

The Role of Emotional Intelligence and Ethnicity in Perceptual Errors of Investors

Reza Rahimi¹

¹Master of Accounting, Faculty of Administration and Accounting, Samangan Nonprofit University, Iran

Received: May 14, 2015

Accepted: August 27, 2015

ABSTRACT

The aim of this study was to investigate the relationship between emotional intelligence and conceptual errors in Tehran Stock Exchange in 1393, investors are. Method of cross-correlation study population consisted of all investors in the Stock Exchange of Tehran. Our analytical model is based on a model of emotional intelligence and doctor Bradbry Jane Graves and investors' perceptual errors include delusions of control, social interaction, is conservative and innovative ways. Results of hypotheses testing using confirmatory factor analysis and correlation indicates a significant relationship between emotional intelligence and errors illusion of control, social interactions, and is innovative. The relationship between cognitive errors and ethnicities, different investors. In the end, the researcher according to the results of this study, recommendations and suggestions to managers, investors and researchers will be presented.

KEYWORDS: Ethnicity, emotional intelligence, control theory, social interactions, conservatism, innovative ways

1. INTRODUCTION

Behavioral sciences in finance is a new approach to the studies of financial markets. This approach argues that unlike standard financial issues and theories, behavioral and cognitive attitudes can affect the price of financial assets. Despite several studies that have been done in this area, many people lack a proper understanding of the concept lies in behavioral-financial sciences. It is important to mention that much of economic and financial theories are based on the concept that individuals act rationally and consider all information in the process of decision-making. However, researchers have found evidence indicating irrational behavior and repeated errors in human judgment and evaluation (Eslami, 2008).

Given what mentioned above and also the necessity that people, before entering the capital market, should have a more accurate understanding of themselves and their innate and behavioral characteristics to perform better and stay committed to a predetermined and developed program, the present paper aims to study the relationship of ethnicity and emotional intelligence with perceptual errors of investors.

1- Theoretical foundations and previous studies:

The most important thing that an investor should do to gain positive returns in the capital market is to make proper decision and yet the easiest thing to do is to make a mistake. Classification of decisions helps the investors and analysts in selecting the models and criteria of decision-making. Different methods are used for the classification of decisions. In addition, the issues considered in the decision-making are classified from different aspects. Several studies have been conducted on various perceptual errors and the effects of these errors on the financial decisions made by investors in financial markets and it was found that several errors cause harm to investors (Kahneman and Torsky, 1979).

2- 1- Emotional intelligence:

Although different definitions of intelligence has been proposed, there is no comprehensive and complete definition convincing everyone. This conflict is for this reason that intelligence is not a concept, but it is an abstract issue and a construct and, unlike concepts that can have instances and external appearances, merely introduces a set of processes that can be inferred from the actions and responses of individuals (Salovy, 2005). Psychologists usually identify and classify three main types of intelligence as follows:

- Abstract intelligence: Ability of understanding and skillfully using sophisticated mathematical and verbal symbols.
- Concrete intelligence: Ability of understanding and skillfully dealing with issues.
- Social intelligence: Ability of understanding and communicating with people.

Emotional Intelligence is a multidimensional construct and involves the interaction between emotion and cognition which leads to an adaptive function (Salovy, 2005). Myer, Salovy, and Caruso argue that emotional intelligence involves four interconnected abilities including understanding of emotion of self and others, using emotion to facilitate decision-making, understanding of emotion, and management of emotions. On the other hand, Bar-On believes that emotional

* **Corresponding Author:** Reza Rahimi, Master of Accounting, Faculty of Administration and Accounting, Samangan Nonprofit University, Iran. Rezarahimi1124@gmail.com.

intelligence is a complex set of emotional self-awareness and other skills and features which is effective in individual success in coping with the pressures and demands of the environment (Bar-On, 2000).

2- 2- Patterns of emotional intelligence:

Goleman *et al.* (1999) express the components of emotional intelligence as follows:

- 1- Self-awareness: Self-awareness or recognition of an emotion that is happening at a time contributes a key and important part of emotional intelligence. The ability to manage the emotions moment by moment indicates self-understanding and a psychological insight.
- 2- Self-organization: Control and management of emotions is a skill that is formed based on self-awareness.
- 3- Motivation: Directing the emotions toward a specific goal is very important to focus the attention and self-motivation. Control of emotions underlies any skill and success and those who are able to show their emotions at the right time try to be productive and effective in any work assigned to them.
- 4- Empathy: Another capability is formed based on emotional self-awareness is empathy with others, which is considered a popular skill. Empathy leaders try to please everyone and try to thoughtfully take into account the emotions of the staff in decision-making.
- 5- Social skills or regulating the relationships with others: The art of communicating with others, to a high extent, is the skill of controlling and managing their emotions. This skill strengthens popularity, leadership power, and individual influence.

