



Analysis of the importance of performance (IPMA) with the approach of integrating the five-factor model of personality and planned behavior on the investment intention of small shareholders in the stock market

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ABSTRACT

The purpose of this research is performance importance analysis (IPMA), with the approach of combining the five-factor model of personality and the theory of planned behavior on the investment intention of retail shareholders. The research method is a description of the correlation type and the statistical population includes all small shareholders active in the Tehran Stock Exchange. The data collection tool was a researcher-made questionnaire. At the descriptive level of data analysis, average and standard deviation statistics were used. In addition, the data were analyzed by using SPSS26 and smart pls software through structural equation modeling.

This analysis is a useful analysis approach in PLS-SEM that extends the results of path coefficient estimation (significance) by adding a dimension. The data collection tool was a researcher-made questionnaire. At the descriptive level of data analysis, average and standard deviation statistics were used. In addition, the data were analyzed by using SPSS26 and smart pls software through structural equation modeling.

Keywords: Performance Importance Analysis (IPMA), five-factor model of personality, planned behavior, investment intention.

1. Introduction

Market participants in the real world often behave unpredictably. This could be because the perceptual factors that may influence behaviors through psychological and personal characteristics have been neglected. On this basis and considering the importance of the stock exchange in the development of the national economy and the role of small investors in it, it is necessary to know more precisely the factors affecting the behavior of small investors, scientifically, and predict their possible future behavior to some extent. and somehow played a role in the transparency of the market.

It has been observed that about 32% of investors are generally unable to understand their investment goals and about 30% of investors are caught between their views and the suggestions of their financial advisor. In addition, the investor is misinformed, confused and in conflict with what he wants and what he can really get (Akhtar and Das, 2019). It is important to know, in the meantime, what is the moderating role of gender, age and experience on the structure of the above integrated model? In addition, by adding another dimension to the aforementioned analyses, the importance-performance of each factor of the integrated research model will also be examined and analyzed.

In recent years, various tools and methods have been presented to help different people with the aim of knowing the effective criteria in the investment of retail investors in the capital market, among which the theory of planned behavior can be mentioned. This theory states that human behavior is guided by three types of considerations, which are: behavioral beliefs, normative beliefs, and control beliefs, which lead to specific results, respectively, such as attitude toward behavior, subjective norm, and perceived behavioral control.

The combination of attitude to behavior, mental norm and perceived behavioral control, all lead to the formation of behavioral intention. Therefore, there is a lot of talk about the importance of this issue and the direct impact it has on the behavioral intention of investors, and many researches have been conducted in this field and many researchers have investigated the issue from different perspectives.

Also, in recent years, various tools and methods have been presented to help different people with the aim of knowing the effective criteria in the investment

of investors in the capital market, including the five-factor model of personality and behavior theory. Scheduled pointed out. In this regard, the present research will investigate the importance of performance (IPMA) and the integration of the theory of planned behavior and the five-factor model of personality on the investment intention of retail shareholders in the Tehran Stock Exchange, which has not been done before in domestic research. It has been largely ignored. In fact, by conducting this research, a scholarly understanding of the factors affecting the behavior of retail investors in the Tehran Stock Exchange when deciding on the intention to invest in stocks will be obtained, and this approach will bring more clarity to the causes and role of influencers in the stock market, as well as forecasting. Their future behavior becomes minimal.

In addition, the large number of micro-investors, as well as the great influence of their personality and demographic characteristics on investment intention, doubles the importance of examining these issues in an integrated way, which has been largely ignored in domestic research. slow It is expected that the results of this research, which is designed to explore people's stock investment goals and to fill the existing research gap, will be fruitful.

Theoretical foundations and research background

In this section, the theoretical foundations and background of internal and external researches have been examined:

Today, investors consider a wide range of factors for investment. But there is little information about the factors influencing decision making. In recent years, governments' privatization policies have played an important role in increasing the prosperity of the stock market. In the economic sector, one of the most important factors in increasing investment and subsequent economic growth and development is having strong and efficient financial markets along with suitable and active financial organizations in these markets. Therefore, the stock market can be an important lever in controlling the inflation rate and increasing the growth rate (Bayer et al., 2020). Since the stock exchange organization is considered as an important criterion in measuring the economic

development of a country, it provides the conditions for the economic and psychological balance of the society and on the other hand, it guarantees the economic growth of the society (Mardanpour, 1400).

