynamic financial environment. Behavioral finance presents an ever-changing understanding shaped by biases and emotions, posing challenges to financial practices. Vuković and Pivac (2024) investigated which behavioral factors and personality traits influence investment decisions and their subsequent impact on investment outcomes. They conducted a survey with 310 investors in Croatia, applying partial least squares structural equation modeling. Their findings show that a preference for long-term investments positively influences satisfaction with investment performance. Dadgar et al. (2023) investigated the impact of investor sentiment and government actions on investor behavior within the Iranian stock market. Focusing on behavioral economics and finance, they used econometric models to analyze the stock market crisis trend observed in 2019. Data were collected daily from 30 large companies listed on the Tehran Stock Exchange. Their findings underscore the significant influence of both investor sentiment and government performance on the net inflow of individual investments into the stock market, indicating that these factors play a crucial role in shaping investor behavior.

Almansour et al., (2023) studied aims to examine the impact of behavioral finance factors on investment decisions in the Saudi equity markets through the mediating variable of risk perception. An online questionnaire was distributed to 150 individual investors, out of which 134 were returned and ready for analysis. The data is analyzed using structural equation modeling (SEM). The results show that herding, disposition effect,

and blue chip bias have a significant positive impact on risk perception. Overconfidence has a significant positive effect only on investment decision making, but not on risk perception. Risk perception is found to be significantly positively related to investment decision making. Hemati et al. (2023) examined emotional and herd behavior among stock market investors. Their study utilized multiple regression to assess research hypotheses, finding that the synchronization of stock prices negatively impacts shareholders' collective behavior. This effect is amplified negatively when institutional shareholders are considered as moderators. Ahmad and Wu (2023) explored the effect of herd behavior on market efficiency, investment decisions, and individual investor performance in the Pakistan Stock Exchange. Using a comparative approach and questionnaires, their data were analyzed with SPSS and AMOS software, and structural equation modeling was used to test hypotheses. The study revealed that herd behavior significantly negatively affects market efficiency and perceived investment outcomes while positively influencing individual decision-making. Komalasari et al. (2022) studied market overreaction, investor emotions, and investment decisions in emerging markets. They identified excessive self-confidence and representative bias as key factors influencing investor decisions in capital markets. Such overconfidence, combined with a reliance on past performance as an indicator of future results, leads investors to overestimate their knowledge under uncertain conditions.

Shahabirad et al. (2022) conducted a study with 300 randomly selected investors from the Tehran Stock Exchange. They applied inferential statistics, employing Pearson's correlation coefficient and structural equation modeling. Their findings suggested that, among the studied variables, spiritual intelligence had the most significant impact on decision-making. Specifically, the belief in religious capacities showed a factor coefficient of 0.81, followed by peace of mind at 0.67, transforming failure into opportunity at 0.40, and spontaneity and courage at 0.36. Regarding emotional intelligence, emotion control had a factor coefficient of 0.74,

pressure and stress management at 0.64, emotional regulation at 0.59, and external communication adjustment at 0.35. In terms of halo error, company fraud had a factor coefficient of 0.88 and the decline in disclosure rank at 0.55 were the most influential. Tootian Esfahani et al. (2021) found a significant relationship between self-control strategies, managers' financial literacy (including money and savings management, financing, credit management, and investment planning), and the quality of financial decision-making in the funding processes of companies listed on the Tehran Stock Exchange. Fooladi et al. (2021) utilized descriptive and inferential statistical techniques alongside structural equation modeling to demonstrate that investors' behavioral patterns, mediated by individual and general characteristics, significantly affect stock investment decisions. Judgment biases influenced by these characteristics also significantly impact investment decisions. However, while behavioral biases do not directly affect investment decisions, the individual and general characteristics of investors do have a significant effect.