Myer and Salovy (1997) have identified four dimensions of emotional intelligence that are as follows:

- 1- Identifying emotions in self and others: The most important ability related to emotional intelligence is to be aware of our emotions and feelings. Self-awareness allows individuals to identify their strengths and weaknesses and to believe in their values.
- 2- Applications of emotions: Application of emotions is the ability to use emotions to get the desired results, solve the problems, and enjoy the opportunities. This skill includes empathy and organizational insight.
- 3- The ability to understand emotions: The ability to understand complex emotions and be aware of their causes and how emotions change from one state to another is called understanding the emotions. This ability can help people to understand that which things can motivate or cannot motivate individuals or groups, so that they can plan a better collaboration with others.
- 4- Managing the emotions: This is the ability to control emotions in self and others. Managers who possess this ability do not let occasional moodiness become dominant in their behaviors during the day. They use this ability to either not bring moodiness and bad morale to their workplace or logically explain the reasons and causes to others. So, they know the origin of this moodiness and how long they may last.

Bradbury and Graves (2003) described the components of emotional intelligence as follows:

- 1- Emotional self-awareness: This includes the following items:
 - The ability to be aware of and understand our own feelings.
 - Self-expression: Ability to express feelings, beliefs, and thoughts clearly and defend the constructive and legitimate skills.
 - Self-esteem: The ability to be aware of self-perception, self-acceptance, and self-respect.
 - Independence: The ability to conduct our own thoughts and actions and be free of emotional tendencies.
 - Self-actualization: The ability to understand the potential capabilities and what that can be done and try to do and enjoy.
- 2- Self-management: This involves the following dimensions:
 - Controlling the impulses and tolerating the stresses: The ability to withstand the events and experimental situations or reducing them and also to control the emotions.
 - Flexibility: The ability to adapt thoughts and behaviors to the changes of environments and situations.
 - Happiness: The ability to feel happy with our life, enjoy being with others, and show positive, frank, funny, and witty feelings.
 - Optimism: The ability to look at life cleverly and strengthen the positive attitudes, even in the event of misfortune and negative emotions.
- 3- Social awareness: This component includes the followings:
 - Problem solving: The ability to identify and define the problems and finding and applying effective and potential solutions as well.
 - Knowing the truth and realism: The ability to evaluate the relationship between what that has been experienced emotionally and something that actually exists.
- 4- Relationship management: This involves the following items:
 - Interpersonal relationships: The ability to establish and maintain satisfying relationships through emotional closeness, intimacy, and kindness.
 - Empathy: The ability to know, understand, and value others' feelings.
 - Social responsibility: The ability to express ourselves as a member of a group who is cooperative and carries constructive attitudes.

2- 3- Ethnicity:

CIA, the Central Intelligence Agency of the United States, is responsible for several tasks that one of them is collecting strategic data and statistics from other countries and other regions throughout the world. Part of these data and statistics has been collected in the book "The CIA Factbook". One of the issues that this book deals with is tribes, ethnic groups, and minorities in each country. According to the CIA Factbook, Iran is composed of many different ethnic groups including Persian (53%), Azeri (16%), Kurd (10%), Gilak and Mazandarani (7%), Lur (6%), Baloch (2%), Arabs (2%), Turkmens and Qashqais (2%), and others (2%). Today, Iranian society is predominantly urban, but a large part of the ethnic composition of Iran is rooted in the history of ancient tribes. Iranian tribes have been gradually sedentary but there are still nomadic tribes in some parts of Iran. Taking a look at statistical yearbooks during the past half century shows that how population of tribes in Iran reached under 5% from about one-third. Iran's main ethnic tribes consist of Lur, Lak, Turk, Turkmen, Arab, Baloch, and Brahui (Taheri, 2013).

2- 4- Perceptual errors:

Perceptual errors are alternative patterns in distortion of perception, inaccurate judgment, or illogical reasoning (Kahneman and Torsky, 1979). Scientists of behavioral sciences and decision-making have found that, under certain circumstances, people would make subjective errors in their judgments. These errors can lead to false expectations, improper pricing of the securities, and finally and taking irrational decisions (Mantier, 2007).

