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RESEARCH ARTICLE

The Effects of Money Beliefs on Investment Addiction

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Abstract

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As the impact of culture, especially money belief, is greater than the rational analysis of the capital market in developing countries, the expansion of Iran's capital market has led to an increased investment addiction. Since a few studies have been conducted in this area so far, this study investigates the impact of money beliefs on investment addiction. Thus, 415 questionnaires were distributed among investors; the data were analyzed using structural equations in AMOS software using the maximum likelihood estimation (MLE) method. The findings suggest that money worship and money status beliefs significantly affect investment addiction, whereas money avoidance belief does not affect investment addiction. In addition, the money vigilance belief has a significant negative impact on investment addiction. Given the effects of most money beliefs on investment addiction, policymakers and consultants of the capital market can readily safeguard traders from capital market dilemmas through effective money belief-building training.

Keywords:

Money avoidance, Money worship, Money status, Money vigilance, Investment addiction

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1. Introduction

Due to technological advancements, the capital markets have grown significantly worldwide, including in Iran, and people from all walks of life have been drawn to it (Griffiths, 2018; Cantwell, 2020). This is because the stock market has evolved from an insignificant market in the economy to an influential market that affects cultural developments and the economy. Society is experiencing the rise of new cultural dilemmas resulting from the capital market boom, including the speculation problem. People strive to meet their basic needs and suppress aspirations through the capital market. People may also become oblivious to their work and daily activities by spending most of their time reading the news and information about the capital market and analyzing various stocks (Markovic et al., 2012; García-Santillán, Mexicano-Fernández and Molchanova, 2021).

In this respect, social media is full of content providers attempting to portray the stock market as a quick way to reach huge wealth (Piñeiro-Chousa, Vizcaíno-González and Pérez-Pico, 2017; Li et al., 2019). 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. 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, Ioime, and Janiri, 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.

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. Thus, as scientific debates, experience, and logical analysis fade away, some irrational thoughts will become more pronounced in investors' decisions. Although different factors contribute to a distorted view of the capital market, a more in-depth investigation reveals that the desire to make more money is the most significant factor contributing to the development of improper insights into the capital market. Evidence suggests that the way people think about money, or money belief, significantly impacts investors' behaviours (Nadeem et al., 2020). Money belief is formed due to the environment and circumstances that the individuals experience throughout their lives and financial values and norms established in them during financial socialization. Under these circumstances, some money beliefs set the stage for unrealistic expectations and disregard for realities of the capital market as investors chase the capital market to make a quick profit. Simply put, one of the most fundamental components of investment is to evaluate the take profit and stop loss, and those who engage in negative money beliefs do so (Tang et al., 2018).

A significant portion of the capital market events is beyond rational analysis due to Iran's economic conditions. Several factors, notably investor culture, influenced the Tehran Stock Exchange in 2020. In other words, some investors' money beliefs and their lack of knowledge and understanding of financial market issues, such as investment addiction, have resulted in a lack of dynamism in the capital market, which serves as the beating heart of the country's economy. Because of their ignorance of these factors, investors are more likely to exit the capital market with the bankruptcy risk. This can have grave economic and cultural implications for the country.

Furthermore, understanding how money beliefs affect investment addiction is critical to both investors and regulatory and executive bodies. Regrettably, no research has been conducted in Iran to add to this literature or eliminate its adverse effects. The current study aims to fill this research gap by looking into the impact of money beliefs on investment addiction.

2. Theoretical Foundations and Literature Review, Development of Research Hypotheses

Socialization is a process that educates a person on how to function in society, provides him/her with a mindset and a sense of culture, and helps him/her improve and develop his/her skills (Zhao and Zhang, 2020; Smith, 2021). Financial issues constitute one of the dimensions of socialization. In other words, it is a process by which people develop cultures and attitudes toward their ability to act well as market customers. Some researchers define it as the acquisition and growth of cultures, beliefs, and attitudes toward household money spending. However, financial socialization is more widespread than learning to spend household money (Nanda and Banerjee, 2021). Financial socialization causes a person's attention to be drawn to the money beliefs of those around him/her, and the financial education that follows can help him/her develop a money belief. When the process of financial socialization fails to instil the desired money belief in a person, it leaves him/her very vulnerable to financial issues, including in the capital market (Santos and Campos, 2019).

2.1. Money beliefs: Money plays an essential role in individuals' daily life and affects their purchasing decisions and incentives. People are typically viewed as rational decision-makers in financial science. Hence, they are constantly looking for new ways to increase their wealth and other financial benefits. On the other hand, people pursue other objectives, such as gaining power and enjoying their lives. These demands are in line with the standard financial needs. These factors affect how people think about money and how they behave in money-related issues (Klontz, Britt, and Mentzer, 2011; Klontz and Lawson, 2019; Pedersen, 2019; Atiri and Bello, 2021).

Put it differently; money beliefs are the ways people think about money that shape their behaviour in money-related issues. People develop their money belief due to the environment and circumstances. The four types of money belief are as follows: money avoidance, money worship, money status, and money vigilance (Pedersen, 2019; Atiri and Bello, 2021), each of which is described below.