Osoolian et al. (2021) explored the links between cognitive abilities, intuition trust, behavioral biases, and the performance of professional investors in the Tehran Stock Exchange. Using data from 311 professional investors collected via questionnaires, along with chi-square, Mann-Whitney, least square regression, and Probit regression analyses, they concluded that trusting intuition is more closely related to behavioral biases and performance than cognitive abilities, offering more insightful information overall. Sha and Ismail (2021) explored how gender and age influence investors on the Muscat Stock Exchange in Oman. They focused on 14 cognitive biases and analyzed how these demographics impact investment decisions. Their findings indicate that gender is a significant factor affecting investment choices. Cao et al. (2021) found that exploratory behavior, perspective, market dynamics, and herd behavior positively influence investment decision-making and performance, with the perspective factor having the strongest effect on both. Their research highlights the critical role these factors play in shaping investor behavior and performance.

Ratnalikar et al. (2020) emphasized the influence of key factors and biases from prospect theory, such as loss aversion, support aversion, mental budgeting, and mental accounting, on individual financial decisions. Sattar et al. (2020) reported that behavioral biases significantly impact investment decisions, with exploratory behaviors exerting more influence than perspectives and personality traits. Although numerous studies have examined investor behavior and financial factors, there remains a lack of a comprehensive model for managing the emotional behavior of individual shareholders in the capital market. This article aims to identify the factors affecting the emotional conduct of real shareholders in Iran's capital market and proposes strategies for managing these behaviors based on the findings.

3. Method

The present research is classified in the "combined research" group in terms of how to collect the required data. One of the important and significant advantages of mixed research designs is that it provides a more comprehensive and better picture of the research problem than any of the designs (quantitative or qualitative). In general, the reasons for choosing the mixed research method for this research are: 1) obtaining more evidence for managing the emotional behavior of real shareholders, 2) the lack of a suitable model for managing the emotional behavior of real shareholders and 3) the need to use the perspectives of Specialist experts to provide templates. In this article, in order to identify the underlying factors of emotional behavior in the Iranian capital market, the qualitative approach of thematic analysis has been used. Due to its exploratory nature, qualitative research is very useful when there is little literature on the topic in question. In this type of research, more emphasis is placed on the subject's experience and the direct relationship that the researcher establishes with society and the research environment. Qualitative research, which is often called descriptive research; it is any type of research that produces findings obtained by methods other than statistical methods or any quantification (Abdillah et al., 2019).

With the description of this issue, in this article, using thematic analysis, the factors affecting the emotional behavior of real shareholders in the capital market of Iran have been identified. The statistical population of the qualitative part of the research will include professors, experts and specialists in the field of managing emotional behavior and investing in the capital market, as well as real shareholders with experience, who were selected by purposeful sampling and with maximum diversity until reaching theoretical saturation. Data collection continues until new concepts and categories are obtained in new interviews. When new interviews do not yield new categories, data collection stops and the so-called categories reach saturation. Within the framework of the described method, 12 interviews have been conducted. Based on targeted sampling, 12 real capital market participants, all of whom were highly active in this field, were selected as the statistical sample of this study. To analyze the interview data, Clark and Brown's six-step method was used based on Figure (3) (Braun & Clarke, 2006):

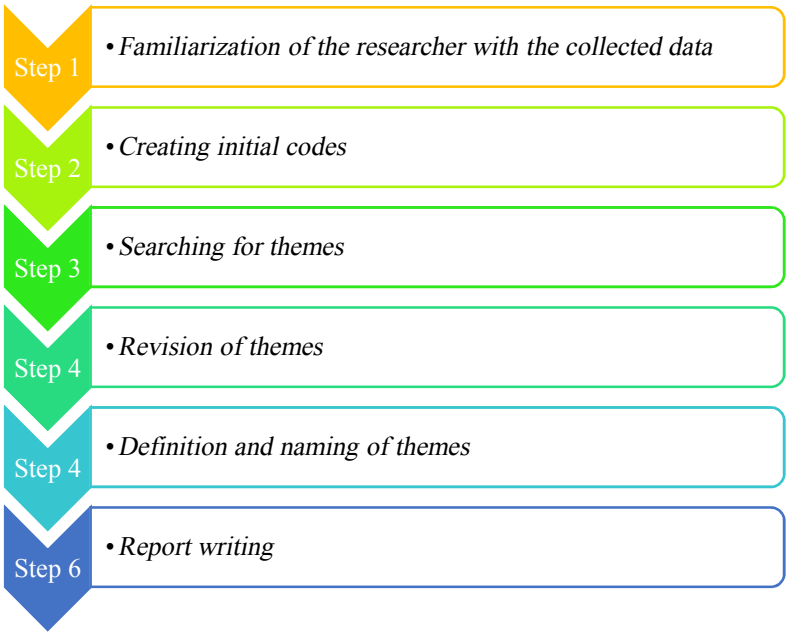

Fig 3. The thematic analysis step***s***

According to Figure (1), the steps of thematic analysis are as follows (Bertoni et al., 2019; Fitra et al, 2018):

