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Original research

Emotional Intelligence, Risk Aversion, Locus of Control and Risky Investment Intentions

Saeed Pakdelan, Alireza Azarberahman[1] [iD], Fateme Vahidimehr
Sara Akbari
Department of Accounting, Shandiz Institute of Higher Education, Mashhad, Iran

Abstract

The present study seeks to identify the three factors of emotional intelligence, risk aversion and locus of control over risky investment intentions, with the aim of assisting investors in making decisions that are more rational and examining the role of literacy and possible advice to investors to promote financial knowledge and understanding. The data were collected through a questionnaire and composed 219 individual investors. In order to achieve the objectives of the research, the method of structural equations modelling for direct hypotheses and hierarchical regression for indirect hypotheses were used. The results showed that emotional intelligence has no significant effect on risky investment intentions. In contrast, it was found that risk aversion can have a significant negative impact on risky investment intentions. It was also determined that the locus of control has no effect on risky investment intentions. The structural equations modeling is based on discover complex relationships between variables. Using this method helps to identify hidden relationships between components. Hierarchical regression method can also be useful to find the effects of variables. In this research, these two techniques have been used.

Keywords: Risky investment intentions, emotional intelligence, risk aversion, locus of control.

[1] *Corresponding author's Email: a.azarberahman@shandiz.ac.ir*

Introduction

So far, a lot of research has been done on behavioral finance, but there is still a lot of gap in this regard. Therefore, researchers are trying to better understand individual's financial behavior. Financial institutions and policymakers also look at this issue from a micro and macroeconomic perspective. From a microeconomic point of view, they are trying to better understand individual's financial behavior in order to manage the demand for their products, and from a macroeconomic point of view, in order to promote savings and investment culture in general (Aydemir & Aren, 2017). In explaining the financial behavior of individuals based on the classical financial paradigm, researchers have emphasized the role of demographic or socio-economic factors (Powell & Ansic, 1997); (Gong & Yang, 2012); (Lai & Tam, 2012). In the traditional financial paradigm, there is an emphasis on the achievability of assumptions such as the rationality of each individual, the zero deviation from rational behavior, and the randomness of probabilities. While the behavioral financial paradigm emphasizes the psychological aspects of individual financial behavior, including assumptions such as the irrationality of individuals, the systematic deviation from the rational behavior of individuals, and the randomness of probabilities. Thus, the behavioral financial paradigm has been shifted to mental issues with respect to psychological aspects and motivational stimuli. Many attempts have been made to explain the effect of emotional intelligence (EI) on risky environments such as education, entrepreneurship and health (Kamalian, Poori, M , & Yaghoubi, N, 2011) (Yip & Cote, S, 2013) (Joshi, 2013). There is little research in this field in Iran, so more studies related to financial risk-taking seem necessary. Also in this study, we tried to examine emotional abilities such as perception and management of using emotions with risky financial behavior.

The concept of locus of control (LOC) as a stable behavioral variable in the field of psychology has been discussed. (Perry & Morris, M.D, 2005) Examined the moderating role of locus control in the relationship between financial literacy (FL) and responsible financial manager behavior. (Grable & Joo, S, 2000) Also observed a positive effect of internal LOC on financial risk. There is no study in Iran that examines the effect of the LOC on risky investment behaviors. This seems necessary in order to understand the level of self-control and responsibility of individuals as well as the timing of preferences and the degree of financial risk tolerance when explaining financially risky behaviors.

Risk-aversion (RA) means preferring to accept less risk. In the sense that the inner desire of the individual (investor) in times of uncertainty to avoid risk is unnecessary. Theories of rational behavior and planned behavior express mental states and norms in recognizing the probability of behavior occurring among behavioral goals. (Schoemaker, 1993) Believes that an individual's inherent risk aversion can be due to the range of some factors among individuals. Some of these factors include the way the problem is structured in the mind, the way information is processed, and value practices and beliefs. (Weber, Blais, & Betz, 2002)Also showed that RA has a specific range. (Sitkin & Weingart, L.R, 1995) Stated that risk perception decision frameworks influence risk decisions. Therefore, this study can help clarify the issue of whether people who are risk averse in their daily lives generally refuse to accept financial risk; or is their overall RA different from their financial RA?