From a general point of view, investment means using available money to get more money in the future; In other words, investment means postponing current consumption in order to achieve the possibility of more consumption in the future. In investment, there are two different and important features, which are: time and risk. The importance of these two issues is due to the fact that in investing, money is spent in the present tense and its amount is certain; While the resulting reward is obtained in the future and is usually associated with a lack of certainty (Grasimovo and Dombrowski, 2022).

Rai 4 and others (2021) conducted a research titled personality traits leading to investor's financial risk tolerance: structural equation modeling approach. This study focuses on whether (a) Big Five personality factors have a direct effect on financial risk tolerance or (b) Big Five personality factors as a secondary (higher order) factor leading to financial risk tolerance?

In this research, the data is cross-sectional in nature, which was collected from 599 investors who invested through Fereshte Brokerage (Securities Company) in Delhi and National Capital Region (NCR) using an online structured questionnaire. . To investigate the relationship between the variables, correlation and regression tests were used using the structural equation modeling approach. The results of this study showed that among the big five personality dimensions, only agreeableness, conscientiousness and openness are significantly related to financial risk tolerance, while personality traits as a secondary factor have a strong relationship with financial risk tolerance. It has investors. Therefore, personality traits are preferable as the second order of the model. Shakri and others (1400) conducted a research titled investigating the effect of personality dimensions on the risk-taking of investors in the Tehran Stock Exchange. The purpose of this research is the effect of five personality dimensions (neuroticism, extroversion, openness to experience, adaptability, conscientiousness) on investors' risk taking. For this purpose, the investors of Tehran Stock Exchange as a sample were randomly selected and the desired data were collected using the standard five-factor NEO personality questionnaire.

By using factor analysis, correlation and regression, it has been tried to test the correctness of the hypotheses. The research findings indicate that the two dimensions of openness to experience and conscientiousness have a positive and significant relationship with risk-taking, the dimension of neuroticism has an inverse and significant relationship with risk-taking, and the two dimensions of adaptability and extroversion have a relationship with risk-taking. They have no meaning. Rafiei et al. (2017) conducted a study on the effect of investors' personality type on their behavioral biases in the Tehran Stock Exchange. In this research, the aim was to identify a number of common behavioral biases among Tehran Stock Exchange investors and to identify their personality type through the Myers-Briggs Personality Test (MBTI). Analysis of variance test was used to investigate the relationship between the personality types of investors and the specified behavioral tendencies. Also, by using Dunnett's test, the personality types with the most behavioral distortion and the least behavioral distortion were identified. The data collection in this research was done through a questionnaire and at the end the researchers came to the conclusion that all the hypotheses (except the fourth hypothesis) were confirmed and between the personality types and behavioral tendencies of overconfidence, belief There is a significant relationship between loss aversion and change aversion in investors. Importance-Performance Analysis (IPA) is a method to measure the distance between expectations (importance) and perceptions (performance) around the phenomenon under study. This method is one of the gap analysis methods that evaluates the distance between "what is" and "what should be".

"Importance-Performance Analysis" method is the Persian translation of Impornace-Performance Analysis. The IPA method was first proposed by John Martilla and John James in 1977. This technique is very close to Seroqual scale in terms of data collection method. Performance-importance analysis is an effective tool for evaluating the organization's competitive position, identifying opportunities for improvement, and designing marketing strategies and providing targeted services.

Marietta and James then presented importance-performance analysis to identify and prioritize product or service attributes that an organization can focus on to maximize customer satisfaction. Through the

formation of a two-dimensional matrix, the vertical axis of which is the customers' perception of the performance (quality) of each feature and the horizontal axis shows the importance of that feature in customers' decision-making, it is possible to provide effective suggestions for managers. This two-dimensional matrix is called importance-performance matrix.

Importance-Performance Map Analysis expresses the results of PLS-SEM considering the performance of a hidden variable in the model. Importance-performance map analysis, which is also called IPMA analysis, is used to calculate two indices of importance and performance efficiency of hidden variables. In partial square analysis, the model is implemented as a whole and the role of the variables within the model is considered the same. The IPMA matrix, by considering a hidden variable in the model, determines the importance and performance of other variables based on that variable in the model.

