Academic Journal of Social Sciences
Online ISSN: 2974-3508 • Volume 1; Number 1; 2025: pp. 73-95

The Impact of Behavioral Factors on Trading Addiction: An Empirical Study on the Investors in Egyptian Stock Market

Prof. Dr. Talaat Asaad Abd El-Hamid[1], Prof. Dr. Saad Abd El-Hamid Metawaa[2], Ahmad Saad El-Adl[3]

1Professor of Marketing and Advertising, Faculty of Commerce, Mansoura University, Cairo, Egypt
2Professor of Finance, Faculty of Commerce, Mansoura University, Cairo, Egypt
3 PhD searcher, Faculty of Commerce, Mansoura University, Cairo, Egypt

Article History

Received : 09 February 2025; Revised : 25 March 2025; Accepted : 02 April 2025; Published : 09 April 2025

Abstract: *This study aims to examine the impact of behavioral factors (overconfidence - representativeness bias - regret aversion - mental accounting - herd behavior) on dimensions of trading addiction (gambling - compulsive buying) from the perspective of Egyptian Stock Market Investors. A sample of 384 Investors was obtained from the population of Investors in the Egyptian Stock Market; the response rate of the sample selected was 76.3%. The results of the statistical analysis showed that there is a significant impact of behavioral factors (overconfidence - representative bias - regret aversion - mental accounting - herd behavior) on dimensions of trading addiction (gambling - compulsive buying). The overconfidence & herd behavior dimensions had the greatest impact in increasing gambling from the perspective of Egyptian investors under study while the herd behavior and regret aversion dimensions had the greatest impact in increasing compulsive buying from the perspective of Egyptian investors under study.*

Keywords: Behavioral Factors - Trading Addiction – Gambling - Compulsive Buying

To cite this paper:

Talaat Asaad Abd El-Hamid, Saad Abd El-Hamid Metawaa, and Ahmad Saad El-Adl (2025). The Impact of Behavioral Factors on Trading Addiction: An Empirical Study on the Investors in Egyptian Stock Market. Academic Journal of Social Sciences. 1 (1), 73-95.

1. INTRODUCTION

To make investing decisions, it is an important aspect of managing one's financial affairs, as it balances current needs with future aspirations. Financial planning can be an intensive and resource-intensive process for individuals and families, which require careful study for available

investment choices (Abdul Lathief et al. 2024). Investor decision determines trends of stock market, means that when the investor know information, he make investment decision according to his beliefs and updated information (Keswani et al. 2019). For many years, in traditional finance it is assumed that the investor is always logical when making any buying or selling decisions in the stock market when comparing risk and return in order to achieve maximum utilities. However, studies of behavioral finance have concluded that investors didn't act rationally as economists think as their financial decisions are someway affected by their psychological emotions (Bakar and Yi 2016).

Many experts have studied irrational purchasing decisions, including compulsive buying decisions. This behavior is characterized by characteristics such as spontaneous decisions, social appearance, and the use of a great amount of money and limited knowledge possessed by the buyer. Thus, compulsive buying is a psychological-economic phenomenon that impacts a person's life, as this behavior takes the form of repeated purchases as a result of unhappy events or negative emotions caused by addiction, stress, or boredom (Mulyono and Rusdarti 2020). Accordingly, behaviors of investors in the stock market begin from the principles of psychology regarding the decision-making process that explain why investors buy or sell stocks. In this regard behavioral finance tries to clarify and maximize understanding the thinking patterns of investors, including the behavioral factors involved and their impact on the decision-making process (Alquraan et al. 2016)

To date, trading in financial markets has not been officially recognized as a potentially addictive activity, as studies on this topic are almost absent. In fact, very few studies have addressed the presence of addiction-like behavior among investors, and when they have, pathological gambling or other non-specific criteria for addiction have been used due to the lack of specific assessment tools. These data direct us to think that pathological trading among investors is a real phenomenon and also represents a significant public health problem that deserves the scientific society attention (Guglielmo et al. 2016; Bahrami et al. 2022). In this context, this study seeks to identify the role of trading addiction as a mediating variable in the relationship between behavioral factors and investment decision from the perspective of Egyptian investors in the Egyptian stock market.

2. THEORETICAL FRAMEWORK

2.1. Behavioral Factors:

Many investors tend to take investing decisions based on their irrational view or behavior, and this bias might cause individual investor to exhibit his behaviors and sometimes biases or errors occur when making investing decisions with illogical behaviors (Novyanto and Robin 2021).

Thus, the current section explores the influence of behavioral factors such as overconfidence, Herding, mental accounting, regret aversion and representativeness biases.

A- Concept of Behavioral Factors:

Individuals largely rely on many determining factors to make investment decisions. It is known that investors do not have consistent logical behavior in their investing decisions. Most times, decisions of investors based on their personal financial needs, financial circumstances, amount of savings, and available investment opportunities. In this regard, financial behavior is one of the significant factors to taking investment decisions (Bakar and Yi 2016). Investors often face asymmetric financial data, which indicates market inefficiency that affects investors' decision-making behavior. This information may negatively affect investors' decision-making, and therefore, decisions may be biased (Ahmed and Noreen 2021).

Although traditional financial theories assume that investment markets and their members are rational, realistic, and want to maximize their wealth, in many cases, many factors such as emotions, experiences, and prior beliefs affect investing decisions, and investors behave in an unexpected, illogical, and unwise way. In order to understand the effect of such factors on investors' decisions, a new field in finance has emerged (Gill et al. 2018). This new field of finance is known as behavioral finance and is an attempt to unify this behavioral approach with traditional theories of economics and finance to clarify the reasons for irrational investment choices of investors today. Behavioral finance deals with the internal and external behavioral factors that impact the financial decisions of investors (Alquraan et al. 2016).

The behavioral factors that determine the investment decision are known as partial aspects of behavioral finance that explain the various factors that influence the investment decision of investors. They are psychological factors that may lead to a systematic deviation from rational judgments (Anthony and Joseph 2017).