2.1.1. Money avoidance belief: Money avoidance belief defines money as evil and corruptive. People with the money avoidance belief may avoid spending money on necessities or delegate their financial responsibilities to others and may generally refuse to deal with money. According to research, these people typically have low income and asset net worth, resulting in an improper financial pattern. For those who believe in money avoidance, money is usually viewed as a force resulting in fear, anxiety, or disgust. According to other studies, unmarried and young people are more likely to have a money avoidance belief, decreasing with age (Klontz, Britt, and Mentzer, 2011; Klontz and Lawson, 2019). Klontz and Klontz (2009) and Klontz and Britt (2012) concluded that financial denial/rejection, hoarding, compulsive buying, and workaholicism are all positively predicted by the money avoidance belief. Furthermore, in another study conducted by Park and Sang (2018), the authors indicated that the money avoidance belief positively correlated with gambling addiction.

2.1.2. Money worship belief: People with a money worship belief claim that having more money makes everything better. Increased income is seen as a solution to problems by those who hold this belief. Money worshipers feel that they can never make enough money and will never pay for their desires. They believe that their needs will never be met, and consequently, they become trapped in a vicious circle in which more money makes them happier (Klontz, Britt, and Mentzer, 2011; Klontz and Lawson, 2019).

However, according to the findings of some studies, having more money has nothing to do with happiness. Furthermore, higher income is associated with higher levels of distrust and depression. According to Klontz and Klontz (2009) and Klontz and Britt (2012), a money worship belief can lead to financial disorders, such as excessive risk-taking and gambling behaviours. Furthermore, The studies conducted by Ong, Lau, and Zainudin (2021) and Park and Sang (2018) demonstrated

that money worship positively affected compulsive buying and workaholism.

2.1.3. Money status belief: People with a money status belief are more likely to buy the most expensive and latest items. They believe that each person is worth as much as the net worth of his/her assets. This belief may put the individuals in a more competitive position than their peers to earn more money. Those who believe that money determines a person's social status feel a clear distinction between socioeconomic classes. Excessive concerns about financial achievement and materialism have also been shown to cause a lot of tension and anxiety in individuals. The money status belief generates a strong incentive to improve one's socioeconomic status. Still, it also puts people at danger of engaging in irregular financial behaviours, such as investing in too risky ventures to get richer sooner (Klontz, Britt, and Mentzer, 2011; Klontz and Lawson, 2019). According to research on money status belief, people with this money belief have lower income and education levels. The money status belief also helps predict compulsive buying, financial dependence, and financial infidelity or lying to the partner/spouse about financial issues (Klontz and Klontz, 2009; Klontz and Britt, 2012). Furthermore, Ong, Lau, and Zainudin (2021) and Park and Sang (2018) reported in their studies that money status had a positive effect on compulsive buying and workaholism.

2.1.4. Money vigilance belief: People who have money vigilance belief firmly believe that saving is essential for the future and are more careful with their finances. Money vigilance belief appears to be protective against and minimize financial distresses. Those with such a belief are involved with more financial planning and enjoy a higher financial health level. People who are overly concerned about how to spend their money (Klontz, Britt, and Mentzer, 2011; Britt et al., 2015; Klontz and Lawson, 2019), on the other hand, may regard money as a sensitive issue in their family and refrain from sharing their financial information even with their family members. According to research on the money vigilance belief, people with the money vigilance belief have higher earnings and net assets. Also, according to Klontz and Klontz (2009) and Klontz and Britt (2012), money vigilance belief is adversely linked to compulsive buying, financial denial/rejection, and financial infidelity. In another study, Park and Sang (2018) revealed that money awareness impacted the variable of money-saving.

Investors have been more engaged in stock markets, and the availability of online trading platforms has led to their increased participation. However, since various incentives exist to present the capital market to make a lot of money, it has become quite difficult to identify their behavioural pattern. Money beliefs are among the above-cited incentives developed in people due to their social interactions, education, and experiences. Since studying the effect of money beliefs on the capital market is a relatively new concept, there has been little research in this area thus far. The following is a literature review on the effect of money beliefs on capital market traders.

Keller and Siegrist (2006) looked at the impact of attitudes toward financial risk, money beliefs, negative moral attitudes toward the stock market, income, and gender on willingness to invest in stocks. The findings suggested that money vigilance belief is negatively associated with the willingness to invest in stocks for men and women with no money savings. Ul Hassan, Mehmood, and Mushtaq (2017) investigated the effects of behavioural biases on the financial decisions of investors given their money attitudes. They first classified the investors into different groups based on their money attitudes and then explored the effect of behavioural biases on investors' decisions. Their findings indicated that money attitudes played a crucial role in how behavioural biases affected investors' decisions. Tang et al. (2018) also tried to figure out how investors used their love of money to forecast stock volatility and improve investment satisfaction. Their results revealed that people with money worship belief are less satisfied due to their inability to control their desire to become wealthy, and they constantly change their portfolios in response to fluctuations in the index

and stocks of their choice. [Nadeem et al. \(2020\)](#) looked at how money beliefs lead to investors' participation in the stock market in the presence of financial self-efficacy. The study found that investors' money beliefs play a significant role in their stock market participation decisions ([Bilgin et al., 2020](#)).