- ***Step 1: Familiarization of the researcher with the collected data***: after transcribing the data along with descriptive details (including how the interviewee expresses his feelings when faced with questions, environmental conditions, etc.), the work of studying them several times and writing the initial ideas by the researcher begins. In this stage, qualitative data is repeatedly read with the aim of searching for meanings and patterns.
- ***Step 2: Creating initial codes***: after the researcher gets familiar with the data, initial coding begins; in this way, the interesting features of the data are coded in a systematic way and according to their set, each code can include one or more words, phrases, sentences or paragraphs. The extracted codes are directly expressed in the interviewees' conversations; or implicitly, it is extracted by the researcher from the text of the interviews. For example, Table (1) shows an example of coding.

Table 1. Coding qualitative data

Interview extract	Codes
Personally, I am not sure. I think that impulsive decisions and the desire to ***earn high income overnight*** lead to such a factor. Of course, other factors can also be influential. For example, in the unprecedented increase in stock prices in Iran in 2019, the largest group that invested was ***young people*** with ***insufficient investment experience***....	• *Gender* • *Age* • *Economic stagnation or prosperity* • *insufficient investment experience*

- ***Step 3: Searching for themes***: In this step, the researcher identifies potential themes; In other words, it has to decide which first-level codes to put in a category or theme so that they have the right semantic relationship.

Themes are generally broader than codes. Most of the time, you'll combine several codes into a single theme. In our example, we might start combining codes into themes like this:

Table 2. Generating themes

Codes	Theme
• *Gender* • *Age* • …..	• ***Personality type***
• *Economic stagnation or prosperity* • *insufficient investment experience* • ….	• ***Economic factors***

- ***Step 4: Revision of themes***: In the next step, the researcher reviews the themes and examines their relationship with the first-level codes and other second-level themes, arriving at the thematic map of the analysis, and actually by integrating sub-themes into larger and higher-level themes. , the general structure of the findings is revealed.
- ***Step 5: Definition and naming of themes***: After obtaining a satisfactory picture of the themes and correcting the specific codes in each theme and the general story of the analysis, it is time to define and name the main themes by the researcher. Naming of the main themes is done based on the content of the theme and the discretion of the researcher and supervisors and advisors.
- ***Step 6: Report writing***: At this stage, when the researcher is faced with a set of main themes that are completely abstract and consistent with the underlying structures of the research, he produces a scientific-analytical report according to the literature on the subject and the research question.

The validity of the theme analysis data was confirmed by the interviewees and then by informing the experts in the process of the interviews, how to code, analyze the data, and also use the experts' points of view to correct the necessary cases. In addition, in this article, the Duran

subject agreement method has been used to calculate the reliability of the comparisons made. Finally, by using brainstorming and with the participation of experts, emotional behavior management strategies have been developed based on the extracted factors.

4. Research Findings

To attain the research objective and classify the underlying factors, causes, and challenges of emotional behavior, and identify emotional behavior management strategies, the data collected from the interview was analyzed. For the underlying factors of emotional behavior, 180 initial codes were identified from the interview, and after categorization and combination, 16 main themes were identified. Table (3) depicts the themes and primary codes related to the underlying factors of emotional behavior.