B- Dimensions of Behavioral Factors:

Previous studies varied in determining the dimensions of the behavioral factors determining the investment decision, as the researchers did not find a consensus among the studies on an agreed set of dimensions. The researchers settled on addressing the dimensions of Antony and Joseph (2017) because they are more comprehensive, namely:

1) Herd Behavior:

The first behavioral factor tested in this study was herd behavior. This behavior may cause a bubble in stock markets when a stock price rises above its fair value and the market crashes. Herd behavior is likely to occur in developing markets (Nareswari et al. 2021).

The herd effect, defined by Kahneman and Tversky in 1979, is where investors tend to follow the decisions of other investors as they depend on collective information rather than private one (Svobda 2022).

Herd behavior is a form of heuristics where individuals tend to follow the majority of individuals, present in a decision-making environment, by following their decisions. However, herd behavior,

as with other heuristics, can be misleading when an investor, for example, follows a general trend in the market (Anthony and Joseph 2017).

The herd effect is the tendency of an investor to follow the judgments of a particular group of investors rather than his own analysis of the situation. Therefore, these investors ignore the relevant and important information, i.e. the analysis of the financial reports and the dividend policy of the company (Ahmed and Nourin 2021).

2) Overconfidence:

Confidence is the self-trust that comes from accepting one's skills, judgments, and abilities. Confidence is internal feelings that an individual has regarding himself. Over-confidence is a biased way of approaching a situation. If an individual is overconfident, he may overestimate his abilities, skills, knowledge, beliefs, and judgments and appears more confident than is required in a given situation (Gill et al. 2018). More simply, when individuals overestimate recognizing their abilities and skills, this is the case of over-confidence (Keswani et al. 2019).

Over-confidence is a cognitive bias that represents the tendency to overestimate one's abilities and forecasting of success (Antony and Joseph 2017). Over-confident investor often trades stocks excessively, which can either increase or decrease his investment performance (Ahmed and Noreen 2021).

This over-confidence gets investors believe that other people's investment decisions are driven by their own emotions, perceptions, feelings, and moods. However, they make their own decisions as a result of purposeful and wise thoughts. This situation leads them to a level where they do not care much about the level of risk that is part of their financial plan. These individuals trade excessively (Gill et al. 2018).

Over-confidence means that investors overestimate their knowledge based on their positive experience in the market. In such a case, the investor underestimates the risks and his/her excessive optimism leads to investing with little diversification (Keswani et al. 2019).

3) Representativeness Bias:

Representativeness is a behavior in which investors use a stereotype to take their investment decision. Representativeness causes the investor to become irrational and make a wrong investment decision (Novianto and Robin 2021). Representativeness bias is a heuristics that generates severe biases. For example, an investor's tendency to buy stocks that represent desirable qualities such as strong earnings, high sales growth, and good management (Antony and Joseph 2017).

Individual investors' previous investments are a strong basis for future decisions. Investors may also choose instruments that are readily accessible and convenient, i.e., reasonable returns and retaining value, especially in the wake of inflation (Abdul Lathief et al., 2024).

Representativeness bias refers to a tendency of investors to make investment decisions, assuming that recent events will continue in the future and ignore their long term impact. They also buy some shares based on a few sample stocks, those with the highest sales (Keswani et al. 2019).

4) Mental Accounting:

In general, mental accounting can be defined as the "set of cognitive operations used by individuals and households to organize, evaluate, and keep track of financial activities" (Khan et al. 2021).

Mental accounting described by Thaler in 1985, the theory that investors divide investments into different portfolios based on mental categories, where each portfolio has a purpose and their investment policy differs accordingly. Investors thus choose portfolios that are not profitable yet satisfy their emotions (Svobda 2022).

Mental accounting is the cognitive process of assigning financial events into categories for making financial decisions and evaluation outcomes. It represents the tendency of people to put certain events into different mental accounts based on superficial attributes (Antony and Joseph 2017).

Mental accounting is the cognitive heuristic in which people break down their complex financial decision into smaller parts for easy monitoring and effective management (Khan et al. 2021).

Followed by this process, investors then define different investment policies for each mental account. Further, they also assign specific purpose to each mental account for the purpose to earn maximum return with minimum risk. This in turn leads to the composition of under-diversified portfolio, which is not profitable; however, satisfy the investors' feeling and emotions (Zahera and Bansal 2019).

5) Regret Aversion:

Regret aversion first described by Loomes and Dugden in 1982, when one regrets one’s decision, it has a great influence on future decisions. He is either motivated to take more risks or, on the contrary, he is reluctant to risk in order to avoid taking disappointments/regrets in the future (Svobda 2022).

Regret aversion conceptualized the idea that the investors usually deter to sell a stock at a loss because of the negative emotions that gets triggered after a losing investment is chosen instead of a winning one (Zahera and Bansal 2019).

There is a human tendency to feel the pain of regret to make mistakes, even if they are small mistakes, and it is a feeling of regret after making a decision that leads to a bad outcome. If one wishes to avoid the pain of regret, one may alter one's behavior in ways that in some cases may be

irrational. Regret theory explains the fact that investors delay selling stocks that have fallen in value and accelerate selling stocks that have gone up in value (Antony and Joseph 2017).

The feeling of regret arises when an investor comes to know that the chosen alternative underperforms the alternative which was not chosen. However, the investor feels proud when the chosen alternative outperforms the other alternatives (Zahera and Bansal 2019).

2.2. Trading Addiction:

Trading is an exciting activity that stimulates sense of pleasure and reward in the brain. Therefore, some people trade regularly to relieve destructive emotions momentarily. However, this may lead to unexpected consequences, as long-term trading addiction (Bahrami et al. 2022).

When trading in securities becomes the main activity of daily life, and the investor turns to trading compulsively irrationally, but feels uncontrollably driven to invest and continue to do so, especially, in the event of financial losses, under the illusion of being able to regain control and win back losses while risking increased amounts of money, it turns into a form of gambling (Guglielmo et al. 2016).

A- Concept of Trading Addiction:

Investors in underdeveloped or developing countries always seek to enhance their monetary status due to a lack of understanding of financial issues and economic volatility, such as scientific debates, experience, and logical analysis fade away, some irrational thoughts will become more pronounced in investors' decisions (Bahrami et al. 2022).

Trading can be defined as the activity of buying and selling financial instruments such as stocks, bonds, futures, commodities, and currencies (Guglielmo et al. 2016).