On the other hand, (Aren & Aydemir, 2014) examined the role of FL on financial behavior. Their study showed that FL has a positive effect on the diversity of financial behavior. Of course, there are other influential factors that have been ignored in most of the researches and in fact in most of them the focus has been on direct effects.

The main purpose of this study is to investigate the financially risky behavior of individuals in Iran. The role of FL moderation in relation to individual factors and risky investment intentions (I) was also tested. At the same time, it was assumed that a person's FL may change over time, so the possible indirect effect of this factor in the management of financial behaviors was investigated.

Theoretical foundations and research background

The term risky investment is used to define financial instruments with uncertain nominal returns. In such an investment, due to the risky situation, the investor does not know how much income he will earn and also the investor may lose his invested funds in the investment process. So risky investing is a concept to describe how much people are interested in investing in any of the alternatives to risky investing. Venture investors usually invest in multiple businesses and thus, by succeeding in one of these investments, they compensate for the losses caused by the failure of other investments and sometimes make huge profits (Soltani & Charki, Iman, 2017). Venture investors are among those who bring with them increased innovation in organizations. Venture investors specialize in financing start-ups that are high-risk but innovative and entrepreneurial. These investors invest in start-ups and high-risk companies, and after achieving their desired added value, they invest their capital along with the profit, out of the investable company, and invest in another profitable but risky and entrepreneurial plan (Imanipour & Kanani, 2009).In many countries, the role of venture investors in various fields such as increasing innovation, productivity, employment and the like has been addressed, which provides a good platform for the expansion of this field in those communities. Today, one of the reasons for the increase in innovation in developed countries can be the platform provided for the expansion of the activities of these investors at the level of those societies. However, despite the great attention paid to venture capital as a way to increase business innovation in many successful countries in the world, in our country, venture capital has not been addressed to the extent it deserves. Venture capital in Iran is a new issue that many domestic studies have not been done in terms of both quantity and variety of subjects in comparison with developed countries in this field (Pakizeh, Akhavananuri, & Karimkhani, 2015). (Schoemaker, 1993)Argues that the inherent attitude of individuals to take risks is different from their observed risk-taking behavior. While some researchers consider neuro-finance (Chiao & Kuhnen, 2009)from a financial perspective to consider individuals' attitudes toward risk-taking as a genetic source, some researchers have defined high-risk behaviors as mental states (McCarty, 2000).

Emotional intelligence and risky investment intentions

EI was first used by a psychologist named (Salovey & Mayer , 1990)to express the quality and understanding of people's feelings and empathy with the feelings of others and the ability to manage the mood well. The EI developed by (Salovey & Mayer , 1990)includes recognizing of own feelings and the others and using them to make

appropriate decisions in life. In other words, it can be considered a factor that motivates a person when he fails and, due to having high social skills, leads to a good relationship with people (Ramezanzadeh & Sadati Kiyadehi, 2013). (Jalali, 2002) States that EI is a social skill that means easy communication with people and controlling their emotions in relation to others and the ability to encourage and guide them. Meyer and Caruso (2000) define EI as a person's capacity for emotions, the attainment and expansion of emotions to aid in thinking, understanding emotions, and emotional knowledge, and the thoughtful regulation of emotions for intellectual and emotional development. (Aqayar & Sharifi, 2007).

(Salovey & Mayer, J.D, 1990) considers EI as cognitive competencies. Competencies, in his view, include the inner person, which includes traits such as self-actualization, independence, and self-awareness. EI is abbreviated as "EI" and its evaluation criterion is "emotional intelligence coefficient" or "EQ".

The common denominator of all the above definitions of EI shows that EI is different from Intelligence Quotient (IQ). EI develops throughout a person's life and will be enhanced through education. People who have high EI will be able to identify and understand their feelings and others. EI plays a significant role in the success of individuals in the workplace, family environment and community environment (Ahmadi & Alamzadeh, 2017).

In another research conducted by (Salovey & Mayer, J.D, 1990), a tool for the growth of EI theory was introduced that includes four areas of emotion, facilitation of thought, understanding and controlling excitement. They introduced and introduced their efforts with Caruso, the EI test of Meyer-Salovey-Caruso. The arrival of behavioral sciences in financial discussions is a new approach to financial markets studies. This approach addresses the issue that, contrary to the debates and financial theories, behavioral and cognitive trends can affect investor risk (Maryam, Ramezanpoor; Dostar, Mohammad; Esmaeil Javadian Leng, 2014).