Furthermore, risk attitudes were discovered to mediate the relationship between money beliefs and stock market participation to some extent. Financial knowledge (literacy) and self-efficacy moderate the relationship between money beliefs and stock market participation. Another research project aimed to better understand individual investors' behaviours in the foreign exchange (Forex) market showed that money worship belief adversely affected investors' performance.

Money is an integral part of people's lives as it motivates their financial behaviours in various ways, resulting in different money beliefs among different groups of investors when investing in various financial assets. Despite the relevance of the effect of money beliefs on capital market traders, little research has been done on the subject.

2.2. Investment addiction: Trading is an exciting activity that triggers a sense of pleasure and reward in the brain. Therefore, some people trade regularly to alleviate destructive emotions momentarily. However, this could result in unexpected consequences, and thus, investment addiction in the long run. According to studies, in the wake of small early earnings, investment-addicted traders undertake larger and riskier investments, ending in irreparable losses. Investment addiction also leads to a gradual increase in time spent in the capital markets and eventually makes a person spend most of the day in the financial markets ([Guglielmo, Ioime, and Janiri, 2016](#)). As the rate of suicidal attempts among traders rises, investment addiction appears to be disregarded by financial market policymakers. Furthermore, this field has a minimal research background. The literature on investment addiction has been summarized in the following section.

[Markovic et al. \(2012\)](#) investigated the relationship between addictive behaviours and stock market investment in Croatia. The statistical population consisted of 111 people, most of whom were 35 to 45-year-old men with a high level of education who spent more than one hour a day monitoring the capital market. According to the findings, most online users, who invest in the stock market and buy and sell stocks, have met the DSM-IV criteria for addiction. [Grall-Bronnec et al. \(2017\)](#) also looked into whether investment addiction could be classified as a gambling disorder. The findings revealed that investment addiction is very similar to gambling disorders in terms of behavioural 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.

In other words, investing is not a form of gambling, yet some people consider it gambling. [Mosenhauer, Newall, and Walasek \(2021\)](#) investigated the associations between stock market trading frequency and problem gambling in their study titled: "The stock market as a casino." They indicated that the investors frequently engaged in trading showed gambling behaviour. In other words, this study supports the hypothesis that there is a relationship between problem gambling and stock market trading frequency.

According to a standard diagnostic checklist developed by the American Psychiatric Association (APA), [Cox, Kamolsareeratana, and Kouwenberg \(2020\)](#) discovered that a group of individual investors of the financial market demonstrated signs of investment addiction. Investors with addiction symptoms followed a more active and more speculative trading style, implying the higher frequency of their daily trading. Besides, [Sonkurt and Altinos \(2021\)](#) carried out a study in 2021 to study the pathology of the behaviour that digital-currency investors exhibited, and the findings indicated that a significant portion of digital-currency traders, including those trading frequently or daily, was likely to show dysfunctional financial behaviour while investing. And some of them

might be addicted to investing in digital currency. [Mathieu and Varescon \(2021\)](#) also investigated stock buying addiction to better. This study influenced investment addiction by three factors: family, investment time, motives (incentives), and beliefs.

According to previous research and a brief examination of investors' behavioural patterns, some investors meet the criteria for addiction. Despite the significance of this phenomenon, little research has been conducted on the factors affecting investment addiction. On the other hand, it should be acknowledged that, based on the literature review, the impact of money beliefs on the capital market has not yet been adequately investigated. Moreover, even though money beliefs can act as the critical determinant of investors' behavioural patterns, including the phenomenon of investment addiction, this issue has received less attention. This study explores the effect of money beliefs on investment addiction to fill this gap. That is to say, as the problem of investment addiction is a new topic, this study is unique in that it aims to advance theoretical foundations and add to the body of knowledge on the subject. It can also be a fundamental solution to the capital market problems for investors and policymakers.

2.3. Theoretical foundations of research hypotheses

According to social learning theory, the norms and values of individuals are formed under the influence of their family and community context ([Inseng Duh, Yu and Ni, 2021](#)). People's belief in financial issues, especially money, is not separable from the social learning process, called money culture. Money avoidance belief is one of the money beliefs, and the people under the influence of this culture believe that money is inherently bad and a source of guilt and shame, so that they do not keep much money with them. People with the money avoidance belief are more likely to make wrong financial decisions, resulting in low income and asset net worth. This is because they ignore financial risks and have no financial planning due to their money avoidance ([Klontz and Lawson, 2019](#)). Additionally, investors with the same money belief do not keep much money and invest without prior planning. Due to this vicious cycle, people become obsessed with investing and exhibit signs of investment addiction ([Cox, Kamolsareeratana and Kouwenberg, 2020](#)).