The model determines the importance and performance of other variables based on that variable in the model.

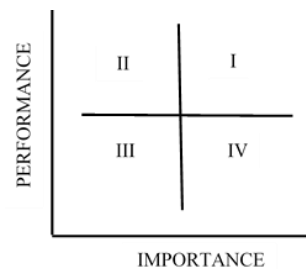
In IPMA analysis, the position of each variable in the model can be identified by calculating the importance and function of the variable in the model. The results of IPMA analysis are important for drawing conclusions in management decisions. Consequently, it is preferable to focus primarily on improving the performance of those constructs that have high importance in explaining a particular target construct, but at the same time, perform relatively poorly.

Because the separate analysis of performance dimension and importance dimension data may not be meaningful, especially when each data set is studied simultaneously. Therefore, the data related to the level of importance and performance of indicators are displayed on a two-dimensional grid. In this diagram, the Y axis indicates the importance dimension and the X axis indicates the performance dimension. This two-dimensional network is called importance-performance matrix or IPA matrix. The IPA matrix actually consists of four parts or quadrants and each quadrant has a specific strategy. The role of this matrix is to help the decision making process. This matrix is used to know the degree of priority of indicators for improvement.

Based on the importance of each indicator (optimal situation) and the performance of the organization in

the field of this indicator (current situation), four quadrants can be distinguished:

- Area of indifference: low performance-low importance
- Area of waste: high performance - low importance
- Area of weakness: low performance-high importance
- Acceptable range: high performance - high importance



Methodology

Considering that in this research, the performance importance analysis (IPMA) with the approach of integrating the five-factor model of personality and planned behavior on the investment intention of retail shareholders in the stock market has been addressed, however, this research is practical in terms of its purpose and considering In this research, by using the questionnaire tool, it has been tried to examine the amount and type of relationships between the variables to answer the scientific problem in the real world.

The statistical population of the present study was made up of all small shareholders active in the Tehran Stock Exchange. Also, in the current research, to determine the sample size, available sampling method and Cochran's (indeterminate) formula were used. Therefore, considering the uncertainty of the statistical population of the research, the minimum sample size for the current research was estimated at 384 people. In this research, a researcher-made questionnaire was used to collect data. In order to determine the content validity of this questionnaire, the face validity method was used. In this way, after preparing the questionnaire and before it was implemented in a final form, the designed questions were given to several expert professors in the field of financial management so that the expert professors would express their opinion about the validity of the measurement tool and finally

The final questionnaire was prepared and distributed. Based on this, after studying and checking reliable library sources, a questionnaire was designed in two parts, according to the research objectives. 1- demographic questions and 2- items matching the structure of the integrated research model. The said questionnaire is arranged in a 5-point Likert scale (never = 1 to always = 5). It is necessary to remember that the Likert scale is the most widely used in humanities and behavioral science research because of its simplicity of understanding and applicability, and because of the wide field of attitude measurement, and because this research also deals with attitude measurement, as a result, the use of this spectrum is very appropriate. Is. Furthermore, functional significance analysis focuses on a key target construct of interest in the PLS path model. Therefore, the first step in creating a performance importance map is the need to select the target structure of interest, which in this research, the intention to invest in stocks was chosen as the target structure.

Findings

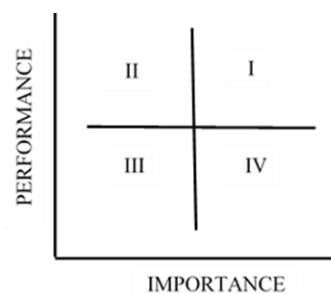
Functional significance analysis focuses on a key target construct of interest in the PLS path model. Therefore, the first step in creating the importance-performance map is the need to select the target construct of interest, which in this research was chosen as the target construct. Based on this and in the following, the measurement model with performance importance analysis (IPMA) is fitted and presented.

Also called Performance Importance Analysis (IPMA), Performance Importance Matrix, or Priority Map Analysis. This analysis is a useful analysis approach in PLS-SEM that evaluates the results of path coefficient estimation (importance) by adding It expands one dimension. In fact, it considers the average values of the latent variable scores (performance). More precisely, the analysis of the importance of performance in contrast to the total unstandardized effects (importance) in the structure and the average value of the scores of the underlying variable on a scale of 0 to 100 is in a graphical representation. As a result, the map identifies the importance of the performance of factors with relatively high importance and relatively low performance. These are high-priority major improvement areas, which in turn increase the

efficiency of the selected target construct in the PLS path model.