2- 4- 1- Hallucination of control:

Hallucination of control refers to a situation in which a person inaccurately estimates his/her probability of success higher than the existing possible probability. Unrealistic optimism is also conceptually similar to the hallucination of control which is considered about the future events (Mantier, 2007).

2- 4- 2- Social interactions:

Individuals tend to be concordant with other in their decisions and judgments. Most investors exhibit emotional reactions in the atmosphere of market. In other words, even when the information signals tell a person that buying or selling of which ones is reasonable, investors are still hesitant to make the correct decision. As a result, investment shifts from objective to subjective state. In fact, this behavior is the tendency of a person to follow a logical or illogical behaviors of a group. There is a generally accepted logic that a big group is unlikely to make a mistake. However, following a group may have other reasons. Sometimes, investors decide to invest in something without having enough information and based on the information provided by others. In this case, price movement is a platform for investment decisions and it is natural that the economic principles that are based on supply and demand will be ignored (Mantier, 2007).

2- 4- 3- Conservatism:

Conservatism is a mental process under which people insist on their previous forecasts and views when receiving new information. In other words, people adapt their ideas with new evidence very slowly. This mistake, also known as insisting on a belief, corroborates the notion that people are reluctant to change their beliefs, even when they obtain new information (Kahneman and Torsky, 1979).

2- 4- 4- Innovative ways:

Since the capacity of information processing is limited in human, people turn to incomplete or innovative methods of decision-making which lead to good decisions. This briefing in decision-making processes is called "innovative simplification". Innovative ways are, in fact, some simple rules or mental shortcuts which facilitate the process of decision-making.

Saadi *et al.* (1386) conducted a study entitled "The effects of personality of investors and conceptual errors on their investment in the Tehran Stock Exchange" in order to identify the common perceptual errors among the investors and its relationship with their personality. Their results showed that extraversion and openness have a direct relationship with prediction error and excessive confidence and also there is a direct relationship between neuroticism and errors of randomness, escalation of commitment, and availability. On the other hand, there is an inverse relationship between conscientiousness and randomness and also between openness and availability error.

Pan and Statman (2012), in two separate research, in addition to reviewing the existing methods for the identifying the characteristics of investors, proposed more comprehensive solutions to measure the traits of investors that affect their decisions. They concluded that people with high risk tolerance have a tendency to excessive trust and also to maximization and high levels of trust in others. Generally, men tolerate the risks more than women and young people are relatively more risk-taker than the middle-aged. Women relatively have a more tendency to regret errors but are less willing to maximization and excessive trust.

Americk *et al.* (2009) studied the relationship between emotional intelligence and behavior of investors in relation to decision-making and came to the conclusion that individuals with higher emotional intelligence exhibit more caution and less courage in deals and transactions.

2- Conceptual model of research:

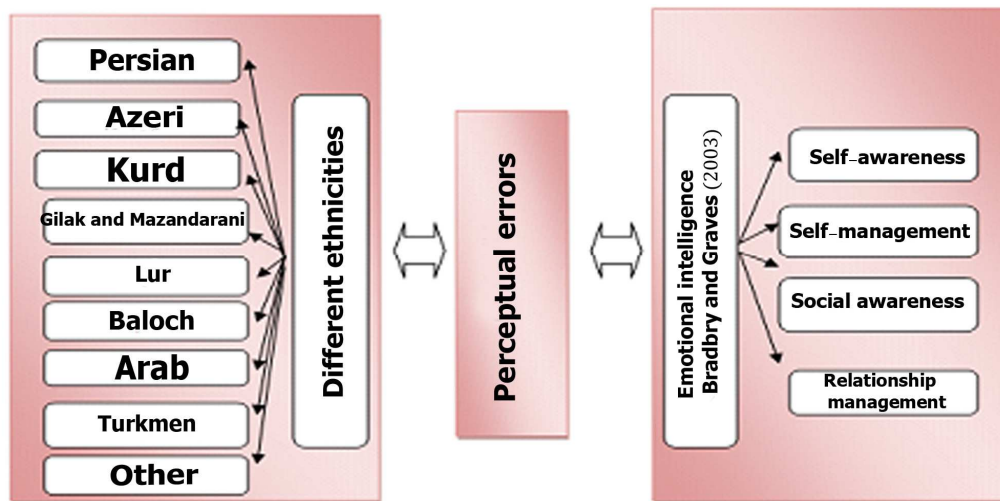


Figure 1: Conceptual model of research

3- METHODOLOGY

In terms of objective, data collection, and the relationship between the variables, the present paper is an applied, descriptive (non-experimental), and causal research, respectively. The main method used in this study was survey, one of the most important features and benefits of which is the possibility to generalize the results.