Trading addiction is very similar to gambling disorders in terms of behavioral patterns. According to this study, investment addicts lack a financial plan like many gamblers. They also lost a lot of money before making a profit, much like gamblers do. To make up for previous losses, they eventually lost control of their expenditures (Bahrami et al. 2022).

But it can be said that investing in itself is not a form of gambling, yet some consider it a gambling (Guglielmo et al. 2016). As noted, there is a relationship between problem gambling and the frequency of trading in the stock market (Mosenhauer et al. 2021).

Trading involves investing money to get more. Although most traders have no problems, some individuals suffer from pathological trading behaviors. The essential feature of pathological trading is a maladaptive behavior related to trading, persistent or recurrent; that disrupts the family, personal and/or professional activities. Pathological trading leads to a progressive loss of control over trading, tolerance and withdrawal symptoms (Guglielmo et al. 2016).

The main issue occurs when investors lose a lot of money after making small but promising profits. At this point, they might fall into psychological traps and spend too much time on the stock market. To put it another way, investors try to reinvest to make up for losses and feel inner satisfaction, which can lead to more losses (Bahrami et al. 2022).

Under such circumstances, investors become trapped in a vicious cycle of unplanned transactions, such that trading becomes an essential activity, and traders frequently disregard their financial resources and debt obligations and behave irrationally. In this case, the investor is addicted to buying and selling stocks (Guglielmo et al., 2016). Some traders have not yet been adequately trained to enter the capital market and lack a thorough understanding of risk and investment time horizons. (Bahrami et al. 2022).

B. Dimensions of Trading Addiction:

Trading in the financial markets is divided into two sides, the buy side and the sell side. And sometimes trading turns into a state of addiction, where buying and selling becomes beyond the rational will of the investor. The following are the dimensions of trading addiction as identified by the researchers:

1) Gambling:

In general, gambling can be defined as "the process of staking a sum of money or anything else of value on the outcomes of an uncertain event determined by chance" (Blaszczynski et al. 1999).

Firstly, it is important to highlight that gambling is a subset of all the investment products available, and that not all investment products are being gamblified, as most sensible investment products have long-term benefits for investors (Newall and Weiss-Cohen 2022).

The way investments are made on the stock market is particularly attractive to educated young people who are interested in new forms of online games. Moreover, stock market investment (SMI) is one of the most socially acceptable "types of gambling", just like lottery, bingo, and sports betting. The practice of trading was as frequent and sometimes as excessive as gambling games. Indeed, trading could be considered similar to gambling in some cases (Grall-Bronnec et al. 2017).

A growing body of literature has shown financial trading to be associated with problem gambling, as high-risk stock traders were more likely to engage in gambling. Stock trading, typically in the case of excessive day trading, may cause gambling disorder and related problems (Lee et al. 2023).

Whereas Cox et al. (2020) suggest that investors can use stock trading as a direct alternative to traditional forms of gambling such as lotteries, casinos and sports betting where speculation in the financial markets offers significant gains and provides investors with immediate feedback about gains and losses. This is similar to traditional forms of gambling, but arguably with better winning odds and lower fees.

2) Compulsive Buying:

Compulsive buying behavior is a recent disorder that has received increased attention among scientists recently. This dysfunctional purchasing behavior has grown rapidly in recent decades,

particularly among young people, who in this age group are impulsive and reckless, often with adverse psychological and financial consequences (Ong et al. 2021).

Basic motive to perform compulsive buying is not about owning goods or services; consumers feel better with the act of purchasing. Compulsive buying shows the non-functional parts of purchasing activities and it is different from the functional or psychological satisfaction which is related to the consumption of products (Belbag and Cihangir 2019).

Thus, compulsive buyers do not derive benefits from a purchased product. Instead, they experience short-lived delights during the buying process itself, followed by negative consequences such as regretting the purchase. Compulsive buying can be interpreted as a form of buying with poor control or excessive willingness to spend or the practice of spending behavior, the consequences of which are often harmful (Gupta 2013). Compulsive buying indicates a chronic, repetitive buying which arises as a basic reaction to negative events and feelings (Belbag and Cihangir 2019).

Compulsive buying behavior, according to Tarka and Babaev (2021), represents "a response to an uncontrollable drive or desire to obtain, use, or experience a feeling, substance, or activity that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual and/or to others".

In case of compulsive buying, the consumer is addicted to purchase and that can lead to severe negative consequences like financial debt. Sometimes, it may lead to strain in relationships between individuals and it could cause havoc in buyer's daily life (Mohanraj 2017).

3. LITERATURE REVIEW

Literature review is classified into three groups, as follows:

- Studies related to behavioral factors in stock markets.
- Studies related to trading addiction in stock markets.
- Studies related to the relationship between behavioral factors and gambling.

In the following, addressing literature review in more details:

A) Studies Related to Behavioral Factors in Stock Markets:

The study of Alquraan et al. (2016), addressed behavioral finance factors affecting the investment decision in stocks of individual investors in the stock market. The results of the study indicated that the behavioral financing factors (loss avoidance, excessive confidence, risk perception) had a significant impact on the investment decisions in stocks of individual investors in the Saudi stock market, while the herd policy had no significant impact.

Also, the study of Gill et al. (2018) addressed factors affecting investment decision-making behavior through the mediating role of information seeking. The study included two factors: overconfidence and economic expectations. The results showed that there was a direct significant relationship between economic expectations and investment decision-making behavior, but when searching for information was included as a mediator, the relationship became insignificant and negative, that suggests full mediation in the case of economic forecasts. It was also found that there is a significant direct relationship between overconfidence and investment decision-making behavior, and the relationship remained significant when searching for information as a mediator was added; that suggests partial mediation in the case of overconfidence.

And on the same track, the study of Keswany et al. (2019) addressed the effect of four behavioral factors, namely, heuristic, prospect, market, herding on decisions of investors. The result of the analysis explained that the four variables have greatly influenced the investment decision and return on investment. All behavioral variables have a significant impact on the decision making process of investors.

While the study of Cao et al. (2021) is more comprehensive in its treatment of behavioral factors affecting investment decisions and their impact on investment results, the results of the research showed that heuristic variables, prospect variable, market variables, and herding variable directly affect investment decisions. Specifically, the probability prospect variable has the strongest influence on investment decision-making and investment performance, and the heuristic variables came second with the strongest effect, then herding variable, and finally the market variable had the weakest effect.