Importance-performance analysis is very suitable for service quality analysis and competitive analysis. To perform this analysis, the paired t-test can be used like other gap analysis methods. Normally, a questionnaire with a range of 5, 7 or 9 degrees is used to collect data. Two types of questions are asked for each index. A question that evaluates the current situation and a question that evaluates the desired situation. In short, in this method, two questions are asked for each factor. The importance of the factor is asked once. Once again, the agent's performance is questioned. Based on the scores in a two-dimensional graph, the status of the investigated agent can be evaluated.

The main gap in the importance-performance analysis model is the second quadrant and the fourth quadrant. If most of the indicators are in the second quarter, it means that the organization has invested in indicators that have little value and the performance in the field of insignificant indicators is high. If most of the indicators are in the fourth quarter, it means that the organization has a poor performance in terms of indicators that are highly important. The organization's strategy should aim at that, first, move the elements from the fourth quadrant to the first quadrant and remove all the elements from the second and third quadrants.



There are four areas or four quadrants in this graphic map. First quarter - acceptable range: high performance - importance is high. Therefore, it does not need to be improved. The second quarter - the area of resource wastage: high performance - low importance, in order to improve, it is necessary to create importance in the studied market. The third quadrant - release area: low performance-low

importance, which in this research, this variable cannot be developed. Fourth quadrant - improvement area: low performance-high importance. These are high-priority major improvement areas, which in turn increase the performance of the selected target construct in the PLS path model. Considering the high importance of this area, it is necessary to improve the performance of variables in this area. In this research, the researcher has identified variables that can be improved.

Since this article combines the five-factor model of personality and the theory of planned behavior on the investor's purchase intention, its findings are as follows:

- Mental norm has a positive effect on the investment intention of retail shareholders in Tehran Stock Exchange.
- The results showed that subjective norms have an effect on the investment intention of retail shareholders in Tehran Stock Exchange, and at the 99% confidence level, the existence of the influence of subjective norms on the investment intention of retail shareholders is confirmed.
- The attitude towards stock investment has a positive effect on the investment intention of retail shareholders in Tehran Stock Exchange.
- The results showed that the attitude towards stock investment has an effect on the investment intention of retail shareholders in Tehran Stock Exchange, and at the 99% confidence level, the existence of the influence of the attitude towards stock investment on the investment intention of retail shareholders is confirmed.
- Perceived behavioral control has a positive effect on the investment intention of retail shareholders in the Tehran Stock Exchange.
- The results showed that the perceived behavioral control has an effect on the investment intention of retail shareholders in the Tehran Stock Exchange, and at the 99% confidence level, the existence of the effect of perceived behavioral control on the investment intention of retail shareholders is confirmed.
- Mental norm has a positive effect on people's attitude towards investing in stocks.
- The results showed that the subjective norm has an effect on people's attitude towards investing in stocks, and at the 99% confidence level, the existence of the influence of subjective norm on people's attitude towards investing in stocks is confirmed.
- Personality traits affect the mental norms of small shareholders in the formation of their intention to invest in the Tehran Stock Exchange.
- Personality traits mean the five factors of extroversion, experientiality, neuroticism, adaptability, and responsibility, which form the structure of the five-factor model of personality. The results showed that among the mentioned personality traits; Extroversion, neuroticism, and adaptability influence the mental norms of small shareholders in the formation of their intention to invest in the Tehran Stock Exchange, and at the 99% confidence level, their influence on mental norms is confirmed.
- Based on the five-factor personality model, personality traits affect the attitude of retail shareholders in the formation of their intention to invest in the Tehran Stock Exchange.
- The results showed that among the mentioned personality traits; Experience, neuroticism, adaptability, and responsibility influence the attitude of retail shareholders in the formation of their intention to invest in the Tehran Stock Exchange, and their influence on the attitude of retail shareholders is confirmed at the 99% confidence level.
- Personality traits affect perceived behavioral control among small shareholders in the formation of their intention to invest in Tehran Stock Exchange.