4- Research hypotheses:

The first main hypothesis: There is a significant relationship between emotional intelligence and perceptual errors of investors in the Tehran Stock Exchange.

The second main hypothesis: There is a significant relationship between ethnicity and perceptual errors of investors in the Tehran Stock Exchange.

Secondary hypotheses:

- There is a significant relationship between self-awareness and perceptual errors of investors in the Tehran Stock Exchange.
- There is a significant relationship between self-management and perceptual errors of investors in the Tehran Stock Exchange.
- There is a significant relationship between social awareness and perceptual errors of investors in the Tehran Stock Exchange.
- There is a significant relationship between self-awareness and perceptual errors of investors in the Tehran Stock Exchange.
- There is a significant relationship between relationships management and perceptual errors of investors in the Tehran Stock Exchange.

5- Research variables:

Emotional intelligence and different ethnicities were the independent variables and the dependent variables involved perceptual errors of investors including hallucination of control, social interactions, conservatism, and innovative ways.

6- Statistical population and sample:

In this study, all investors in the Tehran Stock Exchange were considered as the population. Sample size was determined 384 by using Morgan & Krejcie Table. The sample subjects were selected by simple random method.

7- Data collection tools:

Questionnaire was the main tool for data collection in this study. By using exploratory factor analysis and SPSS16 software, a scale for emotional intelligence and one for perceptual errors were designed. 23 questions were designed by Bradbury and Graves scale (2003) and then analyzed by factor analysis to measure the four dimensions of emotional intelligence. Five questions were removed because of low factor load and the final scale of emotional intelligence consisted of 18 questions, five questions for each of the self-awareness and self-management and four questions for each of the social awareness and relationships management. According to studies of Bashir and Scholar (2013), 19 questions were designed for perceptual errors, four of which were deleted because low factor load and the final scale for perceptual errors included 15 questions, 5 questions for hallucination of control, 3 questions for each of the social interactions and innovative ways, and 4 questions for conservatism. Cronbach's alpha coefficient was calculated 84% for emotional intelligence and 79%, 87%, 86%, 81%, respectively, for hallucination of control, social interactions, conservatism, and innovative ways. These figures indicate high reliability of data collection tools used in the present study (Table 1).

Table 1: Cronbach's alpha coefficients for the questionnaires designed for this study

Reliability (Cronbach's alpha coefficient)	Number of questions	Variables	Questionnaire
0/82	5	Self-awareness	Emotional intelligence
0/79	5	Self-management	
0/81	4	Social awareness	
0/83	4	Relationships management	
0/79	5	Hallucination of control	
0/87	3	Social interactions	Perceptual errors
0/86	4	Conservatism	
0/81	3	Innovative ways	

To assess the content validity of the questionnaires, the comments and views of professional managers, academics, and experts were asked and taken. Then, necessary corrections were applied and it was ensured that the questionnaires will measure exactly the attribute the authors want. Test-factor authentication was also done using confirmatory factor analysis in LISREL software. Considering the outputs of LISREL, it can be found that the model used for measuring emotional intelligence and perceptual errors are appropriate, because in this model χ^2 is low, the ratio of χ^2 to degree of freedom is less than 3, RMSE (Root Mean Square Error of the Estimate) is less than 0.05, and AGFI (Adjusted Goodness of Fitness Index) and GFI (Goodness of Fitness Index) are more than 90%. So, it can be concluded that the research model has been properly fitted and all values are significant at a confidence level of 95%. All mentioned above indicates that the questionnaires of emotional intelligence and perceptual errors have a high reliability and validity.

8- Descriptive statistics:

The results show that maximum and minimum number of investors in the Tehran Stock Exchange belong to Persian and Baloch ethnicities, relatively (Figure 2).