The study of Ahmed and Noreen (2021) also expanded regarding the impact of behavioral factors on investment decision-making. The study showed that there was a direct and significant effect of behavioral factors on investment decisions, and more specifically, heuristics, herd behavior and market variables had strong and significant roles in making informed investment decisions.

According to Khan (2021), his study investigated behavioral factors influencing investment decisions of institutional investors. The findings revealed that disposition effect; overconfidence behavior, mental accounting and diversification heuristic bias have a significant influence on investment decisions of institutional investors.

In the same manner, the study of Novianto (2021) aimed to analyze the influence of investor's behavior on investment decisions in stock investing. The results show that there are only three behaviors from the heuristic theory that have a significant effect on investment decisions, namely representativeness, availability, and anchoring. Meanwhile, overconfidence does not have a significant effect. Herding behavior does not have a significant effect. Meanwhile, prospect theory is only mental accounting behavior that has a significant effect and loss aversion and regret aversion have no significant effect.

In addition to addressing the study of Thodkar and Kumar (2022) to the effect of behavioral factors on stock market investment decision. The study concluded that behavioral factors such as heuristic, prospect, market, herding have positive and significant influence on an individual's investment decision making in stock market. Heuristic has the greatest influence. The second most influential behavioral factor is market information such as stock prices, past trends of the stock, price changes. The third influential behavioral factor is prospect that people value their losses greater than their gains and use factors such mental accounting, regret aversion and loss aversion to make decisions while investing. Indian investors value herding as a behavioral factor as the least influencing which interprets that they do not follow the herd.

In the same manner, the study of Hossain and Siddiqua (2024), aimed at determining the impact of behavioral influences on making investment decisions. The result shows that risk aversion and risk perception are the two most influential emotional dimensions that impact investors' decisions, the other two biases (overconfidence and herding) have a smaller impact.

B) Studies Related to Trading Addiction in Stock Markets:

The study of Guglielmo et al. (2016) investigated the nature of the relationship between investment purchase decision and trading addiction in financial markets. The study concluded that trading in securities can become a satisfactory trading to the point of addiction, including two dimensions, compulsive buying and gambling, which adversely affects the decision to buy securities and makes it an impulsive and irrational decision in many cases.

In another way, the study of Grall-Bronnec (2017) addressed the existence of an addictive-like trading behavior and to discuss its phenomenological similarities with gambling disorders. The results revealed important similarities with gambling disorders. Like many disordered gamblers, excessive traders of this study experienced a number of small early wins, chased their losses, and ended up losing control over the money they invested. All of them invested in very risky stocks associated with short-term trading leading to potential large gains, but also with very significant losses.

While Cox et al. (2020) in their study that addressed compulsive gambling, as the index of addiction to trading, and its effect on investors' tendency toward trading decision in financial markets. The results explained that investors with symptoms of compulsive gambling problems tend to follow a more active and speculative trading style, indicated by a higher frequency of stock trading, day-trading and investing in derivatives and leveraged products. In addition, the results confirm that compulsive gamblers tend to be in significantly worse financial situation and face more financial problems, compared to other investors.

C) Studies Related to the Relationship between Behavioral Factors and Gambling:

While the study of Cox et al. (2018) addressed the impact of four different motives to gambling in order to explain active and speculative trading by retail investors, namely sensation seeking, wealth aspiration, trading as a substitute for gambling and compulsive trading. Results of the study find that gambling motives can explain a substantial part of individual investors' speculative trading behavior, beyond factors like overconfidence, risk tolerance, trading experience and financial literacy. Trading as a substitute for gambling and compulsive trading best explain high trading frequency, day-trading and investing in derivatives and leveraged products. By contrast, more innocuous gambling motives, such as investing for fun or for a small chance to become rich, are not associated with more active trading behavior or a worse financial situation.

Moreover, the study of Shahvari (2022) addressed the impact of behavioral financial cognitive biases (loss aversion - endowment effect - familiarity bias - status quo bias - bandwagon effect - sunk cost fallacy) on frequent trading. Results find that behavioral finance cognitive biases have statistically significant impact on frequent trading, specially bandwagon effect (herding), loss aversion and endowment effect. D) Studies Related to the Relationship between Behavioral Factors and Compulsive Buying:

The study of Omar et al. (2014) aimed to identify the relationship of a group of factors with compulsive buying among credit card holders. The results revealed that budget constraint, impulse buying, and materialism have a significant effect on compulsive buying, while self-esteem does not affect compulsive buying.

Moon and Attiq (2018) expanded on the relationship between a broader set of factors and compulsive buying. However, the results differed significantly from the study of Omar et al. (2014); as stress was the most influential factor on compulsive buying, followed by self-esteem, then depression and anxiety, while materialism had no significant effect on compulsive buying.

While the study of Ong et al. (2021) addressed the relationship between money attitude and compulsive buying through the mediation of materialism. The results indicated that the two dimensions of power prestige and anxiety as dimensions of the money attitude had a significant impact on compulsive buying through materialism.

4. RESEARCH GAP

In light of the researchers review of previous studies, they were able to identify some aspects of research deficiencies that previous studies suffered from in order to identify the research gap that the researchers seeks to address and treat through this research.

The research gap of this study is three-fold. It can be stated as follows:

- *The scarcity of studies that dealt with trading addiction in the emerging markets.*

- *The limited number of studies that deals with the relationship between gambling in the stock market and the behavioral factors - under study - that cause it.*
- *The limited number of studies that deals with the relationship between trading addiction in the stock market in general and the behavioral factors that cause it.*

5) PROBLEM AND QUESTIONS OF THE STUDY

In recent years there has been a shift of investors from keen investment buying decision to uncontrolled intensive investment buying decision with the passage of time.

In order to find out the truth and the reasons for this phenomenon, the researchers conducted an exploratory study on a simple sample of investors who deal frequently with the securities brokerage firms in Mansoura City, in the period from 11-11-2022 to 21-11-2022 and the size of this sample was 40 individual investors. The results of the survey showed the following:

1- Weekly Trading Rate

- 4-5 days/weekly: 24 investors
- 2-3 days/weekly: 9 investors
- 1 day/ weekly: 3 investors

Note: 4 investors mentioned that they do not necessarily trade weekly.