Table 3. Results of coding the information extracted from the interviews - the category of emotional behavior underlying factors

Raw	***Concepts***
1	Behavioral and moral characteristics
2	Lack of correct recognition
3	Personality type
4	Economic factors
5	Psychological factors
6	Non-Financial Measures
7	Political factors
8	Social factors
9	Internal factors
10	External factors
11	Stock Exchange Organization
12	Company
13	Intervening factors
14	Macro factors
15	Micro factors
16	Government, economic structures, and the capital market

The open coding of the concepts in Table (3) is as follows:

- ***Behavioral and moral characteristics:*** "Aggression", "Being greedy", "Lack of self-confidence", "Lack of trust", "Hasty decisions of people", "Fear of getting poorer every day"
- ***Lack of correct recognition:*** "Lack of recognition and correction of behavioral patterns", "Lack of recognition of the thinking process in the decision-making process", "Advertising and media propaganda", "Education and culture making", "Level of knowledge", "Degree", "Rumors", Public opinion", "Fake news", "Lack of experience", "Lack of awareness", "Lack of efficiency and transparency of market and lack of access to information in the same way", "Lack of academic and professional training", "Lack of recognizing mental errors"
- ***Personality type:*** "Gender", "Age", "Self-control", "Calculating logic", "Behavioral biases", "High risk-taking and belief in luck"
- ***Economic factors:*** "Profit sharing", "Profit per share", "Income and wealth", "Inflation rate", "Interest rate and bank profit", "Type of industry", "Desirability and sensitivity of wandering capital compared to other markets", "International economic developments", "Investment profit of other markets", "Economic stagnation or prosperity", "Liquidity index level", "Sanction and extreme currency fluctuations", "Instability in the macro economy such as interest rate increase", "Mandatory pricing", "Per capita household income and their purchasing power", "Oil, gold, currency price fluctuations"
- ***Psychological factors:*** "Reluctance to risky transactions", "Risk aversion", "Individualism", "Concern about the future of the share price", "Recommendation of brokers", "Recommendation of friends and advisors", "Imitating others", "level of risk-taking"
- ***Non-Financial Measures:*** "Stock Price Trend and Fluctuations", "Features of lifestyle", "Person's job", "Unpredictability of investor behavior", "Risk of overnight decisions in macro-management decision-making fields", "Passive reaction of stock market trustees in facing these

risks", "lack of decision-making based on information and consultation with experts", "Factors related to the stock exchange organization", "Factors related to the companies themselves", "Market rumors", "Common interests", "News published in newspapers and magazines", "Unofficial news from company meetings", "Psychological effects of past stock price changes", "Flow of major and institutional investment", "Herd movement of shareholders towards the shares of these indices", "Behavior of others"

- ***Political factors:*** "Political economy expectations", "Failure of government planning", "Foreign policy conflict and unrest", "Government administrative corruption", "Militarism in politics", "Political conditions governing the executive power", "Decisions and laws and regulations created by the government and parliament", "News and domestic political developments", "Statements of domestic and foreign political officials", "Influence of international organizations on the market", "Political relations of Iran with other countries", "Instability in the political sphere and nuclear negotiations", " Positive laws and their changes"
- ***Social factors:*** "Social and cultural changes", "Security and stability of the region", "News and international political developments", "Effect of ambiguous social atmosphere on the country's economic rate", "Lack of social hope", "Cyberspace", "Unstable future of the legal entity"
- ***Internal factors:*** "Stock exchange conditions", "Company"
- ***External factors:*** "Economic factors", "Political factors", "Psychological factors"
- ***Stock Exchange Organization:*** "Production and creation of specialized knowledge", "Information mechanisms", "Information storage mechanisms", "Volume of transactions in the stock exchange", "Statements of the stock exchange officials about the current situation of the market", "Investment returns in the stock market compared to other markets", "Informal relations of stock exchange managers with shareholders"