(Olson, 2006) Stated that emotions that are largely ignored by the classical financial model can affect financial behavior. In addition, (Satterfield, 1998) paid to this issue that cognitive and emotional states of individuals can be associated with their risky behaviors. More importantly, (Ameriks, J; Wranik, T; Salovey, P, 2009) showed that better financial performance is likely to be linked to higher EI. The findings of this study showed that people who spend more caution have less courage than investors who have higher levels of intelligence. Also, in their research, it was found that people with higher EI have a long time to maintain a longer investment situation than those with a lower level of intelligence. Brian Tracy points out that thinking and feeling are dual factors in decision-making. The feeling is a driving force and is a factor that can be a stimulant of mind. Thought without feeling does not react in the lives of people. Logical intelligence can help the power of argument, but the ability to predict the consequences of the decision only comes from EI. The skill of using EI at the time of choice of decision to help people have more effectively control over themselves and an overwhelming impact on others.

Risk-aversion and risky investment intention

In research literature, various risk definitions are presented. However, the fundamental concept that all definitions emphasize is the uncertainty of future events. Hence, risk is a kind of uncertainty to the future that has the ability to calculate. RA also reflects that each person refuses to accept risk in their lives, that is, they do not want to lose their capital and profits. Although all investors have a degree of RA, they are different in terms of this degree. Some are very conservative and hardly intended to put themselves at risk, and others are willing to accept risk and accept more risky investment for access to more wealth (Dobbin & Fiedling, S, 1994).

Based on the theory of reasoned action and planned behavior, mental norms and attitudes are the probability of the occurrence of a risky behavior. (McCarty, 2000) Suggests two types of risk-taking: (1) intrinsic risk-taking and (2) observed risk-taking behavior. In this regard, intrinsic risk-taking is considered a personality trait, while the observed risk-taking behavior is considered as a change in mental state in adaptation to changing conditions. In this case, a person's innate attitude may differ from the observed risk depending on the change in circumstances.

Although many studies indicate that a person is inherently risk averse and avoids any risky behavior (Weber, Betz, & Blais, 2002), other studies have shown that the relationship between risk-taking and risky behavior is different. (Schoemaker, 1993)Acknowledged that people who are inherently risk-averse have different actual and practical risk-taking due to certain issues, such as differences in problem formation in the mind, ways of processing information, and so on. Similarly, (Weber, Betz, & Blais, 2002)showed that risk-taking is effective in a particular domain. In this study, it is expected that a risk-averse person also refrains from any risky behavior.

Locus of control and risky investment intention

The concept of a LOC was first proposed by Julian Rutter in 1954 and used to reflect individuals' beliefs about the source or location of controlling forces in their lives. In this regard, the individual either considers himself responsible for his behaviors or considers his behaviors out of his control. Control is considered as a behavioral variable or more clearly the ability to influence and manipulate the environment. (Ajzen, 2002) Stated that differences in people's perceptions of profit and loss are due to factors beyond their actions and controls. (Rotter, 1966) Tested the hypothesis that the effect of reinforcing behavior could indicate the degree of divergence between individuals in terms of the reward resulting from their behavior. Therefore, if a person perceives any reinforcement or reward as a result of his actions, he is said to have an internal LOC. Conversely, if reinforcement or reward is the result of uncontrollable or external factors such as luck, it will be the external LOC. With this introduction, it can be stated that in predicting the nature of learning processes, the LOC variable is significant and indicates differences in adaptation between individuals. Therefore, the internal and external LOC variable have been used in many studies as a personality trait variable. For example, (Carpentier, A; Brijs, K; Declercq, K; Brijs, T, 2014)observed a significant relationship between risky behaviors and LOC. (Baron, 1968) noted a significant positive relationship between external LOC and conservative risky behaviors. (Grable & Joo, S, 2000) Stated that the LOC is an important predictor of financial risk. (Perry & Morris, M.D, 2005) Showed that LOC has direct and indirect effects on responsible financial behavior. According to

these explanations, the LOC can be related to financial decisions, risk-taking, and risky behaviors.