2- Investors Traded According to

- The opinions of those around them: 27 investors
- The opinions of media specialists: 5 investors
- The opinion of Stockbroker: 3 investors
- Their own opinions: 5 investors

3- Investors Tend to Keep Securities for

- Very short terms (less than 1 week): 3 investors
- Short terms (more than 1 week – less than 1 month): 1 investors
- Both short & too short terms: 18 investors
- Mid Terms (more than 1 month): 3 investors
- All previous terms: 15

4- Over the course of the investment life, only 3 investors achieved net profits.

5- 29 investors showed an unjustified internal desire to trade.

Based on the results of the exploratory study, the researchers can formulate the study questions as follows:

Q1. Is there a significant impact of behavioral factors on gambling from the perspective of investors in the Egyptian Stock Market?

Q2. Is there a significant impact of behavioral factors on compulsive buying from the perspective of investors in the Egyptian Stock Market?

6) OBJECTIVES OF THE STUDY

- Determine the relationship between behavioral factors and gambling as a dimension of trading addiction from the perspective of investors in the Egyptian Stock Market.

- Identify the relationship between behavioral factors and compulsive buying as a dimension of trading addiction from the perspective of investors in the Egyptian Stock Market.

7. HYPOTHESES OF THE STUDY AND THE PROPOSED CONCEPTUAL FRAMEWORK

Based on the objectives of the study, the researchers can formulate the study hypotheses as follows:

H1: There is a significant impact of behavioral factors on gambling from the perspective of investors in the Egyptian Stock Market.

This hypothesis can be divided into 5 sub- hypotheses as follows:

H1/1: There is a significant impact of Overconfidence on gambling from the perspective of investors in the Egyptian Stock Market.

H1/2: There is a significant impact of representativeness bias on gambling from the perspective of investors in the Egyptian Stock Market.

H1/3: There is a significant impact of regret aversion on gambling from the perspective of investors in the Egyptian Stock Market.

H1/4: There is a significant impact of mental accounting on gambling from the perspective of investors in the Egyptian Stock Market.

H1/5: There is a significant impact of herd behavior on gambling from the perspective of investors in the Egyptian Stock Market.

H2: There is a significant impact of behavioral factors on compulsive buying from the perspective of investors in the Egyptian Stock Market.

This hypothesis can be divided into 5 sub- hypotheses as follows:

H2/1: There is a significant impact of Overconfidence on compulsive buying from the perspective of investors in the Egyptian Stock Market.

H2/2: There is a significant impact of representativeness bias on compulsive buying from the perspective of investors in the Egyptian Stock Market.

H2/3: There is a significant impact of regret aversion on compulsive buying from the perspective of investors in the Egyptian Stock Market.

H2/4: There is a significant impact of mental accounting on compulsive buying from the perspective of investors in the Egyptian Stock Market.

H2/5: There is a significant impact of herd behavior on compulsive buying from the perspective of investors in the Egyptian Stock Market.

The Proposed Conceptual Framework for the Relationships between the Study Variables:

Based on the hypotheses of the study, the researchers can formulate the proposed conceptual framework for the relationship between the study variables, which is shown in Figure No. (1):

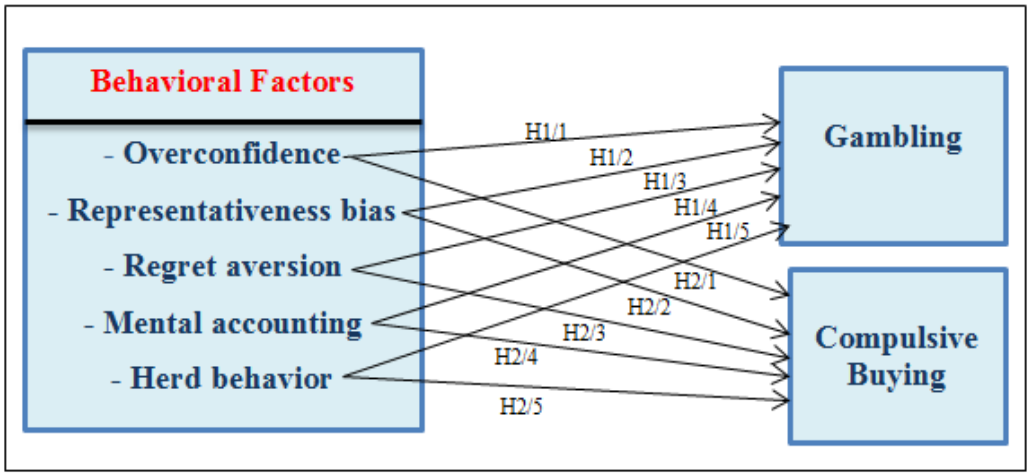

Figure (1). The Proposed Conceptual Framework for the Relationship between Research Variables
Source: Prepared by the researchers based on literature review.

8. RESEARCH METHODS

8.1. Sample selection

A positivist research philosophy was exploited with a quantitative approach to certify the suggested framework, and quantitative data were collected using survey questionnaires to provide answers to research questions. The respondents were the investors in the Egyptian Stock Market. Importantly, investors were chosen specifically in this study because they are assumed to have sufficient knowledge about their trading types and the most behavioral factors that may affect their investment decision. Investors are able to evaluate the extent of participation and involvement in their trading activities.

For this study, the sampling frame is the number of investors in the Egyptian Stock Market. The list related to the number of investors showed that there are nearly 3,961,700 investors in the Egyptian Stock Market until the second quarter for year 2024. This list was obtained from the records of the Egyptian Stock Market.

Therefore, according to Saunders et al. (2019), considering a margin error equals 5% which is the percentage used in social research, a confidence level of 95%, the sample size would be at least 384 investors.

A questionnaire form was utilized as a data collection tool. To select the items that represented the questionnaire's questions. Then, a pilot testing was conducted with 40 individual investors. The results showed that Cronbach's alpha for all of the statements exceeds 0.70,

meaning high internal consistency. After performing the pilot study, the questionnaires were delivered personally to 384 investors.