- ***Company:*** "Transparency of financial information", "Share trading volume", "Price-to-earnings ratio", "Share risk", "Share income forecast", "Share price fluctuations", "Share cash profit", "Delay in dividend payment", "Equity rate of return", "Share liquidity", "Type of company ownership", "Company management", "Increase of company capital", "Programs announced by company managers and officials", "Relationship between the balance sheet items and the company's efficiency", "Reliability of published company financial data", "Company's past performance", "Company's competitive position", "Brand publicity and reputation", "Company's products"
- ***Intervening factors:*** "Person's behavior", "Market behavior", "Having a trading strategy", "Creating rumors by unrelated and influential persons and organizations in the capital market", "Abnormal decisions of the government", "Failure to gain shareholder trust from the government" "Policies of the US Federal Reserve in setting interest rates (due to the fluctuation of global markets)", "Decisions of the government and parliament etc. especially during the approval of the annual budget", "Decision of the central bank to increase or decrease the interbank interest rate and the deposit interest rate Banking as a risk-free interest rate", "Spreading rent news from inside companies as confidential information", "Optimism and overconfidence", "Denial and confirmation", "Following a herd strategy", "Worry about the analysis being wrong" "Worry about losing capital", "Worry about losing investment opportunities in the market", "Being called inept by people around you", "greed and fear", "Desire to get rich overnight", "Feeling of regret", "Interference on Investors' correct decision-making through social networks", "Radio and advertising", "Misleading news", "Imitation of others and group behavior", "Emotions and feelings", "Feeling backward", "Overnight successes", "False self-confidence", "Illusion of knowledge", "Inability to be alert", "Aggression", "Nervousness", "Being defective", "Being negative", "Lack of financial literacy of people", "Lack of necessary

training in the field of financial and capital literacy" "Interference of different people with informational rents", "Lack of market control from the point of view of the market supervisor", "Lack of investment diversification", "Sale and purchase option"

- ***Macro factors:*** "Non-expert recommendations at macro levels", "Trust and mass behavior of people", "Providing infrastructure by the government", "Political factors", "Economic factors", "Social factors", "Cultural factors", "Decisions of the stock exchange organization and Governmental institutions, "Mandatory pricing"
- ***Micro factors:*** "Personal behavior", "Not entering with an investment view", "Not having fundamental and technical knowledge about the stock", "Person's personality", "Not being logical and not analyzing"
- ***Government, economic structures, and the capital market:*** "Queuing phenomenon", "Macro government policies", "Risk transfer (systematic and unsystematic) to the market", "Mandatory pricing", "Increase and decrease of proprietary interest rate", "Feed rate and Profitability of companies"

Likewise, for the causes of emotional behavior, 32 initial codes were identified from the interview, and after categorization and combination, and integration, 8 main themes were identified. Figure (4) shows the themes and primary codes related to the underlying factors of emotional behavior.

The open coding of the concepts in Figure (4) is as follows:

- ***Lack of knowledge:*** "Lack of knowledge about how to make decisions", "Lack of knowledge in the thinking process in behavioral finance", "Wrong mentality towards the capital market, "Lack of experience in financial markets", "Lack of knowledge and awareness of the market and capital", "Lack of knowledge and training on topics related to economy, finance, and capital management", "Low level of financial literacy of people", "Lack of knowledge of concepts and complex relationships between elements in the industry, market, commodities, currency price, interest rate."