Financial literacy and risky investment intention

The American Institute of Certified Public Accountants defines FL as the ability to evaluate and effectively manage personal finances in order to make wise decisions to achieve life goals and achieve good financial status. (Servon & Kaestner, 2008) Defined FL as "an individual's ability to understand and use financial concepts". FL varies with a person's level of education. Also, a person with a university degree may not know the basic financial concepts such as time value, stock and bond valuation, and diversification to reduce risk, and a person without a university degree may be more familiar with these financial concepts. FL includes concepts such as financial awareness, knowledge and science about financial products and financial institutions, or concepts such as financial skills such as the ability to calculate compound interest payments. In general, FL means the financial ability to manage money and financial planning. Although in practice these concepts overlap and are common, but these concepts may have a different implementation method that depends on the level of income of countries (Dianti Deilami & Hanifehzadeh, Mohammad, 2015). (Akerlof & Shiller, 2010)Highlighted people's lack of understanding of basic financial issues (such as compound interest) and argued that many people, on average, do not have enough savings. People with financial knowledge have more different financial and economic behaviors. They are increasingly more active in times of financial crisis and have more responsible financial planning for a comprehensive understanding of financial concepts (Shahrbani, 2012). The diversity of financial products and the emergence of regulation in financial markets has multiplied the importance of this issue. Some studies consider financial knowledge to be effective in making a difference in the perception of investment. Chen and (Chen & Volpe, 1998)found that illiterate people were more likely to be among women under the age of 30 with little work experience. (Diacon, 2004)Showed that people with financial expertise as well as people with less financial knowledge have different perceptions of risk. Financial professionals prefer more risky solutions. (Wang, Keller, & Siegrist, 2011)Concluded that knowledge-based scales are more related to risk-based scales.

Research hypotheses

Concerning the study of theoretical framework and literature of the research, the following hypotheses were made:

1- EI positively influences on risky investment intentions.

2- RA negatively influences on risky investment intentions.

3- LOC negatively influences risky investment intentions.

4-The relationship between EI and risky investment intention is weaker for a society with higher FL group.

5- The relationship between risky investment intentions and external LOC is weaker for a society with higher FL group.

6- The relationship between risky investment intentions and RA is stronger for a society with higher FL group.

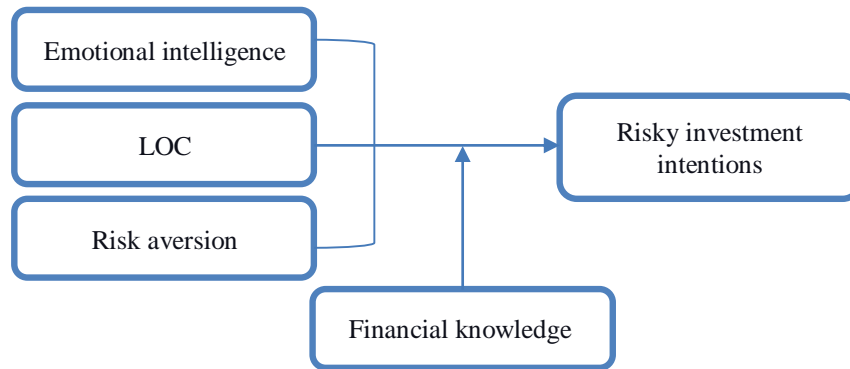Figure 1. shows conceptual framework of the research.

Figure 1. Conceptual framework of the research.

Research methodology

The main purpose of this study is to explain the moderating role of FL on the relationship between individual factors and risky investment intentions. The statistical population of the study is all people who are active in investing in the stock market. Following (Aydemir & Aren, 2017), questionnaire of the research, comprises 45 items in which the EI, risk- aversion, LOC, and investment intentions. Dispersion of questions to determine each of the variables is specified in Table 1 as well as the alpha values. The questionnaire comprises four sections; the first part is investigating the demographic characteristics of the informants. The second part consists of items measuring the individuals' behavioral components, including EI, risk prevention, and LOC. There are some items included in the third part constituting the structure of the risky investment's intentions. In the end, the fourth part measures the FL of the respondents.