Additionally, validity criteria were followed to certify the final form of the questionnaire. With a response rate of the sample members was 76.3%. Only 267 valid questionnaires were obtained with a rate of (69.5%).

8.2. Measures of variables

All of the constructs were measured with a 5-point Likert-type scale (5 = always, to 1 = never). Behavioral factors was measured by a construct involves 17 statements adopted from Antony & Joseph, (2017). Trading addiction was measured by a construct involves 19 statements adopted from Youn, et al., (2016).

9) DATA ANALYSIS AND RESULTS

In this section, the results of testing research hypotheses among study variables are presented.

The main hypotheses of the study suggested that behavioral factors have a direct significant impact on the dimensions of trading addiction; these hypotheses are as follow:

H1: There is a significant impact of behavioral factors on gambling from the perspective of investors in the Egyptian Stock Market.

H2: There is a significant impact of behavioral factors on compulsive buying from the perspective of investors in the Egyptian Stock Market.

The following are the results of the statistical analysis of these hypotheses:

9.1. the first Hypothesis (H1)

There is a significant impact of behavioral factors on gambling. Table (1) shows the results of testing the first hypothesis as follows:

Table (1). Results of Testing the Impact of Behavioral Factors on Gambling

Dimensions of behavioral factors	Beta β	Coefficient of Correlation R	Coefficient of determination R2	F value	Sig F	T value	Sig T
Overconfidence	0.415	0.871	0.759	7.791	0.000	2.340	0.009
Representative bias	0.378					2.176	0.018
Regret aversion	0.157					1.002	0.031
Mental accounting	0.175					1.090	0.033
Herd behavior	0.402					2.231	0.012

Source: Prepared by the researchers based on statistical analysis

In order to know the impact of behavioral factors on gambling, the multiple linear regression model was used as shown in table no. (1), in which the behavioral factors (overconfidence - representative bias - regret aversion - mental accounting - herd behavior) were considered explanatory variables and gambling as a dependent variable. The results of the regression model showed that the model is significant through the F value, which reached 7.791 with a significance of 0.00 at a significance level of 0.05. The results show that the explanatory variables explain 75.9% of the variance achieved in the association with gambling according to the coefficient of determination R2. The value of Beta, which represents the total effect of overconfidence dimension, reached 0.415, which is statistically significant, as this can be inferred from the T value and the significance associated with it. This means that whenever overconfidence increases by one unit, the level of gambling increases by 41.5% unit. The beta value for herd behavior dimension was 0.402, which is also statistically significant, as this can be inferred using the T-value, meaning that whenever herd behavior increases by one unit, the level of gambling increases by 40.2%. The lowest beta value was 0.157 for regret aversion dimension, which was also statistically significant, as this can be inferred using the T-value, meaning that whenever regret aversion improves by one unit, the level of gambling increases by 15.4%.

In light of the above, the first hypothesis was accepted, as there is a statistically significant impact of the behavioral factors on gambling dimension from the perspective of Egyptian investors under study. The overconfidence & herd behavior dimensions had the greatest impact in increasing gambling from the perspective of Egyptian investors under study.

9.2. the second Hypothesis (H2)

There is a significant impact of behavioral factors on compulsive buying. Table (2) shows the results of testing the second hypothesis as follows:

Table (2). Results of Testing the Impact of Behavioral Factors on Compulsive Buying

Dimensions of Behavioral Factors	Beta β	Coefficient of Correlation R	Coefficient of Determination R2	F value	Sig F	T value	Sig T
Overconfidence	0.240	0.838	0.702	6.098	0.000	1.541	0.019
Representative bias	0.334					1.842	0.011
Regret aversion	0.398					1.931	0.009
Mental accounting	0.315					1.713	0.013
Herd behavior	0.434					2.403	0.002

Source: Prepared by the researchers based on statistical analysis

In order to know the impact of behavioral factors on compulsive buying, the multiple linear regression model was used as shown in table no. (2), in which the behavioral factors (overconfidence - representative bias - regret aversion - mental accounting - herd behavior) were

considered explanatory variables and the compulsive buying as a dependent variable. The results of the regression model showed that the model is significant through the F value, which reached 6.098 with a significance of 0.00 at a significance level of 0.05. The results show that the explanatory variables explain 70.2% of the variance achieved in the association with compulsive buying according to the coefficient of determination R2. The value of Beta, which represents the total effect of herd behavior dimension, reached 0.434, which is statistically significant, as this can be inferred from the T value and the significance associated with it. This means that whenever herd behavior increases by one unit, the level of compulsive buying increases by 43.4% unit. The beta value for regret aversion dimension was 0.398, which is also statistically significant, as this can be inferred using the T-value, meaning that whenever regret aversion increases by one unit, the level of compulsive buying increases by 39.8%. The lowest beta value was 0.240 for overconfidence dimension, which was also statistically significant, as this can be inferred using the T-value, meaning that whenever overconfidence increases by one unit, the level of compulsive buying increases by 24.0%.

In light of the above, the second hypothesis was accepted, as there is a statistically significant impact of the behavioral factors on compulsive buying dimension from the perspective of Egyptian investors under study. The herd behavior and regret aversion dimensions had the greatest impact in increasing compulsive buying from the perspective of Egyptian investors under study.

10. CONCLUSION, RECOMMENDATIONS AND DIRECTIONS FOR FUTURE RESEARCH

In this study, the researchers examined the impact of behavioral factors on dimensions of trading addiction among investors in the Egyptian Stock Market. The results of the statistical analysis showed that:

1) The first hypothesis which represents the impact of behavioral factors (overconfidence - representativeness bias - regret aversion - mental accounting - herd behavior) on gambling was accepted as there is a statistically significant impact of the behavioral factors on gambling dimension from the perspective of Egyptian investors under study.

The overconfidence & herd behavior dimensions had the greatest impact in increasing gambling from the perspective of Egyptian investors under study.

2) The second hypothesis which represents the impact of behavioral factors (overconfidence - representativeness bias - regret aversion - mental accounting - herd behavior) on compulsive buying was accepted as there is a statistically significant impact of the behavioral factors on compulsive buying dimension from the perspective of Egyptian investors under study.