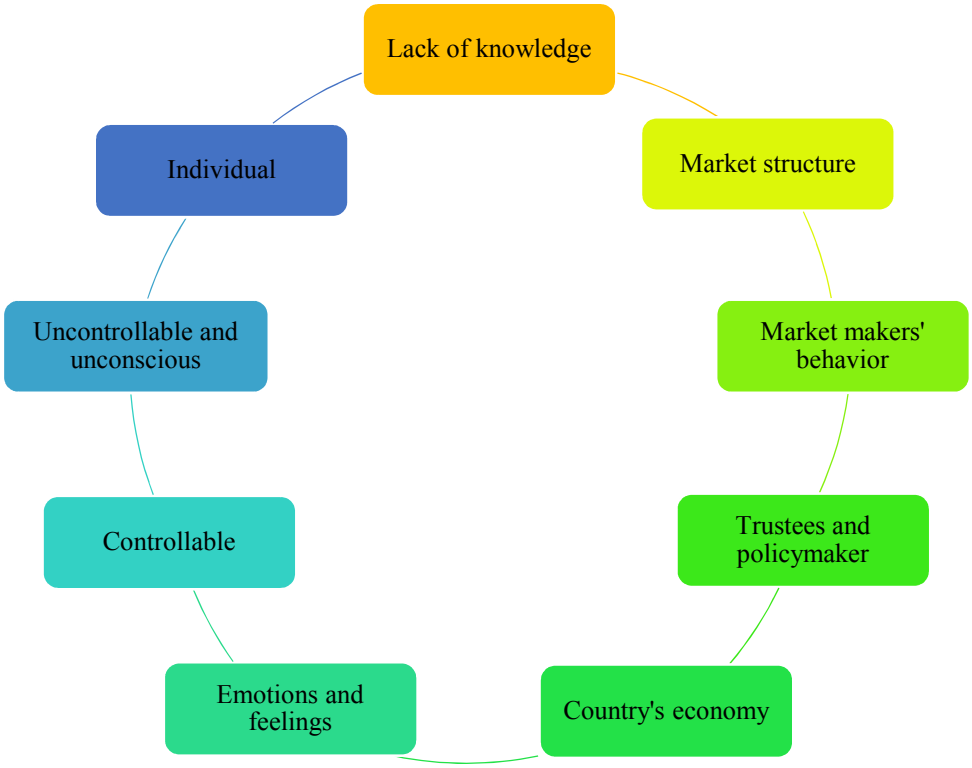

Fig. 4. Results of coding the information extracted from the interviews - the category of causes of emotional behavior

- ***Market structure:*** "Profitability of the market", "Taking money from small traders", "Indirect investment"
- ***Market makers' behavior:*** "Government and government policies and enacted laws," "Social political security conditions," "International relations"
- ***Trustees and policymakers:*** "Capital market management", "Diversification to all types of capital", "Lack of infrastructure", "Lack of confidence in the economic and social situation"
- ***Country's economy:*** "Lack of management", "Inflation", "Wrong economic conditions in the country"

- ***Emotions and feelings:*** "Hope (more stock price growth)", "Fear", "Pessimism", "Optimism", "Prediction"
- ***Controllable:*** "Training"
- ***Uncontrollable and unconscious:*** "Psychological personality of investors", "risk tolerance", "gender"
- ***Individual:*** "Lack of acculturation", "Lack of investment strategy training"

Similarly, for emotional behavior management strategies, 41 initial codes were identified from the interview, and after categorization and combination, and integration, 6 main themes were identified. Figure (5) shows the themes and primary codes related to the underlying factors of emotional behavior.

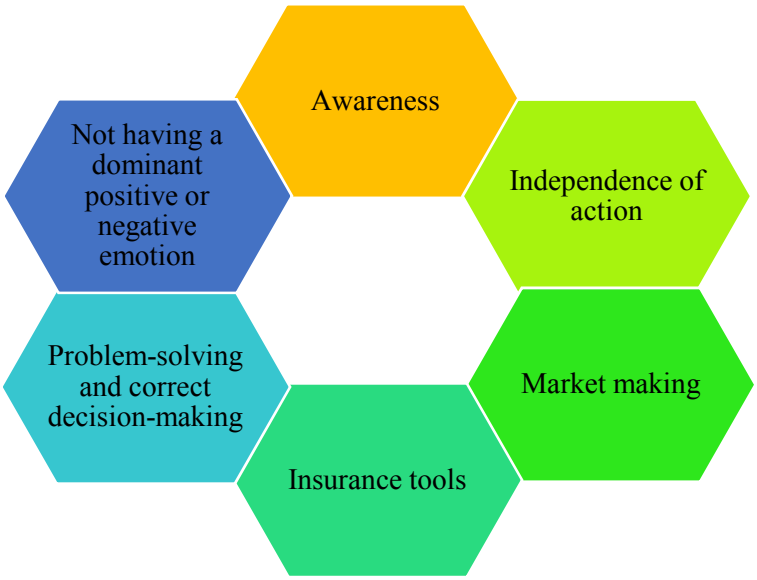

Fig. 5. Coding results of information extracted from interviews - emotional behavior management strategies

The open coding of the concepts in Figure (5) is as follows:

- ***Awareness:*** "Gaining experience", "Holding training classes and attractive courses", "Studying about the state of the world stock market and challenges

and managing the stock market crisis in the world and global experiences", "Teaching emotional management skills", "Knowing the real options and stock market", "Improvement of financial literacy of investors and members of the society", "Free educational programs on radio and television and textbooks and virtual space Free educational programs on radio and television and textbooks and cyberspace"