Based on the agreement, validity is defined between the test score and the quality it is supposed to determine. Given that the employed questionnaire is of a standard type, specialists' viewpoint is considered to check the validity. Besides, Cronbach's Alpha coefficient was employed to assess questionnaire's reliability. The outcomes of Cronbach's Alpha reliability coefficients are indicated in Table 1.

Table 1: reliability of the variables

Variable	Component	Questions	Component alpha value	Total alpha value
EI	Perceived Emotions	1-4	0.705	0.812

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	Managing self's emotions	5-8	0.624	
	Managing others' emotions	9-12	0.666	
	Using emotions	13-16	0.658	
RA	-	17-23	-	0.801
LOC	-	24-30	-	0.783
Investment intentions	-	31-34	-	0.905

Given that the Alpha reliability coefficients are more than 0.7, it can be inferred that the existing items have required reliability to construct the intended structure.

Data analysis

The demographic questions asked in the questionnaire are pertinent gender, age, education level, the extent of income, professional record of working in the Stock Market. The outcomes of descriptive data analysis are demonstrated in Table 2.

Table 2: Demographic information of the respondents

Attributes	Frequency	(%)
Gender		
Male	185	0.845
Female	34	0.155
Experience of trade in stock market		
Less than one year	79	0.36
1 to 5 years	79	0.36
More than 5 years	61	0.28
Age		
20-30	55	0.2511
31-40	88	0.40
41-50	0.64	0.21
50 and above	30	0.14
Educational degree		
Diploma	42	0.159
Bachelor	91	0.41
Master	73	0.335
Ph.D.	13	0.06

As can be seen in Table, the under-study model comprises more than 84% (185 individuals) males and 15% (33 individuals) females. In this statistical model, merely 30 individuals are over 50 years old. A vast majority of individuals in the model are 31 to 40 years old, in which 55 individuals (equal to more than 25%) are between the ages of 20 and 30, and 46 individuals (roughly 21%) are between the ages of 41 to 50. The most frequent university degree is Bachelor's Degree (91 individuals equal to 41%), and the

least frequent degree is Doctoral Degree (6%). Also, 33% of individuals in the model have a Master's Degree.

In the realm of professional record of working in Stock Market, 79 individuals (36%) have been active for less than one year. Likewise, other 79 individuals have been active for one to five years. Statics demonstrates that merely 28% of the individuals in the model have experienced more than five years of activity in the Stock Market.

The method of structural equations' modeling is employed in order to analyze the data, examine the statistical model's fitness, and test the assumptions. Generally, structural modeling calls for the interpretation of two models, including structural modeling and measurement modeling. In this regard, the procedure of two-stage Hulland (1999) was employed. In the first stage, the measurement model's fitness, and in the second stage of the structural model's fitness is tested. The measurement model relates the visible variables to hidden variables. The structural equation modeling relates the hidden internal variables. Hulland argued that the first stage includes defining the measurement model by carrying confirmatory factor analysis out. He also stated that the second stage comprises defining the structural equation modeling by performing structural equations' modeling and determining the fitness indexes.

Before estimation of structural model, the questions' factor load's meaningfulness was examined to make sure of the measurement models' fitness and acceptability of their parameters in measuring the variables. The questions' meaningfulness criterion was that the level of meaningfulness must be lower than 0.05. Therefore, a confirmatory factor model was defined for this purpose. On the other hand, since the FL factor has an observed item, examining the structural factor is not required. The results of analyzing confirmatory factors are demonstrated in Table 3.

Table 3: Results of the validity of the questionnaire

Variable	Component	Questions	Factor loading	Level of meaning	Result	fitness
EI	Perceived emotions	1	0.642	0.000	Significant	$\chi2/d.f = 1.451$ CFI = 0.941 RMR = .046 RMSEA = .047
		2	0.496	0.000	Significant	
		3	0.609	0.000	Significant	
		4	0.723	0.000	Significant	
	Managing self's emotions	5	0.505	0.000	Significant	
		6	0.720	0.000	Significant	
		7	0.445	0.000	Significant	
		8	0.516	0.000	Significant	
	Managing others' emotions	9	0.371	0.000	Significant	
		10	0.742	0.000	Significant	
		11	0.508	0.000	Significant	
		12	0.708	0.000	Significant	
	Perceiving emotion	13	0.176	0.017	Significant	
		14	0.677	0.000	Significant	
		15	0.799	0.000	Significant	
		16	0.587	0.000	Significant	