H₁: Money avoidance belief positively and significantly impacts investment addiction.

Some people believe that more money makes everything better in today's world. This mindset leads to the belief that one can never have enough money or that one's demands will never be met. Hence, they are trapped in a vicious circle in which some money makes them happier all the time ([Klontz and Lawson, 2019](#)). In such circumstances, investors who are influenced by money worship beliefs and whose dream is to gain a huge wealth within a short time become involved in the investment process. They hold a high risk-taking and gambling perspective in their investments. Traders who assume this viewpoint spend more time in the stock market ([Mosenhauer, Newall and Walasek, 2021](#)); in other words, they become addicted to investment.

H₂: Money worship belief positively and significantly impacts investment addiction.

Money is not just about finances (financial issues); most importantly, money has had such a powerful impact on investors that its sudden rise or fall can significantly affect their personalities and attitudes. Some people believe that each person is worth as much as the net worth of his/her assets. In other words, they are influenced by the money status belief, according to which money enhances the social status of the investor ([Klontz and Lawson, 2019](#)). Investors pay too much attention to their financial success under such circumstances, and thus, they invest without financial planning and accept very high risks. As a result, traders incur financial losses that trap him/her emotionally so that the investor re-invests to feel comfortable ([Mathieu and Varescon, 2021](#)), and this vicious cycle continues, causing the trader to become an addicted investment.

H₃: Money status belief has a significant positive impact on investment addiction.

Another money belief is the money vigilance belief. Traders who hold this [money] belief are typically more cautious with their money and are risk-averse people. They also plan out their financial activities better (Klontz and Lawson, 2019). Accordingly, they are less likely to be affected by emotions and dreams of becoming wealthy because they follow a long-term investment horizon. Thus, they are less vulnerable to market volatility and short-term losses. This, in turn, protects them from the emotional pitfalls of financial losses and reduces their risk of investment addiction (Mathieu and Varescon, 2021).

H₄: Money vigilance belief has a significant negative impact on investment addiction.

3. Research Methodology

The current research is a descriptive survey study in terms of data collection. The statistical population comprises all Tehran Stock Exchange investors who monitor the capital market for more than two hours a day. 415 questionnaires (300 electronic questionnaires, 115 paper questionnaires) were distributed among stockholders to collect the samples. Three hundred ninety-six questionnaires were gathered, of which 346 were acceptable. The sample size was determined using the Tabachnick and Fidell formula, which is utilized to determine the sample size in structural equations. According to this formula, the sample size should be more than or equal to 50 plus 8 multiplied by the number of predictor variables. The sample size was increased to 200 participants for better generalizability of the study findings (Habibi and Adnour, 2017).

3.1. Research instrument and data analysis methods

The first section of the questionnaire was dedicated to demographic information, such as age, gender, education, and marital status. The second section is about the “money beliefs” variable. A 16-item localized questionnaire developed by Britt et al. (2015) was employed for this purpose. The investment addiction variable is discussed in the third section. The 4-item modified questionnaire, presented by Markovic et al. (2012), was utilized for this purpose.

3.2. Questionnaire reliability and validity

To assess the questionnaire's factorial structure, reliability, and validity, it was presented to experts in the first step to ensure that it corresponded to the concept being measured (Farasangi and Noghondari, 2017). A quantitative indicator of validity called convergent validity (AVE) was also used for measuring validity. This criterion uses factor loads related to each question to evaluate it. Convergent validity is established when the value of the criterion is greater than 0.5. Cronbach's alpha test and its more recent index, i.e., composite reliability index, were used in the second step to assess the internal consistency of the questionnaire. The tests mentioned above are accepted when their values are greater than 0.7. Confirmatory factor analysis (CFA) was employed in the third step to assess the model validity, the fitness of the factor load, and the fitness of the measurement model (Hayes, 2018).

3.3. Structural equation modelling

The data were analyzed using structural equation modelling (SEM) and Amos software Version 26. The number of unknown parameters was predicted using the maximum likelihood estimation (MLE) approach. In this method, first, the data must be distributed normally. For this purpose, the kurtosis coefficient of each variable should be less than 7, and its skewness coefficient should range between +2 and -2. Secondly, the dependent variable must be continuous (Byrne, 2013). The data were analyzed in two steps. The stability and consistency of the tested choices were examined in the first step, and the degree of likelihood and fitness were reviewed for SEM and hypothetical path

tests in the second step. The structural equation modelling (SEM) technique allows a researcher to test some regression equations simultaneously. It is also a comprehensive method for testing observed and latent variables (Hayes, 2018).

4. Data Analysis

4.1. Descriptive statistics results

A total of 346 people responded to the questionnaire. Females and males made up 49.7% and 50.3% of the population, respectively, and their educational degrees ranged from degrees lower than high school diplomas to doctorates. Investors with a master's degree or higher account for 34.7% of the investors, which constitute the most frequent category in terms of education. In addition, 68.5% of the respondents are married with an average age of 40.