- ***Independence of action:*** "Reducing the involvement of non-experts", "Behavioral strategy for control"
- ***Market making:*** "Increasing the number of market makers in each symbol", "Removing the fluctuation range and base volume to prevent the formation of buying and selling queues", "Using algorithms instead of humans to control extreme fluctuations", "Increasing the free float volume of stocks for transactions dilution", "Existence of a market leader for every company", "Establishing a balance in the share", "Identifying manipulations using factors such as artificial intelligence and machine learning", "Systematic monitoring based on new technologies", "Increasing information infrastructures", "Involving knowledge-based companies", "Faster registration of events", "Having legal requirements for companies", "Disclosure of transactions against the norm of managers and its legal prohibition", "Removing the scope of fluctuation", "Limiting people to buy shares directly", "Easing the issuance and cancellation process", "Increasing the infrastructure of people's indirect investment", "Fundamental and technical review and world trends", "More transparency of fund rating", "Creation of more funds"
- ***Not having a dominant positive or negative emotion:*** "Not having a dominant positive or negative emotion", "Reducing the pattern of herd behavior and blindly following the behavior of the majority in the stock market"
- ***Problem-solving and correct decision-making:*** "Wiser and more rational investment decisions", "Risk management", "Focusing on financial market trends instead of focusing on financial market fluctuations"

- ***Insurance tools:*** "Insuring stocks", "Increasing risk reduction tools"

Consequently, based on the stated contents, Figure (6) shows the overview of the categories and main themes identified.

Fig. 6. Overview of identified themes

5. Conclusion

The current research has analyzed the emotional behavior management model in the Iranian capital market. To this end, the thematic analysis method has been used. After analyzing the interviews conducted with the capital market activists and coding the interviews for the underlying factors

of emotional behavior, 16 main themes were identified, which are: behavioral and moral characteristics, lack of correct recognition, personality type, economic factors, psychological factors, non-financial criteria, political factors, social factors, internal factors, external factors, stock exchange organization, company, intervening factors, macro factors, micro factors and government, economic structures and capital market. Consequently, based on the opinion of the examined sample, the factors that become the basis of emotional behavior in capital market traders are very wide and include various dimensions such as macro and micro factors, infrastructural and educational factors. Likewise, based on the coding of the interviews for the causes of emotional behavior, 8 main themes were identified, which are: lack of recognition, market structure, the behavior of market makers, trustees, and policymakers, country's economy, emotions and feelings, controllable, uncontrollable and unconscious and individual causes. According to the opinion of the examined sample, the factors that lead to emotional behaviors in capital market traders are considered in two parts, controllable and uncontrollable. Controllable factors such as science and knowledge, direct investments, etc. can be eliminated with proper planning and training, and uncontrollable factors such as personality, gender, emotions and spirits of people, etc. can be managed by creating appropriate mechanisms and by clarifying and providing up-to-date information, one controlled these factors to some extent. Likewise, based on the coding of interviews for emotional behavior management strategies, 6 main themes were identified, which are: awareness, independence of action, market making, not having a dominant positive or negative emotion, problem-solving and correct decision-making, and insurance tools. At the end, according to the opinion of the examined sample, with strategies such as stock insurance, risk management, reducing herd behavior, and blindly following the behavior of the majority in the stock market, involving knowledge-based companies in the matter of investment, systematic monitoring and based on new technologies, emotional behaviors can be managed by involving non-specialists and

improving the financial literacy of investors and members of society. The findings of behavioral economics may be used not only by decision makers to improve their decisions, but also by companies, especially in the marketing sector, and by public policymakers to increase efficiency. When using behavioral tools, there are several ethical considerations that must be properly considered. According to advocates of behavioral economics, since people have cognitive biases and lack self-control, the role of government should not be minimized. Behavioral bias makes sense for public policy with the aim of improving people's choices. Most importantly, behavioral economics leads to new approaches to developing policy based on behavioral design principles.

Since each of the factors has a different effect on the decision making of investors in the country's stock market, it is suggested to determine the importance coefficients of each factor using different methods such as structural equations. Also, presenting a comprehensive model can add to the richness of the current research.

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All authors had contribution in preparing this paper.

Conflicts of interest

The authors declare no conflict of interest

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