Variable	Component	Questions	Factor loading	Level of meaning	Result	fitness
RA	-	17	0.688	0.000	Significant	χ2/df = 1.264 CFI = 0.994 RMR = .026 RMSEA = 0.036
		18	0.479	0.000	Significant	
		19	0.359	0.000	Significant	
		20	0.711	0.000	Significant	
		21	0.630	0.000	Significant	
		22	0.139	0.072	insignificant	
		23	0.856	0.000	Significant	
LOC	-	24	0.666	0.000	Significant	χ2/df = 0.923 CFI = 1.000 RMR = 0.029 RMSEA = 0.000
		25	0.158	0.055	insignificant	
		26	0.500	0.000	Significant	
		27	0.448	0.000	Significant	
		28	0.634	0.000	Significant	
		29	0.648	0.000	Significant	
		30	0.600	0.000	Significant	
Risky investment intensions	-	31	0.876	0.000	Significant	χ2/df = 0.416 CFI = 1.000 RMR = 0.004 RMSEA = 0.000
		32	0.939	0.000	Significant	
		33	0.738	0.000	Significant	
		34	0.786	0.000	Significant	

As indicated in the above table, for all measurement models, the value of the Chi-squared criterion (χ^2/df) is less than 3. The comparative fit index (CFI) is greater than 0.9, and Root-Mean Residual (RMR) and Root-Mean-Square Error Approximation (RMSEA) is less than 0.1, which indicates favorable fitness of the measurement models.

Given that question 25 of the control locus are meaningless in the estimated confirmatory models, the load factor of question 22 of the RA variable and these two questions are eliminated from the analysis process.

The second stage in the Hulland procedure is evaluating the model's fitness indexes and path coefficient. The fitness of the structural equation modeling indicates to what extent the collected data support the theoretical model. For this purpose, the quantitative fitness indexes were referred to. After validity confirmation of the model through fitness indexes, the investigation assumption can be tested. If the fitness indexes are accepted or indeed the structural equation modeling is confirmed, the estimated coefficient in the model can be referred to, and the assumptions can be separately tested employing relevant meaningfulness level. The following Figure and Table 3 demonstrate the fitness indexes of the model in the investigation.
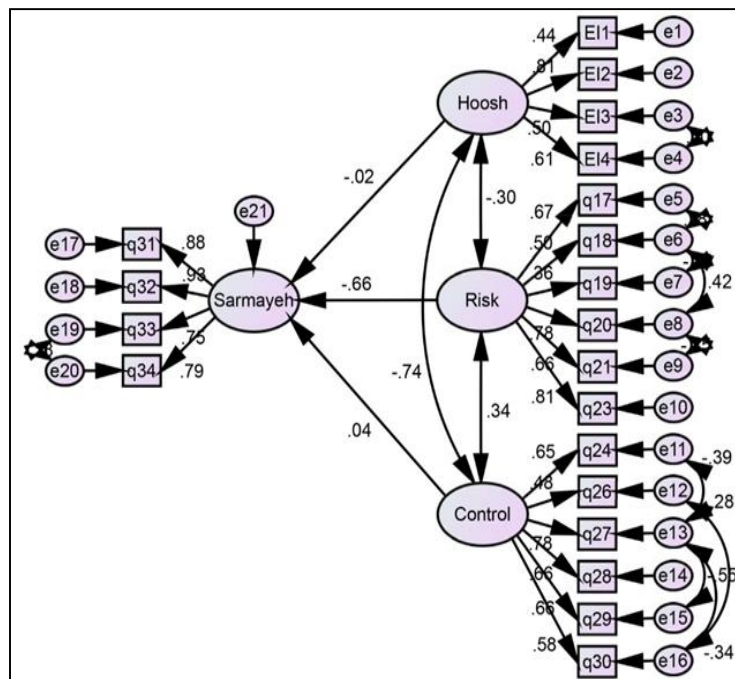
Note: Sarmayeh= risky investment intentions; Hoosh= EI; Risk= Risk aversion; Control= LOC

Figure 2: the final research model

Table 4: Fitness analysis of the research model

Indicator	Acceptable limit	Values obtained
χ2/d.f.	Less than 3	1.201
Comparative fit index (CFI)	More than 0.09	0.981
Root mean square residual (RMR)	Less than 0.09	0.051
Root mean square error of approximation (RMSEA)	Less than 0.09	0.031

The chi-squared index is calculated by dividing chi-squared by the degree of freedom, and its favorable value is between 1 and 3. The actual calculated value of this indexes is 1.201. The favorable value of the Comparative Fit Indexes (FCI) is between 0.9 and 0.95. According to the calculated value of these indexes equal to 0.981, we can claim that the model's fitness to the data is extremely favorable. The estimated model is moved from the independence model and approached saturation model, to put it differently.