Table 1 shows the following descriptive statistics for the research variables: minimum, maximum, skewness, kurtosis, mean, and standard deviation. These variables were measured using a Likert scale (1–5). The averages for money vigilance belief, money avoidance belief, money status belief, money worship belief, and investment addiction are 1.89, 4.03, 3.96, 3.66, and 3.72, respectively. This indicates that the investors of the sampled community moderately/firmly represent the features of investment addiction. Furthermore, there is a moderate to firm belief in money status, money worship, and money avoidance beliefs. As stated in the Methodology section, since the kurtosis coefficient of variables is less than 7, and their skewness coefficient ranges between +2 and -2, the research variables are normal.

Table 1. Descriptive statistics

Variable	Mean	SD	Min	Max	Skewness	Kurtosis
Money vigilance belief	1.89	0.85	1	5	1.01	0.54
Money avoidance belief	4.03	0.72	1	5	-0.86	0.60
Money status belief	3.96	0.72	1	5	-0.95	1.09
Money worship belief	3.66	0.98	1	5	-0.47	-0.56
Investment addiction	3.72	0.92	1	5	-0.63	-0.24

4.2. Reliability and validity tests

As mentioned in the Methodology section, the measurement model's fitness and research constructs were determined using CFA. CFA must meet three criteria: (1) first, each construct must be correlated with its indicators, (2) all indicators must have a minimum factor load of 0.5, and (3) the model must feature a favourable fitness. The model fitness is favourable in the present study. When interpreting factor loads, it is important to remember that a factor load ranges between 0 and 1. Regardless of the signs of the factor loads, if the factor load is higher than 0.5, the factor load is desirable, and if it is less than the specified value, the item should be removed.

Furthermore, if Cronbach's alpha and construct reliability are greater than 0.7, the construct reliability is acceptable (Hayes, 2018). For all variables of this study, the composite reliability and Cronbach's alpha are greater than 0.7, indicating reliability. The constructs convergence is greater than 0.5, which is desirable based on the results presented in Table 2 (Hayes, 2018).

Table 2. Criteria of AVE, validity, and reliability of the measurement model

Research variables	Cronbach's alpha	Composite reliability	Convergence (AVE)	Factor loading	Research variables	Cronbach's alpha	Composite reliability	Convergence (AVE)	Factor loading
IA ¹	0.89	0.88	0.66		MS ⁴	0.88	0.89	0.67	
IA 1				0.88	MS1				0.76
IA2				0.89	MS2				0.85
IA3				0.73	MS3				0.91
IA4				0.74	MS4				0.74
MA ²	0.82	0.83	0.56		MV ⁵	0.88	0.88	0.65	
MA1				0.76	MV1				0.79
MA2				0.75	MV2				0.92
MA3				0.77	MV3				0.78
MA4				0.68	MV4				0.71
MW ³	0.90	0.89	0.69						
MW1				0.93					
MW2				0.94					
MW3				0.73					
MW4				0.63					

4.3. Path analysis of structural equation model (SEM) variables

In the model illustrated in Fig. 1, the path analysis of the variables is examined using the SEM methodology (refer to the Methodology section). Path MA→IA (Fig. 1) analyzes the relationship between money avoidance belief and investment addiction. Path MW→IA analyzes the relationship between money worship belief and investment addiction. Path MS→IA analyzes the relationship between money status belief and investment addiction, and the path MV→IA analyzes the relationship between money vigilance belief and investment addiction. Table 3 demonstrates that the overall fitness of the model was suitable because the chi-square index (CMIN), normalized chi-square index (CMIN/df), root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), comparative fit index (CFI), and relative fit index (RFI) had a good fitness level.

Table 3. Model fitness

Indicator type	Model fitness criteria	Acceptable limit	Model
Model indicators	CMIN		483.67
	P	<0.05	***
	CMIN/df	1-5	3.04
Relative indicators	RMSEA	<0.08	0.07
	GFI	>0.90	0.87
	CFI	>0.90	0.92
	RFI	>0.60	0.87