The results showed that among the mentioned personality traits; Extroversion, adaptability and responsibility are influential on perceived behavioral control in the formation of their intention to invest in the Tehran Stock Exchange, and their influence on perceived behavioral control is confirmed at the 99% confidence level.

Gender moderates the relationship between personality, perceptual factors and the intention to invest in stocks. Gender does not moderate the

relationship between hypotheses. In fact, there is no significant difference between the views of men and women and both have the same opinion.

- Age does not moderate the relationships between personality, perceptual factors and people's stock investment intention.
In fact, there is no significant difference between the views of people over 41 years old or at most 40 years old, and both have the same opinion.
- Experience moderates the relationships between personality, perceptual factors and people's stock investment intention.
In fact, there is no significant difference between the views of people without investment experience in stocks or those with investment experience in stocks, and both have the same opinion.

Fit of measurement models

Importance here means the total effect coefficient including the direct and indirect effects of one variable on another variable in the path model, which can be considered as the ability to explain or predict one variable for another variable. For example, if neuroticism has a high total effect coefficient in predicting investment intention, for example 0.7, it means its importance in this analysis. But the meaning of the function of the current situation is the explanatory or predictor variable. For example, you may come to the conclusion that the neurosis of employees is in a good state in the organization. In this case, the performance gets a high score. In the performance importance matrix analysis, the horizontal axis represents the importance and the vertical axis represents the performance. Based on those variables that have high importance and low performance, they provide the best conditions for intervention.

It should be noted that when analyzing the importance of performance at the level of the main indicators, the average value of an index indicates its average performance. The importance of the structure in the structural model is also derived from the total effect of the relationship between direct and indirect effects. For example, to determine the total effect of

mental norms on investment intention we should examine a direct relationship between these two constructs (0.146) and two indirect effects with attitude.

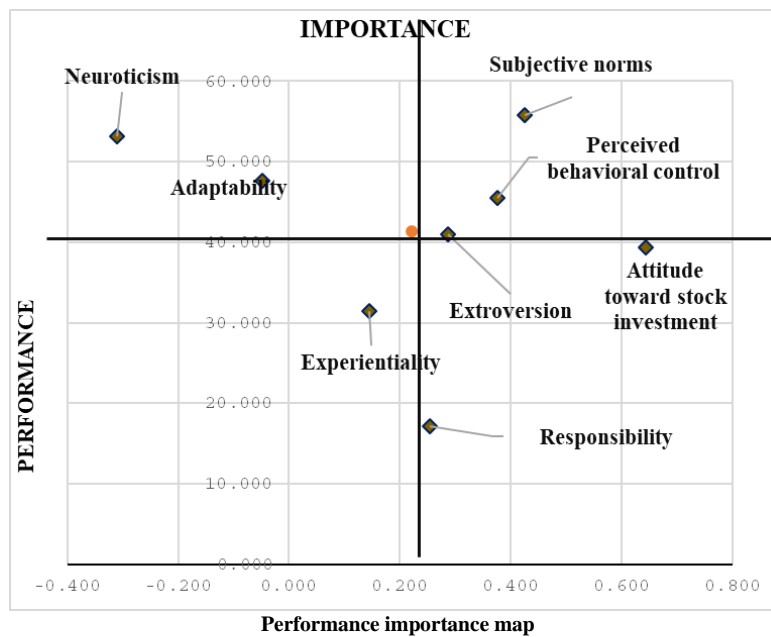
$$\begin{aligned} & \text{investment intention} \quad \text{attitude} \quad \text{Mental} \\ & \text{norms} = 0.433 * 0.643 = 0.278 \\ & \text{investment intention} \quad \text{Subjective norms} \\ & = 0.146 \end{aligned}$$

According to the above calculations, the total indirect effect (0.278) and direct effect (0.147) of the structure of subjective norms on investment intention is equal to 0.424, which indicates the importance of subjective norms in predicting the structure of the goal (investment intention). Therefore, the results of the importance-performance of predictive structures of the intention to invest in shares are presented in the following table.