The value of the second Root-Mean-Square Residual indexes or RMR is calculated to be 0.051. The second Root-Mean-Square Error of Approximation or RMSEA is based on the residual matrix. Since it has a value less than 0.09, it is acceptable.

According to the value of fitness indexes, we can come to the conclusion that the structural equation modeling approximation is acceptable. By employing the path coefficient values between hidden variables, the direct assumptions can be tested. Table 5 demonstrates the results of the first to third assumptions.

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Table 5: Results of the first to third hypothesis test

Hypothesis	Path	Influence coefficient	P-value	Test result
1	EI → I	-0.02	0.881	Rejected
2	RA → I	-0.66	0.000	Accepted
3	LOC → I	0.04	0.721	Rejected

The variable impact coefficient of the proportion of EI to risky investment is 0.20. Due to the meaningfulness approximation, which is 0.881, we can conclude that this path coefficient at the level of 95% is not meaningful. Indeed, EI does not influence risky investment intentions.

The impact of RA on risky investment intentions is negative and meaningful (P-value<0.05). Thus, we can conclude that as RA increases, the risky investment intention decreases.

The variable impact coefficient of the proportion of external control locus to risky investment intentions is 0.04, which is not worth considering due to the estimated meaningfulness, which is 0.721. Hence, with 95% certainty, we can claim that the external control locus does not influence the risky investment.

Hierarchical regression analysis was employed to test the moderating hypothesis. For this purpose, first, the dependent and moderating variables were standardized in order to prevent multi collinearity among dependent variables. Then, the dependent and moderating variables in the first stage and the interactive variables in the second stage entered the regression model. In order to interpret the outcomes, before examining beta values for comparing prediction capability, it is essential to test the linearity to make sure the linear relationship between dependent and independent variables exists. Also, the meaningfulness of the whole regression model should be examined. This matter was performed employing the variance analysis table.

Table 6: Regression analysis of variance

Model	Sum of squares	d.f.	Mean squared	F-Statistics	P-value
Regression	55.220	7	7.889	14.719	0.000
Residuals	105.584	197	0.536		
Total	160.803	204			

Concerning that the obtained significance level is less than 0.05, the null hypothesis based on the absence of a linear relationship between the investigation's variables is rejected. Consequently, we can acknowledge that the independent variables, at least one of them, correlate with the dependent variable, meaning that it has a significant estimating regression model.

According to the interactive effect coefficient (Table 7), the moderating coefficient of the FL is not statistically significant in terms of the relationship between the EI and risky investment intentions (0.09); risk prevention and risky investment intentions (0.06), and external LOC and risky investment intentions (-0.000). Subsequently, the moderating

hypothesis of FL on the relationship between individualistic characteristics and risky investment intentions is not confirmed.

Table 7: Regression coefficients test result of moderation hypotheses

Model parameters	Non-standard coefficients		Standard coefficients	P-value
	β	standard error	β	
Constant	2/816	0.052	-	0.000
EI	0.006	0.061	0.007	0.922
RA	0.530	0.055	-0.597	0.000
External control center	0.059	0.062	0.067	0.343
Financial knowledge	0.071	0.053	-0.081	0.181
EI ^{x} literacy	0.084	0.058	0.097	0.148
RA ^{x} literacy	0.059	0.058	0.066	0.313
LOC ^{x} Literacy	-0.007	0.063	-0.008	0.910

Nevertheless, it can be noticed that the highest moderating coefficient of FL is correlated with the relationship between EI and risky investment intentions raising it by more than 9 percent.