1. Investment addiction
2. Money avoidance
3. Money worship
4. Money status
5. Money vigilance

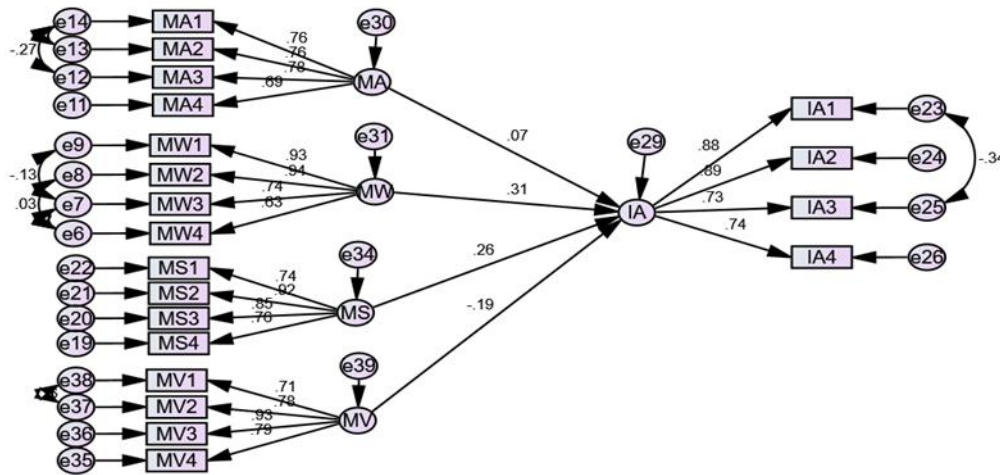


Figure 1. The results of the model

4.4. Testing research hypotheses

According to the analysis results, the “money avoidance belief” variable has an influence coefficient of 0.10 on the investment addiction variable. H1 was rejected because the significance level is 18% (>5%), and the critical value is 1.33, which is above the 1.96 range (Table 5). Moreover, at a significance level of 1%, the influence coefficient of the “money worship belief” variable on investment addiction is 0.27, indicating a significant positive effect. Furthermore, the critical value is 5.74, higher than the 1.96 range, indicating that H2 is confirmed (Table 5). H3 is also confirmed because the influence coefficient of 0.35 is significant and positive at a 1% significance level, and the critical value is 4.75, which is higher than the 1.96 range. In other words, as traders’ financial status belief grows, so does their investment addiction (Table 5). H3 is also confirmed because the influence coefficient of -0.26 is negatively significant at the 1% significance level, and the critical value is -3.59, which is less than the range of -1.96. That is, as traders’ money vigilance belief grows, their investment addiction declines (Table 5).

Table 4. Model path analysis results

Independent variable	Dependent variable	Influence coefficient	Standard error	Critical value	Significance level
Money avoidance belief	Investment addiction	0.10	0.07	1.33	0.18
Money worship belief	Investment addiction	0.27	0.04	5.74	0.00
Money status belief	Investment addiction	0.35	0.07	4.75	0.00
Money vigilance belief	Investment addiction	-0.26	0.07	-3.59	0.00

5. Conclusion and Discussion

This research aimed to figure out what causes the investment addiction phenomenon. This study examined the association between money beliefs and investment addiction. Even though the past literature has limited reference to money beliefs, their impacts on investors’ behavioural patterns in the capital market have not been thoroughly examined. Moreover, with the introduction of social learning theory, culture became the most critical factor in shaping the behavioural patterns of individuals in societies. One of the issues that have always affected people in a community is the addiction phenomena, including investment addiction, which is often influenced by culture, including money beliefs. Despite the significance of the issue, little research has been conducted on the phenomenon of investment addiction, which is influenced by investors’ money beliefs. This

research aimed to close this gap in the literature. Structural equations were used to test the research hypotheses within the research model context. The outcomes of each hypothesis will be discussed briefly in the following section. Due to the complexities of the capital market, investors are responsible for their own decisions and choices. In this regard, some money beliefs, such as money avoidance, can be extremely harmful to individuals. Those believing in money avoidance can justify financial irresponsibility by viewing money as an evil and sinful item for the investor.

Thus, people with the money avoidance belief make wrong financial decisions, often ignore financial risks due to their money avoidance, and make compulsive investments without planning. Therefore, the money avoidance belief can increase the risk of becoming addicted to investing. Nonetheless, the findings of this study revealed that money avoidance belief did not affect investment addiction in the statistical population of investors active at the Tehran Stock Exchange (H1). This result is contrary to the theoretical framework presented in the previous section.

Furthermore, the H2 result demonstrates that the money worship belief leads to monitoring financial market trading with a gambling perspective. Accordingly, they devote significant time following and studying financial news and capital market developments. Under such conditions, a gap is created between the individuals and their family and workplace, making investing their only daily activity. The H2 result is consistent with the theoretical framework.

Some money beliefs, such as money status, can put people in a competitive position to earn more money than their peers. Hence, financial success is critical for investors with this money belief. Accordingly, they strive to invest in the capital market under any circumstances and make speculative profits, even if the risk is high. These traders are more likely to fall into the emotional trap of financial loss as they invest without proper financial planning. Hence, they fall into a vicious, morbid investment addiction cycle. The present study, conducted for the statistical population of investors at the Tehran Stock Exchange, also affirmed that money status belief has a significant positive impact on investment addiction (H3). This result is consistent with what was discussed in the Theoretical Framework section.

Finally, the H4 results revealed that money vigilance belief has a significant negative impact on investment addiction. Since investors with money vigilance belief have control over their finances and invest with prior planning, this result is consistent with the theoretical framework. Thus, they are less likely to be affected by emotions and fantasies about becoming wealthy. Consequently, they are less likely to fall prey to the emotional trap of short-term losses, reducing the risk of becoming addicted to investment.