The herd behavior and regret aversion dimensions had the greatest impact in increasing compulsive buying from the perspective of Egyptian investors under study.

This study provides significant practical implications for many concerned parties, in the form of recommendations as will become clear below:

- Develop a comprehensive list of the most common behavioral factors that influence investors in stock exchanges.
- Train specialists to educate investors on the factors that should be followed and the ones that should be avoided.
- Organizing media campaigns to warn investors of the dangers of trading addiction in stock market through television programs, commercial breaks, and printed publications.
- Brokerage firms' agents cooperate with investors and guide them towards appropriate and correct investments, away from excessive, irrational or unconscious trading.
- Setting a daily trading percentage that is proportional to the size of the investor's total investment, or as deemed appropriate by the officials of the Egyptian Stock Exchange.

However, future research can be directed to the following areas:

a. The current study tested research hypotheses via questionnaire that provides cross-sectional data. Therefore, the study results do not give any indications about the changes in the research variables over time. Thus, further studies may benefit from longitudinal study to observe the changes in investment decision as a result of the changes in market conditions with the same behavioral factors remaining.

b. Testing the impact of other behavioral factors to understand the influence of different behavioral factors on trading addiction.

c. Testing the influence of personality traits on investors' compulsive gambling behaviors.

d. Conducting a study on the impact of demographic factors of investors in the Egyptian Stock Exchange on the relationship of behavioral factors to trading addiction.

REFERENCES

Abdul Lathief, J. T., Kumaravel, S. C., Velnadar, R., Vijayan, R. V. & Parayitam. S. (2024). Quantifying Risk in Investment Decision-Making. *Journal of Risk and Financial Management*, 17(82), 1-21.

Ahmed, Z. and Noreen, U. (2021). Role of Behavioral Determinants for Investment Decision Making. *Asia-Pacific Social Science Review*, 21(2), 48-62.

Alquraan, T., Alqisie, A. and Al Shorafa, A. (2016). Do Behavioral Finance Factors Influence Stock Investment Decisions of Individual Investors? (Evidences from Saudi Stock Market). *American International Journal of Contemporary Research*, 6(3), 159-169.

Antony, A. and Joseph, A. I. (2017). Influence of Behavioral Factors Affecting Investment Decision: An AHP Analysis. *Metamorphosis*, 16(2), 1–8.

Bahrami, A., Noghondari, A. T. and Zeinali, H. (2022). The Effects of Money Beliefs on Investment Addiction. *Iranian Journal of Accounting, Auditing and Finance*, 6(1), 53-66.

Bakar, S. and Yi, A. N. C. (2016). The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang. *Procedia Economics and Finance*, 35, 319-328.

Blaszczynski, A., Walker, M., Sagris, A. and Dickerson, M. (1999). Psychological Aspects of Gambling Behavior: An Australian Psychological Society Position Paper. *Australian Psychologist*, 34(1), 4-16.

Belbag, A. G. and Cihangir, C. K. (2019). Compulsive Buying and Financial Factors: Evidence From Turkey. Third Sector Social Economic Review, 54(1), 415 - 430

Cao, M. M., Nguyen, N. T. and Tran, T. T. (2021). Behavioral Factors on Individual Investors' Decision Making and Investment Performance: A Survey from the Vietnam Stock Market. *Journal of Asian Finance, Economics and Business*, 8(3), 845-853.

Cox, R, Kamolsareeratana, A. and Kouwenberg, R. (2018). Gambling in the Stock Market: The Motivations behind Excessive and Speculative Trading. *Social Science Research Network*, pp. 1-37.

Cox, R, Kamolsareeratana, A. and Kouwenberg, R. (2020). Compulsive Gambling in the Financial Markets: Evidence from Two Investor Surveys. *Journal of Banking and Finance*, 111, 1-14.

Gill, S., Khurshid, M. K., Mahmood, S. and Ali, A. (2018). Factors Effecting Investment Decision Making Behavior: The Mediating Role of Information Searches. *European Online Journal of Natural and Social Sciences*, 7(4), 758-767.

Grall-Bronnec, M., Sauvaget, A., Boutin, C., Bulteau, S., Jimenez-Murcia, S., Fernandez-Aranda, F., Challet-Bouju, G. and Caillon, J. (2017). Excessive Trading, a Gambling Disorder in its own Right? A Case Study on a French Disordered Gamblers Cohort. *Addictive Behaviors*, 100(64), 340-348.

Guglielmo, R., Ioime, L. and Janiri, L. (2016). Is Pathological Trading an Overlooked Form of Addiction? *Addiction Health*, 8(3), 207-209.

Gupta, S. (2013). A Literature Review of Compulsive Buying – A Marketing Perspective. Journal of Applied Business and Economics, 14(1), 43-48.

Hossain, T. & Siddiqua, P. (2024). Exploring the Influence of Behavioral Aspects on Stock Investment Decision-Making: a Study on Bangladeshi Individual Investors. *PSU Research Review*, 8(2), 467-483.

Keswani, S., Dhingra, V. and Wadhwa, B. (2019). Impact of Behavioral Factors in Making Investment Decisions and Performance: Study on Investors of National Stock Exchange. *International Journal of Economics and Finance*, 11(8), 80-90.

Khan, I., Afef, M. and Adil, M. (2021). Behavioral Factors Influencing Investment Decisions of Institutional Investors: Evidence from Asset Management Industry in Pakistan. *Elementary Education Online*, 20(2), 603-614.

Lee, U., Lewis, L. E. and Mills, D. J. (2023). Association between Gambling and Financial Trading: A Systemic Review. [version 1; peer review: 2 approved with reservations] F1000Research, 12(111).

Mohanraj, M. P. (2017). Consumers' Compulsive Buying Behaviour – An Empirical Study. Great Lakes Herald, 11(1), 1-18.

Moon, M. A. and Attiq, S. (2018). Compulsive Buying Behavior: Antecedents, Consequences and Prevalence in Shopping Mall Consumers of an Emerging Economy. *Pakistan Journal of Commerce and Social Sciences*, 12(2), 548-570.

Mosenhauer, M., Newall, P. W. S. and Walasek, L. (2021). The stock market as a casino: Associations between stock market trading frequency and problem gambling. *Journal of Behavioral Addictions*, 3, 683–689.