The scatterplot of the information map shown in the table above allows a performance-importance map to be drawn for the research model. The x-axis represents the importance of extraversion, experientiality, neuroticism, adaptability, responsibility, attitude toward stock investment, subjective norms, and perceived behavioral control to explain the goal construct of stock investment intention, while the y-axis represents extraversion performance. It shows experientiality, neuroticism, adaptability, responsibility, attitude towards stock investment, subjective norms and perceived behavioral control in terms of their open scale variable scores. For better orientation, two additional lines are used in the importance-performance map: average importance (i.e. a vertical line) and average performance (i.e. a horizontal line) shown in the figure above.

According to the results of extraversion, experientiality, neuroticism, adaptability, responsibility, attitude towards stock investment, mental norms and perceived behavioral control, they have an average importance of 0.221 and an average performance of 361/41. These two additional lines divide the importance-performance map into four sections where the importance and performance values are roughly above average.

	PERFORMANCE	IMPPORTANCE
extroversion	40/961	0/286
experientiality	31/423	0/144
Neuroticism	53/117	-0/310
adaptability	47/591	-0/048
responsibility	17/153	0/254
attitude toward stock investment	39/350	0/643
subjective norms	55/815	0/424
perceived behavioral control	45/481	0/376
Average value	41/361	0/221



The way to analyze the importance-performance map for the variables is as follows:

- Priority is given to the variables that are in the right and lower regions (that is, the importance is higher than the average and the performance is lower than the average), in fact, the attitude towards investing in stocks, extroversion and responsibility are the most important in intends to invest in stocks, but since they have achieved below-average performance, they should be prioritized in order to encourage people to invest in stocks;
- The next priority with the variables of subjective norms and behavioral control is understanding. These variables are located in the right and upper region (that is, above-

average importance and above-average performance);

- The third priority is with the experienceability variable, which is located on the left and below (that is, the importance is lower than the average level and the performance is lower than the average level);
- And finally, the fourth priority is with the variables of adaptability and neuroticism, which are in the upper left (that is, the importance is lower than the average and the performance is higher than the average).

In this way, the importance-performance map is a guide for prioritizing management activities that are of high importance for aspects of the selected target subset but also require performance improvement.

Discussion, conclusions and suggestions

The next three research hypotheses are about the influence of personality traits on the subjective norm, attitude and perceived behavioral control of small shareholders in the formation of their intention to invest in the Tehran Stock Exchange. In other words, the second level of the integrated research model. The summary of the results of these hypotheses is as follows:

Personality traits affect the mental norms of retail shareholders in the formation of their intention to invest in the Tehran Stock Exchange.

- Personality traits affect the attitude of retail shareholders in the formation of their intention to invest in the Tehran Stock Exchange.
- Personality traits affect perceived behavioral control among small shareholders in the formation of their intention to invest in Tehran Stock Exchange.

In order to explain the results of the research, according to the results of the above hypotheses as well as the investigation of the background of the research, it is possible to mention some things:

The personality traits mentioned in previous researches were also widely investigated. Norman (1963) considered emotional stability, extroversion, culture, adaptability and conscientiousness as personality entities. The inventory of traits in terms of personality was determined as a classification of five big traits, which include extroversion, acceptance of experience, responsibility, adaptability, and neuroticism (Jahen and Srivastava, 1999). In this regard, researchers stated that personality traits can predict a large number of human behaviors, preferences and influences (Kam and Petrik, 2021). Personality traits are related to sales performance (Vahed et al., 2017), academic success (Mammadov, 2021) and attitudes toward material and money (Gernik-Darse and Brun, 2018). In the financial field, it was also found that the compatibility and responsibility of investors leads to higher returns in the stock market (Isidreh and Aron, 2021). Personality traits are related to short-term versus long-term investment options (Hosseini, 2021) as well as investors' risk-taking activities and their performance in investment portfolios (Durand et al., 2013). In this regard, Kim and Petrik (2021) stated that behavioral