There was no similar study on the impact of money beliefs on investment addiction. However, a few studies have looked at the impact of money beliefs on detrimental financial behaviours. Confirming H2, H3, and H4, the findings of studies by [Klontz and Klontz \(2009\)](#) and [Klontz and Britt \(2012\)](#) and [Park and Sang \(2018\)](#) on the positive effect of money beliefs (money worship and money status) and the negative effect of money vigilance belief on financial behavioural disorders were in line with those of our investigation. In addition, the study of [Ong, Lau, and Zainudin \(2021\)](#) has attested the positive effects of money beliefs (money worship and money status) on dysfunctional financial behaviour. Although studies by [Klontz and Klontz \(2009\)](#), [Klontz and Britt \(2012\)](#), and [Park and Sang \(2018\)](#) indicated the positive impact of money avoidance belief on detrimental financial behaviour, the current study found no such a significant relationship (H1).

This research also faced some limitations. As the questionnaire was used to gather data, some investors refused to respond honestly. It is also difficult to draw causal conclusions from this study because it was conducted cross-sectionally. In addition, the respondents' unfamiliarity with financial concepts doubled the response time and the difficulty of the work for the researcher.

According to the findings of this study, recognizing investors' money beliefs can help market

policymakers drive the capital market toward a boom. The results may also assist capital market professionals in tailoring investors' behavioural patterns. By recognizing the roots of investment addiction, they can provide the investors with essential training, which is essential for traders' financial well-being. Furthermore, because there have been few studies on money beliefs in the capital market, evaluating the impact of investors' money beliefs on investment addiction can add to the literature. Since scholars have not explored the topic above yet, it can be a new area for research innovation. In this regard, it is advised that researchers investigate the factors influencing money beliefs and the impact of financial education and counselling on the investment addiction phenomena.

References

1. Atiri, S. O. and Bello, S. T. (2021). Socio-demographic Determinant of Money Script Pattern of Undergraduates of the University of Lagos. *Psychocentrum Review*, 3(1), pp.105-118. <https://doi.org/10.26539/pcr.31549>
2. Bilgin, Y., Camgoz, S. M., Karan, M. B., and Yildiz, Y. (2020). Understanding the Investment Behavior of Individual Investors: An Empirical Study on FOREX Markets. In *Handbook of Research on Decision-Making Techniques in Financial Marketing*, pp. 228-246. <https://doi.org/10.4018/978-1-7998-2559-3.ch011>
3. Britt, S. L., Klontz, B. T., Tibbetts, R. and Leitz, L. (2015). The financial health of mental health professionals. *Journal of Financial Therapy*, 6(1), pp. 17–32. <https://doi.org/10.4148/1944-9771.1076>
4. Byrne, B. M. (2013). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*, Routledge, New York, USA.
5. Cantwell, A. (2020). Raising the Stakes: The Use and Future Adoption of Cryptocurrency within Online Gambling in Ireland, Master of Science dissertation, National College of Ireland. Dublin, Ireland.
6. Cox, R., Kamolsareeratana, A. and Kouwenberg, R. (2020). Compulsive gambling in the financial markets: Evidence from two investor surveys. *Journal of Banking & Finance*, 111, A. 105709. <https://doi.org/10.1016/j.jbankfin.2019.105709>
7. Farasangi, S. E. and Noghondari, A. T. (2017). Investigating the Relationship between Expectations Gap from Attitude of Accreditation of Audit Report by Credit Experts and Non-repayment of Granted Facilities in the Branches of Keshavarzi Bank of Iran. *International Journal of Economics and Financial Issues*, 7(4), pp. 199-206.
8. Grall-Bronnec, M., Sauvaget, A., Boutin, C., Bulteau, S., Jiménez-Murcia, S., Fernández-Aranda, F. 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), pp. 340-348. <https://doi.org/10.1016/j.addbeh.2015.12.006>
9. Griffiths, M. D. (2018). Hot topics in gambling: Gambling blocking apps, loot boxes, and crypto-trading addiction'. *Online Gambling Lawyer*, 17(7), pp. 9-11.
10. Guglielmo, R. Ioime, L. and Janiri, L. (2016). Is Pathological Trading an Overlooked Form of Addiction?. *Addiction and Health*, 8(3), pp. 207-209.
11. Habibi, A. and Adnour, M. (2017). Structural equation modeling and factor analysis (LISREL software application training), University Jihad Publishing Organization, Tehran, Iran. (In Persian)
12. Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), pp. 4-40.