Mulyono, K. B. and Rusdarti (2020). How psychological factors boost compulsive buying behavior in digital era: A case study of Indonesian students. *International Journal of Social Economics*, 47(3), 334-349.

Nareswari, N., Baqista, A. L. and Negoro, N. P. (2021). The Impact of Behavioral Aspects on Investment Decision Making. *Journal of Management and Finance*, 10(1), 15-27.

Newall, P. W. S. and Weiss-Cohen, L. (2022). The Gamblification of Investing: How a New Generation of Investors Is Being Born to Lose. *International Journal of Environmental Research and Public Health*,19, 1-10.

Novianto, J. and Robin (2021). Investor's Behavior and Stock Investment Decision in Batam City. *Akuntabel*, 18(3), 532-542.

Ong, Z. Y., Lau, J. L. and Zainudin, N. (2021). Money Attitude, Materialism and Compulsive Buying among Malaysian Young Adults. *Management Science Letters*, 11, 281–290.

Omar, N. A., Abdul Rahim, R., Wel, C. A. and Alam, S. S. (2014). Compulsive Buying and Credit Card Misuse among Credit Card Holders: The Roles of Self-esteem, Materialism, Impulsive Buying and Budget Constraint. *Intangible Capital*, 10(1), 52-74.

Saunders, M., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. (8th ed.). Pearson Education Limited, Edinburgh Gate: England.

Shahvari, N. (2022). The Relation between Behavioral Finance Cognitive Biases, Age and Gender and Problem Gambling among Stock Investors in Iran. *New Applied Studies in Management, Economics & Accounting*, 5(2), 22-33.

Svoboda, J. (2022). Analysis of Behavioral Factors Influencing Investment Decisions: A Literature Review. *Trends Economics and Management*, 39(1), 47-56.

Tarka, P. and Babaev, J. (2021). Methodological insights on measurement and evaluation of compulsive buying behavior among young consumers in Poland: the case of compulsive‑ and non‑compulsive buyers. *Quality & Quantity*, 55,1581–1611.

Thodkar, P. P. and Kumar, B. S. (2022). Influence of Behavioral Factors on Stock Market Investment Decisions in India. *Journal of Tianjin University Science and Technology*, 55(5), 356-370.

Youn, H. C., Choi, J. S., Kim, D. J. and Choi, S. W. (2016). Development and Validation of a Stock Addiction Inventory (SAI). *Annals of General Psychiatry*, 15(16), 1-7.

Zahera, A.S., and Bansal, R. (2019). A Study of Prominence for Disposition Effect: a Systematic Review. *Qualitative Research in Financial Markets*, 11(1), 2-21.

Appendix 1

Exploratory Study Questions

To find out the limits of the study problem, the researcher conducted an exploratory study based on a non-probability soft sample. The researcher asked the following questions in the context of conducting the survey:

1- What is your Weekly Turnover Rate?

- 4-5 days a week
- 2-3 days
- One day a week

2- Do you Trade According to:

- Opinions of those around?
- Media expert opinions?
- Your personal vision?
- Stockbroker opinion?

3- Do you Hold Securities for:

- Too short terms
- Short terms
- Both short & too short terms
- Mid Terms
- All previous terms

4- Have you achieved net profits or losses over the course of your trading?

5- Do you feel an unjustified inner desire to trade?

Appendix 2
Survey Questionnaire
1) Behavioral Factors

Table (1). Statements of Behavioral Factors

	Statements	Never	Sometimes	Neutral	Often	Always
A	Overconfidence					
1	Every investor is confident in his ability to do a better job than others when choosing stocks					
2	The investor believes that he has special skills and experience in the field of investment					
3	The investor has sufficient knowledge of investment methods					
4	The investor feels satisfied with his previous investment decisions					
B	Representativeness Bias					
5	The investor evaluates past price movements to predict future price					
6	The investor sees the current performance of a stock as an indicator of future performance					
7	The investor borrows money in order to invest in the stock market					
C	Regret Aversion					
8	The investor may sell a winning stock and then feel that he could have held it longer.					
9	The investor holds a losing stock for a long time, expecting the trend to reverse.					
10	Sometimes the investor buys losing stocks in the hope that their price will rise in the future.					
D	Mental Accounting					
11	The investor invests in securities with the aim of saving money for retirement					
12	The investor invests in a diversified portfolio of securities					
13	The investor invests on a future time basis					
E	Herd Behavior					
14	The investor makes the investment decision based on the recommendations of an expert analyst					
15	The news and rumors circulating about companies in the media affect the investor's decision					
16	The investor asks the opinion of others about buying or selling securities					
17	The investor makes the investment decision based on the trends of investors in the market					

2) Trading Addiction

Table (2). Statements of Trading Addiction

	Statements	Never	Sometimes	Neutral	Often	Always
A	Gambling					
18	I borrow money from friends to get money for investing or trading					
19	I sell some assets to get money for investing or trading					
20	Others see that I have problems with my investments or trading, regardless of whether I believe it to be true					
21	My investments have caused financial problems for me or my family					
22	I have made ill-considered decisions about buying stocks					
23	I do a series of processes to compensate for my losses					
24	My trading makes me feel stressed and anxious					
25	I may resort to lying to my family or others about the amount of investment or trading					
26	I neglect my family and professional life because of my investments or trading in the stock market					
27	I feel an urgent desire to make a large amount of money from my investments or trading in the stock market in a short time					
28	I avoid opening the brokerage company report so that I do not have to think about my losses					
B	Compulsive Buying					
29	I depend on previous investment or trading experiences to anticipate future investments or trades					
30	I resort to investing or trading to escape or alleviate negative moods					
31	I have repeatedly tried to reduce my investments or trading on the stock market but I have returned at the same pace					
32	I sacrifice more time or money for my investments or trading on the stock market					
33	I feel stressed and anxious when trying to reduce or stop my investments or trading on the stock market					
34	I feel regret about my excessive investments or trading					
35	I feel anxious and upset when I am unable to trade on the stock market, for example, when I run out of money, go on vacation, or try to reduce my trading					
36	I feel excited and thrilled when I see that my stock prices have reached the level I expected					