intentions are significantly and positively influenced by attitudes, mental norms and perceived behavioral control. In addition, perceived limitations and attitudes in people with high attachment anxiety; It has a greater influence on their behavioral intentions than their peers. It was also found that investors with high avoidant attachment have greater effects between constraints and attitudes, constraints and perceived behavioral intentions, perceptions and attitudes, and behavioral control and perceived behavioral intentions than their counterparts. Shirtri et al. (2018) concluded that conscientiousness has a positive and significant effect on investment intention. Also, willingness to experience has a positive and significant effect on investment intention. Neuroticism and extroversion also have a positive and significant effect on investment intention. Mayfield et al. (2008) stated that extroverted individuals have higher intention to short-term investment, while individuals with more neuroticism and risk-taking characteristics avoid investing in short-term instruments. Sarwar et al. (2020) claimed that openness to experience, extroversion, awareness, agreeableness and risk are positively and significantly related to investor's investment intention, while neuroticism has a negative relationship with investor's investment intention. Euler et al. (2018) provided empirical evidence based on which extroversion and neuroticism have a significant effect on people's behaviors, such that extroverted people pay more for financial assets and people who are nervous, they had less risky assets. Additional studies showed that the effects of extroversion and conscientiousness on behavioral intention are revealed through the mediation of mental norm (Svendsen et al., 2013). The research results of Jamshidi and Qalibaf Assal (2017) also show that people with an external control center and a tendency to maximize buy and sell more. Also, people with an external control center and high sensationism have less portfolio diversity. In general, little literature on the effects of personality traits on behavioral intention can be found in previous research. Whether investment intentions are influenced by attitude, subjective norm, and perceived behavioral control is not well explored. In general, the literature in this field shows that people's investment decisions are influenced by personality traits. However, for those who have invested in the stock market, how personality traits motivate these people to invest remains unknown.

Therefore, this research used the integrated modeling of the theory of planned behavior and the five-factor model of personality to fill this research gap.

The last three hypotheses of this research are about the influence of demographic factors and the effect of gender, age and experience on the structure of the research model. In other words, the third level of the integrated research model. The summary of the results of these hypotheses is as follows:

- Gender does not moderate the relationship between personality, perceptual factors and investment intention of individuals.
- Age does not moderate the relationships between personality, perceptual factors and people's stock investment intention.
- Experience does not moderate the relationships between personality, perceptual factors and people's stock investment intention.

In order to explain the results of the research, according to the results of the above hypotheses as well as the investigation of the background of the research, it is possible to mention some things:

Regarding the moderating roles of gender, age and experience; Different and contradictory results have been reported in previous researches, some of which are consistent with the current research and some are inconsistent. In this regard, González-Yegval et al. (2021) concluded that female investors consider themselves more influenced by rational analysis and are more risk averse, while younger investors are more influenced by cognitive and emotional biases. Also, women and more experienced professionals show higher levels of optimism and trust. Talwar et al. (2020), stated that gender is related to stock trading performance. This research states that retail investors exhibit different trading performance if their personality and demographics match those of their advisors. Dixon and Ferreira's (2018) research results showed that male investors bear more risk than female investors. Also, there is a statistical difference between male and female investors in the age groups of 35 to 49 years and investors over 50 years old. Ebrahimi Sarovalia and Sabunuchi (2018) stated that men have a higher level of risk tolerance than women and risk are more accepting and also age, job status, professional education and income have a significant effect on the level of risk tolerance and risk taking. The results of Pourreza et al.'s research (2018) show a positive and significant effect of the experience variable on investor

decisions, taking into account mediating variables (investor tendencies, overreaction and underreaction, overconfidence and collective behavior). While the variables of age and gender did not have a significant effect on the investor's decisions. Javashi Hadid and others (2016) stated that women's financial risk tolerance is higher than men's and age has a significant effect on financial risk tolerance. Venkatesh et al. (2012) also claimed that age, gender and experience moderate the effect of hedonic motivation on behavioral intention. Investors should invest with full knowledge and understanding of their abilities and skills, and if they do not have the necessary knowledge, they should participate in training courses organized by brokerages.

In the end, it is suggested that:

- According to the matrix of the importance of performance and the identification of the variables of the area that can be improved in the fourth quarter, it is suggested that future researchers examine the ways to improve these variables and explore how to transfer the variables of the fourth quarter to the first quarter.
- Researchers are suggested to use the performance importance matrix with other theories such as the theory of reasoned action, etc. in combination with the research model. Also, for a more complete analysis of investors' behavior and performance, their other behavioral characteristics, including risk-taking, behavioral biases, etc., should be used.
- It is suggested to examine the matrix of the importance of performance in the integration of the world's authentic personality models on the behavior of retail investors. For example, the MBTI personality model and the five-factor personality model.

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