- <https://doi.org/10.1080/03637751.2017.1352100>
13. Inseng Duh, H., Yu, H. and Ni, Y. (2021). Chinese Millennials' happiness and materialism: Explanations from two life-course theories, self-esteem, and money-attitudes. *Journal of Consumer Affairs*, 55(4), pp. 1306-1332. <https://doi.org/10.1111/joca.12368>
 14. Keller, C. and Siegrist, M. (2006). Investing in stocks: The influence of financial risk attitude and values-related money and stock market attitudes. *Journal of Economic Psychology*, 27(2), pp. 285-303. <https://doi.org/10.1016/j.joep.2005.07.002>
 15. Klontz B.T. and Lawson D.R. (2019). Identifying Problematic Financial Behaviors and Money Disorders. In: Durband D., Law R., Mazzolini A. (eds) *Financial Counseling*. Springer, Cham. New York, USA. https://doi.org/10.1007/978-3-319-72586-4_11
 16. Klontz, B. and Klontz, T. (2009). *Mind over money: Overcoming the money disorders that threaten our financial health*, 1st edition, Crown Business. New York, USA.
 17. Klontz, B. T. and Britt, S. L. (2012). How clients' money scripts predict their financial behaviors. *Journal of Financial Planning*, 25(11), pp. 33-43.
 18. Klontz, B., Britt, S. L. and Mentzer, J. (2011). Money beliefs and financial behaviors: Development of the Klontz Money Script Inventory. *Journal of Financial Therapy*, 2(1), pp. 1-22. <https://doi.org/10.4148/jft.v2i1.451>
 19. Li, D., Wang, Y., Madden, A., Ding, Y., Tang, J., Sun, G. G. and Zhou, E. (2019). Analyzing stock market trends using social media user moods and social influence. *Journal of the Association for Information Science and Technology*, 70(9), pp. 1000-1013. <https://doi.org/10.1002/asi.24173>
 20. Markovic, H., Nikolac, N., Tripkovic, M., Haluga-Golubovic, I. and Custovic, Z. (2012). Connection between addictive behavior and investing on the stock market in Croatia. *Alcoholism and psychiatry research: Journal on psychiatric research and addictions*, 48(2), pp. 69-80.
 21. Mathieu, S. and Varescon, I. (2021). When gambling with derivative products can become problematic: a case report of excessive trading. *International Journal of Psychological Research and Reviews*, 4, 50-50. <https://doi.org/10.28933/ijpr-2021-06-0605>
 22. Mosenhauer, M., Newall, P. W. and Walasek, L. (2021). The stock market as a casino: Associations between stock market trading frequency and problem gambling. *Journal of behavioral addictions*, 10(3), pp. 683-689. <https://doi.org/10.1556/2006.2021.00058>
 23. Nadeem, M. A., Qamar, M. A. J., Nazir, M. S., Ahmad, I., Timoshin, A. V. and Shehzad, K. (2020). How Investors Attitudes Shape Stock Market Participation in the Presence of Financial Self-Efficacy. *Frontiers in Psychology*, 11, A 2286.
 24. Nanda, A. P. and Banerjee, R. (2021). Consumer's subjective financial well-being: A systematic review and research agenda. *International Journal of Consumer Studies*, 45(4), pp. 750-776. <https://doi.org/10.1111/ijcs.12668>
 25. Ong, Z., Lau, J. and Zainudin, N. (2021). Money attitude, materialism and compulsive buying among Malaysian young adults. *Management Science Letters*, 11(1), pp. 281-290. <https://doi.org/10.5267/j.msl.2020.8.005>
 26. Park, J.O. and Sang, S.H. (2018). The effect of consumers' financial beliefs on dysfunctional financial behavior. *Consumer Problems Study*, 49(1), pp. 163-195. <https://doi.org/10.15723/jcps.49.1.201804.163>
 27. Pedersen, M. B. (2019). The Experienced Influence of Money in Social Work Related Psychology, Master's thesis, Aalborg University. *Aalborg. Denmark*

28. Piñeiro-Chousa, J., Vizcaíno-González, M. and Pérez-Pico, A. M. (2017). Influence of social media over the stock market. *Psychology & Marketing*, 34(1), pp.101-108. <https://doi.org/10.1002/mar.20976>
29. Santos, E. J. R. and Campos, A. F. (2019). Symbolic Uses of Money and Disorders of Financial Consumption: State-of-the-art and Research Proposal. *Journal of Psychiatry and Behaviour Therapy*, 2(1), pp .33-36.
30. Smith, M. A. (2021). Social learning and addiction. *Behavioural Brain Research*, 398, A. 112954. <https://doi.org/10.1016/j.bbr.2020.112954>
31. Sonkurt, H. O. and Altınöz, A. E. (2021). Cryptocurrency investment: A safe venture or a new type of gambling?. *Journal of Gambling Issues*, 47(8), pp. 199-216. <https://doi.org/10.4309/jgi.2021.47.8>
32. Tang, N., Chen, J., Zhang, K. and Tang, T. L. P. (2018). Monetary wisdom: How do investors use love of money to frame stock volatility and enhance stock happiness?. *Journal of Happiness Studies*, 19(6), pp. 1831-1862. https://doi.org/10.1007/978-3-319-23514-1_1205-1
33. Ul Hassan, M. N., Mehmood, B. and Mushtaq, M. M. (2017). Effect of behavioral biases followed by money attitudes on investment decisions: evidence from Pakistan stock exchange. *Research Communications in Psychology, Psychiatry and Behavior*, 3(1), pp. 1-21.
34. Zhao, H. and Zhang, L. (2020). Talking money at home: the value of family financial socialization. *The International Journal of Bank Marketing*, 38(7), pp. 1617-1634. <https://doi.org/10.1108/IJBM-04-2020-0174>