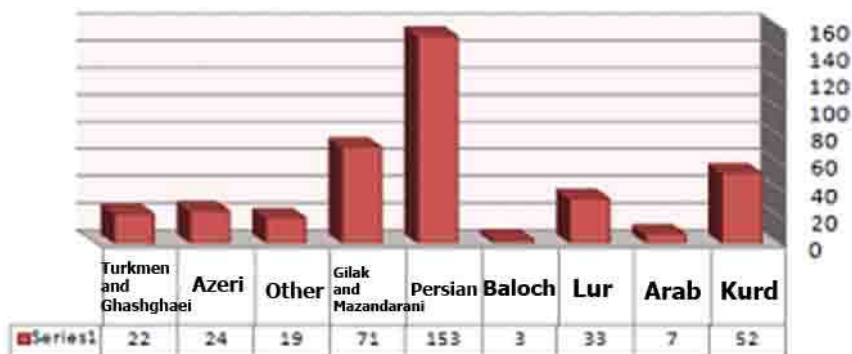


Figure 2: Histogram of ethnicity of investors

The results show that 80.7% (314 people) of the respondents were men and 19.3% (74 people) were women. So, it can be stated that that majority of collected data is related to men (Figure 3).

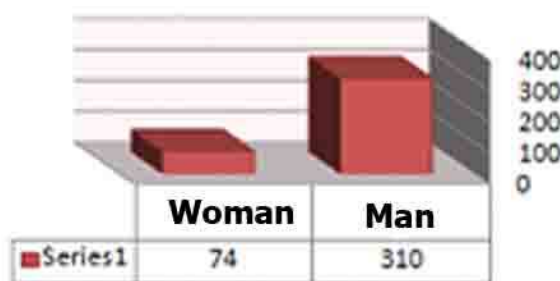


Figure 3: Histogram of gender

In terms of marital status, the majority of information is obtained from the married (Figure 4).



Figure 4: Histogram of marital status

The extracted statistics indicate that those with a bachelor degree and those with a diploma have the highest and lowest frequency among the respondents (Figure 5).

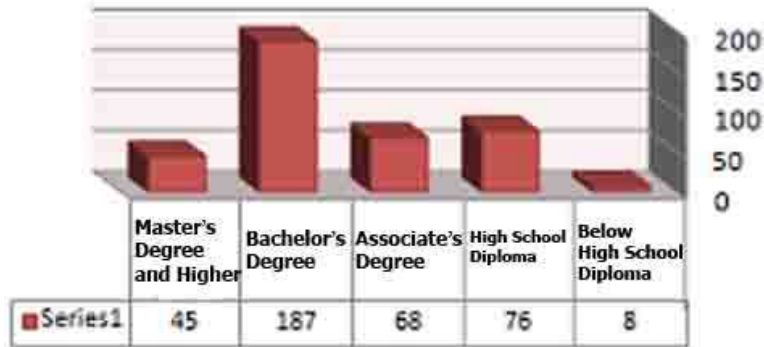


Figure 5: Histogram of education

Data show that people in the early adolescence are less willing to get engaged in buying and selling the shares (Figure 6).

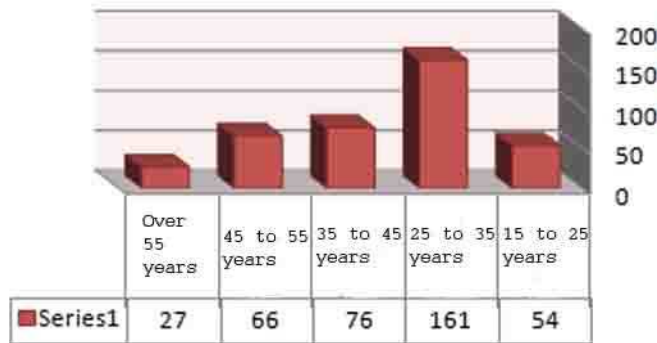


Figure 6: Histogram of experience

9- Analysis of data:

Before determining the type of results, especially in comparative tests, it is necessary to ensure the normality of variables. In order to assess the questions, the data were analyzed in terms of normality by Kolmogorov-Smirnov test (Table 2). In Kolmogorov-Smirnov test, if P-value>0.05, the desired variable is normal and if P-value<0.05, that variable is not normal.

Table 2: Testing the normality of variables (Kolmogorov-Smirnov test)

Correlation test	Status	P-Value	Z-statistic	Related questions	Variables	Questionnaire
Pearson	Normal	0/071	2/891	10-8-6-4-2	Self-awareness	Emotional intelligence
Pearson	Normal	0/411	2/922	22-15-12-9-7	Self-management	

Pearson	Normal	0/093	3/127	14-11-5-1	Social awareness	Perceptual errors
Pearson	Normal	0/084	2/769	23-21-4-3	Relationships management	
Pearson	Normal	0/07	2/625	18-11-9-8-6-3	Hallucination of control	
Pearson	Normal	0/11	3/129	5-4-2-1	Social interactions	
Pearson	Normal	0/063	3/456	19-17-10-7	Conservatism	
Pearson	Normal	0/082	2/753	22-21-20-12	Innovative ways	

As it can be seen in the table above, all seven variables are normal and, as a result, Pearson's correlation test should be used in calculations of significance of testing the hypotheses.