Discussions and Conclusion

There is some evidence in which the emotional and innate skills are significant in risk-taking financial behaviors. There have been several investigations aiming to find out how emotions and logic commonly affect the decision-making process. The positive impact of EI on risky investment intentions can stimulate emotions against logic. EI and higher emotional capabilities bring about self-confidence improvement in individuals, leading them to risky investments. In this case, (Ciarrochi, Chan, & Bajgar, 2001)have detected a correlation between EI and its thorough facets and self-esteem. Despite this evidence, EI has a negative impact on risky investment intentions.

All in all, an individual's attitude towards risk is likely to influence investment intentions. Several studies have assessed the correlation between risk-taking and risky behaviors, indicating that a risk-tolerant individual gives a wide berth to taking any risky actions. In this case, the present study results demonstrated that risk prevention has a meaningful, negative correlation with risky investment intentions. To put it differently, individuals avoiding risk are less subject to risky investments. Two kinds of innate and observed risk-taking are provided; the former is a personal-related characteristic. The latter one is the variation of the mind's state concerning the changing condition. By virtue of the individuals' various structuring and information processing issues, their innate risk-taking can differ from actual risk-taking. Accordingly, risk-taking is effective in a particular field, meaning that not all individuals are generally risk-tolerant in all fields.

We expected that in the third hypothesis's assessment, the external LOC would negatively impact the risky investment intentions, whose results were contradictory. Indeed, the LOC positively affects risky investment intentions. Individuals having a LOC are more likely to carry out risky investments. Investigations indicated that the internal

LOC correlates with risk-taking. Nonetheless, the results demonstrate that it is not true in the financial environment's realm since individuals having an external LOC are aware of the uncontrollable consequences of themselves. In this regard, they are likely to have lower inconvenience than those with an internal LOC, raising their investment intentions. Moreover, not considering its results related to themselves and assuming that those are luck-related issues, individuals with an internal LOC generally demonstrate more risky investment behaviors. In this regard, they do not feel any responsibility to undertake.

Attributing the results to the external and uncontrollable factors instead of themselves and holding themselves accountable indicates risk-taking behaviors. Subsequently, individuals with an external LOC have more tendency to carry out risky investments.

The results indicated that FL does not change the relationship between EI and risky investment intentions. Nevertheless, there is a meaningful discrepancy between individuals with lower and higher FL. This moderating correlation is related to the individuals with lower FL while people with higher literacy have an insignificant moderating impact. Subsequently, a significant impact exists in society, though no moderated or changed connections were detected. In a group with lower FL among individuals but with higher income, the positive influence of EI on risky investment intentions is debilitated. Even if those people have higher self-esteem and lower anxiety, subject to risky investments due to emotional capabilities, such readiness will not remain adequately when FL is lower. Such insignificant impact is likely to be caused by knowledge processing costs or individuals having higher EI and getting delusional can eliminate this delusion by financial knowledge.

As explained in the research background, there is evidence that financial knowledge changes the correlation between LOC and risky investment intentions. Individuals with an internal LOC intend to invest with higher risk, and therefore, we expected that FL could change these intentions, whose results were contradictory. Individuals with an internal LOC and enjoying higher FL demonstrate greater risk-taking. We can acknowledge that higher FL can build a sense of trust for these individuals. Given that individuals with an external LOC have a lower sense of responsibility than people with an internal LOC, such trust in financial knowledge and irresponsibility can reinforce risky investment intentions. The results demonstrated that higher financial knowledge could not change the relationship between risk prevention and risky investment intentions. There is a practical difference among individuals with lower and higher financial knowledge, which can be pertinent to rationality. Higher knowledge regarding incorrect decision-making is pertinent to a limited processing capacity. The outcomes indicate that individuals having higher FL are more risk-tolerant persons.

Regarding personal-related financial behavior, this investigation indicated that having particular financial knowledge is of little importance; the reason behind it is likely to be due to the limited information processing. It means that having more financial knowledge cannot assure making better decisions. Consequently, financial consultants and institutions should consider that specifying the point an individual is sensitive to and correctly determining their incentives makes providing more information unnecessary.

Among the personal factors investigated it seems that, the personality-related factors are likely to be influential to risky investment intentions since the positive impact of the external LOC and risk-taking is confirmed. Although the moderating role was not proved probably, financial knowledge can independently influence risky investment intentions. As a result, proving this claim calls for more studies and investigations.

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