10- Testing the hypotheses:

Table 3: Pearson correlation coefficients of emotional intelligence and ethnicity with perceptual errors of investors

Perceptual errors of investors				Dependent variable
std. ERROR of the Estimate	R Square	Sig	Pearson coefficient	Independent variable
0/185	0/22	0/007	0/473	Emotional intelligence
0/385	0/49	0/001	0/704	Ethnicity

Table 4: Linear regression analysis of emotional intelligence and perceptual errors

Mode	Unstandardized Coefficients		Standardized Coefficients	t	sig
	B	Std. Error	Beta		
1 (Constant)	3/24	0/48	0/473	15/195	0/000
Emotional intelligence	1/36	0/21		4/287	0/007

Table 5: Linear regression analysis of ethnicity and perceptual errors

Mode	Unstandardized Coefficients		Standardized Coefficients	t	sig
	B	Std. Error	Beta		
1 (Constant)	3/36	0/68	0/704	7/995	0/000
Ethnicity	1/74	0/24		3/287	0/001

As the above tables show, since Sig. value is less than 0.05 for both components of emotional intelligence and ethnicity, the hypothesis H₁ is confirmed (Table 3). This means that emotional intelligence and ethnicity have a significant relationship with perceptual errors of investors. According to Pearson's R-value for emotional intelligence which is equal to 0.473, the intensity of relationship between emotional intelligence and perceptual errors of investors is moderate. So, emotional intelligence of investors has a relative and moderate influence on their perceptual errors. Also, in terms of the relationship between ethnicity and cognitive errors, according to Pearson's R-value for ethnicity which is equal to 0.704, this relationship is strong. Thus, ethnicity of investors has a great impact on their perceptual errors.

According to the results of regression analysis, regression equation to predict perceptual errors of investors by their emotional intelligence is as follows (Table 4):

Predicting the perceptual errors of investors = 4.287 + 1.36 × (Emotional intelligence of investors)

Accuracy of prediction of perceptual errors of investors is equal to R. Square=0.22, Beta=0.473. Therefore, about 0.22% of perceptual errors of investors has been predicted through a linear relationship with their emotional intelligence.

In addition, regression equation to predict perceptual errors of investors by their ethnicity is as follows:

Predicting the perceptual errors of investors = 3.287 + 1.74 × (Ethnicity)

Accuracy of prediction of perceptual errors of investors is equal to R. Square=0.49, Beta=0.704. Thus, about 0.49% of perceptual errors of investors has been predicted through a linear relationship with their ethnicity (Table 5).

11- Testing the secondary hypotheses:

Table 6: Pearson correlation matrix for emotional intelligence and perceptual errors of investors

Innovative ways	Conservatism	Social interactions	Hallucination of control	Relationships management	Social awareness	Self-management	Self-awareness	Dimension
							1	Self-awareness
						1	439** 0/	Self-management
					1	174* 0/	0/85	Social awareness
				1	0/86	205* 0/	337** -0/	Relationships management
			1	542** -0/	0/33	349** 0/	658** 0/	Hallucination of control
		1	176* 0/	368** 0/	0/59	518** 0/	178* 0/	Social interactions
	1	471** 0/	347** 0/	0/74	371** -0/	194* -0/	0/69	Conservatism
1	0/126	0/82	431** -0/	184* 0/	0/125	428** 0/	641** 0/	Innovative ways

12- Findings:

Because of the normal distribution of data, Pearson correlation coefficient was used to test the hypotheses. According to Spearman correlation coefficient of relationship of hallucination of control with self-awareness, self-management, and relationships management which is, respectively, equal to 0.658, 0.349, and 0.542 and P-value that is equal to 0.02, 0.00, and 0.00, respectively that are less than the standard level of significance ($\alpha=0.05$), there is a significant relationship between perceptual error of hallucination of control and these three dimensions of emotional intelligence at a confidence level of 95%. Also, as correlation coefficient of hallucination of control with self-awareness and self-management is positive, there is a significant and direct relationship between them. In contrast, in terms of correlation coefficient between hallucination of control and relationships management is negative, it can be stated that direction of changes of these variables is different and inverse (Table 6).

Spearman correlation coefficient of relationship of social interactions with self-awareness, self-management, and relationships management is significantly equal to 0.178, 0.518, and 0.368 and also P-value is equal to 0.00, 0.01, and 0.02 that are less than the standard level of significance ($\alpha=0.05$). So, there is a significant relationship between perceptual error of social interactions and these three dimensions of emotional intelligence at a confidence level of 95%. Additionally, as correlation coefficient between above-mentioned variables is positive, it can be concluded that direction of changes of these variables is the same and direct (Table 6).

According to Spearman correlation coefficient of relationship of conservatism with self-awareness, self-management, and social awareness that is respectively equal to 0.69, 0.194, and 0.371 and P-value which is equal to 0.53, 0.04, 0.008, and 0.351, respectively, that is less than the standard level of significance ($\alpha=0.05$) only in the relationship between conservatism, self-management, and social awareness, there is no significant relationship between perceptual error of conservatism and feeling of self-awareness and self-management at a confidence level of 95%. Also, there is a significant relationship between conservatism, self-management, and social awareness. Since correlation coefficient between two above-mentioned variables is negative, it can be stated that direction of changes of these variables is different and inverse (Table 6).

Spearman correlation coefficient of relationship of innovative ways with self-awareness, self-management, and relationships management is respectively equal to 0.641, 0.428, and 0.184 and P-value are 0.01, 0.00, 0.03, and 0.00 that are less than the standard level of significance ($\alpha=0.05$). Therefore, there is a significant relationship between innovative ways and self-awareness, self-management, and relationships management at a confidence level of 95%. Since correlation coefficient between these variables is positive, it can be concluded that direction of changes of these variables is the same and direct (Table 6).

13- Comparison of perceptual errors between the demographic variables:

The findings show the following facts:

- Men are more prone to errors of hallucination of control and innovative ways, while women mostly make errors of social interactions.
- Single and married investors, respectively, are more prone to perceptual errors of hallucination of control and conservatism.
- Investors aged 15-25 years are at risk of perceptual error of social interactions and those aged 25-35 years are more prone to errors of social interactions and conservatism. In the age groups 35-45, 45-55, and above 55 years, investors are mostly at risk of making perceptual errors of innovative ways.
- Investors with a degree lower than diploma are more prone to perceptual error of social interactions, while those with a bachelor's degree and master's degree or higher mostly commit perceptual error of innovative ways.
- Persian investors are more prone to errors of social interactions and innovative ways, Gilaks and Mazandarani are at risk of hallucination of control, Kurds mostly commit conservatism errors, and Azeris, Turkmens, and other ethnicities are more susceptible to make perceptual error of social interactions (Table 7).

Table 7 : Comparison of perceptual errors between the demographic variables

p-value	Innovative ways	Conservatism	Social interactions	Hallucination of control	Perceptual errors	
	Pearson correlation coefficient				Variable	
0/006	0/652	-0/324	0/101	0/718	Man	Gender
0/03	0/126	0/82	0/811	0/014	Woman	
0/02	0/142	0/131	0/147	0/645	Single	Marital status
0/009	0/51	0/761	0/74	0/109	Married	
0/004	0/015	0/49	0/015	0/83	15-25	Age
0/001	0/57	0/015	0/512	0/86	25-35	
0/006	0/693	0/96	0/71	0/109	35-45	
0/002	0/516	0/127	0/31	0/24	45-55	
0/001	0/724	-0/94	0/117	0/106	Above 55	
0/000	0/63	0/125	0/431	0/52	Below diploma	Education
0/061	0/021	0/136	0/123	0/015	Diploma	
0/007	0/84	0/451	0/127	0/31	Associate's degree	
0/004	0/704	0/148	0/83	0/150	Bachelor's degree	
0/002	0/651	0/121	0/37	0/32	Master's degree or higher	
0/000	0/127	0/31	0/439	0/86	Persian	Ethnicity
0/03	0/125	0/33	0/106	0/532	Gilak and Mazandarani	
0/004	0/73	0/629	0/38	0/119	Kurd	
0/012	0/136	0/123	0/118	0/443	Lur	
0/01	0/129	0/42	0/751	0/150	Azeri	
0/005	0/137	0/35	0/529	0/124	Turkmen and Qashqai	
0/073	0/211	0/158	0/75	0/109	Arab	
0/41	0/217	0/425	0/129	0/312	Baloch	
0/006	0/51	0/145	0/495	0/79	Other	

14- Conclusion and recommendations:

According the results of testing the hypotheses, it can be concluded that emotional intelligence and ethnicity have a strong relationship with perceptual errors of investors in Tehran Stock Exchange. Based on the results of the correlation matrix, three hypotheses were confirmed and one was rejected.

The results of the first and second hypotheses showed that there is a significant and direct relationship between self-awareness and self-management and three perceptual errors of hallucination of control, social interactions, and innovative ways in investors. Therefore, clarification is recommended to reduce innovative ways for taking optimal decisions. Moreover, according to the results of other studies indicating that hallucination of control is the consequence of unrealistic optimism of investors, it is recommended that the morale of realism in investors to be boosted by holding training courses. In terms of social interactions that result from concordance with others in decision-making, it is suggested that the investors to be equipped with sufficient knowledge on behavioral-financial sciences and be provided with useful and applied information about the internal factors affecting investment decisions.

The results of the third hypothesis suggested that there is an inverse relationship between social awareness of investors and conservatism error. Social awareness, in fact, is the ability to evaluate the relationship between what that has been experienced emotionally and something that actually exists. It is therefore recommended that investors attend training workshops to increase their social awareness.

The results of the fourth hypothesis showed that there is a significant and direct relationship between relationships management and two perceptual errors of social interactions and innovative ways. So, it is recommended that investors to be provided with necessary trainings, software, and information systems which makes it easier to access to information in order to reduce such perceptual errors. In general, but not always, in order to overcome the errors of social interactions, investors need to carefully think contemplate about and assess their investment decisions before putting them into action.

The results also showed that correlation between perceptual errors varies in different ethnicities. In fact, different ethnicities in our country have different cultures that influence their behavior and decisions. Thus, it is recommended that Stock Exchange Organization equip the investors with sufficient knowledge on behavioral-financial sciences and provide them with helpful information about perceptual errors that are varied in different cultures and ethnicities in order to help them in taking correct decisions away from the influence of these errors.

15- Suggestions for future research:

For further explanation of behavioral patterns of investors in Tehran Stock Exchange, the following topics are recommended for future studies:

- Conducting the same studies on brokerages of other stock exchanges.
- Conducting similar studies using other models of emotional intelligence.
- Studying the personality of investors and perceptual errors.

- Studying the effect of emotional intelligence and attitudes of investors on perceptual errors.

REFERENCES

- 1- Eslami. Gh; 2008; Theoretical issues on Financial management; Termeh Publications, Tehran.
- 2- Bradbury. T, Graves. J; 2005; Emotional intelligence (skills and tests); translated by Ganji. M; Savalan Publications.
- 3- Pourzareiy. R; 2007; Relationship between emotional intelligence, mental health, and happiness among high school students in the city of Farashband; MA thesis, Islamic Azad University- Arsanjan Branch.
- 4- Saadi. R, Gholipour. A, Gholipour. F; 2010; Effect of personality of investors and perceptual errors on their investment in the Tehran Stock Exchange; Journal of Financial Research, Volume 12, Number 29.
- 5- Farhangi. A, Fattahi. M, Vasegh. B, Nargesian. A; Predictive Intelligence, Transformational Leadership: Investigating the relationship between spiritual intelligence, emotional intelligence, and transformational leadership; Journal of Iranian Sciences of Management, Vol. 4, No. 15.
- 6- Amehrik, J., Wrantik, T. & Salovey, P. (2009). Emotional intelligence and Investor Behavior. The Research Foundation of CFA Institute
- 7- Bar-On R.(2000) Emotional and social intelligence: Insights from the emotional quotient inventory. In: Bar-On R, Parker JD. (editors). The handbook of emotional intelligence. San Francisco: Jossey-Bass;2000: 363-88.
- 8- Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. In C. Cherniss.
- 9- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under Risk. *Econometrica*, 47(6), 263- 291.
- 10- Mayer, J.D., and P. Salovey(1997). "What Is Emotional Intelligence?" In Emotional Development and Emotional Intelligence: Educational Implications. Edited by Peter Salovey and David Sluyter. New York: Basic Books .
- 11- Montier, J (2007). Behavioral Investing A Practitioners Guide to Applying Behavioral Finance.
- 12- Salovey P, Gross D(2005). The science of emotional intelligence. *Current Directions Psychological Science*, 14:5-281.
- 13- Taqqadus Bashir, Scholar et al (2013). "Impact of Behavioral Biases on Investors Decision Making: Male Vs Female", *IOSR Journal of Business and Management (IOSR-JBM)* e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 10, Issue 3 (May. - Jun. 2013), PP 60-68.